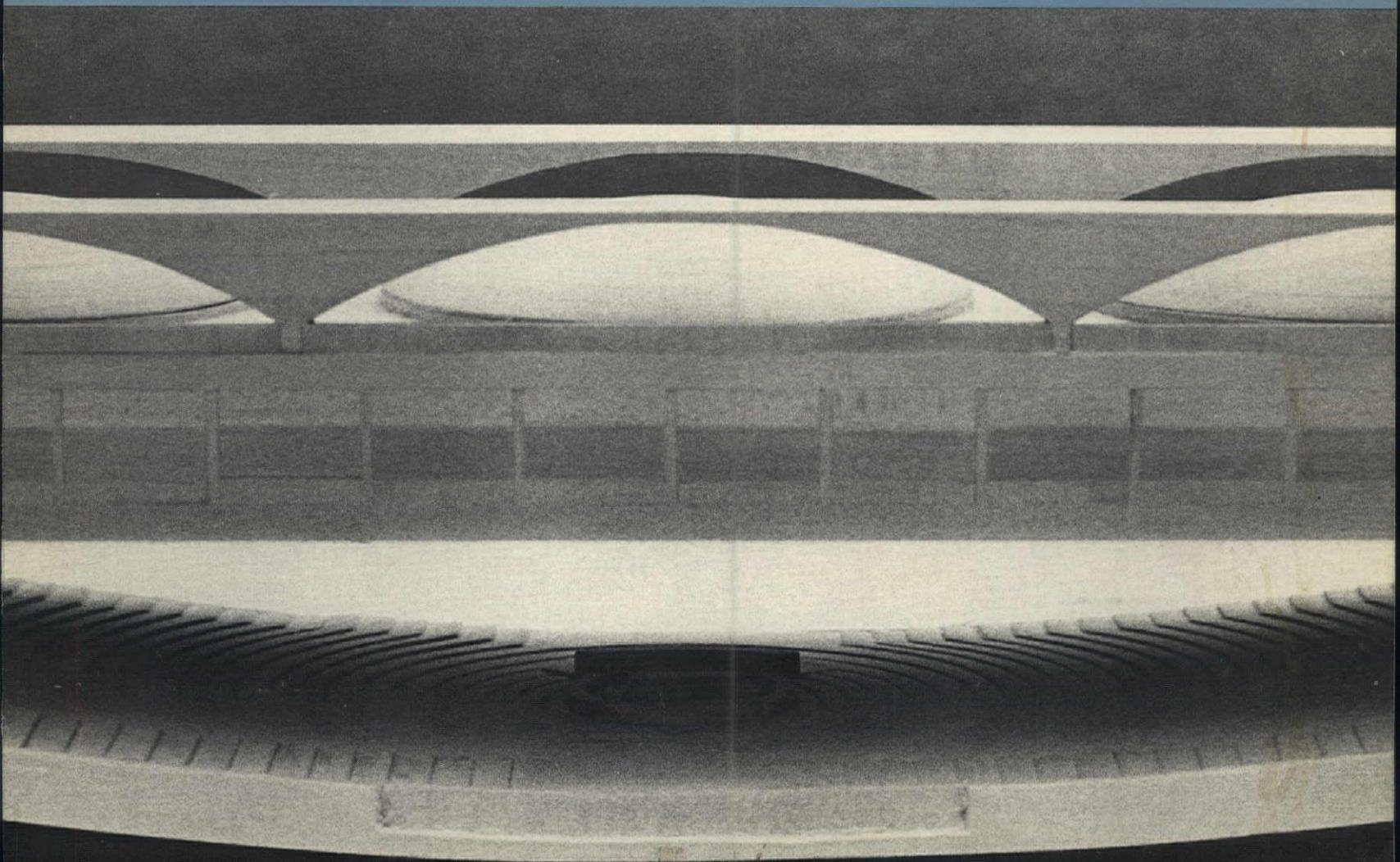


AIA JOURNAL

JUNE 1971





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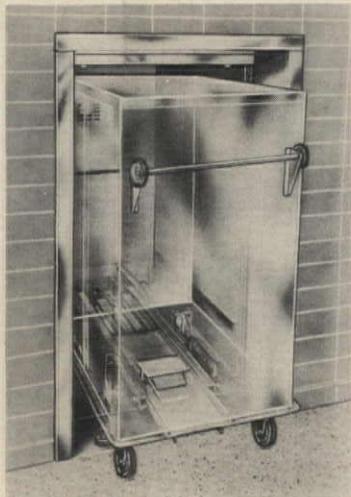


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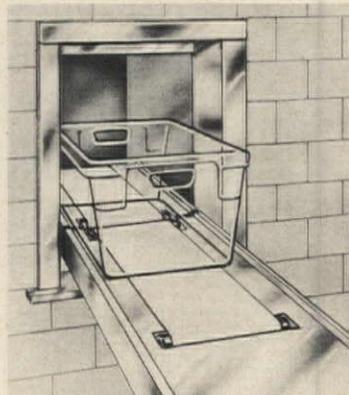
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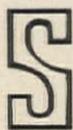
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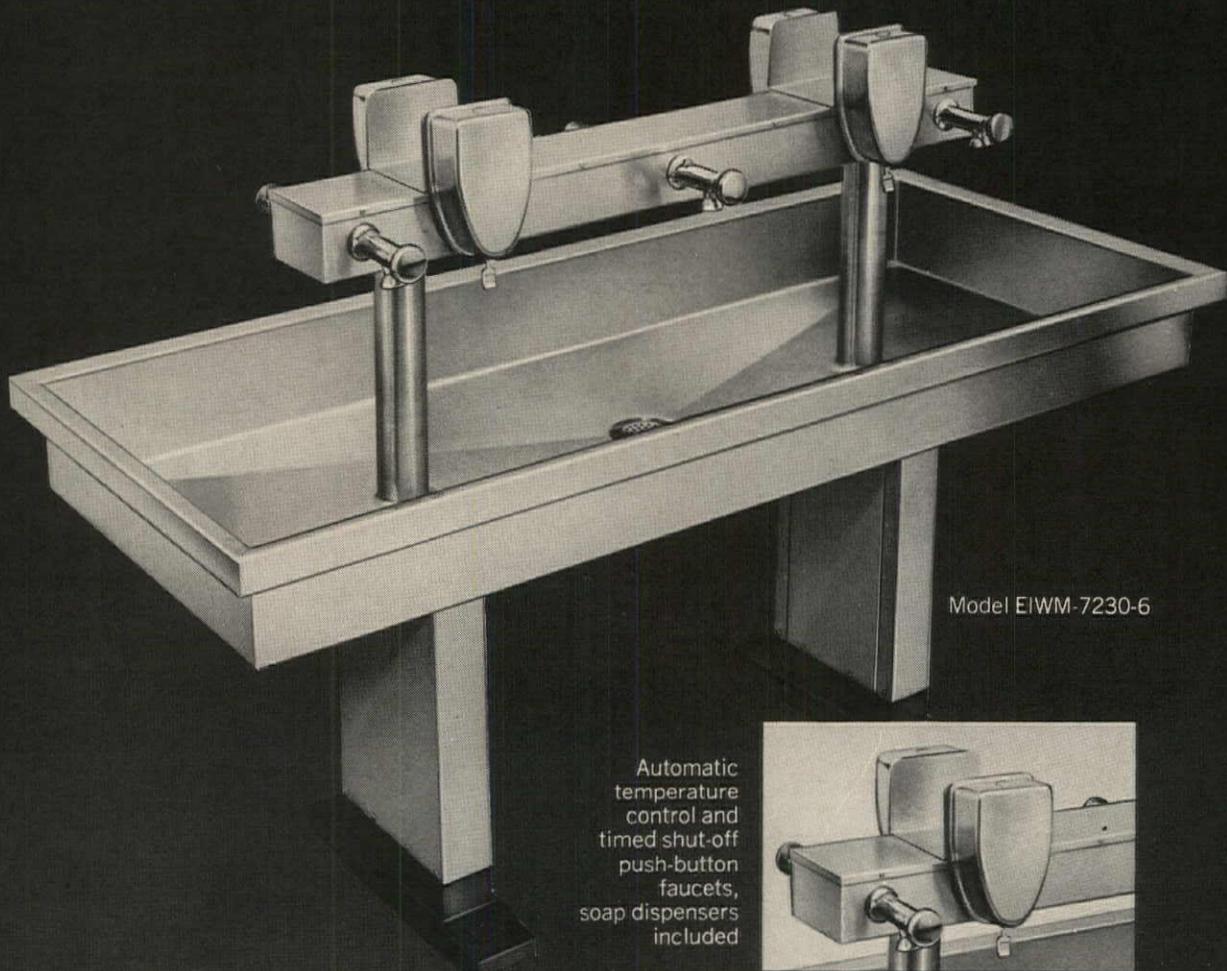


DUKE NUCLEAR LABORATORY, Duke University, Durham, N. C. Cited as one of 16 outstanding examples of campus design for the 1970s by College & University Business magazine. The massive solidity of its design evokes a feeling of security appropriate to its function. Architect: A. G. Odell Jr. & Associates. General Contractor: F. N. Thompson, Inc. Dover Oildraulic elevator installed by Dover Elevator Co.

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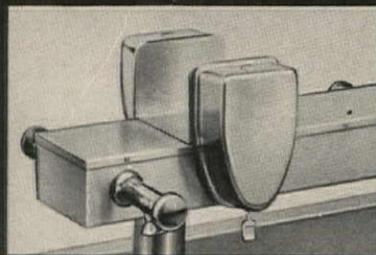
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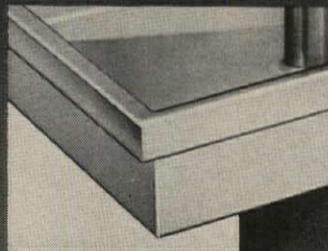


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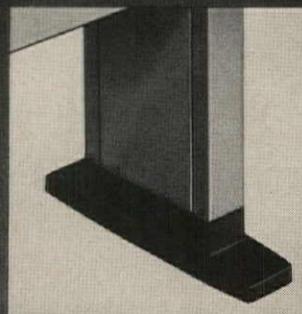
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Congress Hall, Venice, Italy, by Louis I. Kahn, FAIA, see page 25. Photo by George Pohl.

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VOL. 55, NO. 6

comment and opinion

IS DETROIT — OR ANY OTHER CITY FOR THAT MATTER — WORTH SAVING? That question undoubtedly will be raised over and over again when The American Institute of Architects assembles in the Motor City later this month to assess "The Hard Choices," the theme papers of which were published in the May AIA JOURNAL. One of the real pluses of the Institute's annual gathering, in my estimation, is that it moves about the country, from region to region, so that in a span of years almost every major metropolis becomes the site for the week-long proceedings.

Thus convention-goers not only have the opportunity of observing things firsthand, and often with an outsider's fresh approach, but also of seeing the city through the eyes of those practitioners who work and live there. Come to think of it, perhaps the "live there" really is not accurate if we are thinking in terms of the city proper. And this is at the very heart of the problem. No urban area can survive without a vital center, and to achieve this vitality, we simply have to bring more residents back downtown. That means we have to provide housing which will attract people on all levels: choices for all on the whole spectrum of the economic scale.

But let's return to our host city for 1971. It is encouraging to note that prior to the convention opening, Detroit Renaissance, a blue-ribbon organization formed by leading businessmen and manufacturers, is acquiring a full-time president. He is Robert E. McCabe, most recently general manager of the New York State Urban Development Corporation, who is coming back to the city where he was reared.

Many such groups have been organized before. Some have had considerable success, such as Forward Atlanta and Pittsburgh's Allegheny Conference on Community Development, and others have been dismal failures; but on paper, at least, it looks as though Detroit Renaissance might make it. First of all, it has a hard core of leaders who are actively involved, not simply letterhead names. They include financier Max Fisher, chairman; Henry Ford II and bank president Robert M. Surdam, co-chairmen; and government officials starting with Governor William G. Milliken and Mayor Roman S. Gribbs. Whether architects and related professionals have appropriate representation remains to be seen.

A second point, the concern of Detroit Renaissance will not be simply for downtown; it will be for the entire city and the metropolitan area. Its primary focus, however, will be on the city center.

One word of warning: Detroit may end up a more modern city but will it be a better one for people? That is the question which Fred Bassetti, FAIA, recently posed about his own Seattle. "The giant new buildings, thumbing their noses at the more modest scale of the past, offer broad plazas to the passersby in contrast to the people-sized rolling grassy courts that once engaged the back side of the old Carnegie Library. We certainly are more modern, but does it suit us better?" Bassetti asks. Then he adds, "Not all of us will agree. But at least if we discuss it we will not act as blindly as we often have in the past." If architects can at least come to grips with my original question in Detroit, they will have made some kind of start.

ROBERT E. KOEHLER

ACKNOWLEDGEMENTS

8 — center, Harvey Croze
8 — right, Portland Cement Association
25, 26 — George Pohl
27 — right, Roy Vollmer
28 — Marvin Rand Associates
29 — below left; right, Marvin Rand Associates
31 — George Pohl
32 through 35 — Suzy Thomas II
36 — above, J. Nachbar
36 — below, Balthazar Korab
37 — above; center, Daniel Bartush
37 — below, National Reproductions
38 — above; below, Daniel Bartush

38 — center, Balthazar Korab
46 — George Cserna
47 — Robert Lautman
48 — Randall Fleming
49 — Phokion Karas
50 — above; center right; below, Ezra Stoller
51 — Norman McGrath
52 — Phokion Karas
53 — Ezra Stoller
54 — Tom Walters
55 — above, Masao Arai
55 — below, Geismar Photo
56 — above, Randall Fleming
56 — center, Tom Walters
56 — below, Masao Arai

NEXT MONTH

How a complex planning project—that of making a master plan for the already existing Brooklyn State Mental Hospital—was worked out should make for interesting reading. The contract called for the design of a mental hospital, but analysis of the problem brought out that the solution was to try to eliminate the hospital altogether! The result, instead, was a three-dimensional plan worked out by the aid of a computer, a plan which could be used for any type facility. With the goals established, the architect started out with 65 functional requirements and their interactions drawn up in a diagram looking much like a ball of yarn. The planning process is shown almost step by step.

Whatever one's views about moving architectural monuments from their original siting to other places, the story of the dismantling in London of one of Sir Christopher Wren's churches and its rebuilding in Fulton, Missouri, seems noteworthy when told by the British restoration architect who was responsible for the "unbuilding" and the American architect who put it all together again.

As professional practice expands into new areas of planning, the proposals and contracts for these additional services present special problems. A Philadelphia planning firm's principal says that planning and technical services are quite different and should be proposed, priced and commissioned accordingly. He makes it all quite practical by giving his firm's fee schedule for land development.

Looking ahead to the White House Conference on Aging, two authors consider the impact of the environment on the elderly.

Preliminary cost estimating is considered by the chairman of the AIA Computerized Practice Aids Task Force in another article in our series on Practice Aids. He advocates a three-pronged estimating procedure early in the game.

ASIDES

The successful integration of mechanical/electrical systems with overall building design is an area that generally goes unnoticed in the architectural press. That being the case, we think it is only fair to mention that the Salk Institute for Biological Studies in La Jolla, California, which is included in the portfolio of work by Gold Medalist Louis I. Kahn, FAIA, in this issue, has earned three awards for the consulting engineers.

Fred S. Dubin Associates, with headquarters in West Hartford, Connecticut, and offices in four other cities, as a result of their work on the Salk job have won these citations:

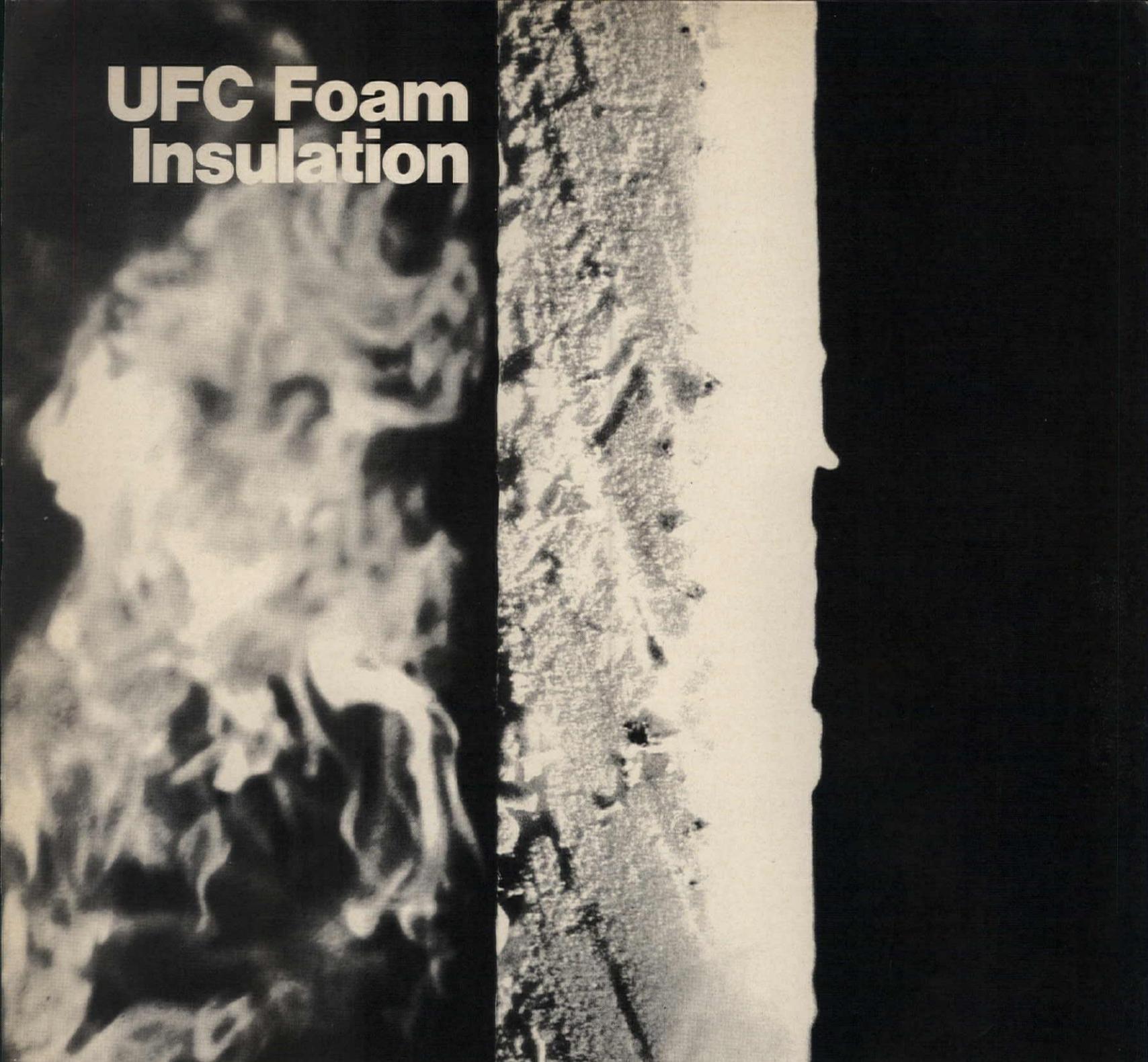
- Top honors in the California Governor's Design Awards

- "Superior" honorable mention by the Consulting Engineers Council

- Winner in the *Actual Specifying Engineer* magazine awards program.

A goal of the engineering design for this multimillion-dollar facility was to provide a distribution system for all utilities that would allow the modular laboratory areas to be efficiently converted to meet the needs of new research projects. □

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Decisions for Detroit: AIA Structure, Associate Membership, New Officers

Among the key issues to be discussed and decided at the AIA convention in Detroit on June 20-24 will be a proposal for changes in the organizational structure of the Institute. A task force, headed by George M. White, FAIA, has been working since last July on suggested changes. Briefly, the proposed structure will: 1) expand the existing Board of Directors so that it will be a more representative policy-making body; and 2) encourage the formation of state regions.

If proposals relating to the structure of the AIA are approved, a suggested action is that "the President of the Association of Student Chapters/AIA shall be a member of the



Work of Eiel Saarinen will be seen at Cranbrook, which he designed, on a June 23 tour.

board, ex officio, and shall have a vote; provided, however, that he shall not sit with the board during its executive sessions nor when it considers . . . unprofessional conduct."

Another issue to be decided concerns the establishment of associate membership at the national level. A task force chaired by Walter Sanders, FAIA, recommends that the new category of membership be instituted due to the fact that the future growth and develop-

ment of the profession "rest squarely upon the young graduates and interns of today." It is proposed that the associate membership will close the gap between student status and certification as an architect and eligibility for corporate membership.

Among the items of business will be the election of new Institute officers who will assume their duties in December. S. Scott Ferebee Jr., FAIA, of Charlotte, North Carolina, is unopposed for the position of first vice president and president designate. Also unopposed is Sanders, of Ann Arbor, Michigan, for treasurer.

On May 12, at the time nominations were accepted at AIA headquarters, the following had been nominated for the office of vice president (three to be elected): Richard M. Bennett, FAIA, Chicago; Louis de Moll, FAIA, Philadelphia; Charles DuBose, FAIA, Hartford; Robert J. Nash, AIA, Washington, D.C.; and Archibald C. Rogers, FAIA, Baltimore.

A convention highlight, as in the past, will be the investiture of members who have been elevated to the College of Fellows (see listing, p. 18).



Cobo Hall (foreground, left), headquarters of the '71 convention, is sited on Detroit River.

Architects Included in Program Planning For NEOCON Merchandise Mart in June

Stress will be placed upon the economics of doing business at the June 23-25 sessions of the National Exposition of Contract Interior Furnishings (NEOCON) slated for the Merchandise Mart in Chicago. There are no registration fees, and people from all disciplines are welcome.

For the third consecutive year, NEOCON will bring together representatives from all contract areas of responsibility to take part in meetings and open discussion. There will be "the most complete variety of products for the contract market ever assembled."

The Chicago Chapter AIA will sponsor a major session on June 24 at 4:30 p.m. on "New Uses for Old Buildings." Brock Arms,

AIA, of Glencoe, Illinois, will be moderator of the session which will consider the economics of remodeling, rehabilitation, conversion, renewal and found space.

Other sessions of interest to the architect will have a number of AIA members as speakers, discussion leaders and moderators. Attention will be given to such topics as competitive bidding; changes in hospital construction; shopping centers; the economics of the environment; college union planning; the library as a brain; office space planning; the turnkey concept in housing; and the planning team.

A new feature of this year's exposition will be "corridor conferences." The format will consist of prescheduled time periods when speakers will be available at specific locations to meet with attendees.



Go Detroit! No matter how difficult the way.

Dearborn Development May Feature Spine System to Integrate Facilities

A multimillion dollar urban complex in a parklike setting is being planned for Ford Motor Company's home city of Dearborn, Michigan. Henry Ford II said that construction was expected to begin next year under a program that would involve development of about 2,300 acres of company-owned land surrounding its corporate headquarters.

Preliminary plans are based on recommendations from two firms specializing in land planning—William L. Pereira & Associates and the Economics Research Association.

The Pereira plan calls for a town center surrounded by greenbelt spaces. A key feature is two "urban spines," running east-west and north-south, that are environmentally controlled malls linking various facilities in the center and providing separate levels for automobiles, pedestrians and an urban transit system.

The town center would contain stores, office buildings, a hotel, activities' facilities. Nearby would be a large area for offices of other companies, apartments, condominiums and combination office/research parks.

Ford emphasized that planning is still in "general form." He said that the idea is to retain sufficient flexibility to permit changes in response to market demand and the needs of individual customers.

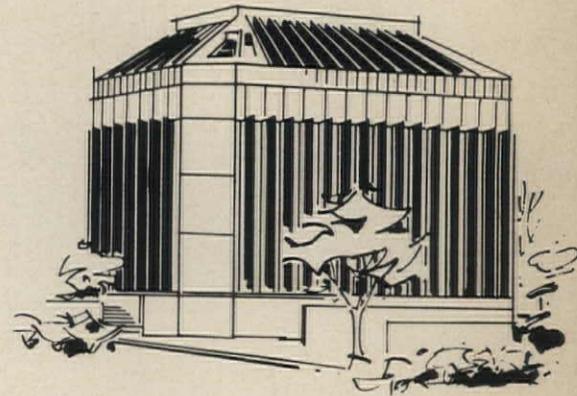
National Effort Spurs Use of Subsystems In Design and Erection of Buildings

The promotion of the subsystems for use in building has received a shot in the arm from the Federal Construction Council with the first phase of a two-part program expected to be completed this fall.

Following a series of meetings with public and private organizations having large building programs, along with manufacturers, designers, labor representatives and regulatory agencies, a council subcommittee will issue a report which hopes to:

1. Identify subsystems that are suitable for dimensional and functional precoordination and that will generate a viable market demand by satisfying a wide range of user needs.
2. Estimate the potential market for the various categories of subsystems.
3. Outline recommended procedures and instruments for specifying, prequalifying, designing with and contracting for subsystems.
4. Determine the extent to which users would be willing to create the needed market

continued on page 10



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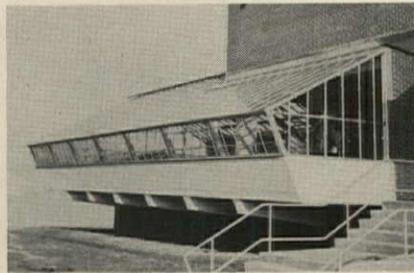
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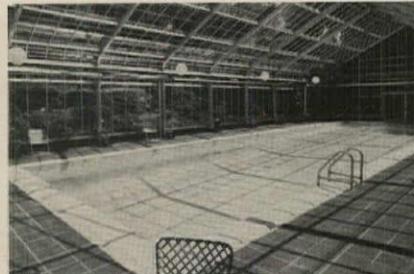
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outlook from page 8

through their building construction programs.

The types of subsystems being considered include 1) structural, 2) space dividers, 3) exterior walls, 4) ceilings, 5) plumbing and 6) electrical—poles, panels and consoles.

Phase 2 of the project will involve monitoring implementation efforts and dealing with the unforeseen problems that may arise.

Plea for Wage Stabilization Received By AGC as It Elects Healy President

Unions have gained "unconscionable power" because of a protective Congress, sympathetic courts and the National Labor Relations Board, said Executive Director William E. Dunn of the Associated General Contractors of America in his annual report submitted to its convention in San Diego recently.

Dunn declared that beginning in 1965 the AGC warned that excessive wage demands by the building trades were leading the country deeper into the morass of inflation and that the concept of a government freeze on wages and prices appeared to be the only alternative. Dunn termed President Nixon's suspension of the Davis-Bacon Act as laudable for the long-range benefit of the industry, but he said it will not save the nation from another wave of demands, strikes and inflationary settlements.

At the convention, attended by about 4,000 members, a building contractor from Wilmington, Delaware, John E. Healy II, was installed as president. Long active in AGC affairs, Healy has served on the AIA/AGC Liaison Committee.

Long Island University Picks Architect Bush-Brown as Its New Chancellor

The appointment of Albert Bush-Brown as chancellor of Long Island University has ended a nine-month search by the 20,000-student private institution.

President of the Rhode Island School of Design from 1962-68, Bush-Brown resigned as vice president for facilities planning at the State University of New York in Buffalo to assume his current post. He has taught courses in art and architecture at Harvard, Princeton and Western Reserve Universities and Massachusetts Institute of Technology. He has served as a member of the National Council on the Arts.

Institute Names Eight Honorary Fellows

Joining the ranks of the 155 other foreign architects who hold the title of AIA Honorary Fellow will be eight others of "esteemed character and distinguished achievement who are not citizens of the United States and do not practice within the domain of the Institute." The eight will be invested during the convention in Detroit.

The newly elected are Gordon R. Arnott of Canada; Carl Auböck of Austria; John Michael Austin-Smith of England; Jacques Barge of France; Gustavo Gallo Carpio of Mexico; Balkrishna Vithaldas Doshi of India; Alex Johan Henri Maria Haak of the Netherlands; and Kiyonori Kikutake of Japan.

continued on page 14



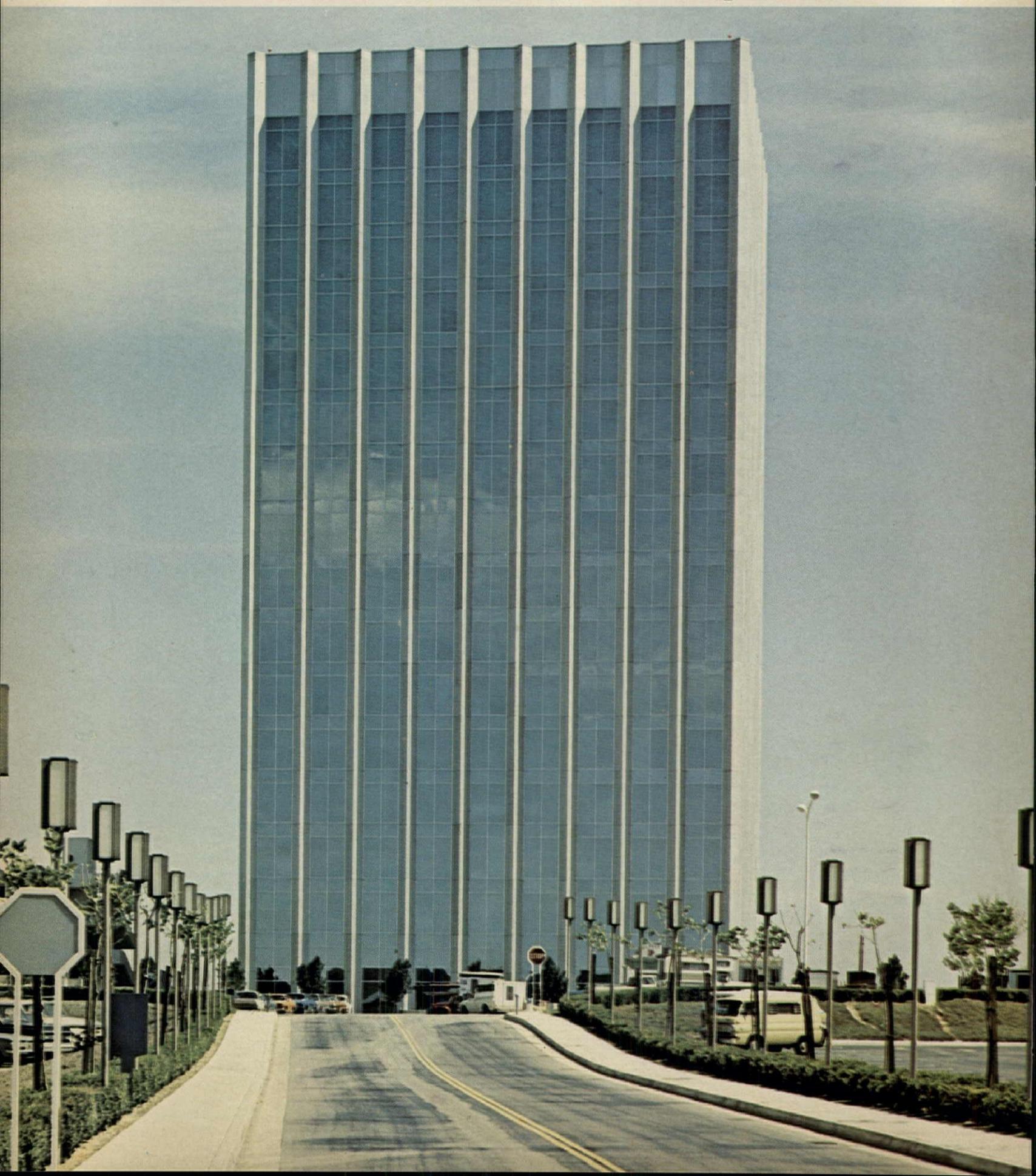
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The improved 'U' value of the double glazed glass had a significant effect on reducing the size — and cost — of the heat recovery cycle required by all-electric concept.

As to the aesthetics, the silvery Vari-Tran 114 blends with the aluminum exterior columns and the spandrels of Tuf-flex® tempered glass, also Vari-Tran coated. (Vari-Tran is available in golden as well as silvery coatings in light transmittances of 8, 14 and 20 percent. Each provides significant reduction in solar heat and glare.)

If you would like a computerized cost analysis of the glass wall of a building you're planning, contact your L-O-F Architectural Representative, or Architectural Dept., Libbey-Owens-Ford Company, Toledo, Ohio 43624.

Here's what Vari-Tran, the glass that cuts building costs, will save.

ECONOMIC GLASS COST ANALYSIS

by James A. Knowles and Associates, Los Angeles

A differential 'Annual Cost of Owning and Operating' between the larger capacity air conditioning plant required for the conventional heat absorbing glass as opposed to the plant capacity required by the Vari-Tran 114 is as follows:

1. Additional Investment —

A. Added A.C. Machinery Cost	\$56,300
B. Larger Roof Machinery Space	\$ 6,320
C. Larger Gas, Electrical Services.	\$ 7,100
Total Additional Investment	\$69,720

2. Additional Annual Owning Cost —

A. Amortization and Depreciation for 20 years at 10% (CRF-0.11746)	\$ 8,200
B. Taxes and Insurance	\$ 3,140
Total Added Annual Owning Cost	\$11,340

3. Additional Annual Operating Cost —

A. Preventive Maintenance	\$ 719
B. Repairs and Replacement	\$ 992
C. Gas, Water and Electricity	\$ 6,771
Total Added Annual Operating Cost	\$ 8,482

4. Summary —

A. Additional Annual Owning Cost	\$11,340
B. Additional Annual Operating Cost	\$ 8,482
Total Added Owning and Operating Cost for conventional heat absorbing glass	\$19,822

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outlook from page 10

Donations to Furnish the Octagon Will Form Fund in Memory of Henry Saylor

Henry H. Saylor, historian of the Institute for many years and editor of the AIA JOURNAL's predecessor, *The Bulletin of The American Institute of Architects*, gave much loving care to the Octagon House and its garden. It is appropriate that the Henry H. Saylor Furnishings Fund has been established in recognition of his tireless and unselfish efforts for the Institute.

The Octagon, which served as AIA headquarters from 1899 to 1949, has been carefully restored by the generosity of many members and is now enjoying an excellent response from the public. It is in need of additional authentic furniture and furnishings, however. With the advise of consultants experienced in the area of period interiors, the Octagon House Committee has drawn up a program. To complete the plan, a sizeable sum of money will be required.

Those who wish to make a tax-deductible donation in support of this worthy objective may do so by sending money or pledges to Mrs. Mabel S. Day, Executive Administrator, American Institute of Architects Foundation, Inc., 1799 New York Ave. N.W., Washington, D.C. 20006.

Tokyo Conference to Focus on Solutions To Urban Transportation Problems

Transportation and planning experts, government, business and political leaders and academicians from all over the world will gather in Tokyo September 6-10 for the Tokyo Conference. Its purpose is to initiate a worldwide exchange of information on urban problems with special focus on transportation. Tokyo will be used as a model.

Main addresses will provide an overview of problems and possible solutions. Smaller forums will consider the elements of the transportation model with speakers who have planned and run innovative or exemplary projects in cities around the world. Panels will match the conference speakers with Japanese experts to discuss the application of the experiences of other cities to Tokyo and to the new plan for Tokyo.

The cost of \$385 per participant includes the conference, materials, a monthly newsletter for six months prior to the conference and scheduled meals.

For complete information, write: Urban Research Corporation, 5464 S. Shore Drive, Chicago, Ill. 60615.

Tulane University School of Architecture Dean, Nationally Prominent Architect

An urban planning specialist and consultant to architectural planning programs and projects throughout the world, John W. Lawrence, FAIA, was named dean of the School of Architecture at Tulane University in 1960. Under his leadership, the school changed from one of predominantly regional appeal to national prominence, attracting students from throughout the nation and several foreign countries.

"His participation in programs of community planning and improvement matched his leadership in education for far-sightedness and constructive imagination," said Tulane's President Herbert E. Longenecker on the occasion of Lawrence's death on April 20 at the age of 49.

A partner in the New Orleans architectural firm of Lawrence & Saunders, Lawrence was the recipient of many awards for design excellence. He was an outstanding and outspoken advocate for the preservation of historic buildings in an urban context; his own buildings met the character of New Orleans' heritage and the human needs of its people.

He served for many years as principal investigator and administrator for the Vieux Carré survey. He also was a leader for the Commission for Architectural Education of the Southern Regional Education Board and the National Architectural Accrediting Board. He acted as a consultant to the Ford Foundation's Program in the Humanities and the Arts and was chairman and national secretary of the Committee on Creativity in Design for the Association of Collegiate Schools of Architecture. His writings have been published in American and foreign journals and books on contemporary architecture.

Winner of International Architectural Competitions, Designer of Furnishings

Danish architect Arne Jacobsen has been praised by critics for his artistic discipline, restraint, precision in detail and excellent workmanship. He himself once remarked: "Economy plus function equals style."

Jacobsen was invited to participate in a number of international competitions for such structures as the town halls of Marl and Cologne and the World Health Organization building in Geneva. He won first prize in many Scandinavian competitions, including an office building for Denmark's National Bank and a town hall and sports hall for Landskrona, Sweden.

Jacobsen, who was made an Honorary Fellow of the AIA in 1962, worked equally well in the design of silverware, gardens, furniture and fabric patterns. His "egg" and "ant" chairs are sat upon everywhere.

Jacobsen died on March 25, at the age of 69, of a heart attack in Copenhagen.

Fund in Memory of Architectural Editor

In 1964, Bradley Little, interior designer, became editor of *Architectural Digest*, a magazine published in Los Angeles. He introduced a designer's expertise and established a standard of esthetic excellence.

Before his association with the journal, he maintained his own interior design firm in Dallas, having gained experience in Natchez, Mississippi, where he completed such projects as the restoration of the Mississippi Capitol.

At the age of 37, Little met an untimely and tragic death on April 9. To honor his memory, the Bradley Little Memorial Fund has been created to aid deserving interior design and architectural students. Checks made payable to the Bradley Little Memorial Fund may be sent to *Architectural Digest*, 5900 Wilshire Blvd., Los Angeles, Calif. 90036.

continued on page 16

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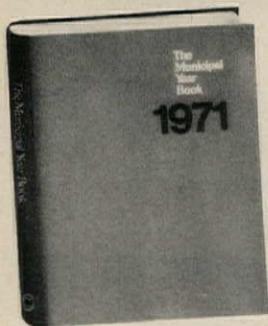
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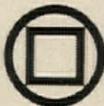
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outlook from page 14

Newslines

■ **The useful role of arbitration** for architects and engineers and their clients is outlined in "The Architect-Engineer Goes to Arbitration" by Robert Coulson. Published by the American Arbitration Association, the study states that of 179 cases reviewed only 18 original claims were filed by owners against architects and seven against engineers.

■ **The Architectural Awards of Excellence** for 1970 are presented in a handsome booklet available without charge from the American Institute of Steel Construction, 101 Park Ave., New York, N.Y. 10017.

■ **Marcel Breuer, FAIA**, is the sole American among nine architects commissioned by the French Government to plan for the redevelopment of 150 miles of coastline on the Bay of Gascony.

■ **A subterranean shopping mall**, encompassing 6½ acres of retail and restaurant facilities, will open in Los Angeles this year. Called the Atlantic Richfield Plaza, the complex includes 52-story twin tower office buildings centered by a free-standing three-story Bank of America office building. Architects are Albert C. Martin & Associates.

■ **"Environment in Crisis"** is considered in depth in the March issue of *Consulting Engineer*. Included are a number of pertinent articles of interest to architects.

■ **A new 60-second TV spot**, sponsored by the National Trust for Historic Preservation, confronts Americans with the destruction of their historical heritage. It has been released to 300 TV stations.

■ **Simon Breines, FAIA**, partner in the New York architectural firm of Pomerance & Breines, has been named to the New York City Art Commission, along with M. Paul Friedberg, landscape architect.

■ **Campbell Soup Co.**, of Camden, N. J., is one of the winners of the 1970 *Business Week* Awards for Business Citizenship. The soup maker was hailed for plowing \$6 million into projects in a deteriorating urban center.

■ **Matthew Rockwell, FAIA**, executive director of the Northeastern Illinois Planning Commission, has been presented with a distinguished service award by the Lake Michigan Region Planning Council.

■ **Construction wages** have increased 92 percent since 1959, with the average worker now making \$6.39 an hour (without fringes), according to a Labor Department survey of wages in cities of 100,000 or more population.

■ **Illuminating Engineering Society** will start publication in July of a new monthly magazine, *Lighting Design & Application*.

■ **Housing** will be the major building construction growth area for 1971, reveals a sur-

vey of its members by the Producers' Council. Total housing starts are expected to increase about 15 percent; mobile homes are forecasted to grow 5 to 6 percent.

■ **Paul Rudolph, FAIA**, has been elected a member of the nation's foremost honor society of the arts, the National Institute of Arts and Letters.

■ **A jetport city** will be erected 10 miles south of the Dallas/Fort Worth Regional Airport, scheduled to open in 1973. Plans prepared by Charles Luckman Associates for the \$150 million development call for a 320-acre, master-planned urban complex that will be called Century 21 and will include 2,500 apartments, a department store plaza, a hotel/visitor center complex, office buildings and automobile sales facilities.

■ **The Guild for Religious Architecture** is now receiving reservations for the 1970 Guild Traveling Exhibit, made up of award-winning designs from the 1970 conference on religious architecture. The exhibit is offered as an educational service to interested groups without charge, except for transportation. Contact: Guild for Religious Architecture, 1346 Connecticut Ave. N.W., Washington, D.C. 20036.

Deaths

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Hammond, Ind.

RALF E. DECKER
Seattle

ROBERT MICHAEL EGAN
Chicago

JOHN FINSETH
Brooklyn, N.Y.

FREDERIC A. FLETCHER SR.
Baltimore

A. T. GRANGER
Hanover, N.H.

AMBROSE HIGGINS
Bangor, Me.

L. M. LOWERY
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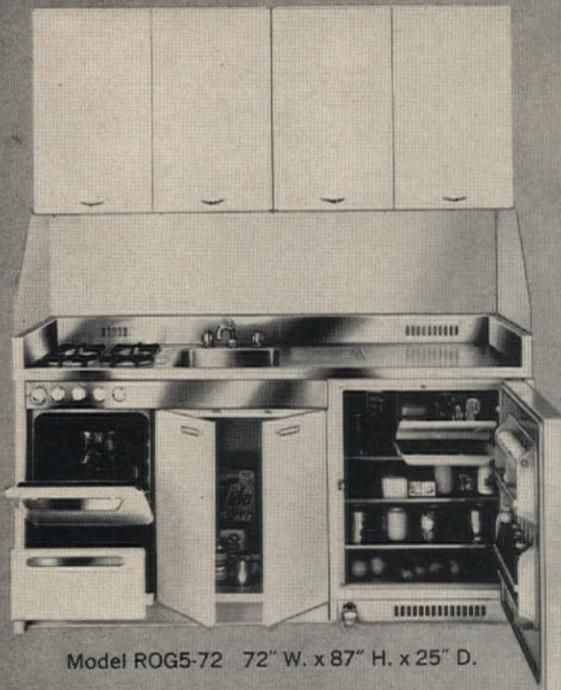
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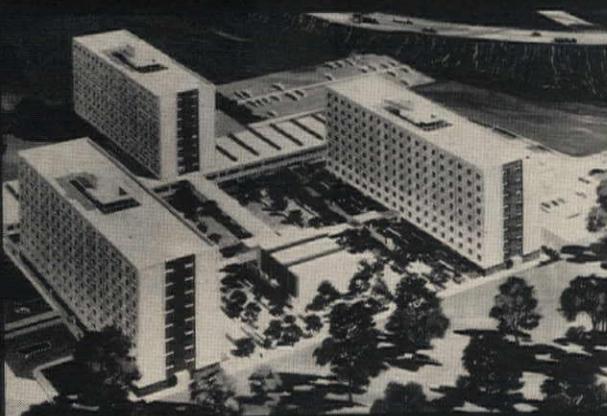


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'As Others See Us'

by MALCOLM MAC EWEN
Editor, *RIBA Journal*

If one nation illustrates the Marxist version of Hegelian dialectics, it is the USA, where everything embodies opposing tendencies, change proceeds by way of conflict and in due course everything turns into its opposite. The American Institute of Architects is a microcosm of this process.

Its structure is determined by American geography, the federal concept and American political as well as professional traditions.

The state organizations are more or less autonomous; this gives the state and local bodies great independence. They are not dependent on AIA handouts or grants, although the AIA will subsidize specific projects which form part of the national AIA program. Some states—perhaps a majority, but I would not know—use their independence to carry on in the old way as social clubs or strong-arm groups for the private practitioner. A progressive chapter can raise a large income and do remarkable things with it.

The prestige architects are rich men building for rich clients. Reputations have not been built, as they have here, on public housing or school programs, planning or new towns. As a result, the AIA has been run by and for the private practitioner. It has never taken the reactionary stance of the American Medical Association, but the dominant influence has been the businessman architect. All this has had a profound influence on the development of the AIA, and explains why the protest movements of the young, merging with liberal and radical currents inside the Institute, forced a decisive turn in the summer of 1969 and why they had so little effect for such a long time.

It is not difficult to find radicals who argue that the AIA is irrelevant, that the Community Design Centers are a diversion from the real political struggle to change the system, that the whole thing is a waste of time. What is not open to discussion is that, in response to the pressure from students and younger members, the AIA has made a very big change in direction. The split in the professional personality has come into the open, and it will be interesting to see whether its progressive side can survive in the present uneasy marriage with the business side.

ED. NOTE: Mr. MacEwen gave his impressions of a four-week visit to the Institute and its components in the February issue of his magazine, official publication of the Royal Institute of British Architects. Excerpts are selected here by the editors of the AIA JOURNAL.

The split personality of the profession is clearly reflected in the revised code of ethics. The real effect of the code is not to promote public interest but to weaken the restraints on commercialism. It is couched in such woolly generalities that, apart from a ban on advertising, it permits the private practitioner to do more or less as he pleases—provided he does it with a good conscience. Nobody believes that many architects will in fact refuse commissions because their rich corporation clients are damaging the environment.

It seems improbable that the AIA will be able indefinitely to perform the balancing act which enables its practicing members to proclaim their devotion to the concepts of human environment and human rights in one breath, and to accept whatever commissions come along in the next. They have increasingly to go out and get them, to enter into property speculation, to become subsidiaries of conglomerate corporations or to ally themselves with financial interests of one kind or another, if they are to survive.

While there is a lot of talk in the AIA about the need to serve the poor client, there is one fact about the poor client that nobody denies: He has no money, and it is money (whether public or private) that decides in the end what gets built and what the architect has to do for his living. Without some deep political change that redistributes wealth and political power, the poor client is unable to do more than block proposals he resents or distrusts, and the rich client commissions the architect.

The white suburbs also have a vote, more powerful because it is a legal one, in the zoning laws that prevent the settlement of the poor and the black in the suburbs. The federal government, quite apart from the inhibiting effects of the federal structure and the jungle of federal and local agencies and programs, is in no mood to make a radical change in its priorities. The result is an urban deadlock. This generates frustration. The CDCs are offering architectural and professional services, when the overriding need is for political change.

The demand that architectural skills are genuinely put at the services of the people is not going to be stilled forever by clause 1 of the AIA code of ethics. Some new ways of engaging the profession in public service will surely have to be found, and soon. □



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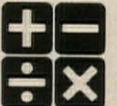
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'NOT FOR THE FAINT-HEARTED'

"His theory, like his practice, has been acclaimed as the most creative, no less than the most deeply felt, of any architect's today," said Vincent Scully in his book *Louis I. Kahn* (New York: Braziller, 1962). ■ The recipient of the 1971 Gold Medal, the highest honor that The American Institute of Architects can bestow, Louis I. Kahn, FAIA, is a poet as well as an architect, a philosopher as well as a builder. "Not for the faint-hearted" is Kahn, as Scully remarks. "Kahn also tends to bridge the gap between architect as artist and the architect as practitioner as no other seems able to do—just as he has been healing the breach between the present and the near no less than the distant past." ■ Kahn's own words give an insight into his sensitivity, his probing mind, his love of his art, his "bridging of the gap" as no other writer can do for him. The selection from the writings that follow are from *The Notebooks and Drawings of Louis I. Kahn* (Philadelphia: Falcon Press, 1962), reprinted with the permission of the author. Illustrated are both completed works and ongoing projects.

On Drawing

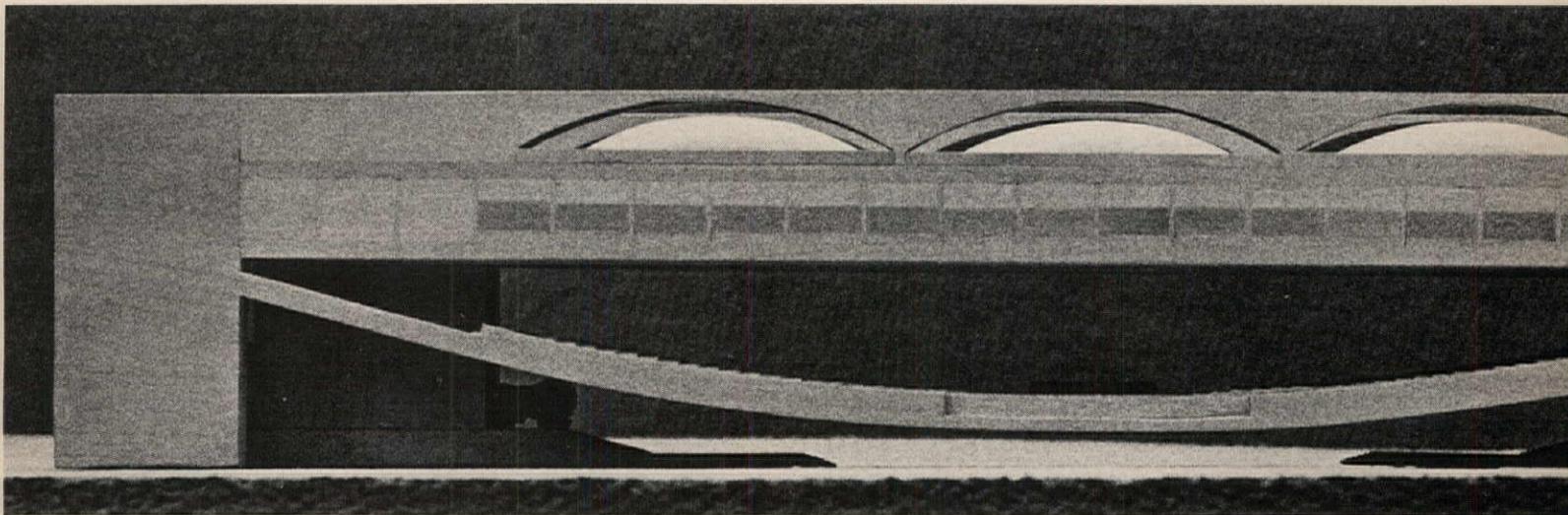
One day, as a small boy, I was copying the portrait of Napoleon. His left eye was giving me trouble. Already I had erased the drawing of it several times. My father lovingly corrected my work. I threw paper and pencil across the room, saying, "Now it's your drawing, not mine." Two cannot make a single drawing. I am sure the most skillful imitation can be detected by the originator. The sheer delight of drawing has its way in the drawing. That also is a quality the imitator can't imitate. The personal abstraction, the rapport between subject and thought also are unimitable.

. . . To an architect the whole world exists in his realm of architecture—when he passes a tree he does not see it as a botanist but relates it to his realm. He would draw this tree as he imagined it grew because he thinks of constructing. All the activities of man are in his realm, relating themselves to his own activity. A few years ago I visited Carcassonne. From the moment I entered the gates, I began to write with drawing, the images which I learned about now presenting themselves to me like realized dreams. I began studiously to memorize in line the proportions and the living details of these great buildings. I spent the whole day in the

courts, on the ramparts and in the towers, diminishing my care about the proper proportions and exact details. At the close of the day I was inventing shapes and placing buildings in different relationships than they were. . . . The sketch book of painter, sculptor and architect should differ. The painter sketches to paint, the sculptor draws to carve and the architect draws to build.

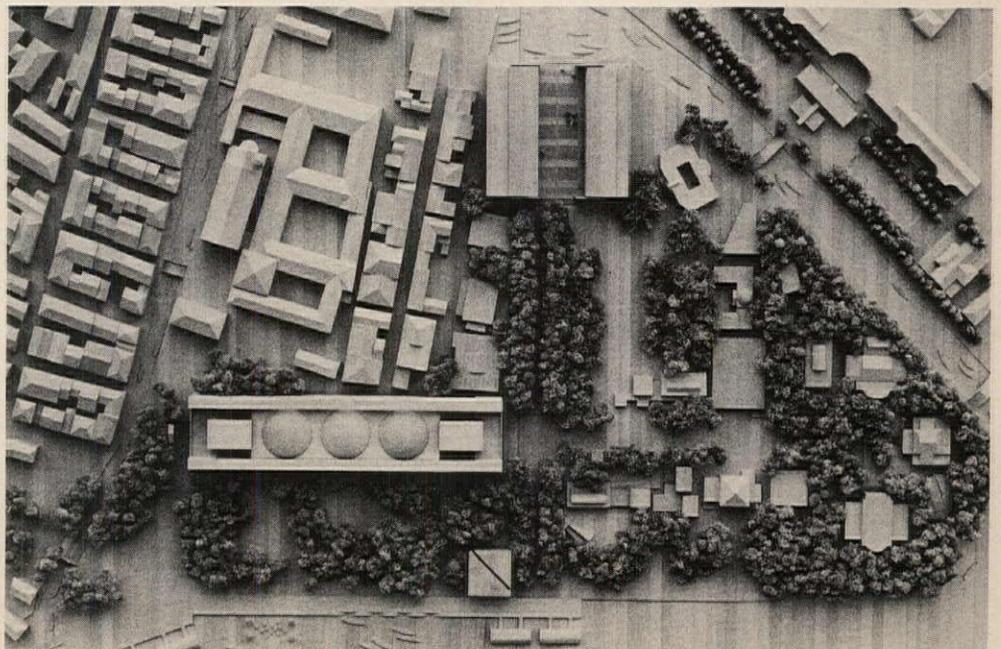
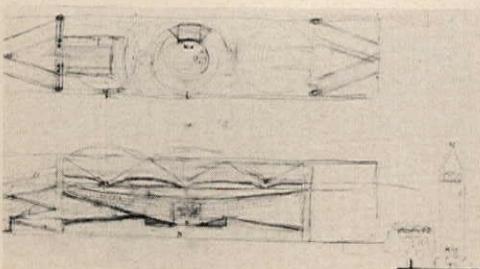
On Stopping Our Pencils

In Gothic times, architects built in solid stones. Now we can build with hollow stones. The spaces defined by the members of a structure are as important as the members. These spaces range in scale from the voids of an insulation panel, voids for air, lighting and heat to circulate, to spaces big enough to walk through or live in. The desire to express voids positively in the design of structure is evidenced by the growing interest and work in the development of space frames. The forms being experimented with come from a closer knowledge of nature and the outgrowth of the constant search for order. Design habits leading to the concealment of structure have no place in this implied order. Such habits retard the development of an art. I believe that in architecture, as in all art, the artist instinctively keeps the



Congress Hall, Venice, Italy

"I can see the Congress Hall as if it were a theater in the round—where people look at people," says Kahn. "The curve of the meeting hall is slight in order to retain the sense that it is really a streetlike piazza gently sloping. The whole structure, reinforced concrete with marble details, is conceived like a hanging bridge supported on the two ends by two columns . . . where also the stairs and elevators reach the various levels."



marks which reveal how a thing was done. The feeling that our present-day architecture needs embellishment stems in part from our tendency to fair joints out of sight, to conceal how parts are put together. Structures should be devised which can harbor the mechanical needs of rooms and spaces. Ceilings with structure furred in tend to erase scale. If we were to train ourselves to draw as we build, from the bottom up, when we do, stopping our pencil to make a mark at the joints of pouring or erecting, ornament would grow out of our love for ducts, conduits and pipe lines by pasting acoustical material over structure. The sense of structure of the building and how the spaces are served would be lost. The desire to express how it is done would filter through the entire society of building, to architect, engineer, builder and craftsmen.

On Winking at Chapels

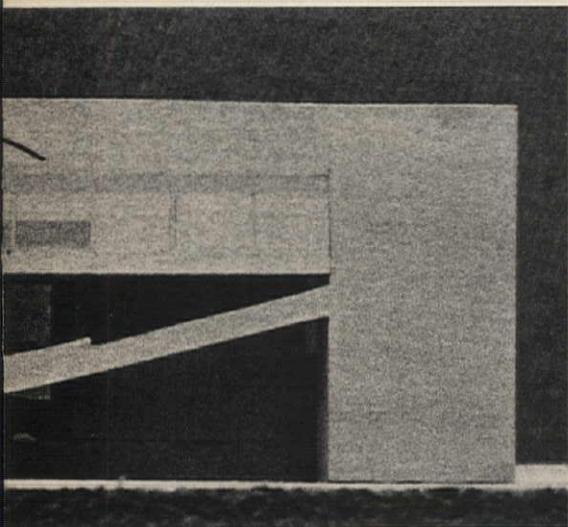
As a problem in architecture, consider a chapel of a university. Is it a space divided for denominations of set ritual or is it a single space for inspired ritual? In search of form for such a chapel, its concept may come from how you think about its undefined nature. To invent a circumstance, let us imagine the feelings of a student of architecture after an inspiring criticism. Full of dedication to

his art, he passes the chapel and winks at it; he doesn't go in, he winks at it. This is inspired ritual.

The chapel has a central space which for the moment we won't describe; around it is an ambulatory for those who don't want to enter. Outside the ambulatory is an arcade for those not in the ambulatory; the arcade overlooks a garden for those not in the arcade. The garden has a wall for those who don't enter and merely wink at the chapel.

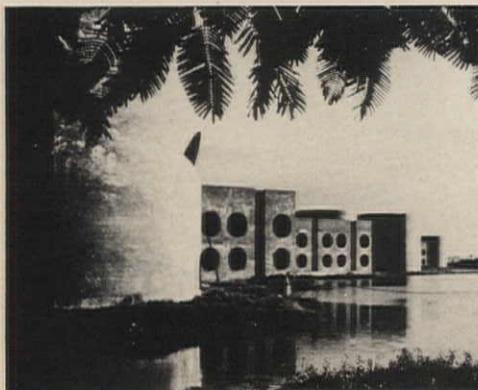
On the Limits of Architecture

Giotto was a great painter. Because he was an artist he painted the skies black for the daytime and he painted birds that couldn't fly and dogs that couldn't run, and he made men bigger than doorways. A painter has this prerogative. He does not have to answer to the problems of gravity, or represent images as we know them in real life. As a painter he expresses a reaction to Nature, and he teaches us through his eyes and reactions about the nature of man. Again, a sculptor is one who modifies space with objects expressive of his reactions to Nature. Architecture nevertheless has limits. When we touch the invisible walls of its limits, then we know more about what is contained by them. A painter can paint square wheels on a cannon to express the futility



Second Capital, Dacca, Pakistan

"Because this is delta country, buildings are placed on mounds to protect them from flood. The lake was meant to encompass the hostels and the assembly and to act as a dimensional control. The assembly, hostels and supreme court belong to the Citadel of Assembly . . . suggesting a completeness causing other buildings to take their distance," Kahn comments.



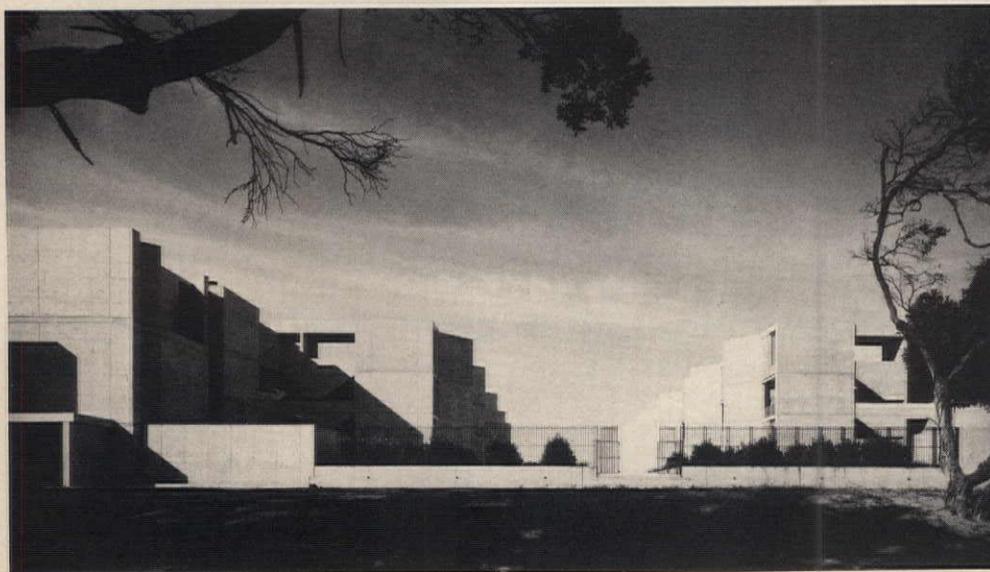
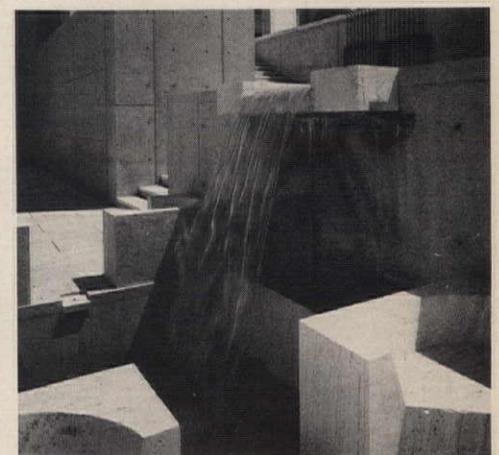
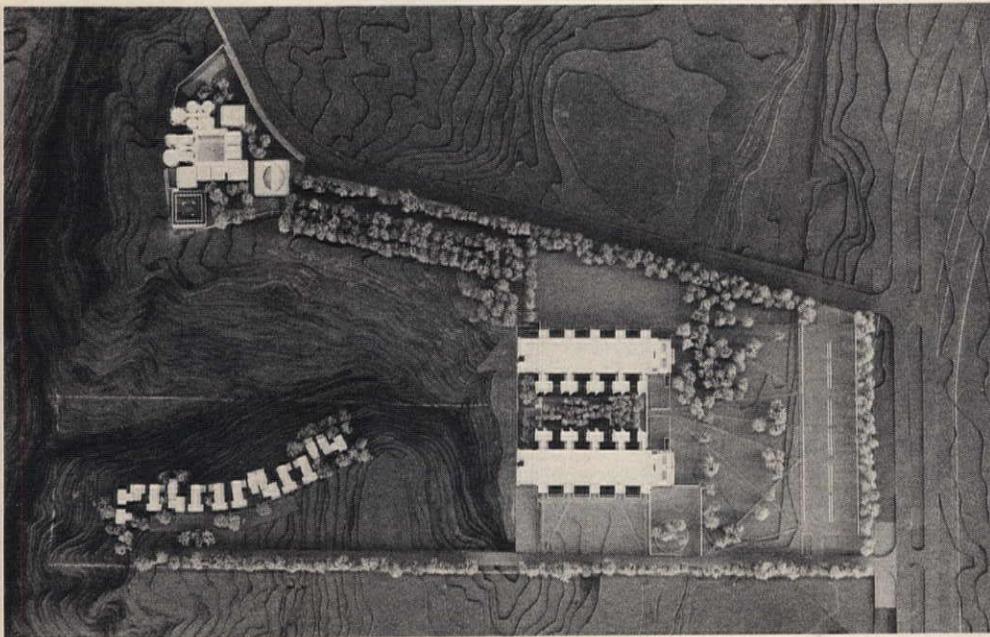


of war. A sculptor can carve the same square wheels. But an architect must use round wheels. Though painting and sculpture play a beautiful role in the realm of architecture, just as architecture plays a beautiful role in the realms of painting and sculpture, they do not have the same discipline. One may say that architecture is the thoughtful making of spaces. It is not the filling of areas prescribed by a client. It is the creating of spaces that evoke a feeling for appropriate use.

On Winking at Wonder
Form comes from wonder. Wonder stems from our "in touchness" with how we were made. One senses that nature records the process of what it makes, so that in what it makes there is also the record of how it was made. In touch with this record we are in wonder. This wonder gives rise to knowledge. But knowledge is related to other knowledge and this relation gives a sense of order, a sense of how they interrelate in a harmony that makes all things exist. From knowledge to sense of order we then wink at wonder and say, "How am I doing, wonder?"

On Interplay in Architecture
My medical research building at the University of Pennsylvania incorporates this realization that science laboratories are essen-

tially studios and that the air to be breathed must be separated from stale, waste air. The normal plan for laboratories places the work areas along one side of a central corridor, the other side of which houses the stairs, elevators, animal quarters, ducts and other facilities. In such a corridor there is mixed together with the air you breathe the outflow of contaminated, dangerous air. The only distinction between one man's work space and that of another is the difference in numbers on their doors. For the university, I designed three studio towers in which each man may work in his own bailiwick. Each studio in these towers has its own escape sub-tower and exhaust sub-tower for the release of isotope air, germ-infected air and noxious gases. A central building around which the three major towers cluster serves as the area for facilities, usually to be found on the opposite side of the corridor in the normal plan. This central building has nostrils for the intake of fresh air located far from the exhaust sub-towers for vitiated air. This design, the result of consideration of the unique uses to be made of its spaces and their service requirements, expresses the character of the research laboratory. From what I



Salk Institute for Biological Studies, La Jolla

"The original concept of the three parts which expresses the form of the Salk Institute—the laboratories, the meeting place, the living place—has remained. The acceptance of the separation has made Dr. Salk my most trusted critic. . . . When his belief in what constitutes the nature of a laboratory space was fully realized, he could not turn back."

have said I do not mean to imply a system of thought and work leading to realization from form to design. Design could just as well lead to realization in form. This interplay is the constant excitement of architecture. **On "House" and "A House" and "Home"** Form is *what*. Design is *how*. Form is impersonal, but design belongs to the designer. Design is prescribed by circumstances—how much money there is available, the site, the client, the extent of skill and knowledge. Form has nothing to do with such conditions. In architecture, it is a harmony of spaces good enough for a certain activity of man. Reflect, then, on the abstract characteristics of "house" as contrasted with "a house" or "home." "House" stands for the abstract concept of spaces good to live in. "House" is thus a form in the mind, without shape or dimension. "A house," on the other hand, is a conditioned interpretation of living space. This is design. In my opinion, the greatness of an architect depends more on his power to realize that which is "house" than on his ability to design "a house"—something prescribed by circumstances. "Home" is the house and its occupants. It becomes different with each occupant. The client for whom a house is designed states the areas he needs. The architect creates spaces out of these

required areas. Such a house, created for a particular family, must, if its design is to reflect trueness to form, have the character of being good for another family.

On the Future of Architecture

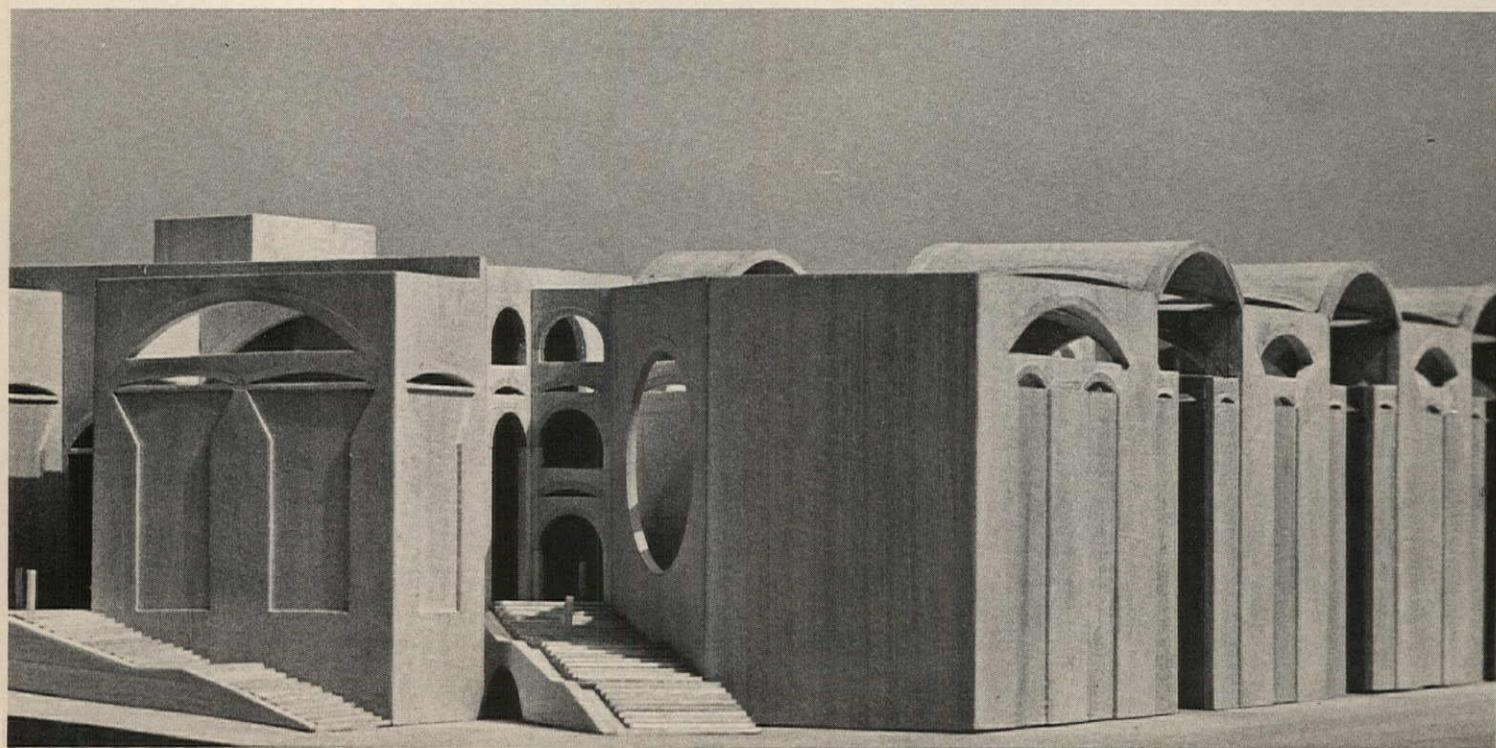
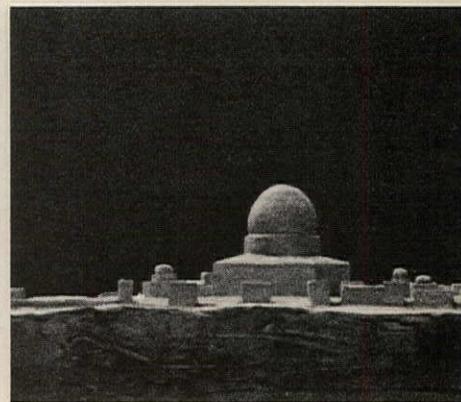
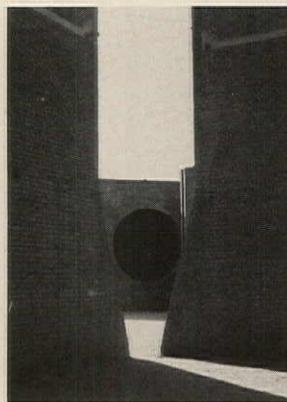
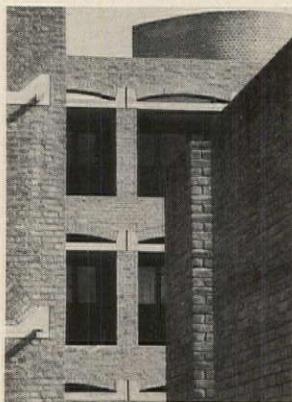
The city is made up of institutions—that which has been established and is supportable by all men. Education, government, the home are such institutions. When an architect begins his work, the building he is about to design must present itself as belonging to an institution. Even before satisfying the client's specific needs, the force of the institution in society should be the background of his architectural decisions. I cannot predict the architecture of the future. We can only work within the laws we comprehend now. The architecture will be based on new rules as the system of laws becomes more and more part of a new comprehension of physical order and the nature of man.

On Law and Rules

Man makes rules which are of the laws of nature and of the spirit. Physical nature is of law. The laws of nature work in harmony with each other. Order is this harmony. Without a knowledge of the law, without a feeling for the law, nothing can be made. Nature is the maker of all things, the psyche desires things and challenges nature to make that which expresses the inexpressible, that

Institute of Management, Ahmedabad, India

"The plan comes from my feelings of monastery. The unity of the teaching building, dormitories and teachers' houses—each its own nature, yet each near the other—was the problem I gave myself. . . . You notice I made all these buildings answerable to each other, even though the scale of the house and the dormitory and the school is so different. . . . The fullness of light, protected, the fullness of air, so welcome, are always present as the basis for architectural shapes."



which cannot be defined, that which has no measure, that which has no substance—love, hate, nobility. Still the psyche wants to express just that and cannot without an instrument. Law is the maker of instruments. The violin—beautiful out of the law, how the upper and lower diaphragm of the violin lends itself to the stresses of a bow, and the vertical strip dividing the two membranes are in a sense a continuous column. Even the sound holes in the upper diaphragm are cut so that little of the continuity of the beam is lost. Law leads to rules. A rule is subject to change, being man-made.

On Things Disliked

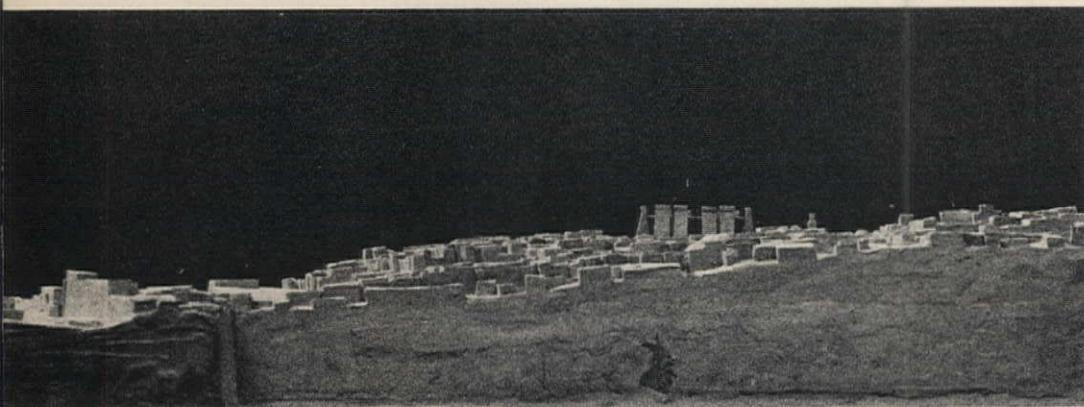
I do not like ducts; I do not like pipes. I hate them really thoroughly, but because I hate them so thoroughly, I feel they have to be given their place. If I just hated them and took no care, I think they would invade the building and completely destroy it. I want to correct any notion you may have that I am in love with that kind of thing.

On Designing Schools

Schools began with a man under a tree, a man who did not know he was a teacher, discussing his realization with a few others who did not know they were students. The students reflected on the exchanges between them and how good it was to be in the

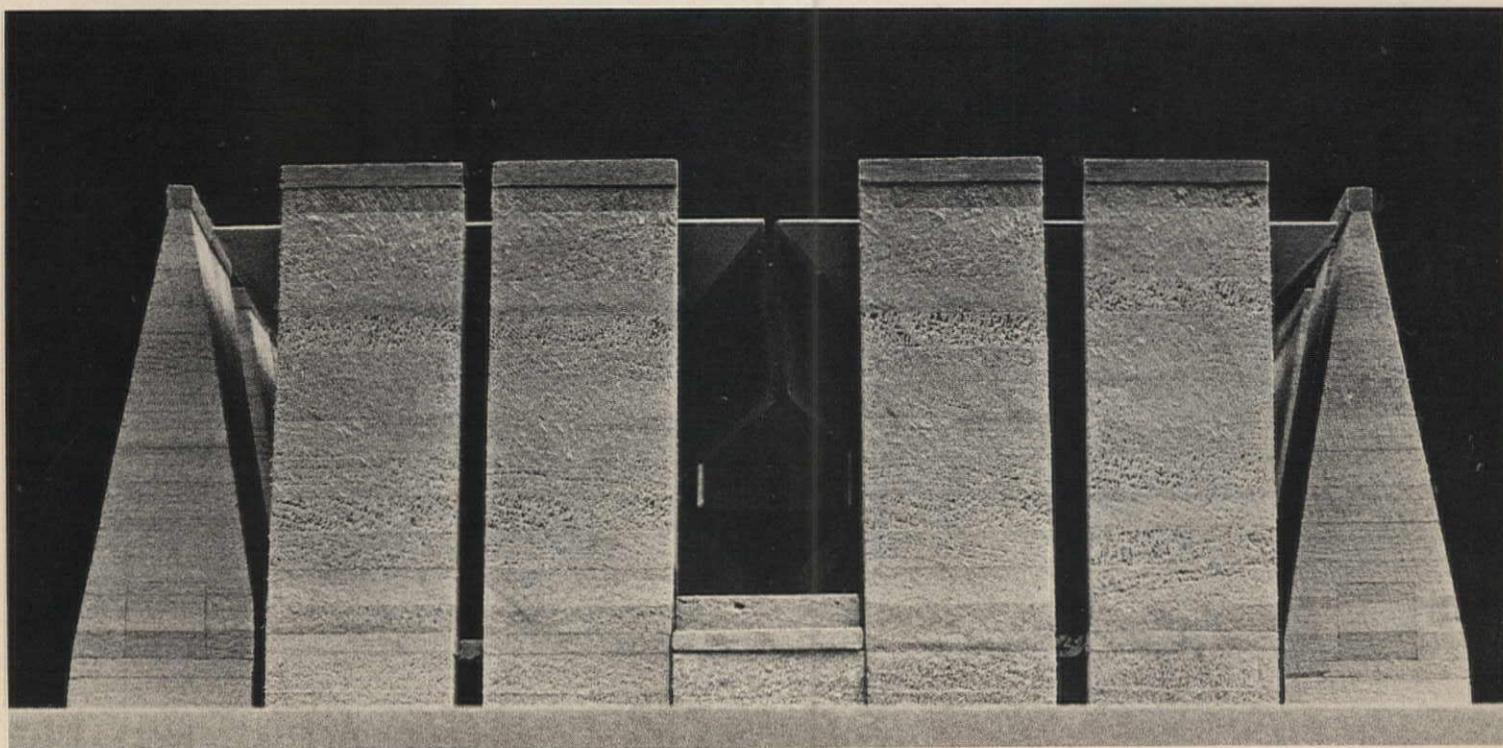
presence of this man. They wished their sons, also, to listen to such a man. Soon, the needed spaces were erected and the first schools came into existence. The establishment of schools was inevitable because they are part of the desires of man. Our vast systems of education, now vested in institutions, stem from these little schools, but their spirit is now forgotten. The rooms required by our institutions of learning are stereotyped and uninspiring.

. . . The actual classrooms . . . should not follow the usual soldier-like dimensional similarity but should invoke use through their spatial variety, for one of the most wonderful aspects of the spirit of man under the tree is its recognition of the singularity of every man. A teacher or student is not the same with a few, in an intimate room with a fireplace, as in a large high room with many others. And must the cafeteria be in the basement, even if it is not in use so much of the time? Is not the relaxing moment of the meal also a part of learning? A realization of what particularizes the domain of spaces ideal for "school" would make the designing of an institution of learning challenge the architect and awaken in him an awareness of what "school" wants to be, which is the same as saying an awareness of the form: school. □



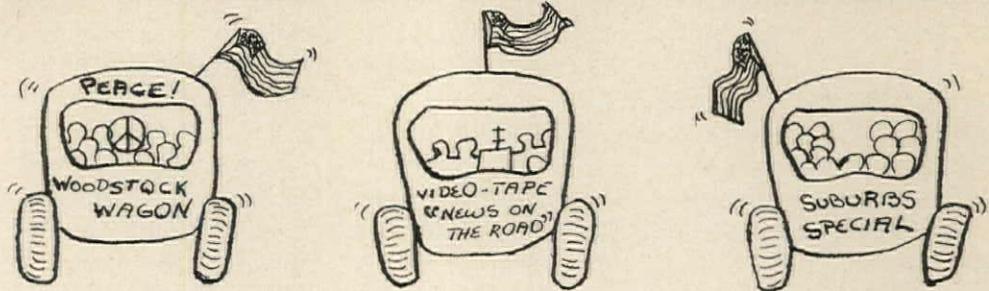
New Huerva Synagogue, Jerusalem

"Light is a needed thing yet an enemy," states Kahn. He proposes to protect the interior of Huerva Synagogue from glaring light and heat of sun with an outside pyramid-shaped stone bastion. In 1948, the old synagogue was destroyed, and Kahn was asked to design a new one on the same site. He decided to let the ruins remain and to link them with the new structure by a garden. Symbolic of a love of tradition and a hope for the future, he proposes to link the two with the Wailing Wall by means of a continuous program of spaces for a museum, a center for religious study, etc.



THE NEW WHO?

Swarmers, Videofreaks and Urban Field Runners



by GRADY CLAY

Tolstoy once defined history as "the unconscious general swarm-life of mankind." Today's swarming by groups who seek self-discovery is shaking the establishment, doing away with old geographic fixations, creating unheard of markets, finding new bases of information—all with implications for architecture.

The invention and production of new identities has become a major growth industry in the United States. More people crowd into the business, old professions learn new tricks, competition is keen. New products flood into the market and new media expand to cover and promote these identities.

"Identity" has become an object of widespread research and coinage; it is fashionably multidisciplinary. Charles Reich's *The Greening of America* made it semiofficial by defining states of Consciousness I, II and III with which all Americans could identify or argue. The search-for-identity cuts across all social groups, uniting Black Panthers and white ethnics as they work both sides of the same street.

To think about one's own personal identity is a familiar struggle for most people, but the struggle has become institutionalized as professions, business firms, political subgroups and whole regions now go through the ordeal of asking, "Who am I—who are we?"—and then begins the longer process of trying to peddle, market and/or promote this thing called identity.

In this process, the invention, production and marketing of new identities has become an important growth industry. It is full of newcomers jostling for a slice of the market which they conceive to be ever expanding. There is good evidence that, once one begins the search for identity, it never stops. As the world changes, one's own "fit" into the world must change and so must one's identity. It may well turn out that nobody will ever find an identity because he is too busy anxiously becoming something else, engaged in a deliberate personality-change-game all the way to and beyond the grave. But at the moment, most identity-seekers do not view it this way.

I propose to examine three contemporary forms of identity as new products in the marketplace. Each of them includes millions of Americans. Each has architectural implications. In dealing with them I will offer impressionistic descriptions, unequal time and few conclusions.

Swarmers

They came to be called the Woodstock Nation, having come together on that memorable weekend in August 1969, when their campers, cars, bikes and buses formed a bumper-to-bumper

traffic jam for some 30 miles outside Max Yasgur's farm near Woodstock, New York.

The occasion was one of the most curious examples of identity-declaration in modern times. Never before Woodstock had US society so clearly shown its capacity for nonmilitary crowd formation. Never before Woodstock had 350,000 young people assembled under such festive and primitive conditions, drawn one and all to seek and to declare a new identity.

Never before had mass auto-mobility combined so effectively with mass media to create instant Us—large scale communities assembled by media, by word-of-mouth and by personal transport. We have had crowds before, traffic jams before; we have had chatauquas, world's fairs, camp meetings, conventions and jamborees before. But this was something else.

I had been looking in the mid 1960s for some way to describe the new kind of place I kept seeing as an eyewitness journalist—huge new state fairgrounds, civic centers, community plazas, shopping centers, stadiums, all surrounded by vast parking lots. I had called them "congregation stations," an awkward phrase. Finally, it was a word from J. B. Jackson, the landscape historian, which helped me to form a new conception, a handle for the Woodstock phenomenon.

This is the word "swarm" in its biological sense, and the activity which I call "swarming." In its early 19th century meaning in New England, the phrase "to swarm" meant to send out a colonizing group from a parent church into the wilderness to form a new mission church, let us say in western Massachusetts. It was also called "hiving," and old accounts give these events a strong emotional flavor. (The word "hiving" also occurs in descriptions of the ancient Phoenicians' process of spinning off new communities around the Mediterranean.)

Looking at the hundreds of rock festivals since Woodstock, it is clear that these 20th century swarmings bring people from vast distances with their own transport, free time and a determination to be a part of a group experience. It is massive declaration of identity—and it is continuing.

Such swarming requires a large and mobile population from which to draw, a market conditioned by years of exposure to recordings, to personal appearances and to TV showing of rock music and its personalities. Music has been the magical network of communication, "the glue holding us all together," as Ralph Gleason put it in *Rolling Stone*, the most successful of all newspapers catering to the rock culture identity.

Such tribal occasions as Woodstock and its sequel appear live and kicking on TV and with great shock value invade every

living room. Thus swarming has accumulated the suspicions of the square world, the attentions of its police and the counteraction of its establishments.

Those who hold the old traditionalist-monopolist view of cities tend to see these mobile, volatile, touch-and-go swarmers as threats to all those predictable fixities-in-place on which traditional cities have for so long depended. Swarming does not hold still for scientific examination. It keeps no records. But it makes exciting movies and some of them—like *Gimme Shelter*, depicting the Rolling Stones' 1969 fiasco at Altamont Race Track, California—turn into rank identity propaganda.

To market-oriented economists, swarming is shattering evidence of the evanescence of markets. It can pick up its 350,000 potential spenders and move out—just like that. The gate potential at Woodstock, unrealized because of gate-crashing, was \$5.5 million; the festival used \$1.4 million in materials and over \$600,000 in services. Such vast new money in town, or in the boondocks, is a radicalizing force, and many small towns and other outlandish places have been and will be radicalized. This chancey dumping of money by strangers onto small town society is upsetting to normal commerce and society, which reacts adversely. Fathers fear for daughters' virginity, farmers for their crops and sound sleepers for things that go "gaboom" in the night.

By now it has become apparent that swarming, being the essence of transience, is a threat to so-called stable community values. It contributes nothing to "normal community growth." It puts a premium on the swarmer's own mobility and self-sufficiency. Swarming descendants of the Woodstock Nation wear their own costumes, speak a kind of sartorial Esperanto, travel light and prefer off-the-road vehicles wherever possible.

Any day now we should expect "swarming kits" to appear at supermarket prices, a derivative of the riot coverage kit developed by the general manager of Los Angeles Radio Station KHJ for its

reporters who cover the more violent outdoor events. It cost \$800 and contained a blue jumpsuit with the large words "Press" front and back, first aid kit, poncho, sleeping bag, helmet, goggles, gas mask and tape recorder.

Other early warning radar images of the swarming kit may be found in the work of the Archigram group of architects in London: a "cybernomadic living kit," a mobile air-land-sea vehicle with its own plug-in terminals for computer access; or the "informaion," fully equipped with the latest mobile telecom.

Swarmers themselves want as little as possible to do with new buildings, with cities and with organized, structured places. Swarming does not require buildings, but it cannot exist without urban supplies and infrastructure: highways, communications, helicopters on call, instant coming-down places for bad trips.

The essence of this capacity to swarm is the geographic mobility of the swarmers and the instant community spirit or communication which they can generate. The fact that drugs eased the pains of high density overcrowding in the mud and rainstorms at Woodstock 1969 tells us something about how high density overcrowding may be made palatable, bearable and repeatable in the future. But it is clear that something more pervasive and powerful than drugs was and still is at work. That stimulation was and remains a searching for identity; a declaration of selfhood, a dramatic and photogenic aspect of what I call "Instant-U-Culture."

Swarming arises from new feelings and convictions among young Americans, from their search for identity and community. It is the outward evidence of a new and powerful minority group declaring its existence and its intention to become a majority no matter what statistics may say to the contrary. For the swarmers themselves, it has proved to be a powerful means of self-discovery; of finding out who are one's friends; of trading passwords, new language forms, identity tokens and attitudes; and of making declarations about these matters to the world outside.

The Woodstock swarming is only one example of the emergence of new and often violent groups of freewheeling independent people with their own lifestyles and values which appear to be the primitive setting up of threatening camps just outside straight society. Such occasions test the capacity of straight society and its mass media to distinguish one tribe from another without falling into the error of concluding "they all look alike to me." One should not be surprised at future swarms of more conservative types: ecology-actionists cleaning up trashed valleys in weekend swarms by the thousands or mobile boy scout jamborees bringing mass good deeds to the multitudes.

In *Beyond the Melting Pot*, Glazer and Moynihan observed: "Ethnicity is more than an influence on events; it is commonly the source of events. Social and political institutions do not merely respond to ethnic interests; a great number of institutions exist for the specific purpose of serving ethnic interests." I would extend the Glazer/Moynihan image to say that "identity is more than an influence on events; it is commonly the source of events."

In the course of declaring their identity, swarmers have met increasing resistance. As city police have armed themselves to overcome rioters, they have quickly turned on swarmers. It has grown tougher to get a permit, to get highway access or to avoid injunctions and hassling from the nonswarming world. But the basic conditions which created the market for coming together in the first place still exist: the huge numbers of young people not yet admissible or taken into the labor market; the all-time record number in college with spring and summer vacations; their automobile and their special communications through music.

I would argue that swarming is becoming a permanent con-



dition, and, if it is repressed, the energies it has set loose will crop up in other, maybe more dangerous form. The automobility and vast communications systems behind it cannot be shut off.

Videofreaks

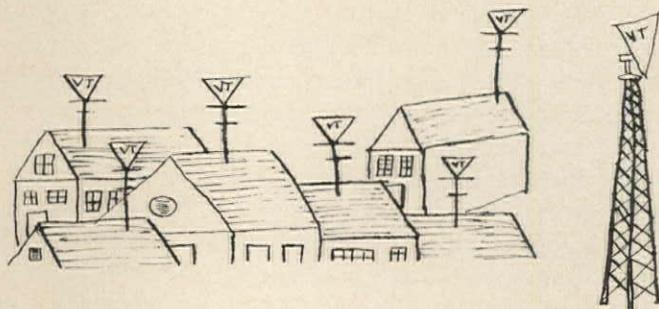
In July 1970, there was held at Goddard College in Plainfield, Vermont, an Alternative Media Conference, where some 800 representatives of the press-radio-film-TV underground came together to proclaim the birth of a so-called videoconspiracy. Its purpose was to gain control of the way American, and possibly world, society is going to gain control of, or access to, TV by means of videotape.

It was a raunchy randomized affair that came close to disintegrating when a long-winded rock band had to be railroaded offstage and when some of the more enthusiastic couples publicly stripped by the lake and engaged in what has been euphemistically called a love-in.

Judging by what I can reconstruct from several different accounts of the event, the central question put up was: "How did the airwaves, which belong to the people, get stolen by the FCC and the broadcasting companies?" And secondarily, "What are we going to do about it?" Even though the order of business seemed sometime to be love over labor, the three days of chaos did produce some results.

As the *Boston Phoenix* of June 27 put it: "How do you explain the nation's most talented young producers of video tapes, once in fierce competition, coming together to give up their businesses in favor of an antiprofit corporation called Radical Software, whose goal it will be to radically change the entire nature of television with no assistance from established commercial or educational networks?" (*Radical Software* also became a publication.)

One explanation is that the young Goddardites, along with thousands of businessmen and others, are obsessed by the implicit



power as well as the potential profits that lie in cable TV and in the production and marketing of videotaped programs. These programs, or software, can be marketed either over cable TV or by means of videocassettes. Major manufacturers in the US and abroad are madly competing for the future world market in videocassettes.

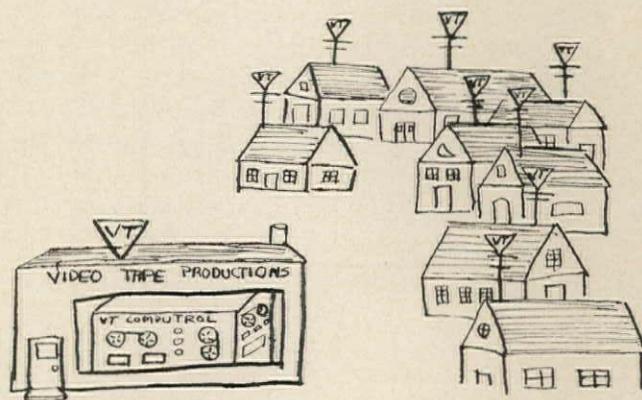
The Goddard crowd was convinced that the new videotape medium is in danger of being controlled by the same old establishment. As one pessimist said, "We must establish alternatives against the time when we are totally denied access to the airwaves and magazines and newspapers. . . . We may never have another chance."

Optimistic videofreaks, on the other hand, insist that the market is expanding so fast there will be hardware running out of everybody's ears. A prediction in *Radical Software 2* (Fall '70) asserts that: "Within five years, with the microwave linkups and satellite linkups, there's a lot of hardware accessible that has no software to go into it. A lot of cable stations are going to say

"Take it, here's a \$1,500 portapak that you can rent for \$10 a day, come over, stand in line, and we'll put this over 10 channels."

Marco Viassi in *Radical Software 1* predicts: "Tape will soon be everywhere. CATV will bloom, and electronic neighborhoods will be the rage. Special interest networks will spring up. Home cassettes will rival the hi-fi markets in sound recording. There will be a computer in every pot and play-back equipment for the sophisticates to add dash to their orgies. Videotape encounter groups will stick up their hybrid heads. . . . Tape as an art form will develop its modes, its classicism, its surrealism, its abstractions. The boobs who have been staring hypnotically at the tube for 30 years will come to with a start . . . and discover they have a radically new medium on their hands. Finally it will become good business. And the race for exploitation rights will be on."

Such predictions as this run through the entire history of utopian thought—the hope that man will be able to break down barriers to communication and freedom by new techniques that have ranged from Christianity to LSD, from the printing press to public videotape. Markets and minorities, after all, are much alike, both depending upon freedom of access to information and to media for their survival. Thus there is a public interest in seeing that the new media not be captured by big corporations and big government; that access is open, hardware cheap, channels many, programming free and that the market is expanded, not tightened.



In an instant feedback world of the sort predicted by *Radical Software*, by Buckminster Fuller, by George Leonard in *Look* and many another, there will be simultaneous feedback, instant response to new information, a worldwide communications network—and "no need for points on the (feedback) circle where heavy power can accumulate," as Leonard remarks.

To whatever extent this happens—as information cheapens, as movement-of-data takes the place of movement-of-people—the older monopolies of geography (Downtown Days, tolls of the Port of New York Authority, \$150 per square foot for Manhattan real estate, etc.) will continue to deteriorate.

And if instant communication and feedback become as common as TV watching, the manufacture of new identities may be speeded up beyond anything we can conceive. New identity declarations of the Woodstock sort will flow hot and heavy over the computer nets; squadrons of critics will be mustered to screen, to sort out and to advise. And the whole phenomenon will probably take place wholly removed from structures with which traditional architects and city planners have the remotest connection.

Mr. Clay himself has at least two identities: consulting editor at large and editor of *Landscape Architecture*. He is also an honorary AIA member. His comments are based on a paper given earlier this year to the Salmandu in Louisville, Kentucky.

Urban Field Runners

The redistribution of population across the face of the US has reached the stage at which the familiar downtown oriented American city is disappearing. Most "save downtown" schemes are based on 19th century ideas about the monopolistic power of the old city center: the idea that if anything was important, you found it or did it at the center.

Increasingly larger portions of people in a metropolitan area do not work in the center, do not shop there and spend weeks, months and even years without ever going to the center except on a special occasion. I met a man who said that the last time he was downtown in his own hometown (and what an old-fashioned sound *that* has!) was when his trade association held a national convention there.

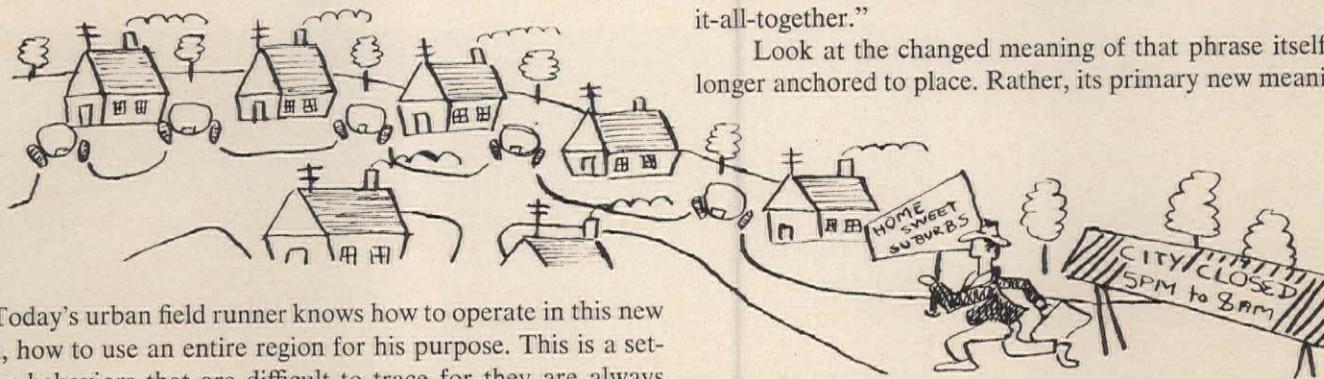
An analysis of American commuting habits, based on a sample of the 1960 census by the Social Science Research Council and Dr. Brian Berry of the University of Chicago, was the first to trace out the implications of the current restructuring of population. Berry and his associates tracked the daily movements of commuters from 43,000 census tracts to 4,300 "concentrated places of work."

Discovered in this process was the way we Americans have reorganized ourselves into 173 "daily urban systems" or urban fields. Each system/field has a radius of some 70 to 80 miles, with much overlapping of systems in the crowded Northeast. Within these 173 daily urban systems, the 4,300 concentrated places where Americans work tend more and more to be outside the old central city.

This is a new ball game; it has new rules. The old base runner has disappeared. His place is taken by what I call the "urban field runner." Under this new conception, with a new identity, the city "is no longer a physical entity but a pattern of point locations and connecting flows of people, information, money and commodities," remarks Berry.

It was quite true, as the late Catherine Bauer Wurster wrote in 1962, that "modern metropolitan trends have destroyed the traditional concept of urban structure . . ." But it is no longer true, nine years later, that (as she said in the rest of that sentence) . . . "there is no new image to take its place."

I submit that there *is* a new image, a new identity, a "community of shared interests" that has exploded the old geographic concept of the city so that it occupies greater and more amorphous geographic space, more akin to the electric field than to the old severely and politically limited thing once called "city."



Today's urban field runner knows how to operate in this new milieu, how to use an entire region for his purpose. This is a setting for behaviors that are difficult to trace for they are always running off the map, crossing into new jurisdictions. But like all good broken field runners, our man makes the most of an unstructured situation.

The significance of these urban field runners is that they are footloose. Their incomes are above average; they enjoy free

choice. What they choose in lifestyles, in habitats and in the way they invest time and mobility give us some early warning images of what is ahead for the larger society.

But the urban field runner, as I see him, is also rather conservative. Typically he is in his 40s, married, ambitious, socially striving, in debt and overmortgaged. His house is above all else resalable. His roots are like his bank account: withdrawable. He and his wife have moved seven times in 15 years.

His mobility is super-American in being largely territorial. He will move almost anywhere for many reasons. He uses space expansively, cuts his grass mechanically and follows the typical American tendency of using space as a social lubricant, putting as much of it between himself and the next fellow as possible.

His identity is self-centered and tenuous. He is a tremendous consumer of suburban goods, from housing to cars to gadgets to boats to travel to private schools (which is another way of putting space between his own children and those of strangers). He will buy new goods but seldom new goals. This other-directed upwardly mobile stereotype, in his self-centered way, is busy taking care of number one. That is the identity he finds most real.

But when aging urban field runners grow short of breath and long on annuities, they form an increasingly conservative slice of American voters and may see themselves as a potent power group. I will leave to Lou Harris and other pollsters the job of keeping us infomed of the future emerging identities as more of these old field runners are turned out to pasture.

Identity Without Propinquity

Each of the foregoing groups shares an increasingly common trait: the capacity to acquire an identity that is independent of old structures and familiar places. Field runners need not stick close to downtown, nor swarms to the old hive, nor videofreaks to a downtown recording studio. The sudden rise in 1969-1971 of Muscle Shoals, Alabama, as a booming rock recording town is a clue to the new decentralization.

Thus the old monopolies of information based on place are weakened. Gradually the ties that bound millions of Americans to one geographic spot are loosened. Professions such as architecture and newspaper journalism, to choose two odd bedfellows once tied to downtown Rotary Club dinners and builders' exchanges for their informational vital supplies, are now exposed to data from all directions, signals from many sources and vital inputs from afar.

Touted in years past as "the mother of matrimony," propinquity, the state of being close to one another in physical presence, has less and less to do with that contemporary state of "getting-it-together."

Look at the changed meaning of that phrase itself. It is no longer anchored to place. Rather, its primary new meaning has to

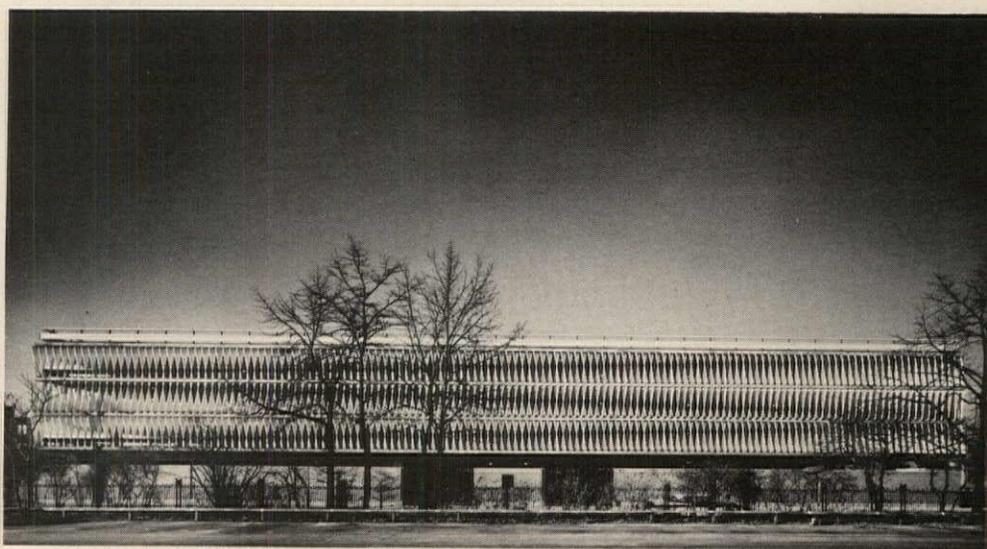
do with a collection of attitudes and a state of mind, instead of with coming-together-in-a-geographic spot. Those who persist in anchoring themselves to the old-timey geographic fixations are likely to end up left behind, uninformed, immobilized and dead to the new world. □

Maintaining a Detroit Tradition



Albert Kahn Associates has roots in Detroit stemming back to the days just before the automobile industry started rolling. Albert Kahn, who founded the firm 75 years ago, made his first contribution to that industry when he designed, for the Packard Motor Company in 1903, the first reinforced concrete frame factory erected in the United States. His subsequent work for the various motor companies was to a large degree instrumental in speeding up the manufacture of cars. After Kahn's death in 1942, his predecessors have followed a course which this year brought the firm to an important milestone: The American Institute of Architects' Firm Award, which recognizes "continuing collaboration among individuals of the firm" which "has been the principal force in consistently producing distinguished architecture." Shown here are some of the recent projects of the firm which since 1958 has been headed by Sol King, FAIA, who is also its director of architecture. □

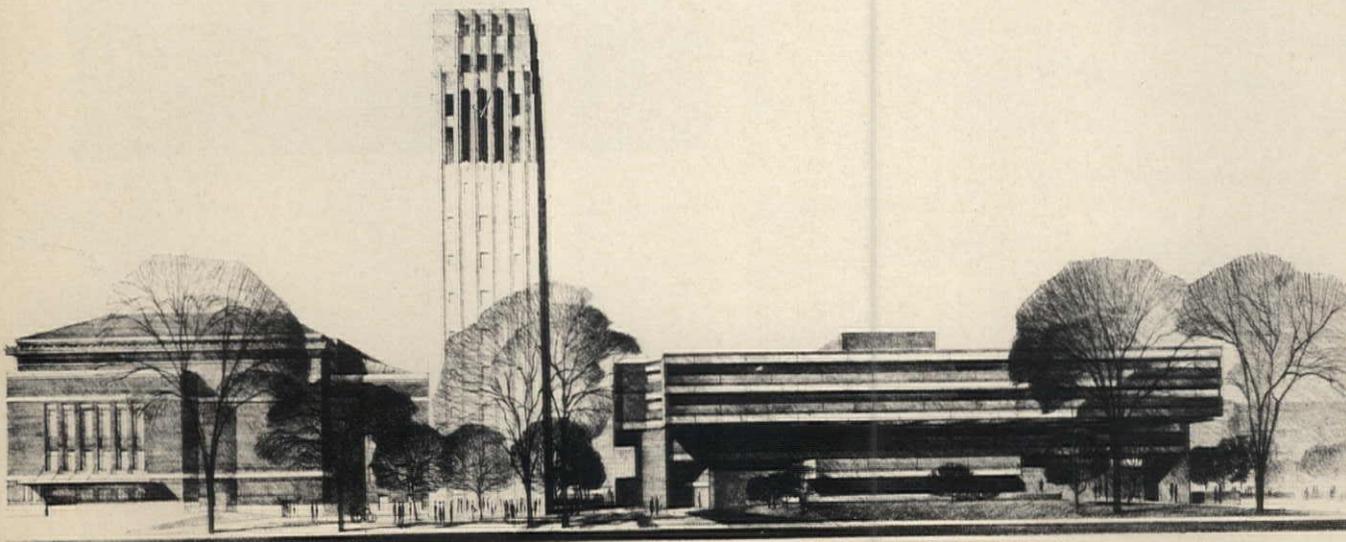
The parking structure (1959) for the Henry Ford Hospital in Detroit houses 870 cars behind its compound-curved panels of precast white concrete. These not only screen the vehicular traffic within but also make the open-deck garage compatible with the residential neighborhood.



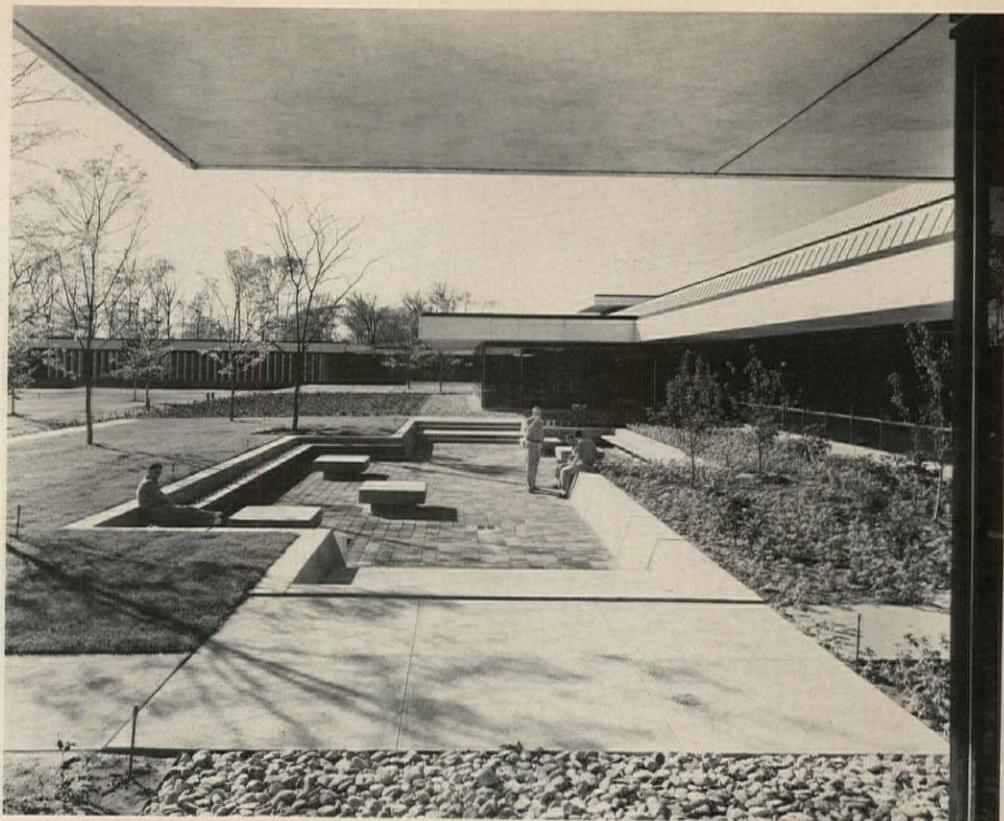
The Harlan Hatcher Graduate Library (1971) at the University of Michigan, Ann Arbor, is located between the Clements Library (in foreground) and the General Library (hidden), both designed by Albert Kahn in 1922 and 1919, respectively. The new building contains stairs and utility cores in separate adjoining towers and is connected with the General Library on the second floor. A cross-campus walkway runs the full length of the open ground floor space.



The Physics and Astronomy Building (1962) at the University of Michigan, Ann Arbor, is designed in two heights to accommodate a growing student population without giving the campus a crowded look. The university's new Classroom and Office Building (below) is scheduled for completion in the fall. It completes a city block composition that includes Hill Auditorium and the Burton Memorial Tower (1914 and 1936), both by Albert Kahn. Brick facing of the new building gives it a visual relationship with Hill Auditorium and a contrast to the limestone shaft of Burton Tower.



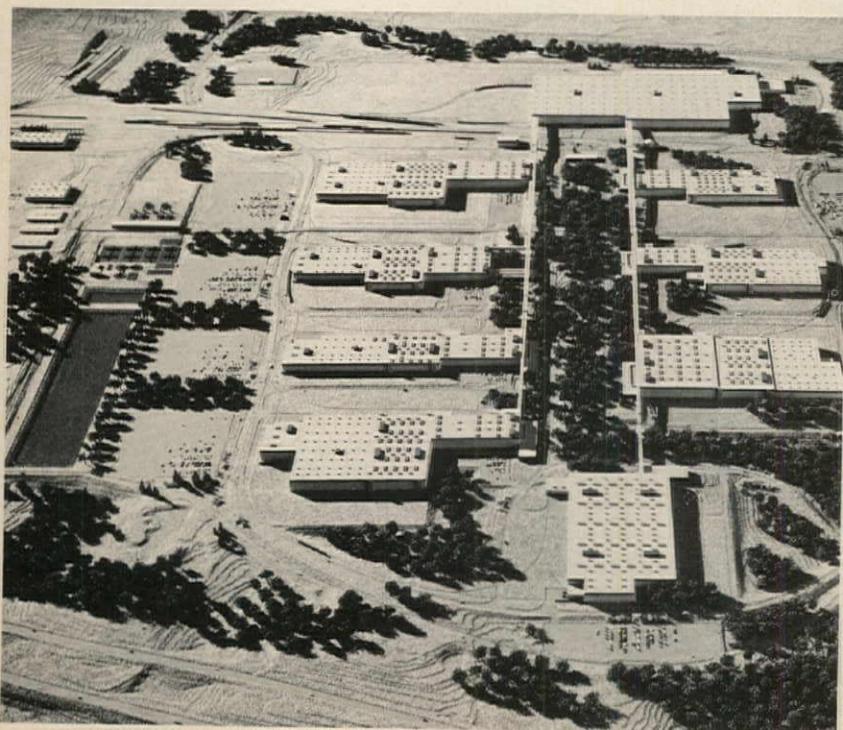
Laboratory and Office Building (1965) for Avon Products, Inc., in Springdale, Ohio, one of the many Albert Kahn Associates' industrial plants, reflects concern for the well-being of the employees. Breaking down the volume contrast between manufacturing and office spaces, it provides a pleasant working environment in and around the building. Shown is the employee patio.



Headquarters Building for the National Bank of Detroit (1959) is a steel-frame, reinforced concrete structure with a skin of white Cherokee marble, stainless steel and glass. It has citations from both the Detroit Chapter AIA and the American Institute of Steel Construction. A model of the structure toured Europe as part of the George Danforth Exhibition.



General Electric Company Appliance Park-East, Columbia, Maryland, is under construction on an 1,100-acre site. The movement of raw material is from the peripheral end of the manufacturing buildings to the opposite end facing the central mall, from where the products are carried by overhead conveyor to the warehouse for shipment and storage. Office buildings are underneath the conveyor enclosure, allowing them, as well as employee cafeterias, to overlook the parklike mall.



DETROIT: Virile or Anemic?

by GLEN PAULSEN, FAIA

The revitalization of the city must come from the ranks of thinking citizens in concert with the automotive industry.

Like many others who live in Greater Detroit, my roots are not very deeply planted in this area. I came to the Motor City 22 years ago to work with the late Eero Saarinen, who had been commissioned to design the General Motors Technical Center in Warren. That was in 1949, and the automotive industry was racing to catch up with the backlog of demand for new cars that had been building up through the war years of nonproduction. As it raced, so did all the satellite supplier companies that fed components to the assembly lines. They were hectic but wonderful days.

As a stranger, I had to learn what natives and old-timers have always taken for granted. For example, there was a freedom of expression for the architect which I was sure was more than just coincidence. I searched for the reason, and I think I found it. And then there was a powerful, almost irresistible, attraction for young architects and designers that such lovely suburban areas as Birmingham, Bloomfield Hills and Troy held out. There had to be a reason, and I think I have found it too. Finally, there was the excitement of a creative atmosphere not to be found elsewhere in the country.

Detroit has always provided an environment of opportunity. So it was that when the lumber barons of the 19th century had felled the great stands of virgin timber, and the railroad tycoons had finished crisscrossing the state with their ribbons of steel, Detroit was ready with the unlimited horizons of the motor industry in the 20th century.

Except for the genius of two men, Detroit might have been bypassed by the infant automotive industry as it sought its center. There was no natural reason for it to concentrate here. Indeed, there were good reasons for it not to. Detroit was, and is, off the beaten paths of the transcontinental railroads and hundreds of miles from the populous centers of the East. It was remote, too, from the steel mills of Cleveland, Youngstown and Pittsburgh. In 1900, one blacksmith shop was as good as another for assembling custom-made cars. Dozens of cities had their little car-producing shops.

Why, then, Detroit? I have mentioned two geniuses. One was Henry Ford, the other Albert Kahn, brought together by chance in a single city and each in his way to leave an imperishable imprint upon the automotive industry.

Kahn, a legendary figure in American architecture, had been in practice for only six years when Detroit entered the 20th century with a population of 308,000. His flair for industrial building design caused him to watch the growing pains of the motor industry with more than casual interest. Even before the car builders

themselves, he sensed the need for a new kind of industrial plant for the manufacture of the horseless carriage.

It was in 1903 that Kahn designed his first automotive plant. Still standing on East Grand Boulevard is the building he planned that year for the old Packard Motor Car Company. It was followed by scores of other such plants that he was to conceive for every segment of the industry.

The lessons of the Packard plant design were not lost upon Henry Ford who, even then, was "having a better idea." His was the idea of the assembly line—a line of continuous, synchronized production that would cut costs to the point where nearly every family could afford an auto. Ford's idea took shape in the buildings Kahn designed for him in Highland Park.

The existence of these two men in the same city at the same time made it almost inevitable that the automotive industry should center here. The supplier firms followed as a matter of course.

So much for the beginnings of modern-day Detroit. Kahn energized the magnetic field that drew architects like iron filings to the city because this was where the action was. He was the first to join the professions of architecture and engineering in one firm. The College of Architecture and Design at the University of Michigan exposed many students to the fresh environment of the Detroit area. But it remained for a visionary layman, George Booth, the great newspaper publisher, to foster an equally fascinating chapter of the same story.

Eliel Saarinen—Eero's father—had come to the university and was chairman of its Department of Architecture. George Booth's son, Henry, was a student under the elder Saarinen in the early 20s, when the Cranbrook institutions were just taking shape in Booth's dreams. At the urging of his son and others, Booth, in 1926, lured Eliel Saarinen from Ann Arbor to Bloomfield Hills, where the architecture of Cranbrook stands today as an enduring monument to his great talent.

Students from all over the world began looking toward Cranbrook, especially architectural undergraduates longing for the chance to study at the graduate level under the gifted elder Saarinen.

A less personal but equally important attraction of architects to the area is the nature of the automotive industry itself. As a business which changes the design of its product every model year, it is accustomed to thinking in terms of variations of appearance. Thus innovations in the design of factories encounter little or no resistance, as long as the changes contribute to the efficiency and productivity.

At this juncture, I would like to point out that in addition to the great concentration of architectural talent in the area metro-

politan Detroit also is the greatest center of industrial designers in the world. The inexhaustible demands of the automotive industry also are the root cause for this abundance of skills.

A spinoff from the characteristic of change that marks the automotive industry is the influence that it has had on institutional and residential architecture. Auto executives at all levels are found on school boards, the governing bodies of various cultural institutions and others such as hospitals and research agencies. Their presence and progressive point of view make it easier for architects to prevail when innovations are desirable in new construction, and rarely in the United States has the breakthrough from the traditional in such architecture been more dramatic.

These, then, are the principal reasons I have discovered for our abundance of architectural and design talent. Is it strange that, in the midst of such needed leadership skills, I feel dismay at our city's continual failure to take advantage of it? City administration after city administration in Detroit has almost totally overlooked the presence of these "acres of diamonds" to be found both at its suburban doorstep and within the city itself.

Now what are the most critical problems confronting us today? I think that most of us are familiar with them. To name a few: air pollution, neighborhood deterioration, crime in the streets, political lip service and do-nothingism, mass transit and the absence of enlightened control of even the most basic criteria of building and community design. Want more? How about the craze to replace buildings with parking lots, the dimly lighted streets in most residential areas and the utter neglect of development of what could be one of the most magnificent waterfronts in the world? (It should be noted that a group known as the Downtown Stadium Authority, while meeting with a great deal of resistance, is proceeding with preliminary plans for a riverfront domed stadium.)

What has been the result of these elements of crisis? Let me cite one or two facts that express the whole story. In only 17 years since reaching its population peak of 1.9 million, Detroit has lost more residents than live in St. Paul; about as many as live in Portland, Oregon, and almost as many as reside in Louisville, Kentucky. During a period of steady national growth, Detroit in the 1970 census had a population of 1,493,000, or 177,000 fewer than it had in 1960. And the end is not yet here. The vital question is, how many more amputations of population strength of these dimensions can Detroit take?

As the problems that I have just cited become prime concerns of architecture—because they are all parts of our environment—a coordinated organization of varied talents will be needed. Overall, a superorganization will be required to direct the operation. New organizations, whether public or private, will include, in addition to architects, environmental professionals, management specialists, sociologists, psychologists, legal experts, systems analysts, etc., plus a host of supporting technicians. Urban problems then will be approached and attacked in their totality and not piecemeal.

Where better to initiate this advanced kind of planning and execution than in Detroit, where so much needs doing to erase the growing blight that pocks the city, to heal the festering fingers of once-grand thoroughfares that now conduct visitors to downtown Detroit through gullies of chaos?

Mr. Paulsen, who resigned from the presidency of Cranbrook Academy of Art a year ago, has continued to head its Department of Architecture. This month, however, he is retiring from teaching to devote full time to architectural practice in the Bloomfield Hills firm of Tarapata, MacMahon, Paulsen Associates, Inc. This article is adapted from a talk given before the Rotary Club of Birmingham, Michigan.

That's enough gloom for one reading. There is indeed a brighter side of the coin. Let us be thankful for the resources still at our disposal and turn to the question of what can be accomplished without waiting for the federal government to bail us out on carefully circumscribed terms that could leave us worse off at the end than when we began.

What can be done? A great deal. I would like to describe briefly a project completed by my firm, then known as Tarapata-MacMahon Associates, Inc., in association with landscape architects Johnson, Johnson & Roy, Inc., which I think has great relevance here.

A group of private citizens in Canton, Ohio, tiring of seeing the heart of their thriving industrial city deteriorate steadily over the years, decided to do something about it—by themselves. Somehow, they raised nearly half a million dollars in what has turned out to be some of the most fertile "seed money" ever planted. Our firm was commissioned to design a Central Plaza development, covering only two city blocks in the heart of downtown Canton.

When we were done, we had a beautifully landscaped "oasis in the stones," to quote from a *Reader's Digest* article describing the project (a merit winner in the 1964 AIA Honor Awards program). As I mentioned, the cost approached \$500,000. Now, how much building activity do you suppose this modest investment set off? Surrounding the plaza today are \$22 million worth of new buildings and face-lifted older buildings.

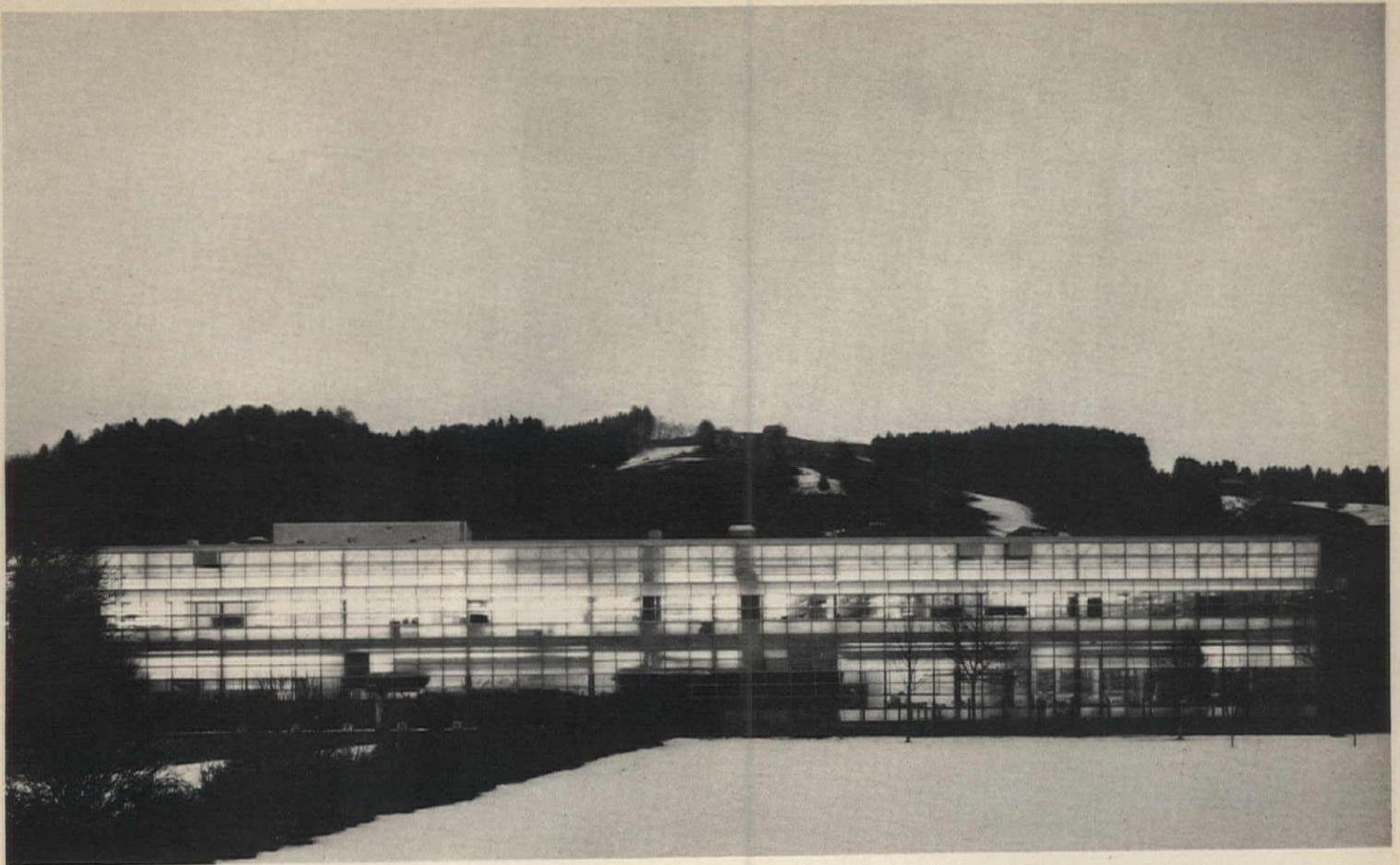
As the *Reader's Digest* commented further: "What Canton's Central Plaza is telling us is *not* that every American city should have a park at its center with an outdoor cafe in it. And it is *not* merely that street improvements may be wonder cure for city ills. It is that, when it comes to streets or cities, we should think more about people."

If environmental architecture can do this for Canton, how much more can it do for Detroit, once the imagination and creativity of our architectural colony is set loose to give a new dynamism to the city?

One step in marshaling our forces has been the formation of a group of leading citizens, primarily businessmen, called Detroit Renaissance,* which is seeking to find projects which can be financed and carried out in the inner city. I would hope that this group embraces the best and most persuasive lay talent in the city, in company with an appropriate number from the fields of architecture and planning. I would hope, too, that this group establishes broad criteria for new construction that does not inhibit innovation and creativity but insures complementary design to avoid architectural hodge-podges. Most important, it should take into consideration every aspect of man's environment to make certain the viability of each new addition to our streets, landscape and horizon. It should avoid sameness like the plague, but it should require architecture in buildings that do not insult one another.

We all know, of course, that the revitalization of Detroit cannot be brought about without the support of the automotive industry. We know, too, that in the past it has never turned a cold shoulder when practical plans for needed developments were brought to its leaders for support. But I don't think we can go to them, hat in hand, to tell them to do the whole job. The planning, the creativity, the leadership must come from the ranks of thinking citizens. I have no reason to doubt that if we bestir ourselves to energize the movement with the talent we know is at hand, the automotive industry will do its part. It is for us to act first. □

* For more details on this organization, see Comment and Opinion, page 6.



"The project demonstrates a sensitive approach which includes both good design and an esthetic solution to a major human problem: a good working environment. We were pleased that a building had been submitted the nature of which will become an increasing challenge to our society, and we hope that this award will encourage both architects and industry to devote greater attention to this type of structure." With these words the jury decided the winner of the

1971 R. S. Reynolds Memorial Award, a machine factory in the village of Wattwil, near Zürich, Switzerland, selected from more than 100 submissions. The building, which was completed about a year ago, is part of a planned complex of plants, offices and service facilities being constructed for Heberlein & Co.

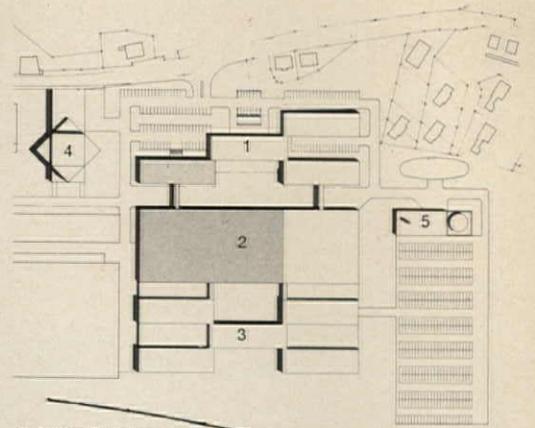
The international award, which carries a cash prize of \$25,000 and an original sculpture in aluminum, created this year by Virginia's F. D. Cossitt, will go to three partners in a Zürich architectural firm: Professor W. Custer, Fred Hochstrasser and Hans Bleiker.

In choosing the factory, the jurors pointed out: "The trend to locate industrial projects on nonurban sites, where they will come into closer contact with both natural and residential environments, suggests that there is a growing need to give greater consideration to good design. The winner, despite a perhaps too restricted site plan, shows that it is not only possible to design a compatible structure, but that at the same time an improved environment can be created for the workers inside the plant.

"The aluminum used for the curtain walls and sunscreens was clearly detailed and well proportioned. The treatment of interior partitions is possibly somewhat less consistent, but there is great potential for growth and change," added the jury, made up of AIA Fellows Rex Whitaker Allen, chairman, Carl Koch, Robert B. Marquis and Joseph D. Murphy, along with Paul Depondt of Paris, a recipient of the 1970 award. Glenn Currie of Auburn University was student observer.

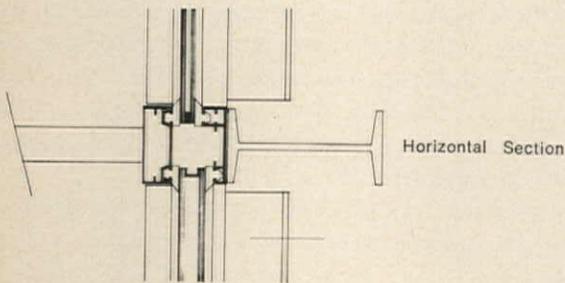
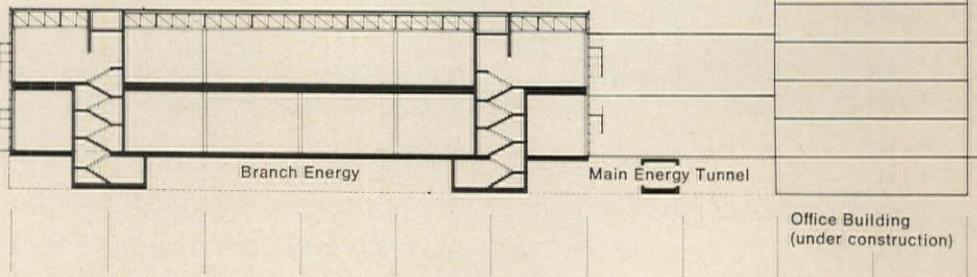
The plant's production operations are centered on the sec-

A Factory Can Be a Good Neighbor Too

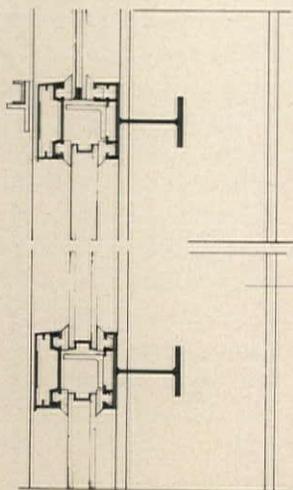


- 1 Office Building
- 2 Machine Factory
- 3 Multistory Factories for Electronics and Precision Mechanics
- 4 Cafeteria & Social Building
- 5 Central Energy Plant

Sandwich panels of anodized aluminum on the outside and untreated metal on the inside are used at the corners of the building and for the lowest segment of the insulated-type glass curtain wall. Structural system for the shaded glass and anodized aluminum sunscreen also serves as a maintenance platform and fire exit.



Horizontal Section



Vertical Section

Curtain wall and sunshading device details.

ond floor. This elevation, the open spaces provided by the "plant landscaping" layout and the expanse of sunscreen-shaded glass offer the workers a sweeping view of the alpine valley panorama.

"An aluminum curtain wall with insulating glass is considered a luxury in common industrial building design and therefore too expensive," the prize-winning architects noted. "Intensive investigation showed in this case that if all factors—the ratio of floor area to perimeter, operation expenses, maintenance and installation costs—were considered and weighed in an optional solution, the price of such a curtain wall is no longer a disturbing factor and can be justified."

The architects commented further: "Aluminum extrusions for the curtain wall and the sunshading device were selected because of their high technical level in detailing, combined with an industrial production capability. In combination with glass and neoprene gaskets, the system provides a skin that can be quickly mounted, demounted and reused. Through these features, the wall fulfills the planning requirements for flexibility, short construction time and future expansion."

Administered by The American Institute of Architects, the Reynolds Award is given annually for distinguished architectural design in which significant use is made of aluminum. While the jurors said they were impressed by the variety of submissions which continue to demonstrate the material's adaptability, ranging from store fixtures to complex structures, they were disappointed with the overall level of design and the apparent inability of some entrants to present their projects clearly enough to permit adequate appraisal.

CITY AND SUBURB IN TANDEM

A plan for Detroit links a new town in the inner city with one outside, making them paired communities. Such mutual reinforcement may solve the problems of deterioration and sprawl and is worth the consideration of most American metropolitan regions.

"The fathers have eaten a sour grape, and children's teeth are set on edge," commented the Old Testament prophet Jeremiah. If one may be permitted to interpret this observation rather freely, it becomes a parable for our times in more ways than that of a younger generation bearing the consequences of the acts of an older one.

Today city fathers balk at the sourness of swallowing aid for suburbanites, those indifferent progenies, and at footing all the bills for big-city amenities and services that the suburbanite enjoys so freely at city expense. At the same time, the suburbanites drain off city affluence and leadership but are "set on edge" at taxation for or support of solutions to big-city problems.

Recently, a leading newspaper carried an editorial on the urban dilemma, stating: "It is fantasy to think that millions can thrive in the suburban segment of the metropolitan complexes when central cities are collapsing into racial strife, municipal bankruptcy and paralyzed service." With political power in the suburbs, however, few state politicians look at the urban catastrophe. Consequently, cities are left with a declining tax base and deteriorating facilities and services.

Correspondents of the *New York Times* in 10 cities report that the exodus from downtown to suburbs is a national pattern. It is stated that in Detroit the moves have come to such a pass that "two prime symbols of civic identity," the Detroit Lions football team and the *Detroit News*, are leaving the city. At a recent banquet of the Detroit Press Club, there was a banner displayed which asked facetiously: "Will the last company to leave Detroit please turn off the lights?"

A plan to unite city and suburb in a common bond with a single cause and flag to which they both can rally has been set forth in a recent report by Detroit's Metropolitan Fund, Inc., called *Regional New Town Design: A Paired Community for Southeast Michigan*. In a letter addressed to his board of trustees and to Michigan Governor William G. Milliken, Fund President Kent Mathewson states: "I do not believe that architect Peter Paul need be correct when he says our urban growth policy is about 'to trade the American dream for a posh party by the pool, away from the city riot.'"

Following a conference on new towns in 1969, Mathewson sought to reconcile inner city and suburb polarization. Some of the participants looked upon new towns as simply a means of extending benefits and services of society's "haves" at the detriment of the central city's poor. Others declared that to reject the new towns concept on the assumption that it automatically is a diversion of resources from the ghetto is to misread the future "because the majority of investment will go to the growing suburbs." As

one conferee said, "The question is, what form is that investment going to take, and are we going to shape it to take advantage of the opportunities of making new cities open up . . . to share in those benefits with the poor and the black?" Mathewson then asked the question of why a new-town-in-town could not be paired with a new-town-out-of-town.

Subsequently, with grants from the Department of Housing and Urban Development, the Kresge Foundation and the Metropolitan Fund, a paired new town feasibility design has resulted after five intensive months of planning and consultation. A team of physical planners, social scientists, political scientists and economists worked under the leadership of Mathewson and Dr. Hubert Locke of Wayne State University.

According to Locke, the concept envisioned by the report is an attempt to "make certain that future urban growth—both physical and economic—takes into account the needs of both city and suburb, so that one is not expanded and enhanced at the expense of the other." In essence, the report proposes a "paired new town" community which would be developed in Detroit and in a suburban location, simultaneously and under a single development authority. The study identifies nine potential sites within Detroit and 10 on the suburban fringe, recommending that two of these sites be paired in a prototype development. The idea is aimed at solving the economic, racial and environmental issues of burgeoning suburbs and decaying central city.

Each pair of sites would be geographically separated by 20 to 40 miles, but they would exist as political, social and economic entities connected with mass transit lines and services. Housing for every income level would range from single family dwellings to multiple housing in both high- and lowrise configurations. The paired concept would build a common bond between the residents of the in-town component and the citizens of the out-town one, demonstrating that "suburban and city dweller can, and will, share the region equally and equitably."

It means the planning and construction of one new town on two sites. Architectural critic Wolf Von Eckardt has called the idea "one of the most constructive answers to the myriad frustrating questions the urban mess has raised since Ebenezer Howard, in 1898, invented the concept of satellite towns as an answer to city slums and urban sprawl."

The physical planning team, a multifaceted group of architects and planners under the overall supervision of Skidmore, Owings & Merrill, forecasts the need for an in-town site of 600 to 2,000 acres and an out-town one of some 8,000 acres. A total population of about 100,000 people is anticipated on both sites with 75,000 of them living in the out-town component. Built at the same time under one plan and one administration, the towns would have vital links with each other with benefits for both.

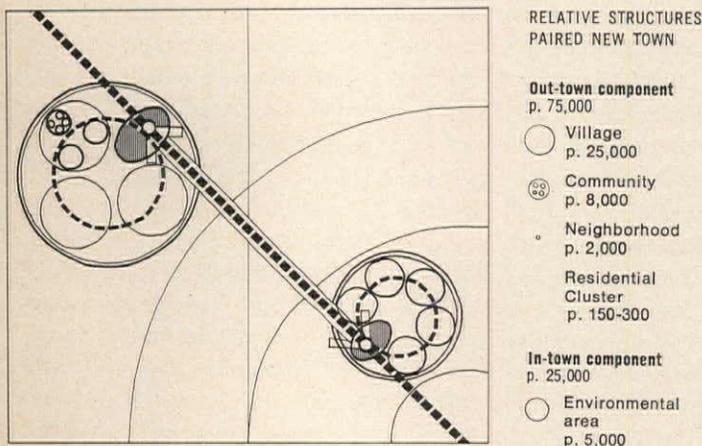
The overall structure of the out-town component would be a trio of "villages," clustered in a "town" setting which would provide shopping, office, medical, governmental and other major fa-

cilities. The in-town component would provide theaters, research and medical centers, large libraries and all the other things that a true urbanite holds dear but that many new towns cannot afford.

In either in-town or out-town, the residents would be inhabitants of one community, sending their children to the same school system, voting for the same officials, using the same facilities and sharing in the same desire for the good life. A variety of industrial and service oriented jobs would be available to all; indeed, the building of the in-town component with its provision for industrialized housing is envisioned in itself as a source of employment.

According to the consultants from Urban ERA Associates who addressed themselves to the social imperatives of the paired community, the social objectives of the two components would include the achievement of a lifestyle "which enables its residents to realize the full expression of individuality together with a sense of community" based upon as "widely diversified an economic, educational, racial, age group population as possible."

Three individuals, all nationally recognized experts in regional governance, were assigned the responsibility for the investigation of the governmental possibilities for the paired new town. "The idea of a linked or paired new town offers an opportunity not only to deal with the physical, social and economic problems of the metropolis," they reported, "but to demonstrate that better approaches to local government are possible as well." They recommended that the community be developed by a special district created by state legislation. The paired community would then be governed by a matching special service district. Each of the mechanisms would cover the two sites of the paired concept and each would supplement existing governmental structures. The team suggested also that the state channel future industrial growth and housing construction into the paired new towns, thus preventing sprawl in the Detroit area and preserving existing open space,



agricultural uses and natural resources. The service district would afford a legitimate vehicle for early and continuous citizen participation in all phases of development.

An economic model was designed by the Real Estate Research Corporation. The consultants forecast a 20-year life span for the development phase of the project. In an outlay of over \$1 billion, some \$160 million would go for land acquisition and development; \$639 million for the construction of housing and commercial and industrial structures; and \$254 million for service facilities. Expenditures may exceed income by 2.4 percent or \$26 million, requiring a public subsidy of a little more than \$1 million a year over the development period. On the other hand, "Income might exceed expenditures by a substantial amount—\$85 million or more." In either event, the people who put together this feasibility study believe that if social values are taken into account,

"cause for support of the project would be most persuasive, even at the maximum subsidy projected."

Experts have pointed out that new towns provide not only new homes but new job opportunities near home. By linking the two sites into one real community and connecting them with efficient transportation, easy access to jobs would be insured.

The report states that the independence of city from suburbs and vice versa is a myth. "Neither political realism nor economic trends justify such attitudes; if they are allowed to persist, they will be equally fatal—socially, economically and politically—for city and suburb alike." So the study offers a "realistic option to oblivion." It's an option that other metropolitan complexes besides Detroit might well consider.

Secretary of HUD George Romney has observed that huge crash programs fail to achieve lasting, meaningful and beneficial results. There has to be a considered plan of implementation; there must be organizational structure with all projects inter-related to insure the fulfillment of goals. The initial study for the paired new towns in Detroit does not delineate a clear plan of implementation, and eventually the leaders will have to come to grips with this process. Perhaps they are already doing so.

An illustration of the implementation process they may find useful is that being produced in Hartford, Connecticut. According to Secretary Romney, "The exciting thing here is that this is all not going to result in a 30-volume study. The plan is to get projects underway as soon as their development becomes feasible—to set in motion a continuing process of feasibility and direct action. It is the first time that a direct marriage of planning research and actual development has occurred."

The Greater Hartford Corporation was established in 1969 by 20 leading companies in the region. They contracted with the American City Corporation, a subsidiary of the Rouse Company, developers of the new town of Columbia, Maryland, for an investigation of the Hartford area. From the interviews conducted and the information accumulated, the staff of ACC devised the Greater Hartford Process. This is not just a plan nor a study but a "continuing process of community development. It is a living model of how communities may fulfill their needs and meet their opportunities with emphasis on each locality individually, on the City of Hartford as the center of the region and on the region as a whole."

The process calls for the creation of new towns within the older areas of the inner city, on the outskirts of existing urban areas and in heretofore undeveloped parts of the region. It aims to contain suburban sprawl and to develop a rational regionwide effort that will create new social and economic values, match development with opportunities, provide a workable framework for investors and bring new living environments into existence.

At a Princeton University conference on new communities in 1970, Leo Molinaro, president of ACC, said: "There is an overwhelming sense of despair in everything we do or say about cities, and a complete absence of models that incorporate the best available ideas and experience. . . . Every city and metropolitan area suffers from incapacity, the very element that is supposed to distinguish human communities from those of lower animals. . . . What we need, now that everything seems to be falling apart, is not regulation, but enterprising ideas."

The planners who envision the paired community of in-town and out-town components for the Detroit area and those who are working on the implementation of planning research and direct action in Hartford have those enterprising ideas. Perhaps we may yet climb out of the slough of despair about urban America.

MARY E. OSMAN

THE 1971 HONOR AWARDS

Report of the Jury

Milton L. Grigg, FAIA,
Chairman

Louis J. Bakanowsky, AIA

Gunnar Birkerts, FAIA

Joseph Esherick, FAIA

Rai Y. Okamoto, AIA

Francis D. Lethbridge, FAIA
Adviser

John H. Mathis Jr.
Student Observer

The 1971 Honor Awards Jury was confronted with 550 entries, the highest number since the initiation of the program in 1949. It was a candid jury. It was looking for and, happily, found evidences of our profession's worthy response to today's social and environmental concerns—not an easy task in view of the fact that most of the projects reflect a time spread of five years from conception to presentation. "Instant archeology" was the term used by one juror to point this out.

The entries required two days and one evening of preliminary screening. In carrying this out, each juror read the program, evaluated the solution and entered it on a form which later was reviewed with the other jurors. This preliminary viewing left some 105 projects (some of which received only one nomination). These were considered in detail in the second plenary screening on the third day. Here, color slides were viewed to aid full panel discussion.

A third review indicated that 17 projects merited on-site visitations. Thus at least one juror, and in many cases two, had visited the project before the final meeting of the jury on the fourth and final decisions. This procedure eliminated seven of the entries. The remaining 10, the 1971 winners, are of high quality, and the jury was able to find excellent examples of the response of the profession to our charge for a work to intelligently reckon with, and respectfully complement, society and its surroundings.

The responsibility of the architect to conserve the environment was a strong influence in the jury's decisions. Two of the entries were subterranean structures. However, neither took full advantage of this challenging, nonassertive form. Both failed to retain the open space they sought to preserve either by virtue of physical bulk or an excessive number of

surface projections. As one of the jurors commented:

"To serve our ever-increasing population, we are ruthlessly covering the surface of our earth with a thin layer of asphalt and structures, displacing the natural surface with man-made skin. Not every man-made container deserves the right to assert itself as an object on the landscape. As much as nonassertive building structures would calm the prevailing, but seldom appropriate, architectural exuberance and heroism, they will not shrink the man-made skin of the earth. The need for underground structures to contain certain functions can be established with great validity."

The charge to the jury that projects be evaluated on individual merit, on how well each fulfilled the requirements of its own problem rather than in competitive comparison with other entries, permitted objective evaluation without prejudice to low budget buildings. While the awards program does not categorize building types, the jury was struck with the lack of both quantity and quality of entries in the fields of education, housing and urban design. One housing project appeared to stand out significantly but upon examination it was found that it had not been completed and might fail to meet expectations. The informal comment of the jury was, in summary, that the elimination of nonphysical constraints such as antiquated bureaucratic procedures, codes, etc., would enable architects to produce vastly better work in housing design.

The entries for private homes revealed a high level of form innovation, yet addiction to fashionable design clichés persisted. The year 1971 in China is the year of the "Pig"; 1971 in American architecture is still the year of the "45-Degree Shed Gable"! □

The 1971 Honor Awards will be on exhibit at the Octagon House from July 1 to 29.

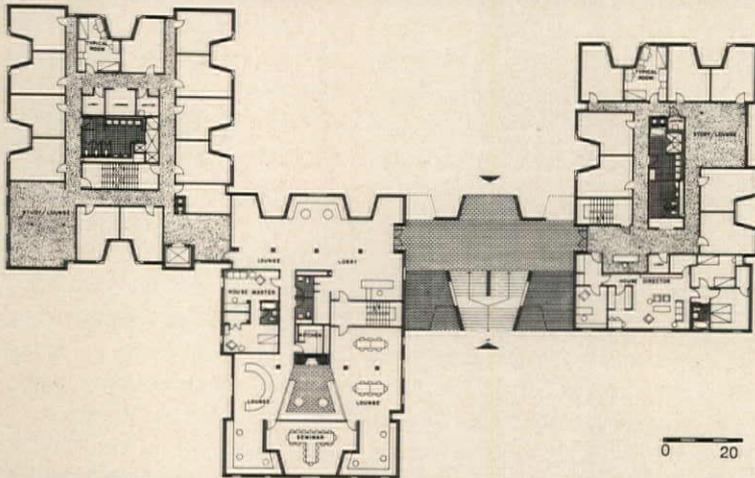
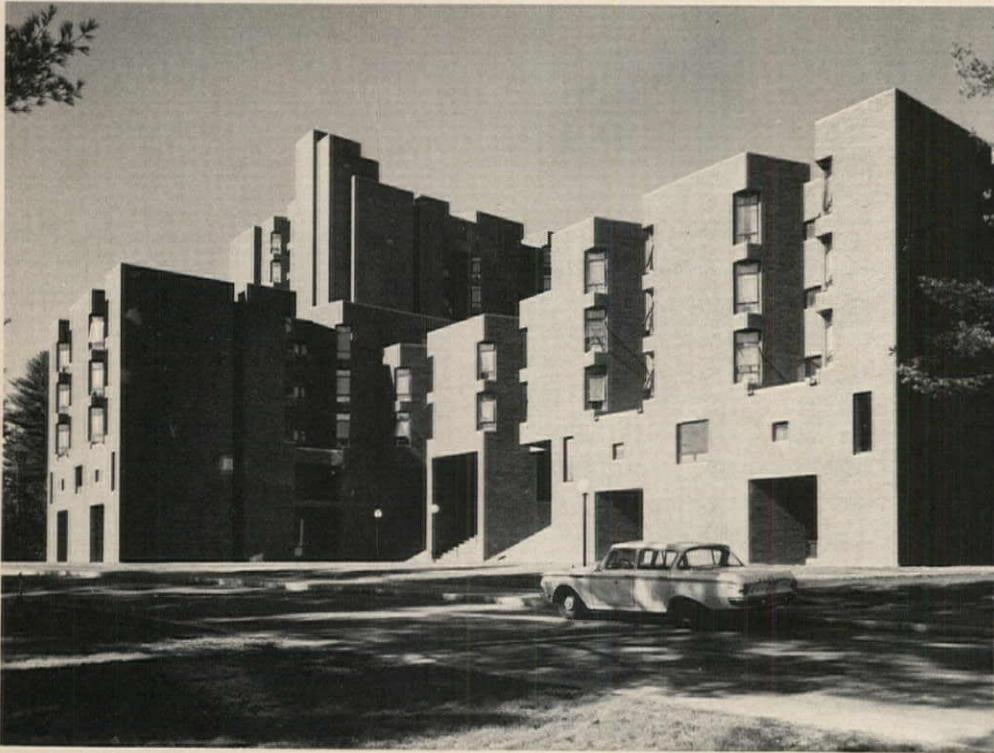
CHRISTENSEN HALL

University of New Hampshire
Durham, New Hampshire

ULRICH FRANZEN

Structural Engineers: Aaron Garfinkel & Associates; **Mechanical and Electrical Engineers:** John L. Altieri; **General Contractor:** Harvey Construction Company.

The problem: to design a low budget, state university, coeducational dormitory for about 450 students, part of a larger master plan for a new residential quadrangle; providing each student with his or her own identifiable corner; creating a more personal, and less institutional, atmosphere throughout the mass housing project. Said the jury: "There is an intimate scale in the dining, social areas, corridors and activity spaces, all resulting in a very human quality. The unique arrangement of a typical double dormitory room brought forth favorable comment from the jury, which expressed the hope that the departure from the traditional rectangular room can be 'prototypal.' A clean-cut structure, well sited, well functioning."



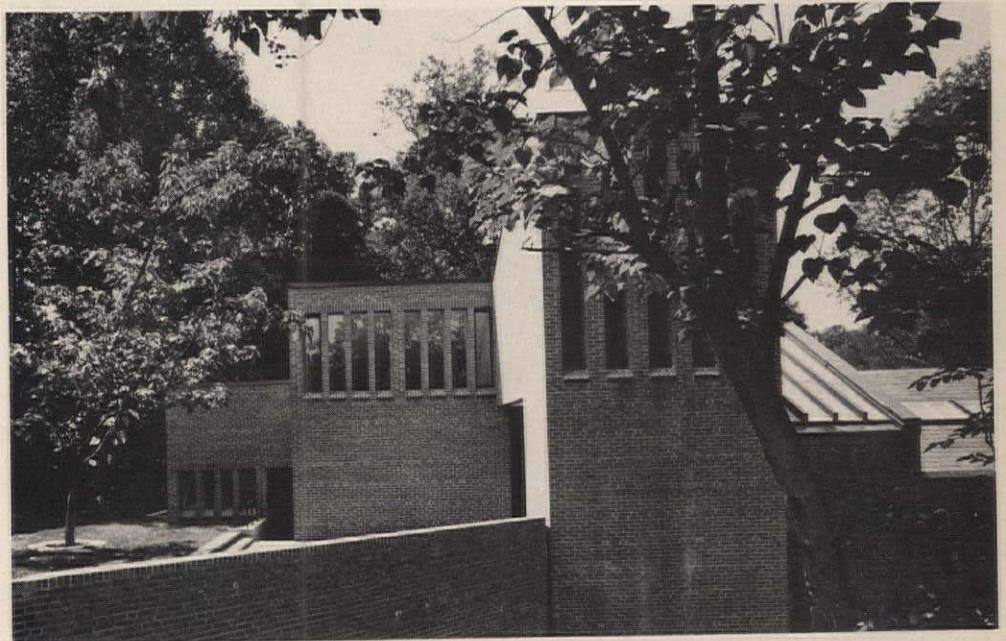
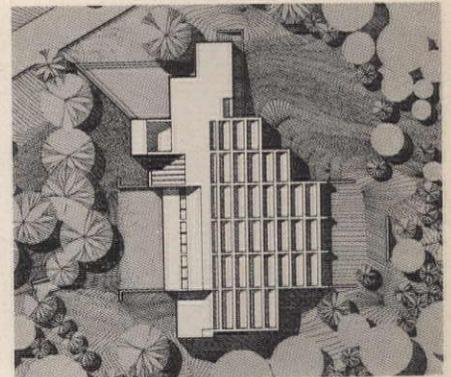
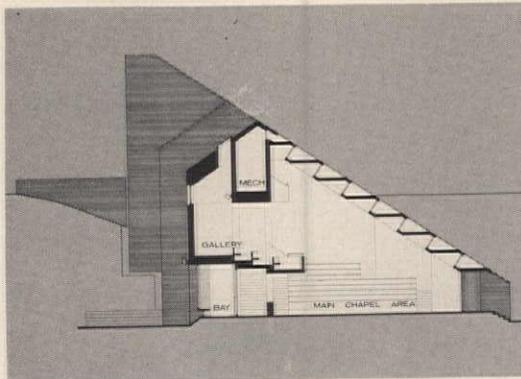
HARTMAN-COX

FLORENCE HOLLIS HAND CHAPEL

Mount Vernon College
Washington, D.C.

Structural Engineers: James Madison Cutts; **Mechanical and Electrical Engineers:** J. E. K. Associates; **Landscape Architect:** Lester A. Collins; **General Contractor:** Edwin Davis Builder.

The problem: to provide a nondenominational chapel for a two-year woman's college, with flexible seating arrangements for 300 persons for worship, contemplation, music or drama; to relate, in contemporary style, the chapel in scale and materials to the existing neighboring brick and slate-roofed, neo-Colonial buildings. Said the jury: "The building relates most successfully in scale and materials to the existing adjacent neo-Colonial buildings without being subservient to these design pre-determinations. The siting is well handled. The interiors are characterized by a simple and excellent integration of color, furnishings and structure. A particular feature of this building is its unique accommodation of the requirements for multiple use. As such, it possibly is pointing a direction for future buildings for multipurpose uses, responsive to a broader concept of what religious activities really are all about."

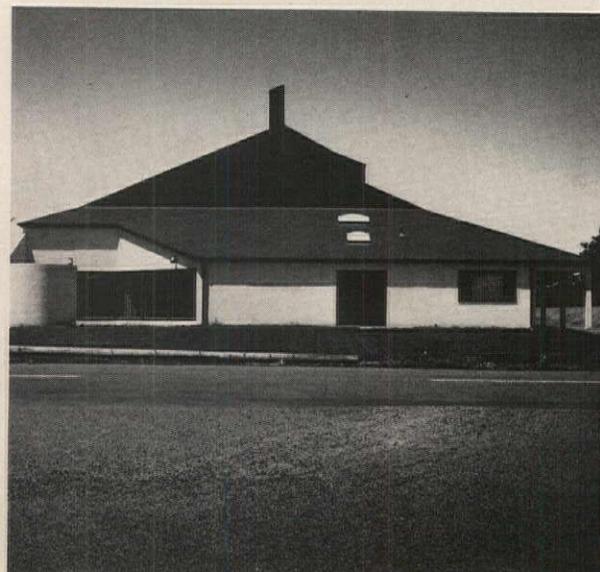
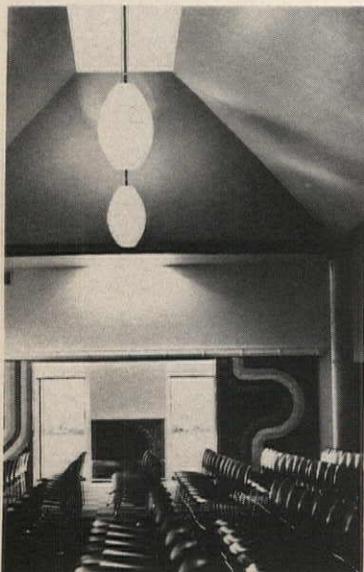
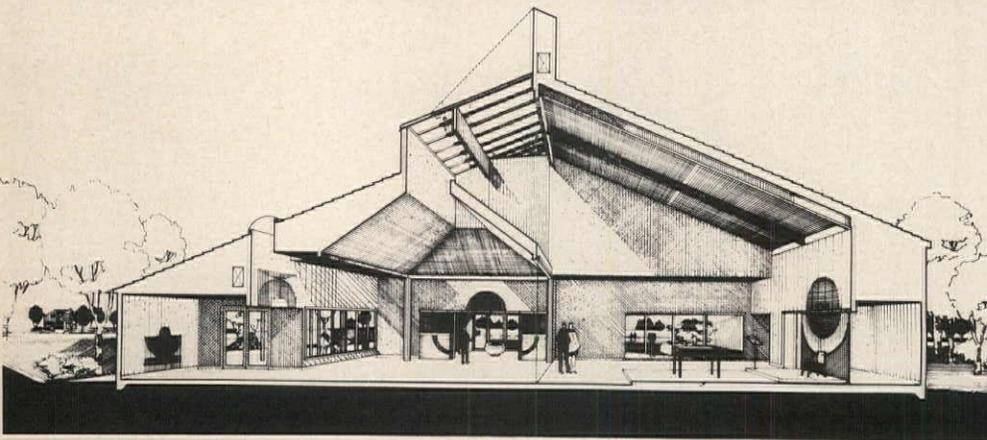
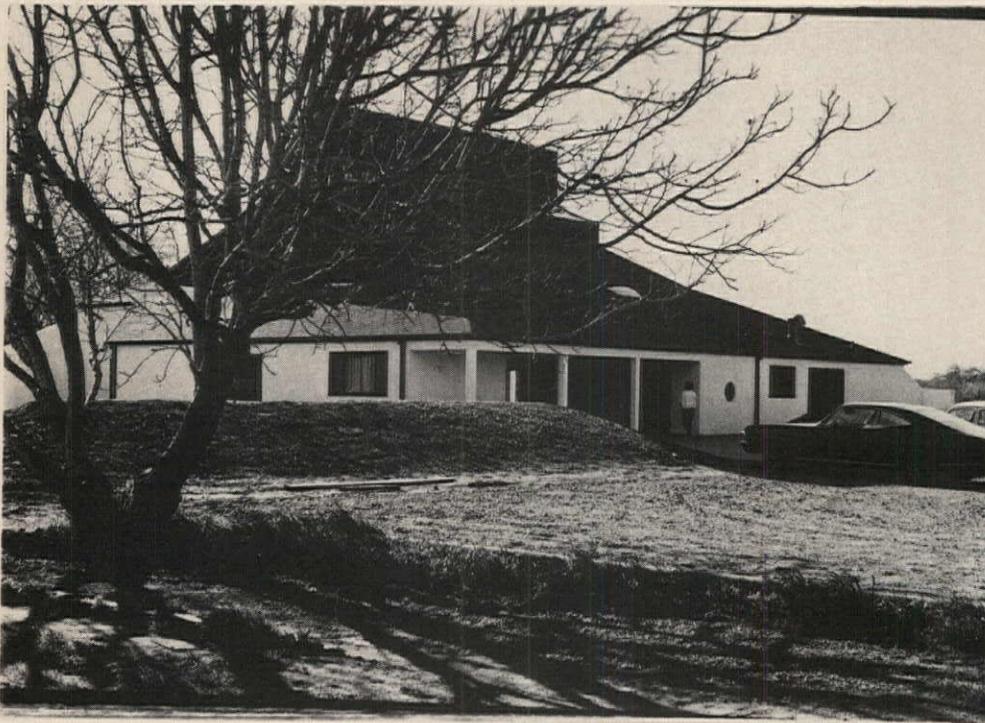


CHURCH OF OUR DIVINE SAVIOR
Chico, California

QUINN & ODA

Structural Engineers: McCain & Associates; **Mechanical and Electrical Engineers:** Belden & Wistort; **Landscape Design:** Quinn & Oda; **General Contractor:** Novak Construction Company.

The problem: to create a building flexible enough to accommodate a wide range of liturgical and social activities in the same spaces, on a very restricted budget and in a climate where temperatures range from 28 to 104 degrees with strong, rain-laden winds and some snow in winter, hot direct sun in summer; with a character of a community home. Said the jury: "While only the first unit of a more extensive master plan, most of the elemental program functions are being carried out in the present building. It is a strong social statement and exhibits a sensitive and sincere architectural expression. It responds positively to the traditional dichotomy of sacred versus profane space. It is extremely low budget. It makes a positive community commitment in a setting among trailer courts in the poorest part of the town. The building is used in many exciting ways related to the community. It is flexible in use and points a direction, not only for those who would build the shelters but also for those who would conceive the programs for religious structures in the contemporary context."

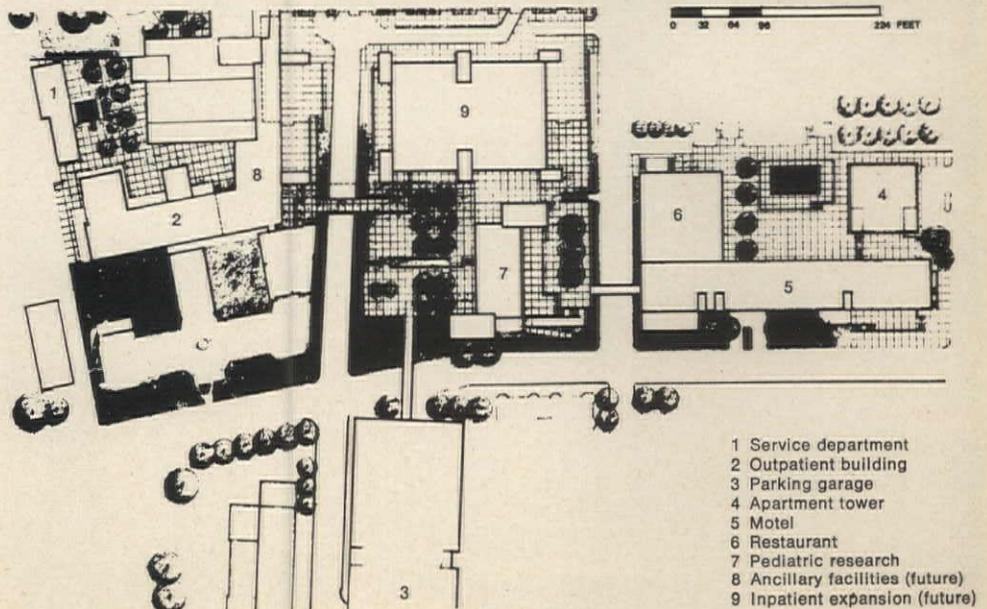


**THE ARCHITECTS
COLLABORATIVE INC.**

**CHILDREN'S HOSPITAL MEDICAL CENTER
Boston, Massachusetts**

Principals in Charge: John C. Harkness, FAIA; Roland Kluver, AIA; Jean Fletcher; **Job Captains:** Joseph Hoskins; Edmund K. Summersby; **Structural Engineers:** Souza & True; **Mechanical Engineers:** Metcalf & Eddy and Francis Associates; **Electrical Engineers:** Engineer Incorporated; **Landscape Architect:** Laurence Zuelke; **General Contractor:** Turner Construction Company.

The problem: to expand a medical center, work on which has been in progress for over 10 years and still is going on, without interrupting the operation of the hospital itself; to develop and update master planning in view of changing design criteria; to work out scheduling and size of construction packages in relation to the funding of the projects. Said the jury: "This building is a lively, street-oriented development resulting in a truly supportive environment for sick children and their visiting parents. It is characterized by horizontal, rather than vertical, zoning of functions. While each building varies in detail reflecting its function, an overall scale, character and texture continues throughout the entire center. The building provides, as a broader gesture, an active street edge which contributes to the quality and life of the surrounding urban area."



WESTBETH ARTISTS HOUSING
New York City

RICHARD MEIER

Structural Engineers: Felcher Atlas Associates; **Mechanical and Electrical Engineers:** Wald + Zigas; **General Contractor:** Graphic Starrett Company.

The problem: to meet the acute need of working artists in New York City for apartments and studio space at a price within their reach; to transform an enclosed loading area for trucks into an open space to serve as a focus of access and egress for the apartments, with shops and galleries at ground and mezzanine levels. Said the jury: "Although no radical departure from anonymous architecture, this is an outstanding example of building and neighborhood preservation through the rehabilitation of an obsolete, yet worthy, structure to new uses. The jury commends this approach for the economical provision of housing through such reclamation and renovation, and advocates that the strong social commitment it expresses be applied to housing for other needy groups."

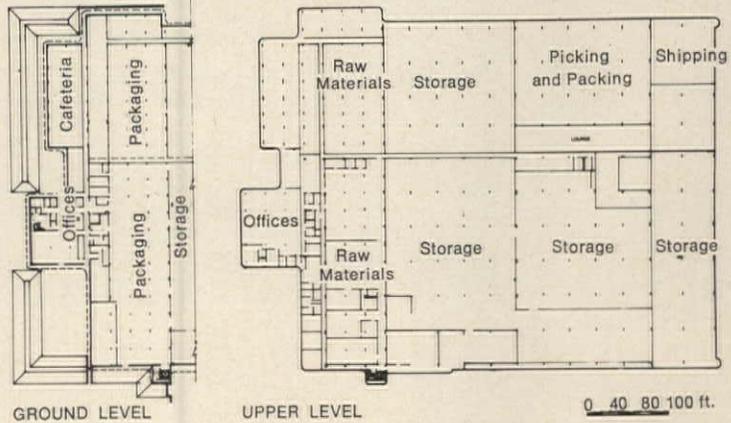
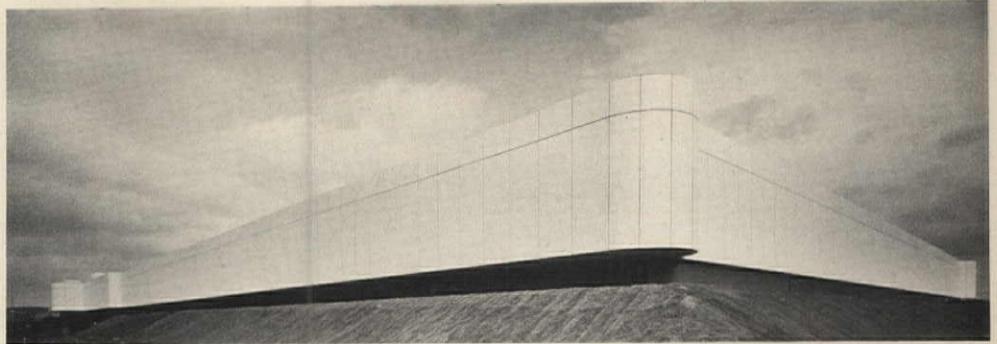


DAVIS, BRODY &
ASSOCIATES
AND RICHARD
DATTNER & ASSOCIATES

ESTEE LAUDER LABORATORIES
Melville, New York

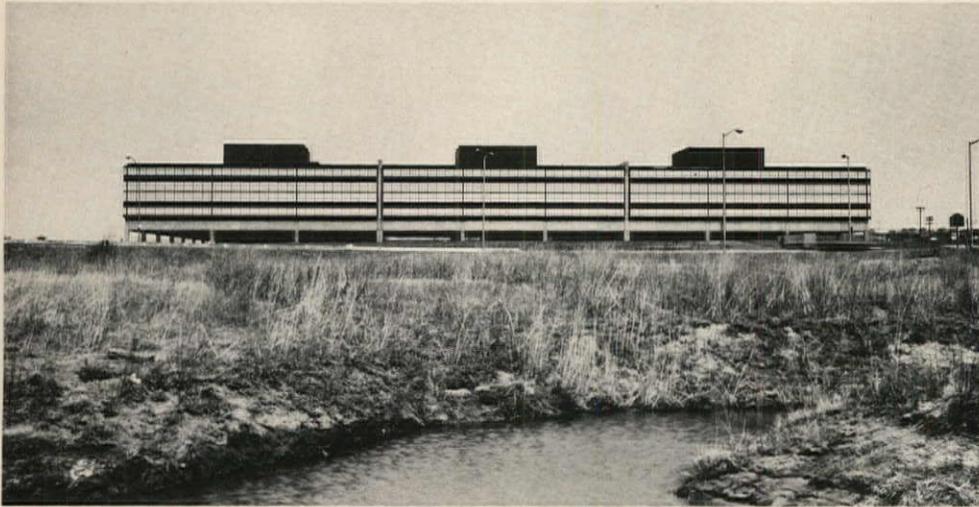
Project Architects: Harold Rolls (Davis, Brody & Associates); Richard L. Carpenter (Richard Dattner & Associates); **Structural Engineers:** Goldreich, Page & Thropp; **Mechanical and Electrical Engineers:** Wald + Zigas; **Landscape Architect:** A. E. Bye & Associates; **General Contractor:** W. J. Barney.

The problem: to combine manufacturing, packaging and warehouse departments and offices into one facility, to be built in phased increments on a sod field next to a superhighway; to provide the manufacturing areas with good north light; to avoid openings — for reasons of security — in the warehouse portion, or two-thirds of the building. Said the jury: "Here, the design team has gone beyond the capable creation of what is apparently a quite agreeable, highly functional and readily expandable manufacturing facility. It points out that such an operation can be carried on without adverse effect on the neighboring visual environment. This building is at once environmentally compassionate to its occupants, its neighbors and the masses of commuting humanity daily passing its delightfully landscaped situation."



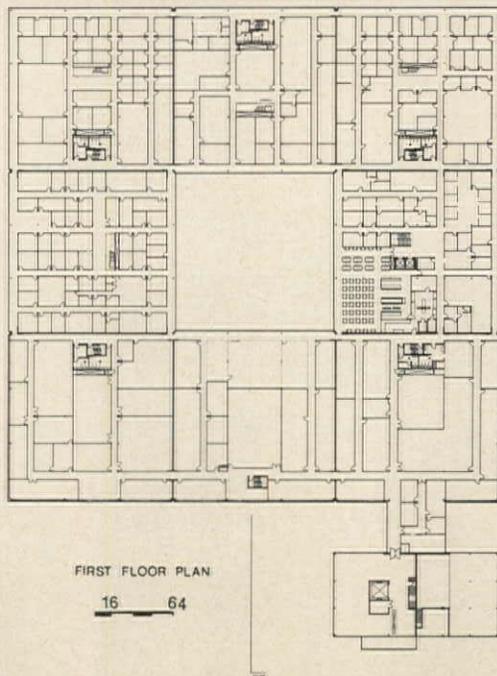
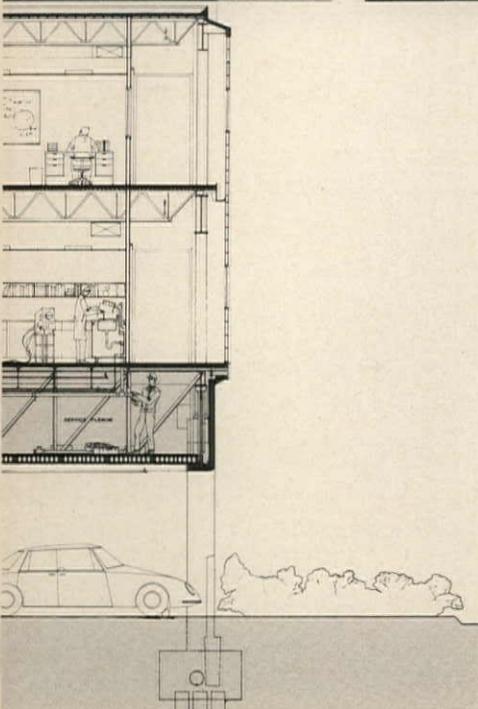
AVCO EVERETT RESEARCH LABORATORY
Everett, Massachusetts

PEIRCE & PIERCE



Partner in Charge: Walter S. Pierce, FAIA; **Project Architect:** George Neilsen; **Structural Engineers:** Souza & True; **Mechanical and Electrical Engineers:** Francis Associates; **Landscape Architect:** Mason & Frey; **General Contractor:** Turner Construction Company.

The problem: to bring together in an efficient and attractive working environment a variety of scattered research programs on a site with unstable subsoil conditions, surrounded by highways and commercial development; to meet the needs for large floor areas and parking requirements on the relatively small site. Said the jury: "The positive features of this project are its provision of an introverted environment in an industrial area where outlook is always unpredictable, as well as the general flexibility of a laboratory set up with easy connection to a unique plenum level. The exterior is recognized for its impressive detailing, handsome color, proportions and siting. The exterior circulation allows frequent visual contact with the exterior to relieve the overall heavy impact of the extreme horizontal extent of the building. This building, as a new element in the landscape, is a positive visual addition in an anonymous industrial landscape, well scaled to adjacent expressway movement."

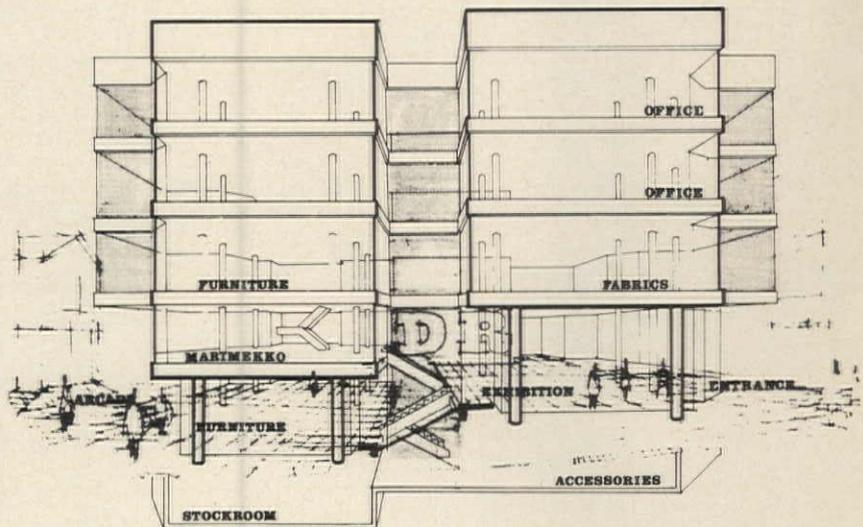
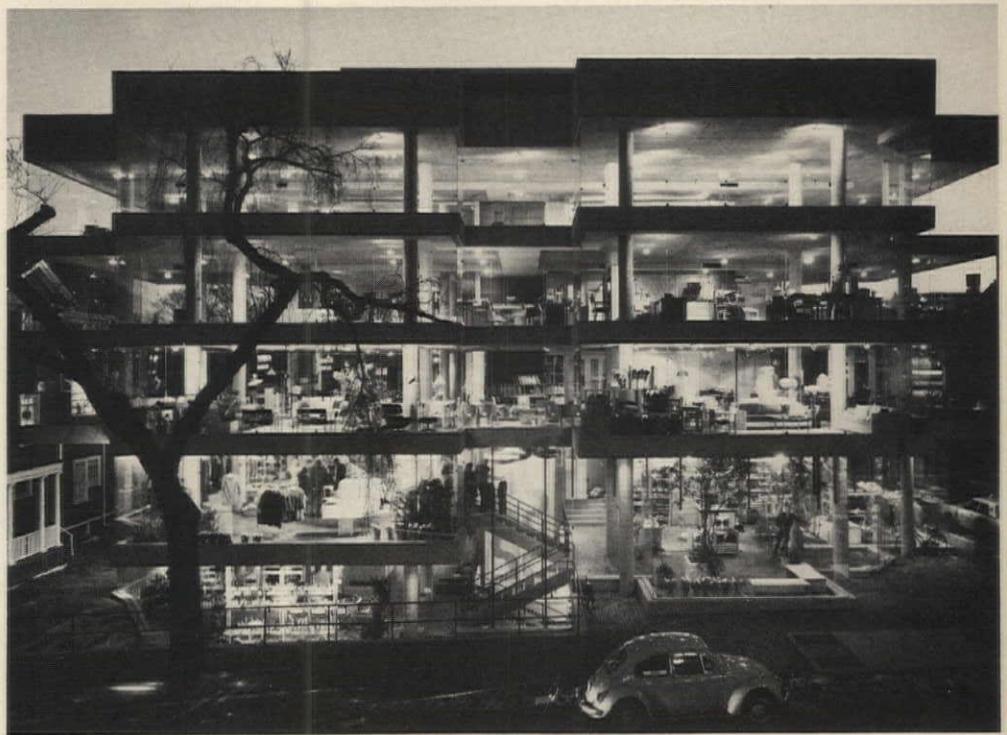


**BENJAMIN THOMPSON
& ASSOCIATES, INC.**

DESIGN RESEARCH BUILDING
Cambridge, Massachusetts

Architect: Benjamin Thompson, AIA; **Associate Architect:** Thomas Green, AIA; **Project Architect:** Edward DesJardins; **Structural Engineers:** LeMessurier Associates, Inc.; **Mechanical Engineers:** Rardon & Turner; **Mechanical Consultant:** Boston Air Legasse Corporation; **Electrical Consultant:** Norfolk Electric Company; **General Contractor:** Canter Construction Company.

The problem: to arrange the interior for continuous, flexible selling space with maximum visibility of all goods; to give the exterior a special image in the elemental simplicity of a nonbuilding, a structure which would itself disappear and re-emerge as the world inside; to invite shoppers to enter into an atmosphere of a festive street bazaar. Said the jury: "The life of this building extends to the life of the street and makes a lively contribution as they become one in mutual reinforcement. The complete visibility of the interior through the simply detailed all-glass walls makes the merchandise the expression of the building. It is a very fitting idea for a retail building in this location, but it could be an arrogant intrusion on neighborhood privacy if used with less discernment and more mundane motives."

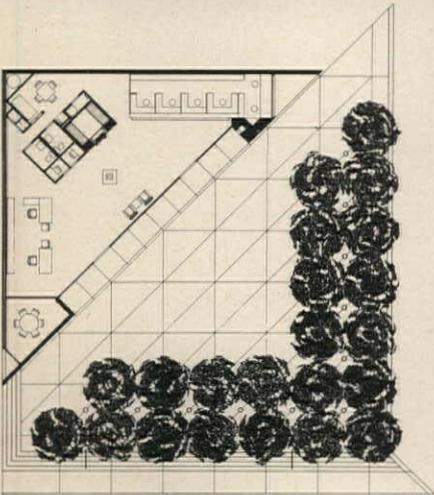


NORTH CAROLINA NATIONAL BANK BRANCH
Charlotte, North Carolina

WOLF ASSOCIATES

Structural Engineers: R. V. Wasdell Associates; **Mechanical Engineers:** Mechanical Engineers, Inc.; **Electrical Engineers:** John Bolen Consulting Engineers; **General Contractor:** Butler & Sidbury, Inc.

The problem: to strengthen the streetscape with a low-cost, 2,500-square foot bank branch with auto teller service and maximum parking; to avoid contributing to the visual cacophony of the impoverished black neighborhood — a mix of residential and commercial strip development; to create a green oasis in a blacktop sea; to achieve necessary identity for a bank within existing disorder. Said the jury: "A distinguished design response to a sensitive social program of the owner has provided an outstanding element in an otherwise impoverished urban area. It makes a distinct contribution to the visual and psychological quality of the neighborhood by its very low key, low budget, modest design. A commendable example of architectural humility, it is an example of small-scale urban design by virtue of its well used pedestrian pathway and open space."

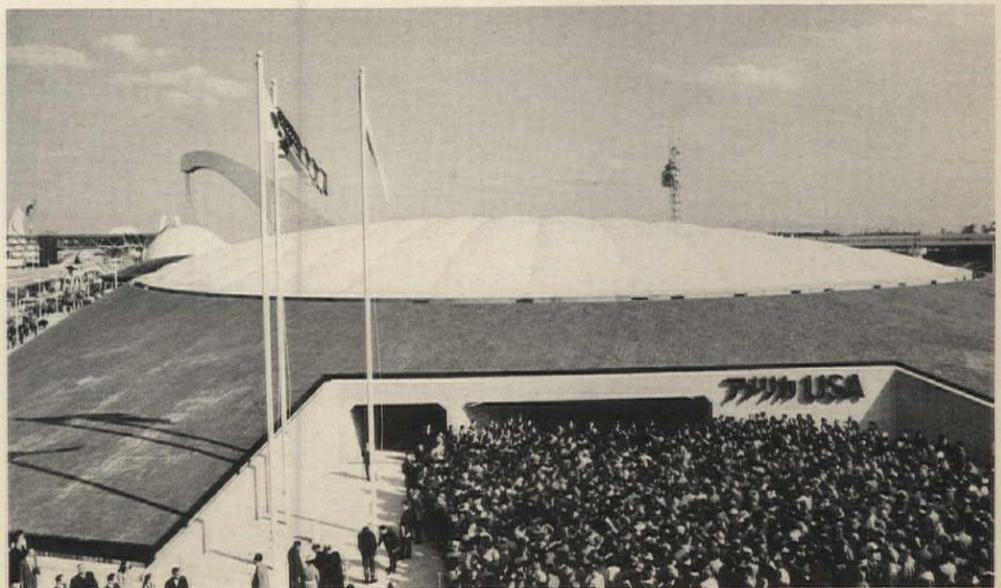
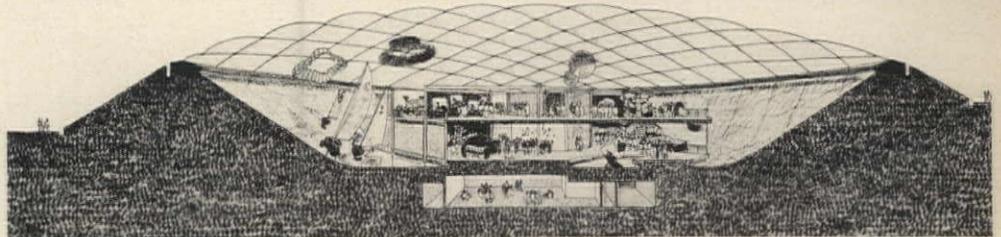
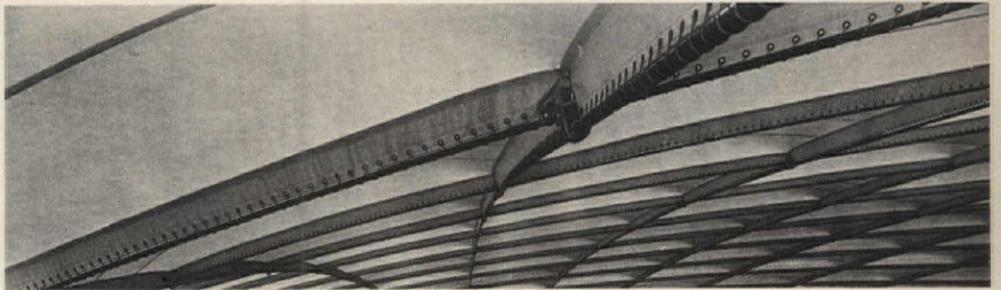
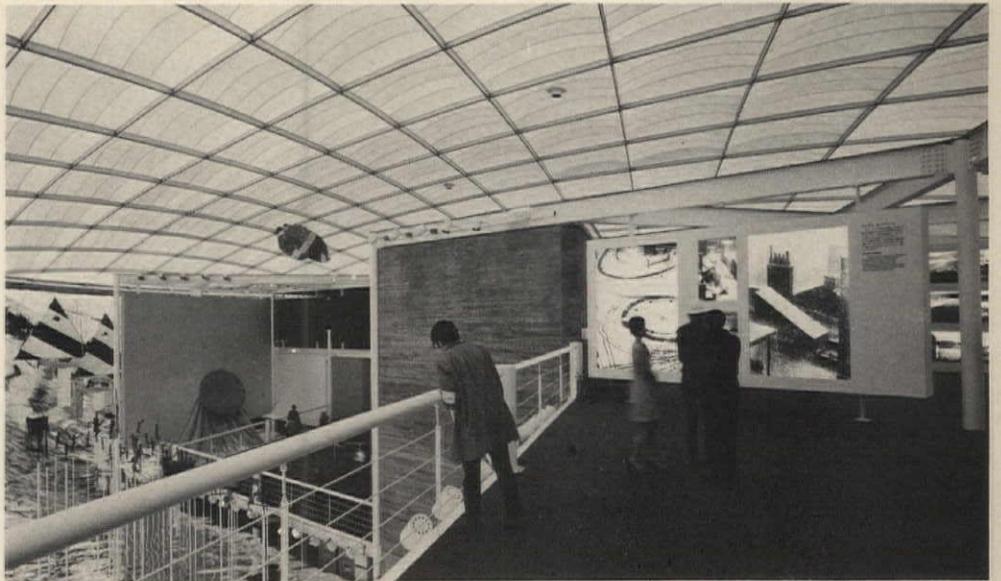


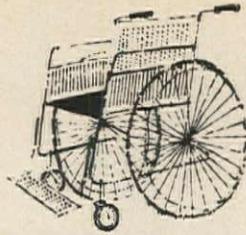
DAVIS, BRODY,
CHERMAYEFF, GEISMAR,
DEHARAK ASSOCIATES

US PAVILION
Japan World Exposition, 1970
Osaka, Japan

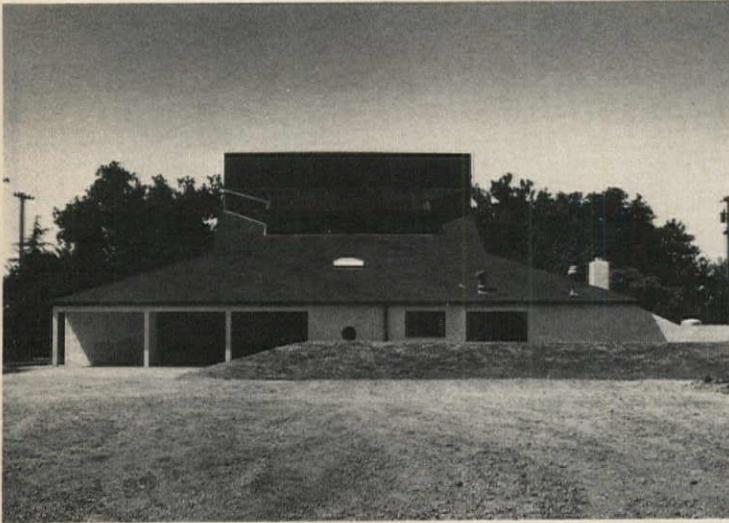
Co-Architect: Ohbayashi - Gumi, Ltd.;
Structural Engineers: David Geiger - Horst
Berger; **Mechanical Engineers:** Cosentini
Associates; **Audio-Visual Consultants:** Will
Szabo Associates, Inc.; **Lighting Consult-
ant:** Howard Brandston Lighting Design,
Inc.; **Landscape Architect:** M. Paul Fried-
berg & Associates; **General Contractor:**
Ohbayashi-Gumi, Ltd.

The problem: to design a temporary exhibit structure for an international exposition to be erected in a short period of time, to handle about 10,000 people per hour, resist earthquakes and typhoon winds of 125 miles per hour on a site with poor subsurface conditions. Said the jury: "The unique structural concept, the nonostentatious profile, the facility with which the building carried out its intended functions, indicate that the architects fulfilled the highest purpose of international exhibition buildings and, in so doing, reflected credit on both their country and their profession."





The 1971 Bartlett Awards



The Bartlett Award—purpose of which is to bring universal attention to the problem of architectural barriers—is named in memory of the late US Senator E. L. Bartlett of Alaska, who successfully legislated for accessibility in federally funded buildings. It is awarded annually to AIA Honor Award winners which offer to the handicapped, the aged, or otherwise not readily mobile persons ease of movement in entrances, interior spaces and approaches.

This marks the third year of presentations of the award, which is sponsored jointly by the President's Committee on Employment of the Handicapped and The American Institute of Architects. The jury, composed of members of the Potomac Valley Chapter AIA, consisted of Wm. Baltzer Fox, chairman; Edwin F. Ball; and James F. Hilleary. Their comments:

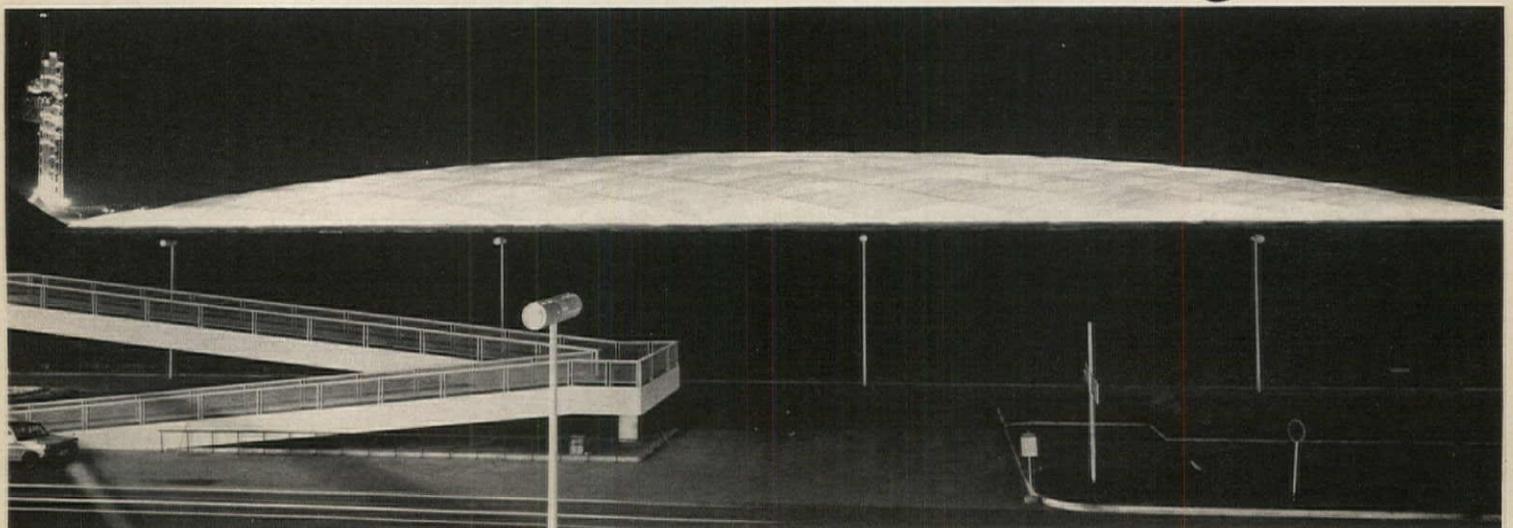
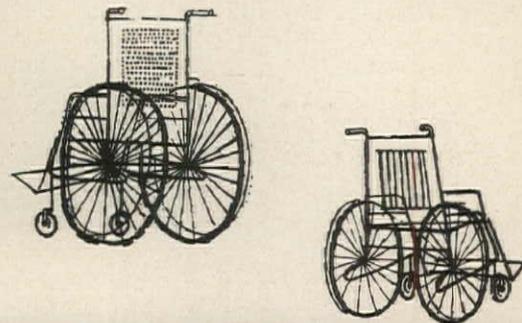
"From the 10 Honor Award winners, three were selected to receive the Bartlett Award:

- US Pavilion, Japan World Exposition 1970, Osaka, Japan.
- North Carolina National Bank Branch, Charlotte, North Carolina.
- Church of Our Divine Savior, Chico, California.

"The three premiated projects provide complete access and usability for the handicapped and the aged in ways that are so well integrated into the design that it is not obvious." □



The Church of Our Divine Savior in Chico, California (Quinn & Oda, top) has no barriers at all. Every approach is easily traversed in a wheelchair; doors open readily; all facilities within can accommodate anyone, thus making active participation a possibility for all. The North Carolina National Bank in Charlotte, North Carolina (Wolf Associates, center) has a plaza with steps along one portion, a retaining wall along another due to a sloping site. The ultimate height of the plaza allows a level entrance at the street side, flush with drive and sidewalk. The essentially open, doorless plan of the interior makes it easy to take care of business matters even from a wheelchair. The US Pavilion in Osaka, Japan (Davis, Brody, Chermayeff, Geismar, DeHarak Associates, bottom) has ramps throughout the open exhibit areas, a feature welcome at a fair not only by the handicapped but also by visitors tired from walking.



'New Moon Landings in Education'

A game, a learning experience, a tool for planning the school of tomorrow. Computer based, transportable, flexible, accurate, fast and realistic—all these are Simu-School.

"All the world's a stage. And all the men and women merely players," is a quote from Shakespeare that nearly every schoolchild knows. "And one man in his time plays many parts," the bard goes on to say. The Committee on Architecture for Education of The American Institute of Architects takes the playwright's words seriously and applies them in a simulation game called Simu-School in which role playing has a part.

The rationale behind Simu-School is that change is the central fact of the world we live in, and massive adjustments in education will be required to accommodate social issues confronting the country. In the dilemma of change, there are bright hopes: new methods of teaching, new tools for education, new forms of education. But they are widely scattered and seldom assembled in enough order to create new educational systems.

"We desperately need new moon landings in education," states a task force, created in 1970 by the committee to explore the idea of Simu-School and to determine its feasibility, cost and potential as a planning tool, "and we *can* achieve them, if only pieces of knowledge are brought together in sufficient quantities in every educational setting in America." Educators alone cannot assemble all the parts, nor can architects working with them. Only entire communities can do so, says Donald F. Burr, AIA, of Tacoma, Washington, who heads the task force.

Simu-School provides group play for 20 to 30 persons involved in and with the planning process. Participants play a role: school board member, parent, businessman, teacher, city official, student, representative of a special interest group or of the community's power structure. In his role, the participant advocates the point of view his part requires, and at certain points he steps out of his assumed character and presents his own thoughts.

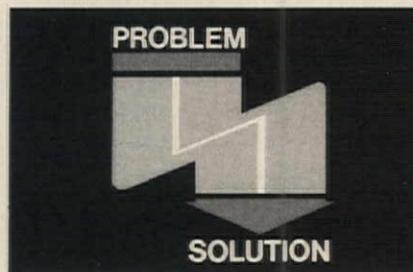
Before this role playing, participants are seated in a semicircle at the rear of a large conference room equipped with slide projector, overhead projector, tape recorder, two teletype keyboards, a graph plotter and a small computer. There are maps, graphs, slide narration, discussion and a continuing dialogue with the computer to analyze and project data.

Participants learn about the social issues that bear on the educational system and translate the issues into objectives; they are assist-

ed in defining the educational resources of a community and in understanding the constraints within which the educational system must operate; they learn how other communities are going about solving school problems; and, finally, they experiment with ways to sift and assemble all this information in a search for new forms of education suited to their own community.

With a skilled discussion leader offering overviews of the major steps and serving as a guide to the entire process, each participant presents information upon which Simu-School is built, using slides and prepared scripts. Then the role playing takes place.

After a working body of information has been assembled, the role players split into small teams and analyze the information in



order to formulate new educational concepts and school plans. Role playing continues as plans are made for the implementation of new ideas. The computer system with its two teletype terminals and graph plotter produces knowledge at any step in the process for the participants. For example, it can forecast a school budget quickly by asking questions about teacher/pupil ratio, salaries and other cost figures.

There are two versions of Simu-School. There may be a working session of three to six hours with participants building an educational scheme for a theoretical city, using information about social and school problems, budgets, political issues, geography and so on. Or Simu-School may last two to three days and be based upon the participants' own system with real issues and confrontations rather than theoretical ones. There may be two teams of 15 persons with one to determine educational strategy and the other financial management. The possibilities seem almost endless.

The task force believes that the architect's first concern in school planning is not the building but "the form and purpose of life that the building is meant to house." That is why the task force has been willing to give time and effort to determining the potentialities of Simu-School. A grant from the US

Office of Education enabled them to employ a private contracting firm to carry out the first necessary detailed research; funds from the Educational Facilities Laboratories made possible the assemblies of top educational leaders to provide counsel. To date, expenditures have amounted to between \$70,000 and \$80,000.

Simu-School is now viewed as a medium of communication which utilizes technology to acknowledge and deal with the future; as a tool that insures a more thorough distribution of knowledge but has within itself a flexibility and capability to adjust as required to receive new facts and to express them quickly and accurately; and as a means of putting knowledge in proper perspective in the educational planning process.

The US Office of Education plans to direct \$300,000 to Chicago where an initial operational model of Simu-School will be assembled for actual use by skilled planners in a specific location. According to Burr, the demographic data and all the other characteristics of the city will be built into the model. Hopefully, it will become a valuable planning tool for all who have responsibility within the area of educational decision making. In a sense, the model will become a permanently anchored "mobile" unit that other urban centers can emulate. Simu-School will enable the planner to study the ramifications of combined decisions in a much shorter period of time than has been possible hitherto.

Another \$200,000 will be granted to the Santa Clara County, California, by the Office of Education. This will be the site for the design of the developmental model, a project which will take three to five years to complete. Once created, the model will have a national home that will become a center for planning. New information will be received here constantly and will be relayed to the branches and segments of Simu-School. Mobile units that bring planning information to a community, teach the process and provide knowledge of options available will be directed to any community in the nation that needs planning assistance.

"More and more, here and there," states the task force, "we see schools doing things unthought of a decade ago. . . . We also see that conventional school buildings do not adequately serve. . . . If schools of a different kind are to be built, different patterns of education must first be laid out. . . . Perhaps new forms of education will not require school buildings. We do not know. We repeat, the first concern of the architect is life, not buildings." □

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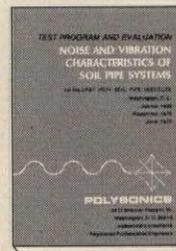
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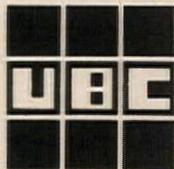
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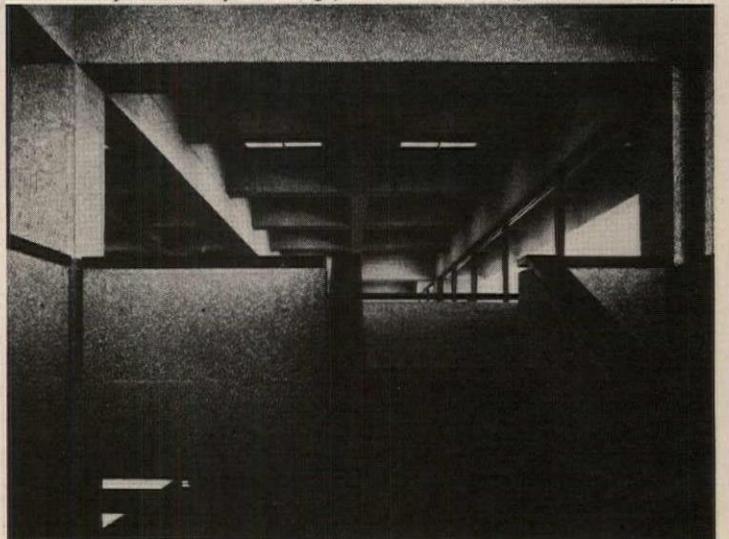


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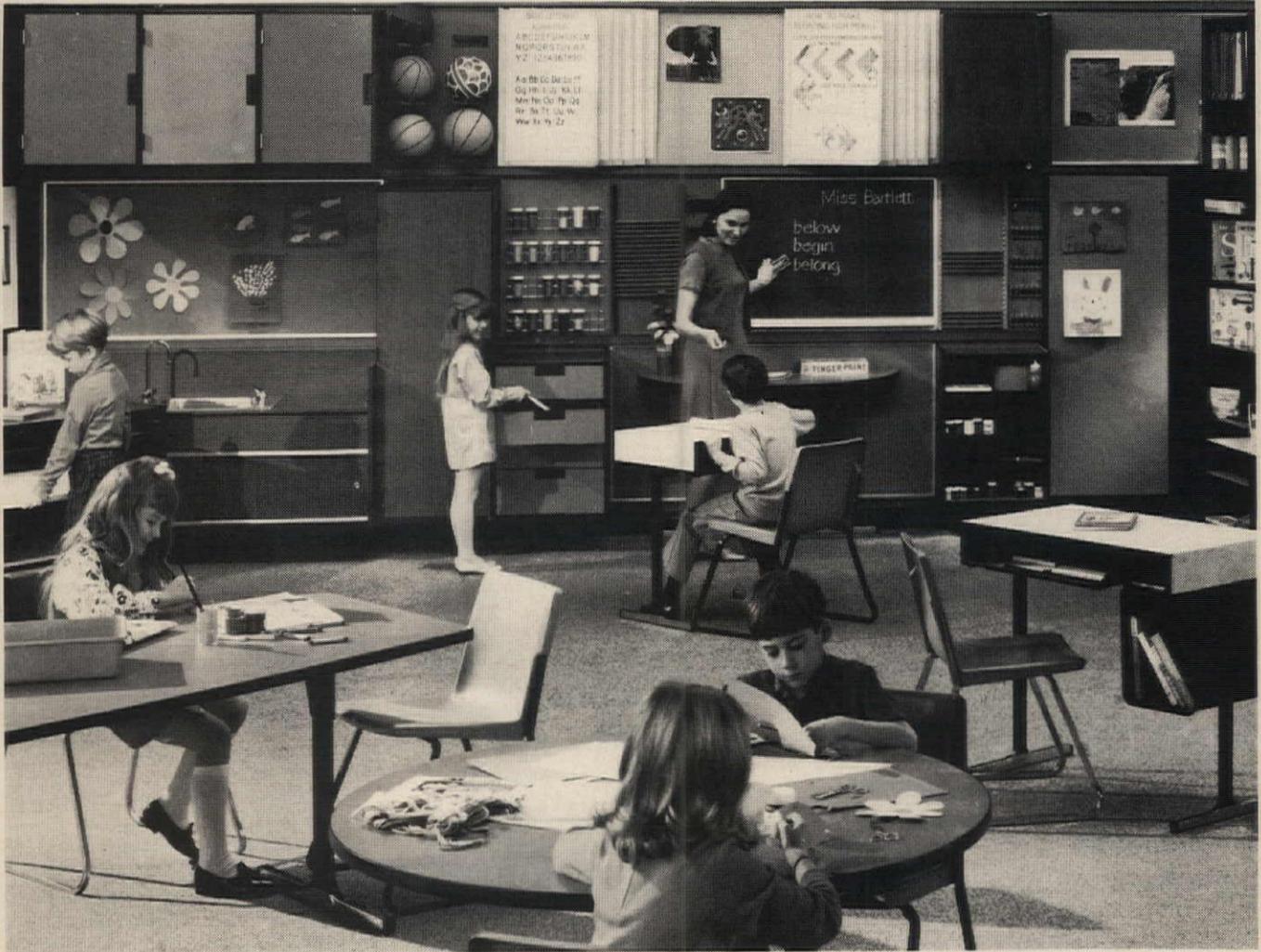


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BOOKS

Emergence and Growth of an Urban Region: The Developing Detroit Area. Constantinos A. Doxiadis. Detroit: Detroit Edison Co., 1966-70. 3 vols. \$20 each.

These three volumes record the results of a study undertaken by the Detroit Edison Company in cooperation with Wayne State University and Doxiadis Associates. The research project was directed by Doxiadis. It is expected that the data will aid planning authorities and all those who are concerned

with the advancement of human as well as economic values in the Detroit region.

The first volume includes an analysis of existing conditions and establishes the Detroit urban system, emphasizing the information important as the empirical base of the study. The second one, on future alternatives, is an essay into a methodology that should have general usefulness in the examination of human settlements. The third makes specific proposals for patterns of orderly future development with social, political, technological, physical and cultural aspects explored in detail. It discusses methods that will serve to alleviate the existing and increasing environmental crisis facing Detroit and its surrounding 23,059-square-mile area. Essential pro-

grams are outlined and presented with specific targets indicated and suggestions made as to who should undertake the responsibility for the coordination of goals. The theory of ekistics expounded by Doxiadis is applied in the approaches to all three volumes.

As urban centers tend to grow and cross state and national boundaries, regional studies become increasingly important. The urban Detroit area is identified as including parts of northern Ohio, southern Ontario and southeastern Michigan. It cannot be limited in scope by administrative jurisdiction.

As an application of the theory of ekistics to a well-known American region, the three volumes provide an insight into the philosophy and work of Doxiadis. In addition, they open up a provocative approach to what is termed a "Great Lakes megalopolis," which is not only utilizing vast amounts of electric energy, but also is generating tremendous new social energies as one of the important large-scale urban systems of the world.

There are many diagrams, maps, plans, charts and visual materials to aid the serious reader.

MARY E. OSMAN

Complete Guide for Planning New Schools. Nickolaus L. Engelhardt. West Nyack, N.Y.: Parker Publishing Co., 1970. 296 pp. \$19.95.

Written by an educational consultant in the planning of new schools, this book is primarily for educators, providing them with insights into the problems confronting them in school building planning and suggesting ways to solve those problems. The book shows how changes in curricula and techniques of teaching have affected the school architecture. It will afford the architect with some practical information on such matters as space requirements and equipment.

Architectural Acoustics. Anita Lawrence. New York: Elsevier, 1970. 219 pp. \$11.75.

The author, an Australian architect, provides here a concise exposition on two main aspects of architectural acoustics: the control of noise in buildings and the design of auditoriums. Appendices include a typical method of assessing the annoyance of community noise, tables of airborne and impact sound insulation of common building elements and typical sound absorption co-efficients.

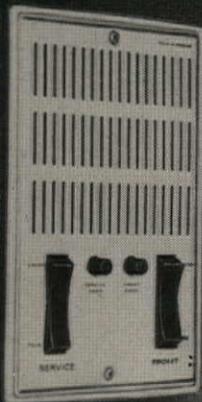
Frei Otto: Tension Structures. Conrad Roland. New York: Praeger, 1970. 172 pp. \$22.50.

A comprehensive survey of the structural studies, projects, experimental devices and completed structures carried out between 1953 and 1967 by Frei Otto and his followers.

The Roman Forum. Michael Grant. New York: Macmillan, 1970. 240 pp. \$8.95.

Lovers of Rome will admire this handsome book on the city's famed square and meeting place. The first section of the book tells why and how the Forum came into existence. The main portion of the volume describes the principal monuments and the events that took place in this world center, which is followed by the sad story of what has happened to the Forum during the centuries since its heyday. Two appendices cover the building materials and the vanished monuments. □

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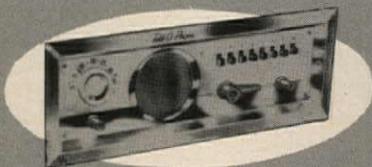
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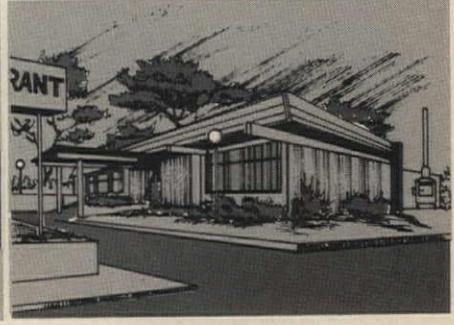
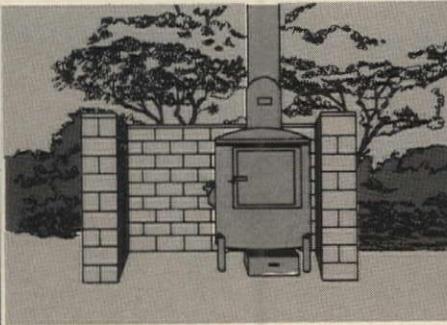
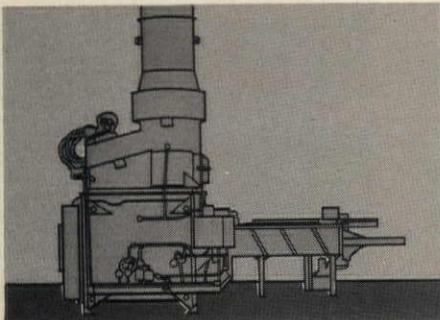
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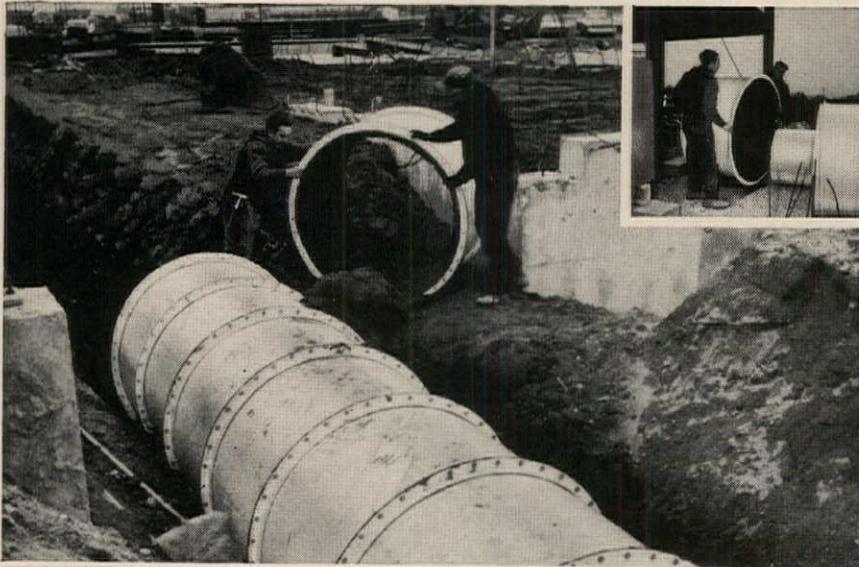
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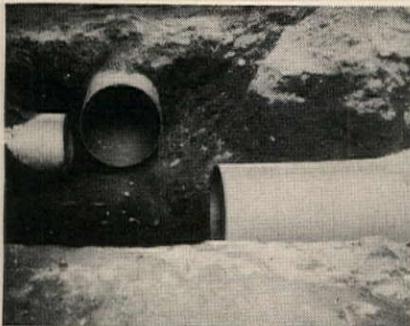
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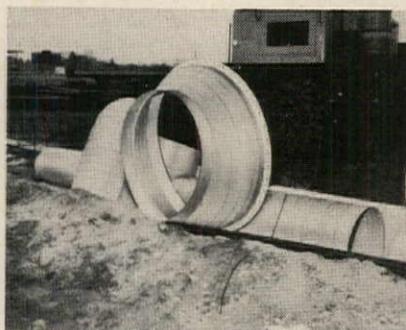


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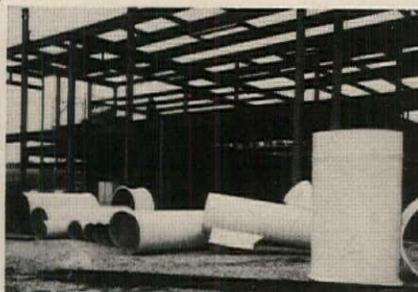
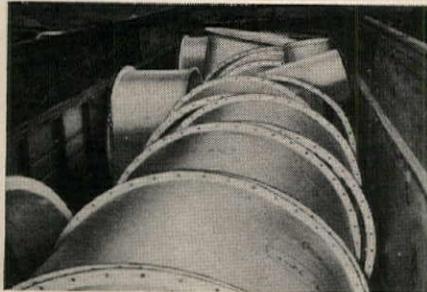
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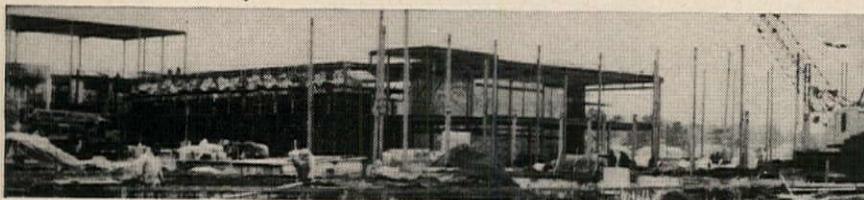
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The Power of an Idea

The wheels grind slowly, but surely. My article "Amid the Explosion, an Experiment Proposed," in the January 1967 issue, has brought some interesting repercussions.

First, I was invited to write a guest editorial for the Weyerhaeuser Company publication *Innovation in Wood*. Titled "From the Music That I Hear," the article was in essence a one-page condensation of what was said in more detail in the *AIA JOURNAL*.

I also was invited to lecture at various schools. One of the more significant requests came from Montana State University in Bozeman where I spent a week working with 60 students on the exciting problems of the creation of thinking armatures. In other words, we worked not on the solution of any particular problem but on the evolution of a three-dimensional model of how to think about a problem. This resulted in six models, each fitting into approximately 4x4 feet of floor space. They interrelated and formed a comprehensive exhibit.

The problem of developing a new way of thinking that is a nonlinear, nonsequential one and of developing techniques of seeing reality with an omnidirectional, 360-degree awareness and a higher degree of simultaneity has been an intriguing idea to which I have devoted considerable time.

Last year, I had an interesting meeting with Battelle Northwest Research Foundation in which I explored these thoughts. Hopefully, it will lead to some kind of program to develop further models.

The biggest surprise came in the fall of 1967 when I was invited by the Spanish Government to represent the United States at the first International Seminar on Industrial Design in Barcelona. After long and deep soul searching, I accepted. On the political side, I decided that since the Spaniards were the ones who asked me, I could reconcile my going so long as I exercised my opinions freely. A more compelling reason was the opportunity to see firsthand the works of Gaudi. This trip turned into a month spent in wandering through Europe. Who would have thought an article in the *JOURNAL* would have such influencing power?

I have sent reprints of the article to many people and institutions and have used it as a reference material in lectures. Of course, as far as I am concerned, this was a point from which I have evolved my ideas onward. I am involved in various projects which I hope will culminate in something more concrete than just exhortation or verbiage.

One of these is a project being developed for the Athenian School with Glen Storek of San Francisco. Sponsorship of the physical requirements development is being considered by Kaiser Enterprises. It should result in an educational tool by which a group of

students can move out into an open site and structure and restructure a community with minimum imprint on the land. They should learn in the process something about what forms a community and should have a basis from which more meaningful and effective communities can be developed.

One of the more important aspects of this would be that each living cell unit, as well as the total community, will be as self-sufficient as possible so far as mechanical requirements are concerned. This means, at present, off-the-shelf equipment which comes as close as possible to the ideal of a bio-regenerator system and which to this date is still nonexistent. Eventually, this would be developed into much more sophisticated paraphernalia.

I am involved in a variety of other activities. In conjunction with several other architects, I have participated in purchasing one of the old buildings in the Pioneer Square area of old Seattle, where we have been successful in having a historical preservation ordinance passed just a few months ago.

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Arcology: Dream or Cop-out?

My thanks to Dr. Edward Higbee for his interpretation of Paolo Soleri's *Arcology* in the February issue. He describes Soleri's fanciful concept as a "leap over the most complicated and agonizing questions of the moment with one majestic, if quite unrealistic, flash of intuition." To me, this statement sums up the absurdity of the entire proposal.

The urgency to find effective answers to man's universal problems is not based on moral and esthetic considerations only. If we are to have the opportunity to work out our "foundation of equity," we must buy survival time with workable answers to "the agonizing questions of the moment." We must encourage the growth of oxygen-producing organisms to help in the reduction of our alarming oxygen deficit and find economical sources of nonoxidizing energy to serve our technological society.

We must reduce the rate of population expansion through serious discipline in family planning. We must find better solutions to circulation and transportation at every level in our man-made system. We must find practical answers to waste disposal and pollution control. And above all, we must seek social unity through renewal of hope and justice. These are the immediate problems that Soleri nimbly leaps over to the sanctuary of his "Arcology."

Another weak point of Soleri's rationale appears to spring from his apparent understanding of congruence. The stresses, interrelationships, competitions and successions

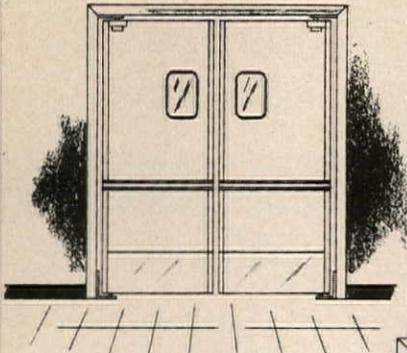
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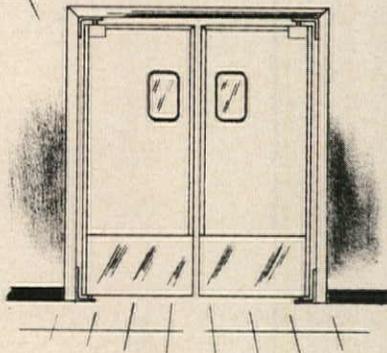
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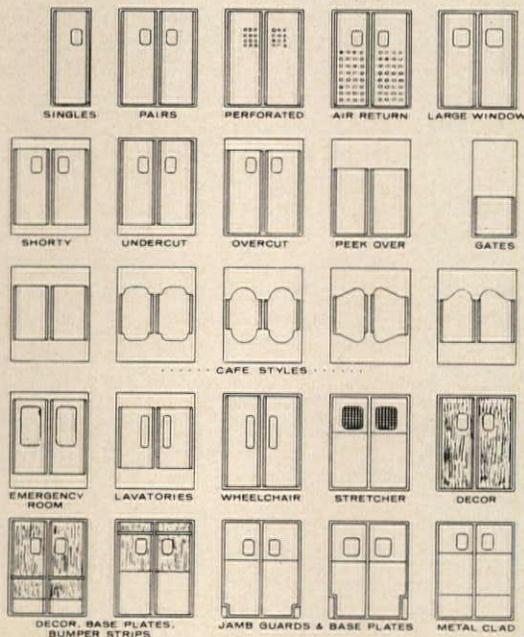
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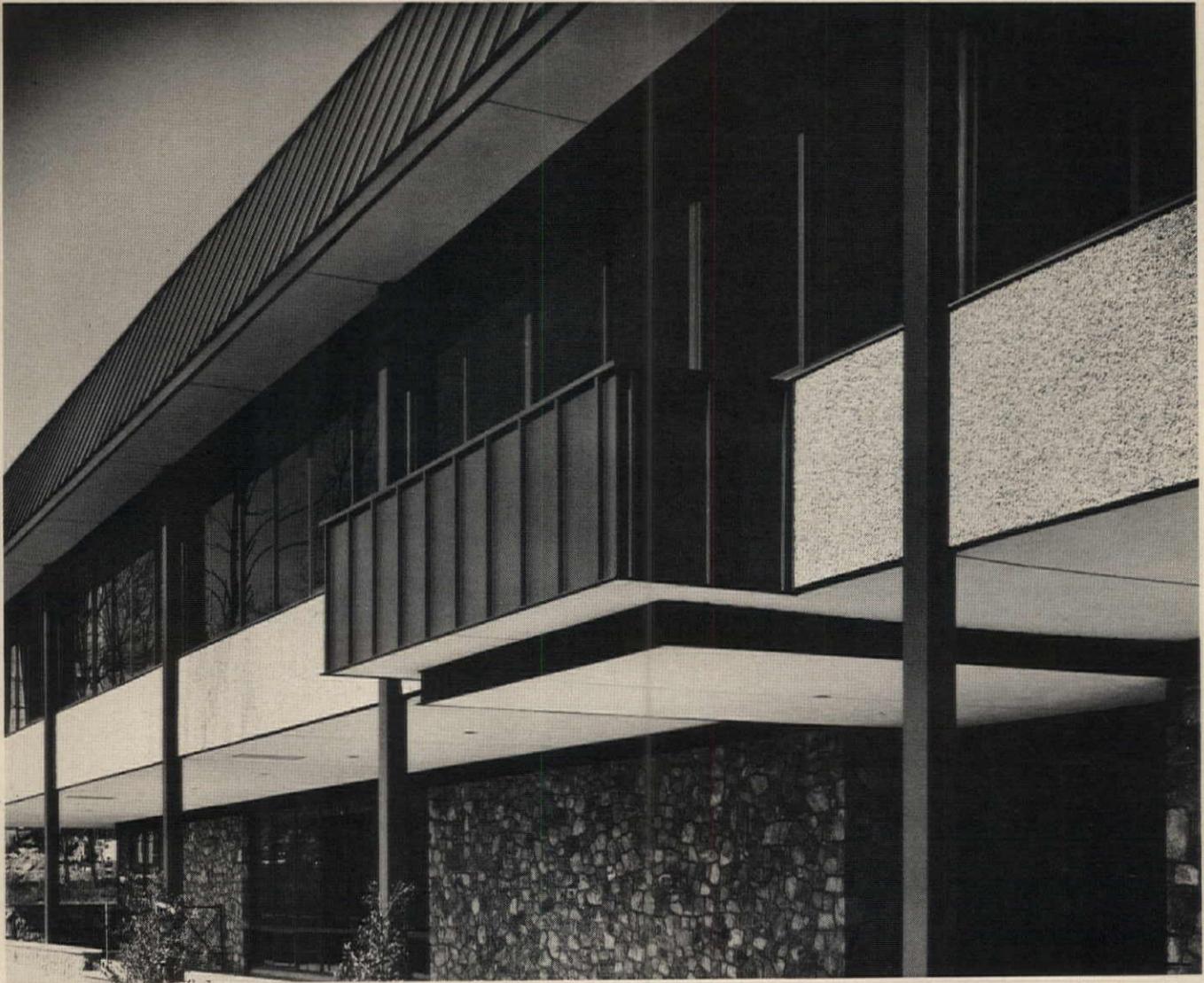
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evident in the organic world are anything but a "constant coordination of disparate things into congruous patterns." There appear to be predictable tendencies in nature, but the resulting "patterns" are unstable and infinitely diverse in detail. Thus reference to either pattern or balance in nature is oversimplification.

Life does not stand still long enough to be circumscribed. Even the static condition which seems to come with cessation of life is only an illusion, for death is transformed by the thrust of other organisms finding abundant life in decay. Nature is in a constant state of fluctuating tension that moves, eddies, grows and subsides like a plasmodium reacting to changes in its environment and to the ebb and flow of other organic forces competing for existence.

The concept of universal equity, therefore, is a contradiction to the harsh reality of nature, and it should be no surprise that man so frequently returns to the antagonistic rules of biological survival.

It would be pleasant to plan congruent cities for congruent people unified in a common ethic, but this type of euphoric society simply does not exist. Effective idealism must find its challenge in the problems and inequities of the world with which it struggles. Solutions for social, economic and technical problems must evolve together. To stimulate and direct this unfolding process will continue to demand the patient leadership of

pragmatic planners at every level of public service. Man needs to dream, but unless he finds reasonable ways to bring them to fruition, the dreams become little more than tantalizing trips and cop-outs from reality.

ORVILLE O. RICE, AIA
Topeka, Kan.

In Praise of Samuel Chamberlain

Thank you for including a few of Samuel Chamberlain's sketches in the March issue.

His book, *France Will Live Again*, causes one to wonder if etchings and superb renderings of this type will also live again and if more talent will be used to this end.

Chamberlain's *Domestic Architecture in Rural France*, a portfolio published in 1928 which contains 100 durable plates, is a real treasure for many architects whose continued interest is always in pencil rendering or sketching.

LEROY GAARDER, AIA
Albert Lea, Minn.

Leonardo da Vinci's drawings of wild flowers are not yet dated! No matter how expertly flowers are photographed, even in color, when it comes to identification and study only a drawing can point up the detail necessary.

By the same token, Samuel Chamberlain's pencil drawings will never become "dated," as he so humbly suggests in his letter published in the April issue. When this ability to search and detail is combined with true artistry and superb craftsmanship, we have a very special thing.

Much gratitude is due the editors for their taste and imagination in bringing these exquisite drawings to our attention. Even for the high standard we have come to expect from your publication in recent times, the layout is outstanding. No doubt the printer too deserves a big hand as pencil is not easy to reproduce well.

UNA HANBURY
Sculptor
Santa Fe, N. M.

Giving the Pedestrian His Due

The article by Charles E. Thomsen, AIA, on "Open Spaces: Their Shape and Scale" in December was particularly timely and exciting to us Richmond readers because of the possibilities of creating a two-block pedestrian mall linking the new coliseum with the existing retail area.

The proposal is unique in that a great deal of development of the property (much of it vacant) fronting the proposed mall will have to precede the construction of the mall itself. This gives us an opportunity to suggest ways in which development could extend the notion of a pedestrian-activity precinct into the block interiors. It also gives us an opportunity, as so much will be new, to examine many aspects of the cityscape with a view to establishing design standards and guidelines. Conceivably, any standards developed could be extended to the whole of the city.

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— Christopher Lehmann-Haupt, *The New York Times*
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by Paolo Soleri

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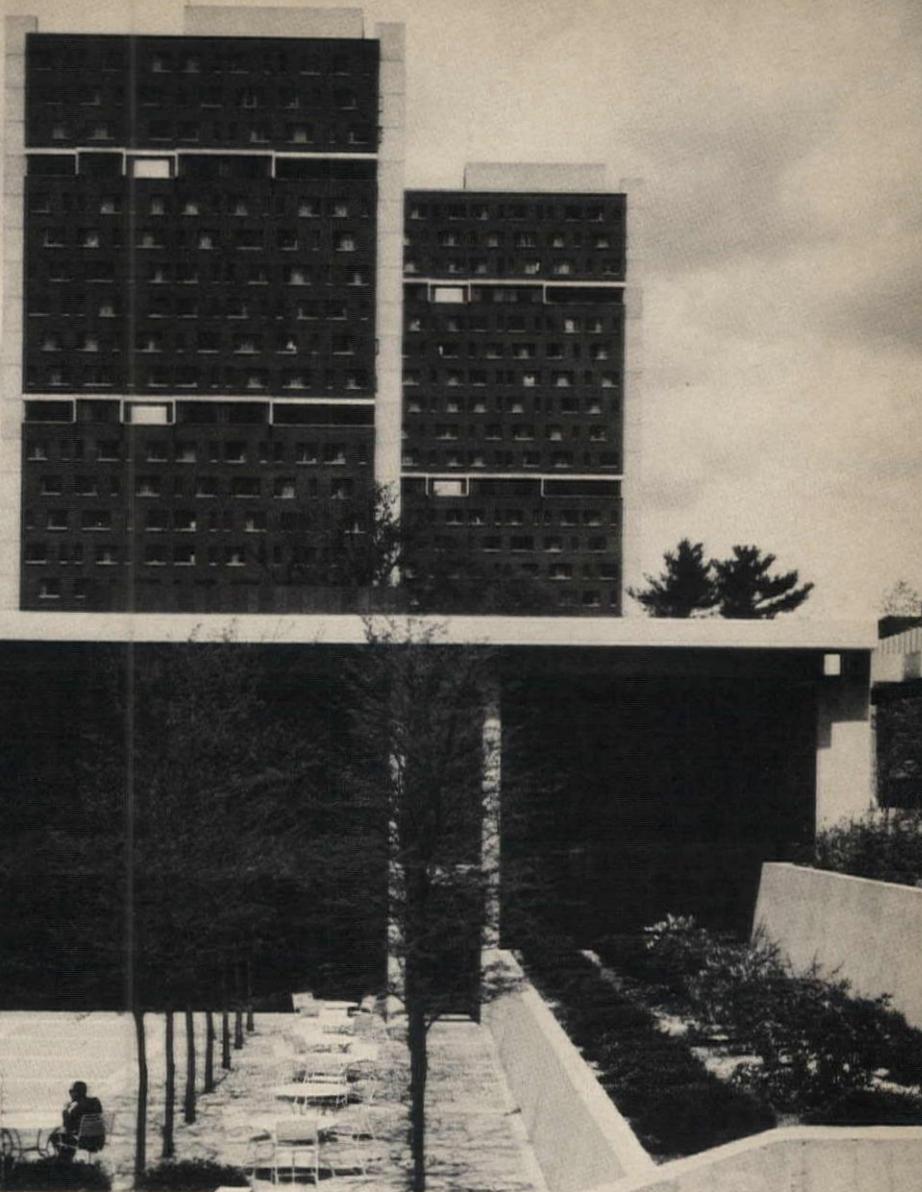


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events

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National

June 18-19: ACSA Annual Meeting, Detroit Hilton Hotel, Detroit

June 20-24: AIA Annual Convention, Cobo Hall, Detroit (recessed convention, Copenhagen and London)

June 21-22: Conference and Exposition for the Building Team, Cobo Hall, Detroit

June 21-24: American Society of Engineering Education Annual Conference, US Naval Academy, Annapolis, Md.

June 23-25: National Exposition of Contract Interior Furnishings, Merchandise Mart, Chicago

July 14-17: NCARB Annual Meeting, Fairmont Hotel, San Francisco

July 26-30: National Transportation Engineering Meeting, Olympic and Washington Plaza Hotels, Seattle

Aug. 2-6: Engineering Foundation Conference on Engineering and Social Costs in Environmental Control, Deerfield Academy, Deerfield, Mass.

Aug. 8-11: Society for College and University Planning Annual Conference, Sheraton-Palace Hotel, San Francisco

International

Aug. 23-27: Seminar on Architecture and Planning in Finland, Association of Finnish Architects, Helsinki

Sept. 8-10: International Conference on Urban Transportation, Pittsburgh Hilton Hotel, Pittsburgh

Competitions

Aug. 1: Registrations due, new buildings for Tanganyika African National Union. Contact: Alex Mathias, Competition Secretary, International Competition for TANU, Box 9431, Dar Es Salaam, Republic of Tanzania.

Awards Programs

July 1: Entries due, Prestressed Concrete Institute Awards Program. Contact: PCI, 20 N. Wacker Drive, Chicago, Ill. 60606.

Sept. 4: Entries due, Architectural Awards of Excellence Program. Contact: American Institute of Steel Construction, 101 Park Ave., New York, N.Y. 10017.

Fellowships

July 1: Applications due, Senior Fulbright-Hays Awards for teaching in 1972-73. Contact: Senior Fulbright-Hays Program, 2101 Constitution Ave., Washington, D.C. 20418.

Nov. 1: Applications due, US Government Full and Travel Grants for graduate study and research abroad. Contact: Information and Research Division, Institute of International Education, 809 United Nations Plaza, New York, N.Y. 10017. □

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