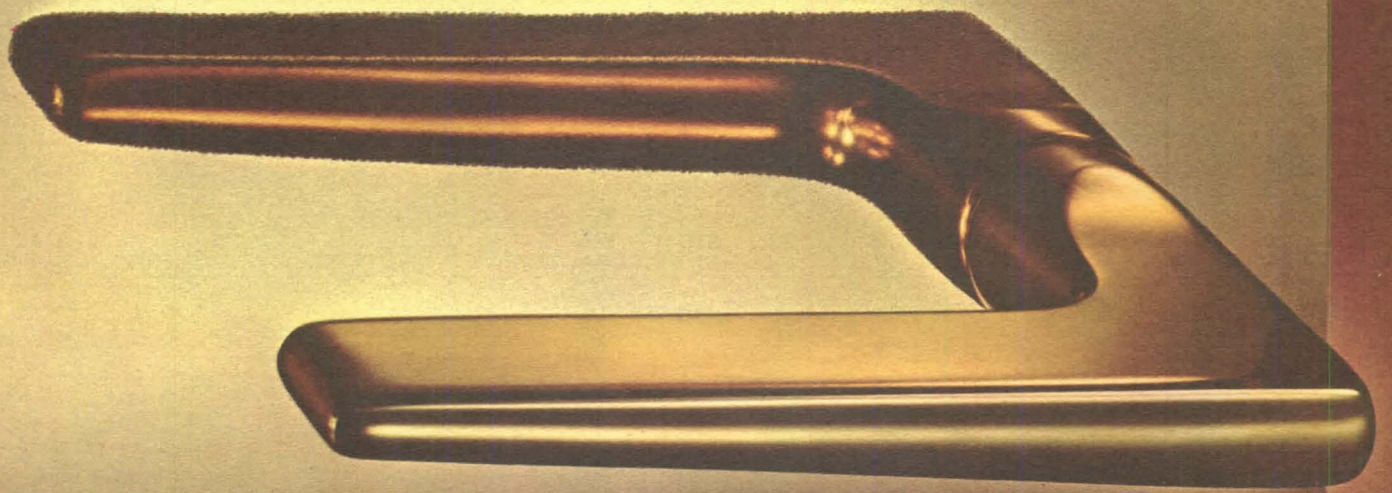




FORUM





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<b>LETTERS</b>	<b>10</b>
<b>FORUM</b>	<b>27</b>
A monthly review of events and ideas.	
<b>DRAMATIC CASTLE</b>	<b>31</b>
The towers and battlements of Hous- ton's new Alley Theater are outward expressions of its interior functions.	
<b>ROUTING THE ROAD GANG</b>	<b>40</b>
After a two-year fight, a disastrous Baltimore highway has been tamed.	
<b>IRISH ATRIUM HOUSE</b>	<b>46</b>
Its massive masonry walls conceal a spacious, open interior courtyard.	
<b>REGISTRATION ON TRIAL</b>	<b>50</b>
A plea for specialized architectural exams. By Paul B. Farrell Jr.	
<b>THE INDIVIDUALIST</b>	<b>52</b>
Artist Hans-George Rauch's personal vision of cities and buildings.	
<b>FOCUS</b>	<b>56</b>
A monthly review of notable buildings.	
<b>MUSCULAR HEALTH CENTER</b>	<b>60</b>
It asserts its strength in a setting of poles, neon, and billboards.	
<b>HAPPENING IN VENICE</b>	<b>64</b>
Louis Kahn unveils his three-building design for the city's Biennale.	
<b>MINIARCHITECTURE</b>	<b>68</b>
A one-room nursery school answers the needs of handicapped children.	
<b>DOWN A HILLSIDE</b>	<b>70</b>
The Swiss School in Naples is a handsome gesture of diplomacy.	
<b>BOOKS</b>	<b>76</b>
Herbert Bayer; urban transportation.	
<b>POP GO THE PROFS</b>	<b>78</b>
A Santa Barbara faculty club designed in the California vernacular.	
<b>PREVIEW</b>	<b>93</b>
Health center; neo-Habitat.	



Cover: From a photo  
of the Faculty Club  
at Santa Barbara  
by Morley Baer. (p. 78)

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# **PUBLISHER'S NOTE**

A growing number of FORUM con-  
tributors are distinguishing them-  
selves in the academic world. We  
previously reported Burnham  
Kelly, dean, College of Architec-  
ture, Cornell; Charles Moore,  
chairman, School of Art and Ar-  
chitecture, Yale; Donlyn Lyndon,  
head of the department of archi-  
tecture, MIT, and now, starting  
July 1, Bernard P. Spring will be-  
come Dean of the School of Archi-  
tecture, City College, New York.

Spring plans on using New York  
City as a laboratory for teaching  
his students the complex realistic  
problems which tomorrow's archi-  
tects must face. "I don't want  
these kids designing Long Island  
country clubs," he said recently.

As co-author of an AIA report  
on environmental design educa-  
tion, Spring concluded that the  
system needs restructuring to the  
core. "It is impossible for educa-  
tion to deal separately with archi-  
tecture, engineering, planning,  
landscape architecture, etc." the  
report said, "when these subjects  
refuse to stay compartmentalized  
in the real world."

Spring shows remarkable flair for  
shifting gears in his own life, which  
perhaps accounts for his open-  
ended approach to education: a  
practicing architect with Davis,  
Brody & Associates; an educator  
who has lectured at MIT, Boston  
Architectural Center, University of  
Washington, Cooper Union, Royal  
Academy of Fine Arts, Copenha-  
gen, and Princeton University; au-  
thor of several articles for ARCHI-  
TECTURAL FORUM, where he served  
as technical editor; and co-author  
with Burnham Kelly of the book  
*Design and Production of Houses*.

The new dean is one of a grow-  
ing number of architects who have  
augmented their design training  
with technological expertise. (He  
can discuss such disparate special-  
ties as space heating with solar  
energy or plastic structural sand-  
wich panels.)

Spring is presently heading up a  
group of 28 Princeton University  
urban planners who are devising  
techniques for community residents  
of seven New Jersey cities to make  
their own planning decisions in-  
telligently. "Communities have  
learned how to stop projects," he  
said, "but they have not learned  
how to generate plans." —L.W.M.







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Architect: Harrison & Abramovitz & Abbe.









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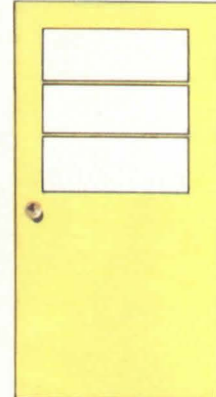


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# tight site

But self-contained Newport III heating/cooling units let architects put a lot more building in a limited space.



The prime but narrow strip of land selected for a new office building in Washington, D.C. presented architects with a sizeable space conservation problem. Site limitations made it imperative that their design offer maximum rental area. This meant space required for building functions had to be kept to a minimum yet provide optimum operating efficiency. Key to the impressive Thomas Circle South building is Newport self-contained, individually-controlled heating/cooling units. By eliminating the need for a boiler room, cooling towers and central air conditioning equipment, the Newport system added tenant space worth \$50,000 a year.

Other plus factors in favor of Newport were savings on installation estimated at \$40,000 to \$60,000 and lower future operating costs based on the easy-to-maintain modularized construction that makes it possible to repair or replace Newport units

in minutes. From a rental standpoint, tenant-controlled heating and cooling—available both day and night—had high saleability. Small wonder Newport is the leading "demand-meeter" to the growing call for climate control systems that are compact, efficient, economical and as changeable as the weather. What can Newport do for you?


For more information on independent air conditioning that blows hot and cold on your terms, write Space Conditioning Division of Dunham-Bush, Harrisonburg, Virginia, for the name of the representative in your area. *Credits, Thomas Circle South: architects, Edmund Dreyfuss and Associates, Washington, D.C.; mechanical/electrical engineers, Shefferman & Bigelson Co., Silver Spring, Md.; structural engineers, Tadjer-Cohen & Associates, Silver Spring, Md.; general contractor, Blake Construction Co., Washington, D.C.*

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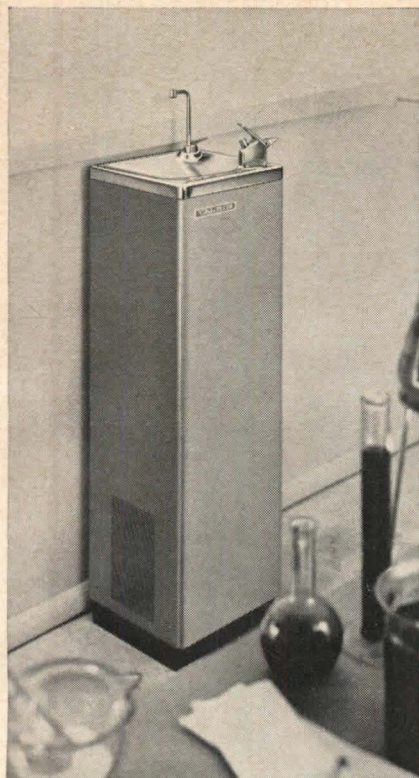


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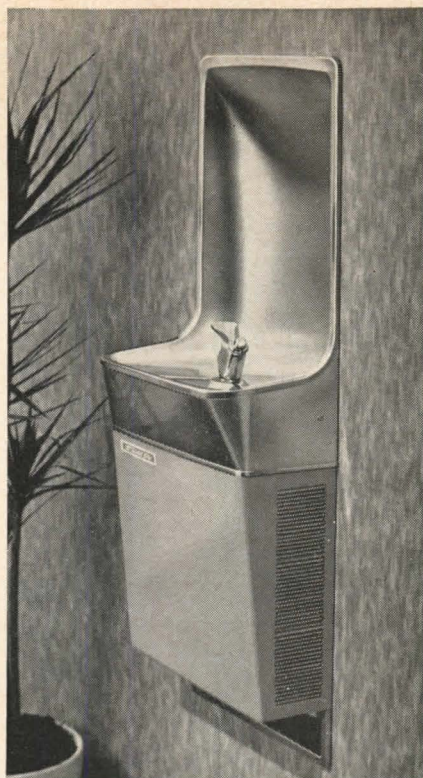
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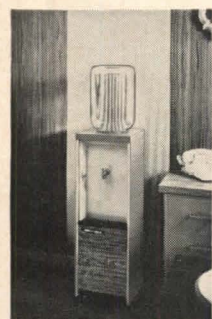


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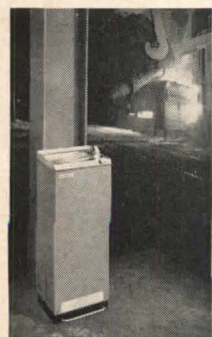


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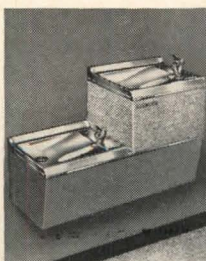


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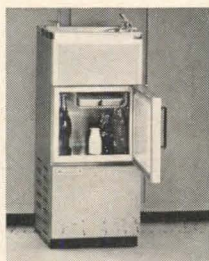
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## LETTERS

### DISCERNMENT IN BOSTON

Forum: Boston City Hall [Jan./Feb. issue] is a great building and the Sybil is a so-so critic.

Her lack of discernment about surrounding buildings, chronology, climate, causes and effects, democratic institutions, and building materials would be too tedious to detail.

ROBERT S. STURGIS

Cambridge, Mass.

Architect

Forum: Headline: MRS. MOHOLY-NAGY STRIKES AGAIN. THIS MONTH BOSTON, NEXT MONTH . . .

As a user of the real everyday work-a-day A&A Building at Yale, I strongly suggest that Forum continue the policy of writing follow-up articles on building use like the July/Aug. '67 reappraisal of the A&A.

It is useful to contrast architecture as-used with architecture as-observed in the usual magazine pre-use purple-prose art-hysterical facsimiles; while Mrs. Moholy-Nagy entertains us now, I believe three years hence office workers interviewed by Forum will instruct us on the architecture of Boston City Hall.

A philosopher told us that architecture was frozen music. I do not particularly care to melt Boston City Hall to find out, but I would be curious to check up on the inhabitants in a future Forum.

JEREMY SCOTT WOOD

Yale University

Architecture '69

### IT CAN BE DONE

Forum: We read with great interest Walter McQuade's column on Co-op City [Nov. '68].

We agree completely with his critical evaluation and go even one step further in believing that the residents of Co-op City will not be as happy as the sponsors think, once they become aware that much superior environment can and is being built at lower cost by using a more advanced building technology.

As an example, we would like to point to Thamesmead, a new community for 60,000 people (just about the size of Co-op City), which is being built on vacant land some 12 miles from downtown London. London architects and

housing officials are no longer accepting pat statements such as "The main thing is that the element you depart from standard materials and construction, is going to cost more. The cheap wall is still a plain brick wall."

Thamesmead is being built with industrialized methods with components fabricated in a Balston system factory and assembled in a great variety of exciting housing units of highest environmental quality and performance standards.

Cost? Below that of conventional construction. A study which undertook for the National Commission on Urban Problems (Dallas Commission) indicates that savings through industrialized system building will even be substantially greater in the U. S. than Great Britain.

Time? At least twice as fast as that of conventional construction.

Codes? No problem—even old New York City Building Code permitted this type of construction.

Labor? Unions working with industrialized systems the steady year-round work is safe and comfortable working conditions. Contractors like that eases the strain on hard-to-skilled building mechanics and community at large likes that industrialized building provides employment opportunities for unskilled, underprivileged, unemployed workers.

This technology is operative on a vast scale in many European countries without government subsidy and is available in the U. S. to anybody who has a housing program of even lesser size. Co-op City. All it takes to start a program of industrially built housing is leadership, technological know-how and an attitude of "it can be done."

GUY G. ROTHEN

L.I. City, N.Y.

Associated System Planning and Design

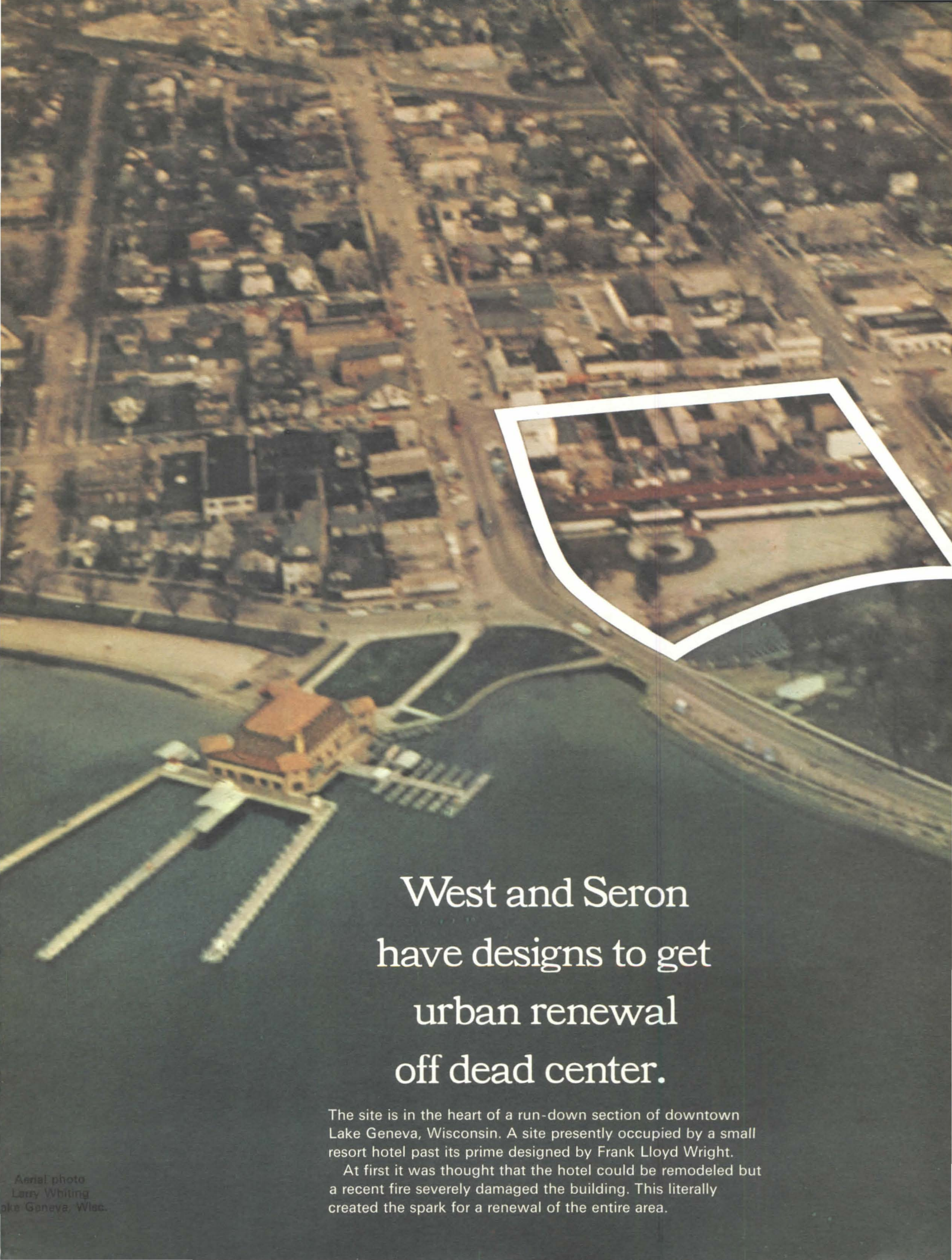
### PASSING GO

Forum: Your article on Gammanship [Dec. '68] was extremely well written, and I would like to thank you for including our university in it.

Albert Filoni and Barry N. two masters students in the department of architecture at Harvard, were directly instrumental in helping with the development of the games and their use in the community. John Pynoos, a planning student with the Harvard Urban Field Service, also utilized the games in projects that have

(continued on page 11)



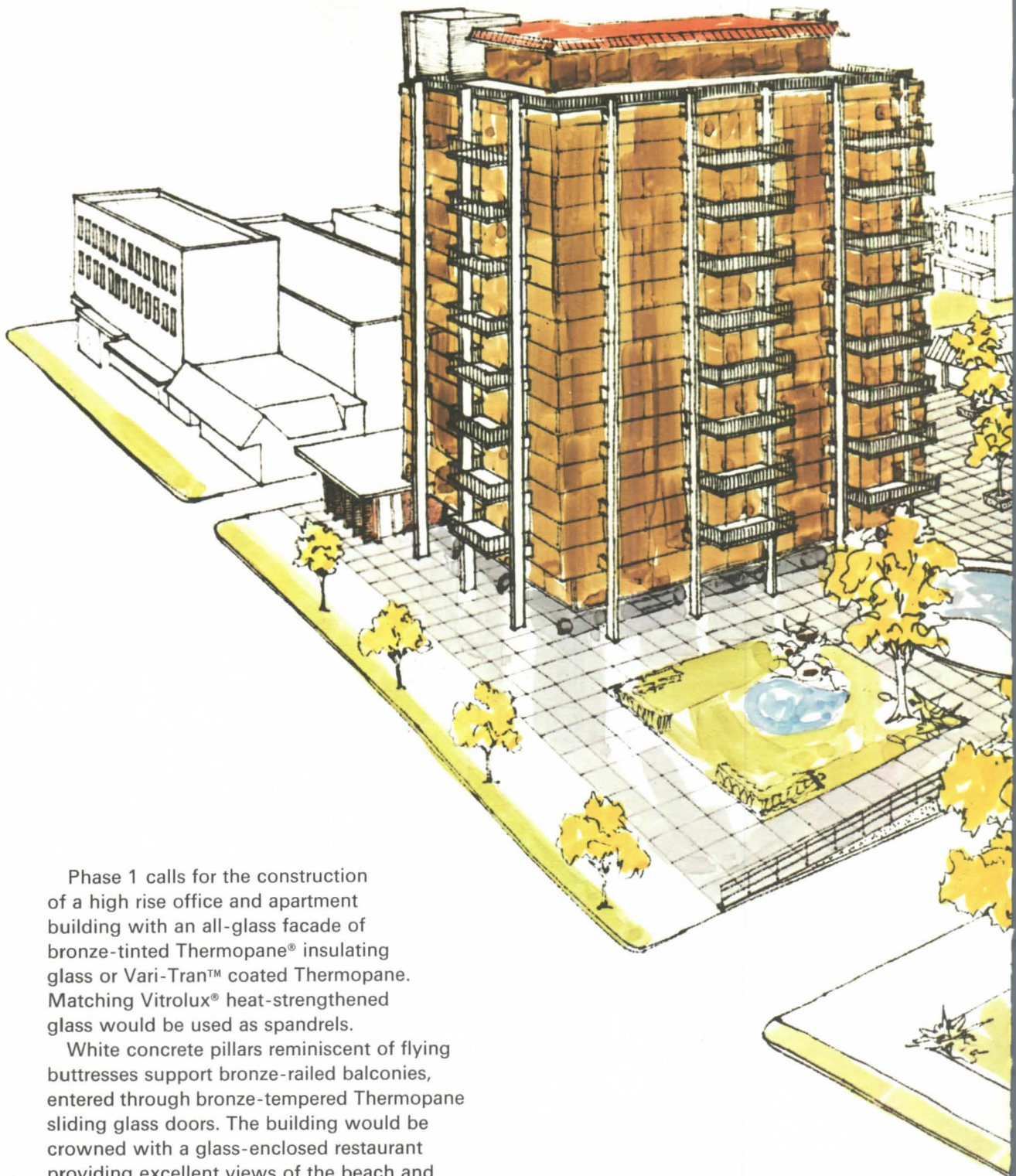


## West and Seron have designs to get urban renewal off dead center.

The site is in the heart of a run-down section of downtown Lake Geneva, Wisconsin. A site presently occupied by a small resort hotel past its prime designed by Frank Lloyd Wright.

At first it was thought that the hotel could be remodeled but a recent fire severely damaged the building. This literally created the spark for a renewal of the entire area.





Phase 1 calls for the construction of a high rise office and apartment building with an all-glass facade of bronze-tinted Thermopane® insulating glass or Vari-Tran™ coated Thermopane. Matching Vitrolux® heat-strengthened glass would be used as spandrels.

White concrete pillars reminiscent of flying buttresses support bronze-railed balconies, entered through bronze-tempered Thermopane sliding glass doors. The building would be crowned with a glass-enclosed restaurant providing excellent views of the beach and Lake Geneva. Underground parking will be provided beneath the street level terrace.

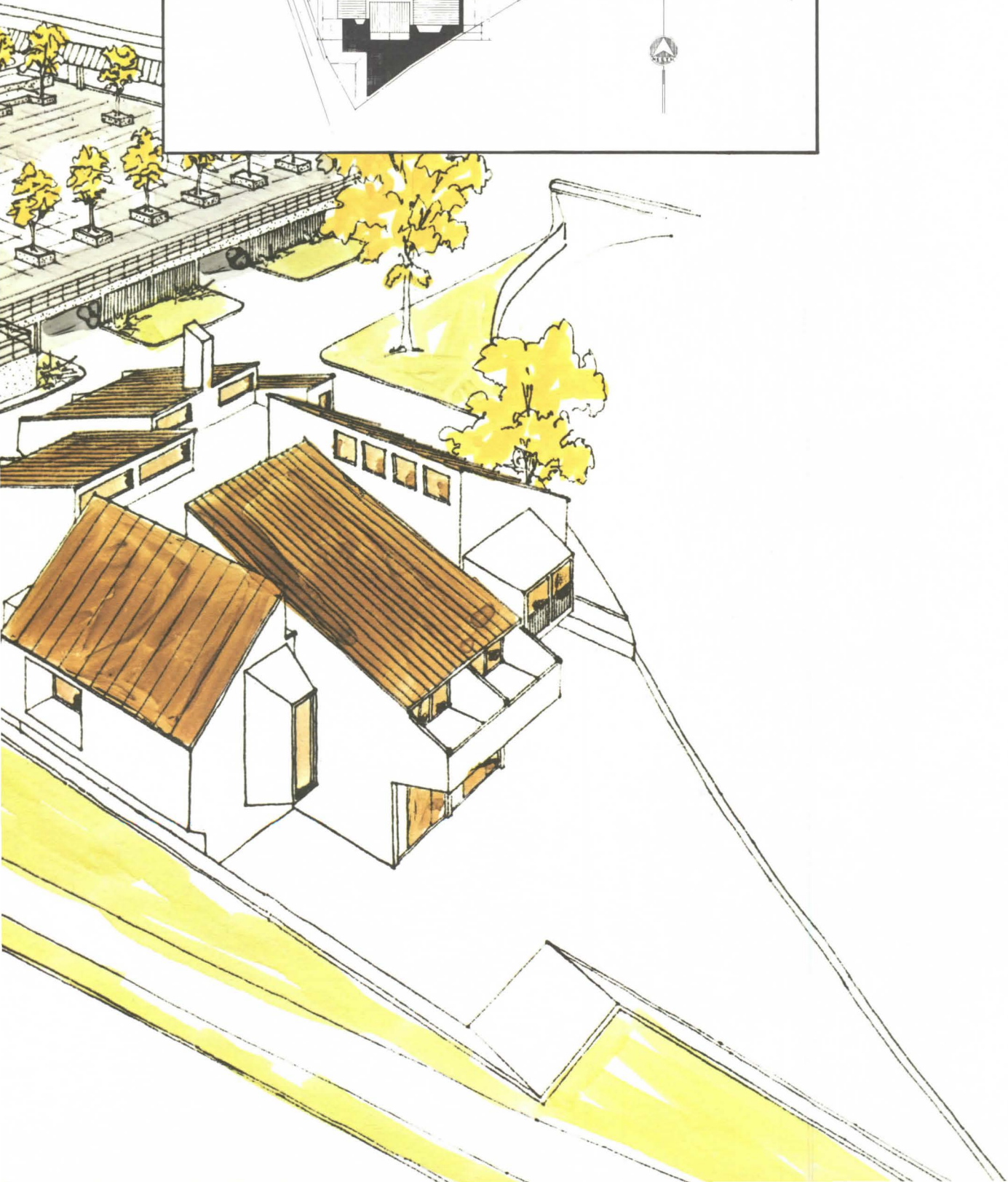
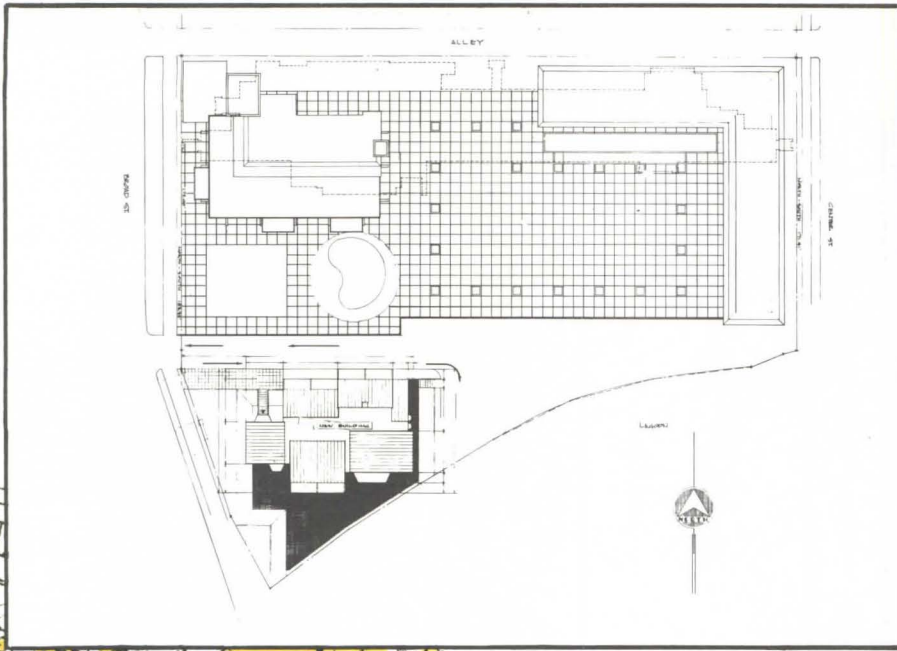
Phase 2 envisions the erection of some small studio apartments down near the lake. These will have copper roofs. Bronze-tinted Thermopane windows will provide indoor comfort and control of reflected glare from the sky and lake.

Mr. West has also developed suggestions for the rehabilitation of Main Street stores which separate the two sites.

He expects that the whole project will encourage property owners in the adjacent three- or four-block area to remodel their buildings to create a smart shopping center in the heart of town. Many are enthused.

Thus, Derald West, A.I.A., Lake Geneva, and Levon Seron, A.I.A., Joliet, Ill., associated architects, hope to inject new vitality into this growing resort town.









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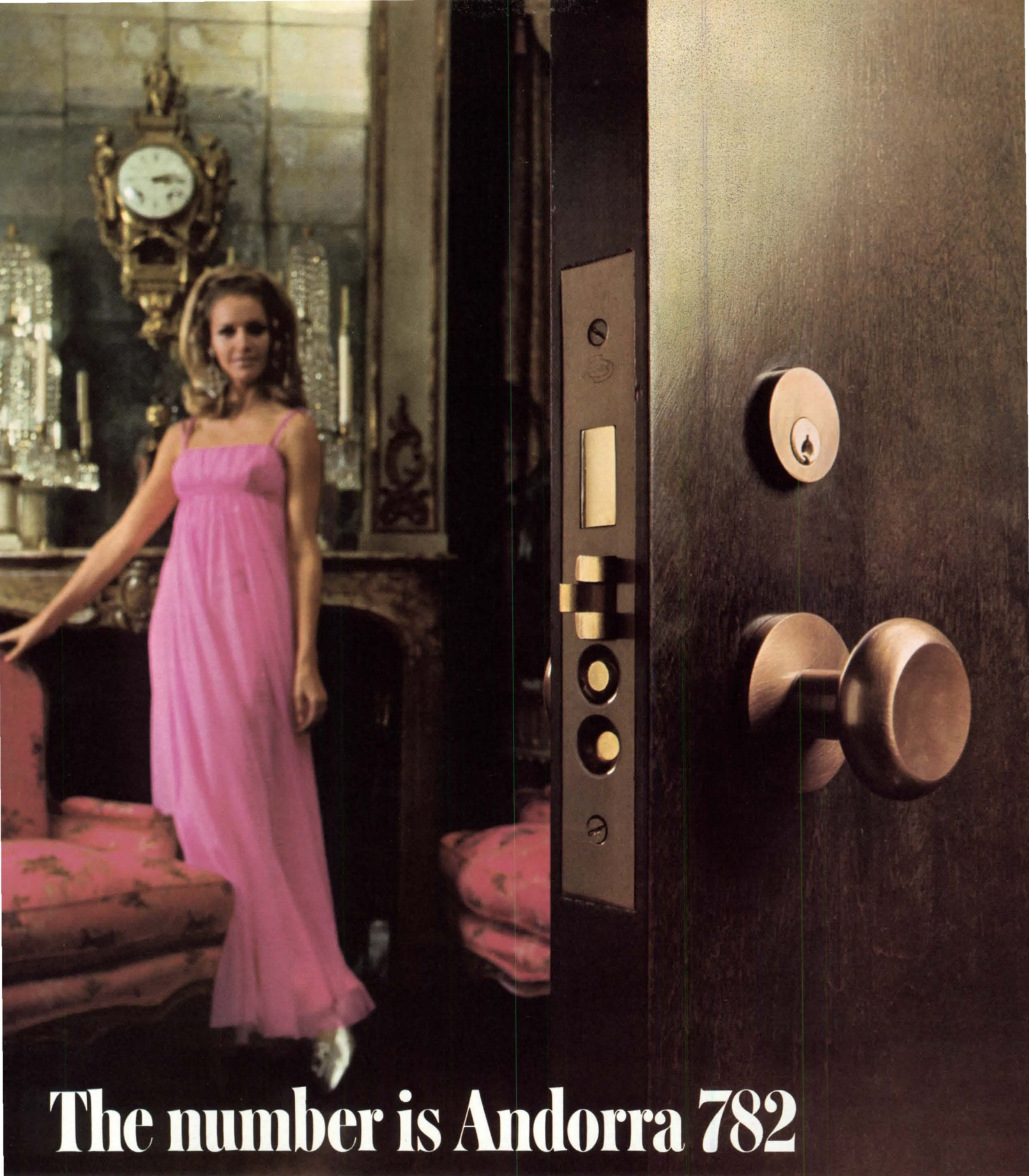
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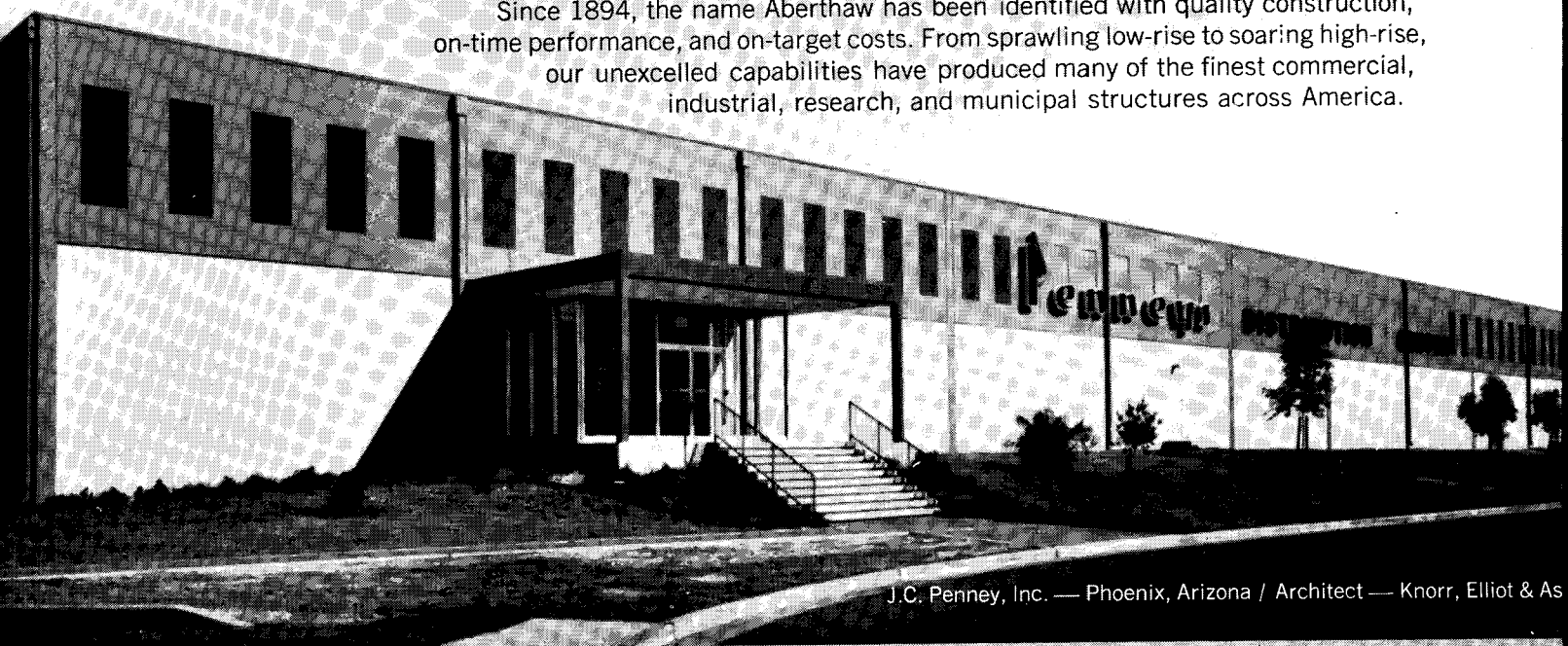
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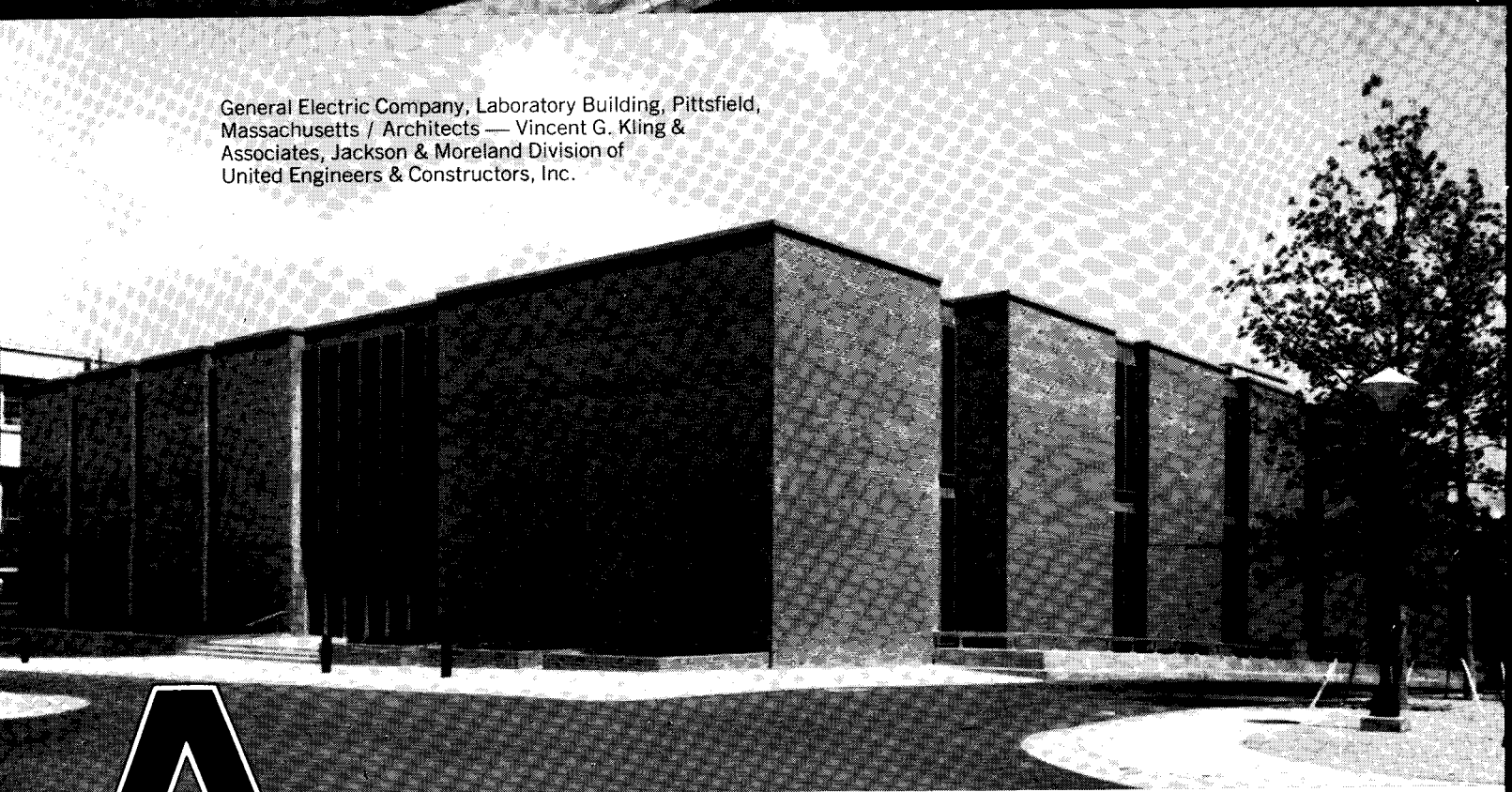
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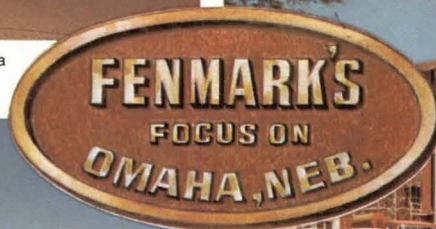
Dormitory for Duchesne College - Omaha, Nebraska  
Architect - Leo A. Daly  
Contractor - Butler Const. Co.



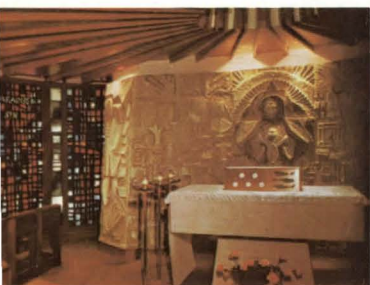
Fort Crook School - Omaha, Nebraska  
Architect - Martin, Money and Assoc.  
Contractor - Butler Construction Co.



Ehrling Bergquist U.S.A.F. Hospital  
Offutt Air Force Base - Omaha, Nebraska  
Architect - Leo A. Daly & U.S. Corps of Engineers  
Contractor - Peter Kiewit & Sons



University of Nebraska - Omaha, Nebraska  
College of Medicine Hospital  
Architect - Henningson, Durham & Richardson  
Contractor - A. Borchman & Sons



Sisters of Mercy - Omaha, Nebraska  
Architect - Leo A. Daly  
Contractor - Butler Const. Co.



First West Side Bank - Omaha, Nebraska  
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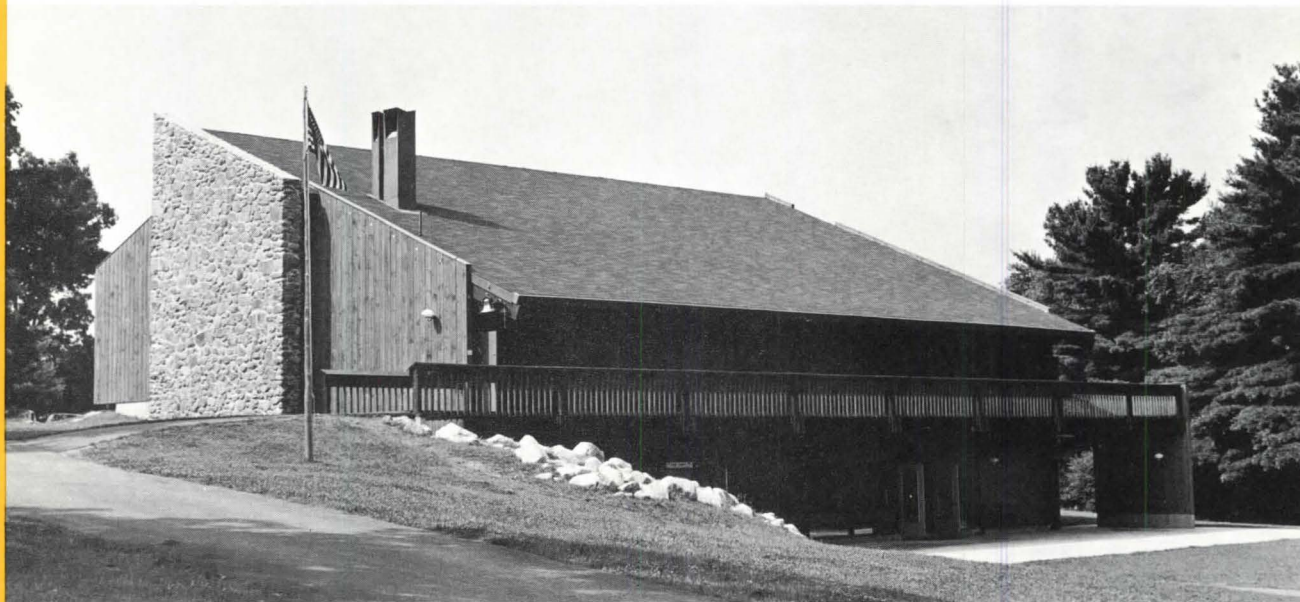
*The drinking fountain that looks better than a drinking fountain—Haws Model 30 in vivid stone.*



**DRINKING FOUNTAINS**



# Northeastern University Selects Electric Heat for Seven New Physical Education Buildings



The main lodge at Northeastern University's new physical education center faces lake in rural Massachusetts

**THE CASE**—Warren Center in Ashland, Massachusetts, is an all-electric physical education center owned and operated by Northeastern University's Boston-Bouve College. Situated on a 65-acre tract of land, the center consists of five sleeping cottages, an infirmary, and a main lodge.

Completed in March, 1967, the recreation center was designed by Salsberg & Le Blanc, architects of Brookline, Massachusetts, as "an outdoor laboratory" for students planning careers in physical education, recreation, and physical therapy.

Because the cottages and infirmary would be erected some distance from each other in a heavily wooded area, the administrators and the designers decided to install an electric heating system in each of the seven buildings because, architect Ralph Le Blanc explains, "electricity was readily available, posed no delivery or storage problems, and offered first cost advantages plus ease of installation."

Maurice Noon of the Amory Engineering Corp., consulting engineers of Jamaica Plain, Mass., designed the electric heating systems for the seven buildings, all of which are heated by baseboard

units or a combination of baseboard and fan coil units with individual room controls.

Styled to blend with the rustic setting, buildings at the center are constructed of wood. The five one-story cottages, each with sleeping accommodations for 16, and the infirmary, are alike in design. The main lodge, which is built on a sloping site overlooking Lake Ashland, has 15,000 sq ft of floor space on three levels and 20 rooms, including a library, meeting rooms, kitchen, dining room, lounge and offices.

**THE HISTORY**—Since its opening in 1967, Warren Center has been operated on a 12-month schedule. In the summer it is used as a camp for underprivileged children under the supervision of university students. In the winter months, which can be severe in Ashland, the electric heating systems keep the buildings' occupants comfortably warm. Dr. Catherine L. Allen, Dean of Boston-Bouve College, says: "We are very pleased with the electric heating systems at the center. They are economical to own and operate, and very clean and comfortable."



Gentlemen:  
Please send the complete series of Electric Heating  
Case Histories as they become available  
to me at the following address:

Name and Profession:

Firm, University or other affiliation:

Address:

Zip Code:

# 1 CATEGORY OF STRUCTURE:

Educational—Physical Education Center

# 2 GENERAL DESCRIPTION:

Area: 22,000 sq ft  
Volume: 220,000 cu ft  
Number of floors: two and a half in main lodge;  
one in other buildings  
Number of rooms: 20 in main lodge  
Types of rooms: lounge area, library, offices, kitchen, dining rooms, meeting and conference rooms, study areas, plus cottages and infirmary.

# 3 CONSTRUCTION DETAILS:

Glass: double in main lodge; single elsewhere  
Exterior walls: wood siding and sheathing, 3/8" mineral fiber batts (R=13); wood paneling; U-factor: 0.06  
Roof and ceilings: asphalt shingles on plywood sheathing, 6" mineral fiber batts (R=19), vegetable fiber exposed panels; U-factor: 0.05  
Floors: wood  
Gross exposed wall area: 14,135 sq ft  
Glass area: 3,189 sq ft

# 4 ENVIRONMENTAL DESIGN CONDITIONS:

**Heating:**  
Heat loss Btuh: 420,000  
Normal degree days: 6000  
Ventilation requirements: none  
Design conditions: -10F outdoors; 70F indoors  
**Cooling:**  
None

# 5 LIGHTING:

Levels in footcandles: 20-75  
Levels in watts/sq ft: 1-4  
Type: fluorescent and incandescent

# 6 HEATING SYSTEM:

Individual rooms in the main lodge are heated by electric baseboard units installed under all window areas. Spaces such as hallways, stairwells, and entrances are heated by flush-mounted wall convectors or fan-forced cabinet units. The sleeping cottages and the infirmary are heated by baseboard units with individual room controls.

# 7 ELECTRICAL SERVICE:

Type: underground  
Voltage: 277/480v, 4 wire  
Metering: primary

# 8 CONNECTED LOADS:

Heating	321 kw
Lighting	65 kw
Water Heating	137 kw
Cooking	63 kw
<b>TOTAL</b>	<b>586 kw</b>

# 9 INSTALLED COST:\*

General Work	\$291,600	\$13.25/sq ft
Plumbing	30,000	1.36/sq ft
Electrical (Incl. Mech.)	100,000	4.55/sq ft
<b>TOTALS</b>	<b>\$421,600</b>	<b>\$19.16/sq ft</b>

\*Buildings were completed March, 1967 and costs are for entire complex of five sleeping cottages, the infirmary, and the main lodge.

# 10 HOURS AND METHODS OF OPERATION:

Buildings are occupied seven days a week, twelve months a year.

# 11 OPERATING COST:

Period: 8/4/67 to 8/2/68  
Actual degree days: 6058  
Actual kwh: 417,800\*  
Actual cost: \$7,849.67\*  
Avg. cost per kwh: 1.88 cents\*  
\*For total electrical usage for entire complex

Billing Date	Degree Days	Demand	kwh	Amount
9/5/67	25	207	26,400	\$ 594.47
10/4/67	105	156	18,000	425.71
11/3/67	369	132	25,200	447.46
12/6/67	890	195	46,800	817.91
1/5/68	955	117	39,000	619.16
2/5/68	1140	192	63,600	1,011.36
3/6/68	1187	210	63,600	1,057.20
4/4/68	648	126	36,600	615.60
5/6/68	449	162	27,000	550.80
6/4/68	232	180	27,000	576.00
7/3/68	57	201	33,600	684.60
8/2/68	1	141	21,000	449.40
<b>TOTALS</b>	<b>6058</b>		<b>417,800</b>	<b>\$7,849.67</b>

# 12 FEATURES:

Heating equipment in each room or area is controlled by a separate wall-mounted or integral thermostat wired to a central seven-day program clock which automatically sets back the temperature approximately 10 degrees at night and during unoccupied periods.

# 13 REASONS FOR INSTALLING ELECTRIC HEAT:

Electric heating systems were selected for all seven buildings because electricity was readily available, posed no delivery or storage problems, and offered first cost advantages and ease of installation.

# 14 PERSONNEL:

Owner: Northeastern University  
Architects: Salsberg & Le Blanc  
Consulting Engineers: Amory Engineering Corp.  
General Contractor: Poley-Abrams Corp.  
Electrical Contractor: J. & M. Brown Co., Inc.  
Mechanical Contractor: Air Conditioning Contractors, Inc.  
Utility: Boston Edison Company

# 15 PREPARED BY:

Robert T. Woodman, Sales Engineer, Boston Edison Company.

# 16 VERIFIED BY:

*Ralph Le Blanc*

Ralph Le Blanc, Architect

*Maurice Noon*

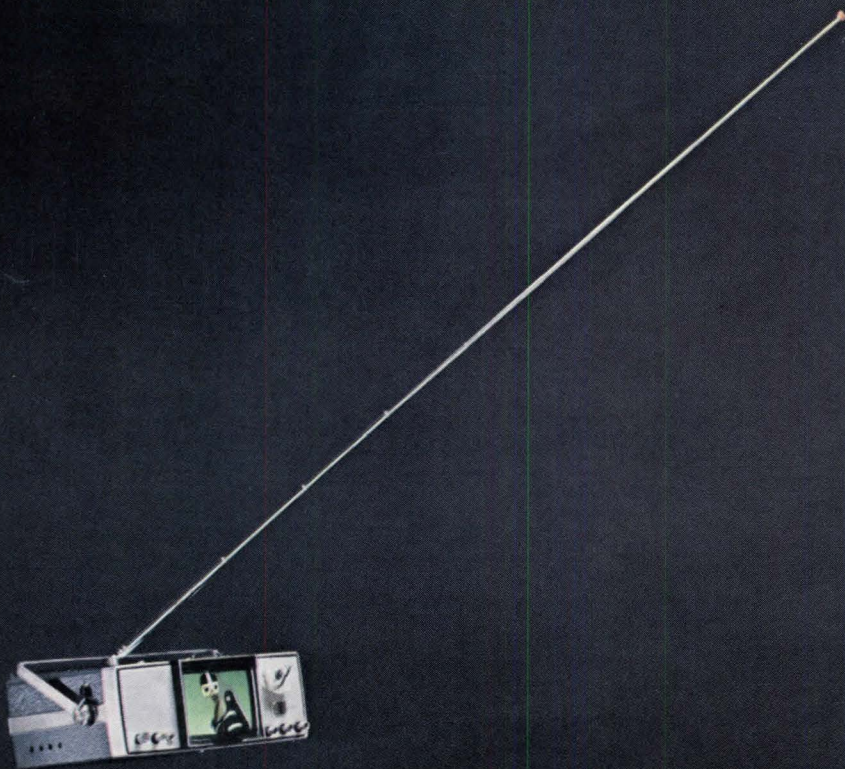
Maurice Noon, P.E.



**NOTICE:** This is one of a series of case histories of buildings in all structural categories. If you are an architect or consulting engineer; an architectural or engineering student; an educator; a government employee in the structural field; a builder or owner, you may receive the complete series free by filling out the strip coupon at the left and mailing it to EHA. If you are not in one of the above categories, you may receive the series at nominal cost.

**ELECTRIC HEATING ASSOCIATION, INC.** 437 Madison Avenue, N.Y., N.Y. 10022



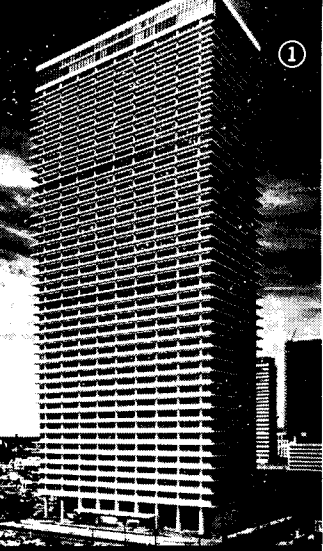


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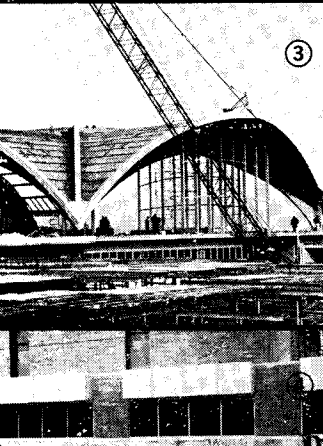
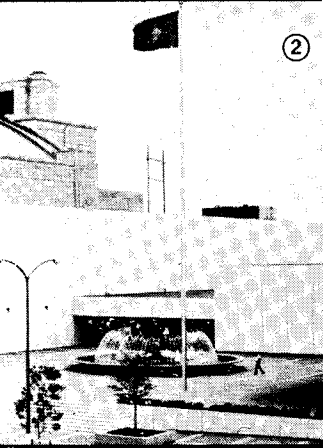


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- ① Foundation and tunnel waterproofing for the Humble Building, Houston, Texas  
ARCHITECT: Welton Becket & Associates
- ② Plaza and fountain waterproofing for the Philadelphia Trade & Convention Center  
ARCHITECT: Davis, Poole & Sloan and Edward D. Stone, Associated Architects
- ③ Free form roof waterproofing on the St. Louis Airport Terminal.  
ARCHITECT: Hellmuth, Obata & Kassabaum, Inc.
- ④ Water barrier and run-off drain for Ohio's Bowling Green State University Undergraduate Library.  
ARCHITECT: State of Ohio, Division of State Architecture and Engineer, Carl E. Bentz
- ⑤ Reflecting pool liner at the Museum of Modern Art in New York City.  
ARCHITECT: Philip Johnson

CONSTRUCTION MATERIALS DEPARTMENT

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## LETTERS

(Continued from page 10)

pervised. These students have made an excellent contribution to the development of these games.

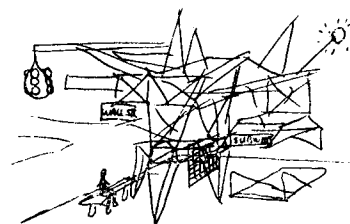
The games have also been proposed for use in helping Cambridge residents plan their living units and their community in the Cambridge model city proposal. We have great hopes that we will be able to further improve the quality of the game and utilize the result of the game in real projects. Cambridge, Mass. NEAL MITCHELL

### CONSTRUCTIVE ADVICE

Forum: I enjoyed your article about the tension/compression structures in Bryant Park [Jan./Feb.]. What a great idea for downtown!

The Parks Commission should team up with the Utilities Department or someone and produce a piece of sculptural street furniture, combining a traffic light, street signs, benches, lamps, and small enclosures for newspaper stands or subway entrance covers. Expensive yes, but a great deal of fun.

Somerville, N. J. MICHAEL KRESKI  
"A friend of better living-through-fun-in-environment."



Above: Mr. Kreski's "design"—ED.

### DESIGN DATA

Forum: Together with Sim Van der Ryn, I am working on a research project sponsored by the National Institute of Mental Health. The purpose of the project is to collect data on design methodologies as they apply to the architectural planning process, and to present the findings in a book that will be published by March, 1970.

My focus is on existing computer programs relating to all aspects of architectural design. To this end, I need the following information: program name, programmer, sponsor, description, program limitations, machine specifications, availability and references. A copy of the computer

output must accompany each submission.

Please direct all inquiries to me at the Laboratory for Computer Graphics and Spatial Analysis, Graduate School of Design, Harvard University, Cambridge, Mass. 02138.

ERIC TEICHOLTZ  
Director of Graphic Services  
Harvard University

### BRING BACK BOCK

Forum: The Frank Lloyd Wright-Richard Bock fountain located on Lake Street in Oak Park (Chicago) will be relocated this spring as part of the "Prairie Century" celebration commemorating the 100th birthday for FLLW being planned by the Oak Park Beautification Commission for the month of June.

The fountain was originally planned to serve people, dogs, and horses and was, in fact, erected in 1909 by the Oak Park Horse Show Association. In the intervening 60 years, the immediate environment of the fountain has changed radically and, of course, horses are now excluded by Village Ordinance from Oak Park. The plan is to give the fountain a proper setting and a new functional life in a small plaza 100 ft. east of its present location, where it would provide a pleasant formal entrance to Seville Green.

The present condition of the concrete fountain, however, requires that it be rebuilt in its entirety, as it has been virtually pul-



verized by the elements (see photo). The method chosen for the restoration will give precise massing to the forms, but, as with any work of this kind, the problem of authenticity is of primary importance. Any information, therefore of possible sources for sketches or early photographs of the fountain especially of the Bock 3/4 reliefs would be most appreciated. Such information should be sent to my attention at the Perkins & Will Partnership, 309 West Jackson Boulevard, Chicago, 60606.

Chicago JOHN MICHEL





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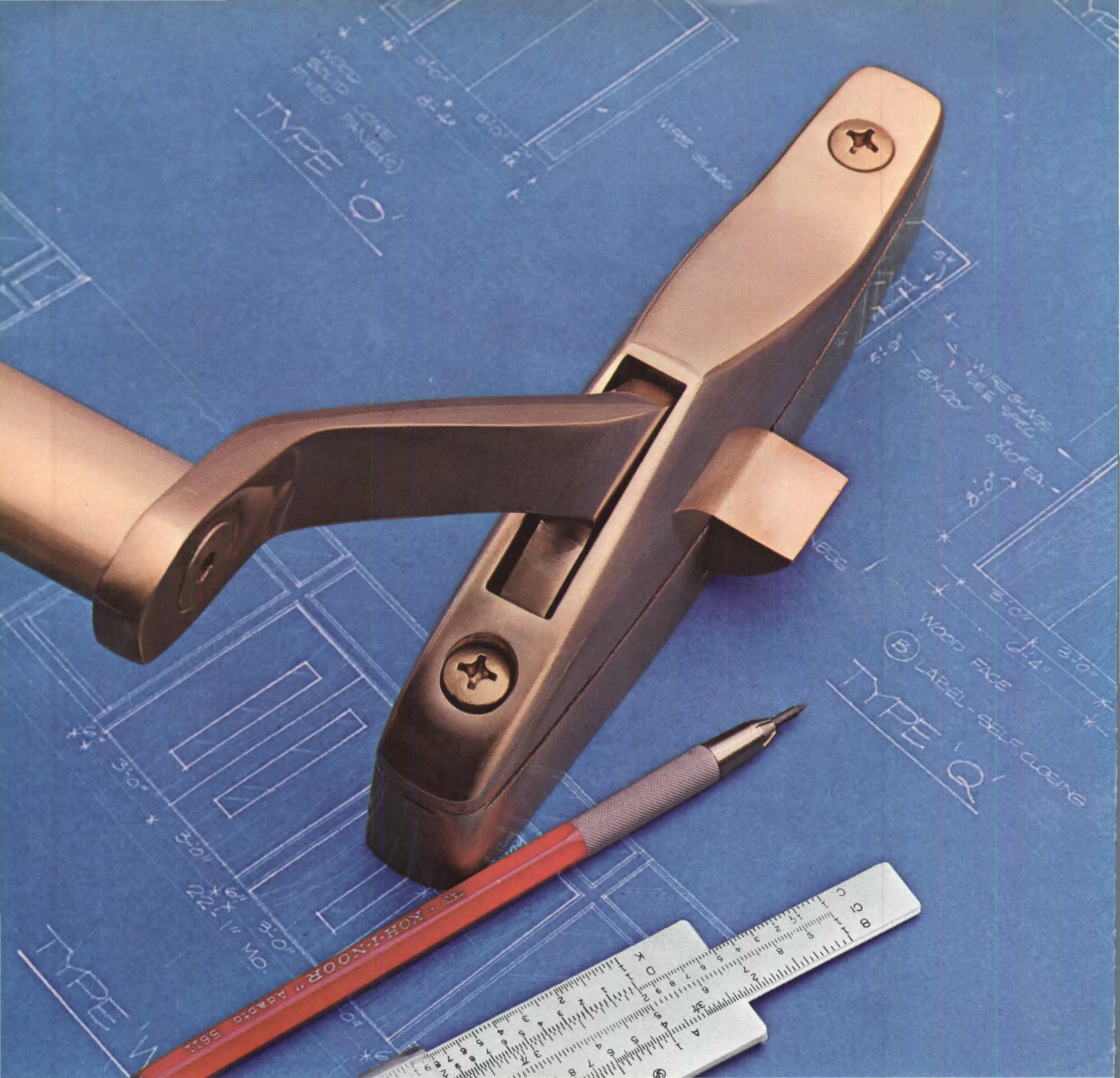
The name Gold Bond identifies fine building products from the National Gypsum Company. For more information on Travacoustic Nondirectional, write Dept. AF-39C, Buffalo, New York 14225.

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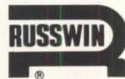




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# FORUM

In what appears to be an effort to prove that cities are now obsolete, the Architectural League of New York a month ago initiated a program that has, in any event, demonstrated that recital halls are obsolete. The program—"Dial-A-Poem"—was initiated by Poet John Giorno (below) who recorded several dozen short tapes by young poets reading their own works, plugged the tapes into half a dozen telephones, and then announced that anyone, anywhere, willing to dial (212) 623-0400, could get an earful of Allen Ginsberg, William Burroughs, Taylor Mead, or others.

The response to Mr. Giorno's announcement has been absolutely



phenomenal: during the first several days, the six phones were busy day and night, clocking about 4,000 calls every 24 hours. (The Telephone Co., which—unlike the poets—was getting richer by the minute, estimated that another 12,000 callers a day tried, but failed to dial the Muse.) After the first week, the League found it necessary to install an additional four telephones, and Mr. Giorno was going frantic tapping additional verse. As this is written, Dial-A-Poem is being called by around 60,000 thespiphiles a week—or more than have ever heard poetry recited by real-life poets before in the entire history of the United States! (This is the sort of sweeping statistic that we challenge anybody to disprove . . .). In any event, if funds hold out, Dial-A-Poem will still be operational when you read this.

What it all means, of course, is that architecture for communication—in the traditional manner—may well be on its way out. The Austrian architect, Hans Hollein, once made the point succinctly when asked to design an addition

to a Vienna museum: he just drew the old building with a giant TV-set plugged into its side! And if the prime need of cities is to facilitate communication between people, the Architectural League and Mr. Giorno have rather dramatically questioned that need.

## HARLEM ON THEIR MINDS

We do not mean to imply that museums are completely out of date—yet. New York City's Metropolitan Museum of Art, on January 18, opened a show entitled "Harlem On My Mind." It upset a lot of people, and the museum's director, Thomas P. F. Hoving, said he hoped "things would quiet down." It could also upset the all-time attendance record, and, since we do not believe he was referring to that, we repeat the score here: 182,880 as of February 16, or about 6,500 per day.

## BLOWOUTS

### CRISIS POLITICS

Secretary of the Interior Walter J. Hickel was given a sadly ironic test last month in Conservation vs. Exploitation. The oil-slick disaster at a Union Oil Co. well off the Santa Barbara, Calif., coast covered the course quite thoroughly: leasing of natural resources, water pollution, wildlife protection, and scenic conservation. Hickel (viewing disaster scene, below) passed the test onto his department for further study, which was, of course, the right thing to do.

In 1967, the Santa Barbara County Supervisors petitioned the Interior Department, on four separate occasions, to declare a



one-year leasing moratorium until the possibility of oil pollution from drilling blowouts could be further studied. They cited a long history of earthquake tremors from Land's End Fault, near which the ruptured well was eventually drilled. But they proved a

their complaints to the statehouse (right) and to Volpe's successor as governor, Francis W. Sargent.





less formidable lobbying interest than the oil industry, which paid the government \$1.6 billion last year for offshore oil and gas

touchier legal and less tangible political considerations.

(The nuclear nonproliferation treaty, not yet ratified, obliges the

Official landmark status derives principally from its great interior court (bottom left). The court is a circulation core, with marble



finance the first 50 units; the national AFL-CIO has agreed to provide interim construction mortgage financing through its new Department of Urban Affairs; and the Labor Department is supplying \$176,500 for recruiting and training, to be carried out by Construction Job Opportunities Inc., an organization of general contractors in St. Louis. The houses will be renovated by Jeff-Vander-Lou, under the 221d3 program, and will sell for about \$13,000 (with down payments of about \$200).

JVL has already made a name for itself in the Yeatman district of St. Louis, as a neighborhood-based, action-oriented nonprofit corporation. (Its actual name comes from three streets in the area—Jefferson, Vandeventer, and St. Louis Avenues.) In less than three years, and without direct federal aid, JVL has rehabbed 32 houses, and can move immediately on 50 others that it has bought; it has broken ground for a clinic and has built a small park; and it is bringing a major industry, a shoe factory (to be black-managed) into the area. JVL will have the major voice in administering the new four-way agreement, with three representatives from JVL on the committee, two from labor, two from management, one from the FHA, and one from the Model Cities agency.

#### NEW TOWN, NEW TWIST

"Soul City," which will be a new town primarily inhabited by black people, and is Floyd B. McKissick's answer to the intolerable conditions of the urban Negro, is moving closer to reality. McKissick, formerly national director of CORE, announced on February 19 that 1,810 acres of ranchland in the impoverished Piedmont area of North Carolina has been purchased for \$500,000 for the new town.

Ifill, Johnson & Hanchard, New York architectural firm, has been selected to design the town, which will be located on U.S. 1 about an hour northeast of Durham. Technical help will be given by the planning schools of MIT and the University of North Carolina, the business schools of Harvard and Columbia, and the Rouse Company (developers of Columbia, Md.). Support from the Nixon Administration has also been promised.

The \$25-million town will be developed by Floyd B. McKissick

Enterprises Inc., which has investments in a supermarket, publishing company, and other black-owned ventures. Four major industries are committed to locating plants in the new town, and although these will initially be white-owned, McKissick has hopes ultimately for local management and ownership. (At present, the area's chief industry is tobacco, a declining crop grown largely on the tenant sharecropper system.)

Population of Soul City is expected to reach 18,000 in 10 years. Although it is being built primarily to provide job opportunities for Negroes, from both rural and urban areas, McKissick is careful to explain that the community is open to anyone whose philosophy is one of respect for the black man. Segregation is against the law, he points out. He says that Soul City will be "a showplace of democracy in a sea of hypocrisy."

Present residents of Warren County are somewhat wary. There were some 12,700 nonwhites, and 6,300 whites at the 1960 census, with whites in almost complete control of everything. School integration was still being resisted this past fall, despite a court order. The county has only one black policeman, and only one black lawyer (T. T. Clayton, whom McKissick calls "my right-hand man" in the project). One of the county commissioners says he doesn't think the new town would be fair to white people, "since they'd be put in a minority." Another commissioner says, "It wasn't discussed with us, and that's one of the things I don't like about it." The area was selected, in part, because of its proximity to major roads and rail transportation, and in part because of the ease of assembling a large tract of land (the entire acreage, once a slave plantation, was owned by a single man).

## LARGESS

#### NAVY YARD OCCUPIED

The City of New York took possession of the Brooklyn Navy Yard last month after two and a half years of futile negotiations with the Johnson Administration and 167 years of federal ownership. It was the Nixon Administration's way of saying that they are agreeable to the transfer of surplus properties (mostly mili-

(continued on page 87)

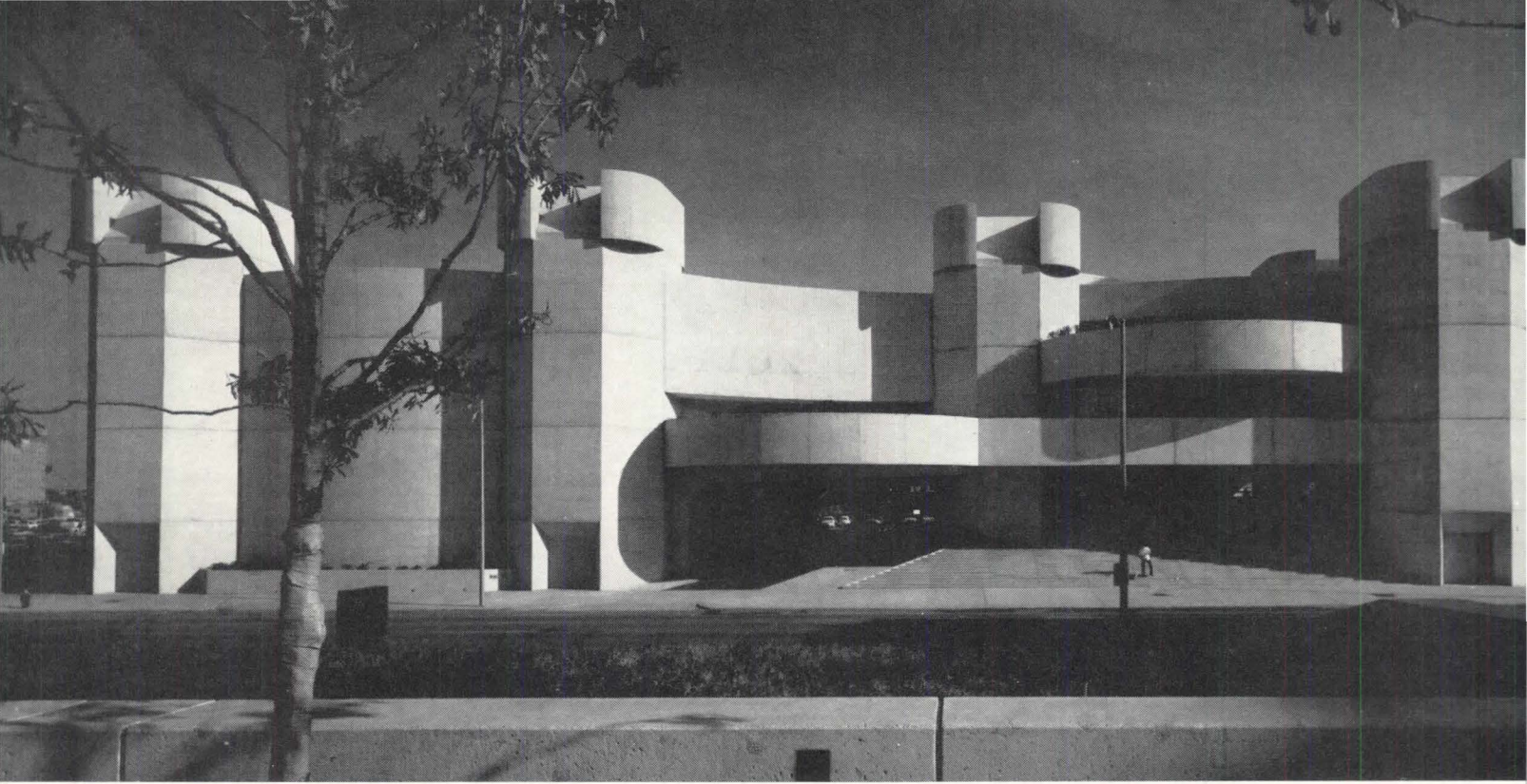
# HOUSTON'S ALLEY THEATER

The new home which Ulrich Franzen has designed for one of America's foremost repertory companies is both a functional achievement and a sensitive addition to the city's growing downtown core.











After 21 years in a converted fan factory on the fringe of downtown, the Alley Theater now has its own \$3.5-million building in Houston's new cultural center. The structure actually contains two theaters, an 800-seat house with an open stage—not quite like any other in the world—and a 300-seat arena similar to the Alley's old playhouse.

Architect Ulrich Franzen has worked out an internal layout (right) that allows both theaters to share the same covered entrances and the same array of dressing rooms and shops. This intricate assemblage of spaces has not been crammed into a blandly monumental container, but expressed externally in a vigorous interplay of forms.

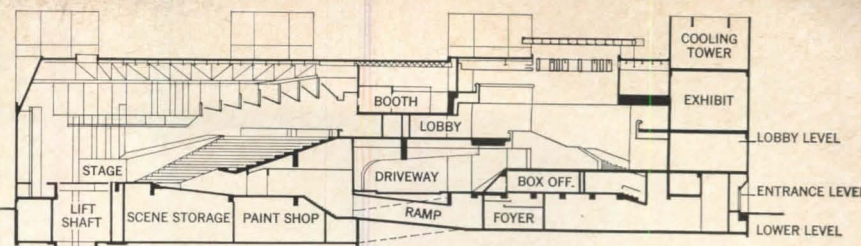
The nine towers rising up through all levels of the building serve as abutments for its long roof spans and as containers for its numerous stairs and mechanical risers. The overhanging penthouses on top of each one accommodate elevator mechanisms and air handling equipment, isolating their sounds from performing spaces.

#### For this company, for this site

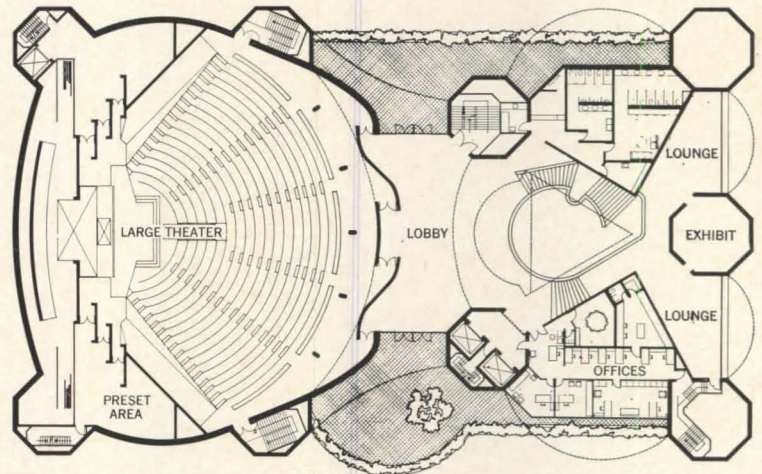
The building was designed from its two theaters outward. For 12 months of the 18-month design period, Franzen worked with Nina Vance—founder and director of the company—exclusively on performing spaces and extensive backstage facilities to meet the Alley's needs.

Once Franzen took up the building as a whole, he designed it as part of the city. In a place where the heat can be withering and the sunlight merciless, its walls are thick and its openings deeply shaded.

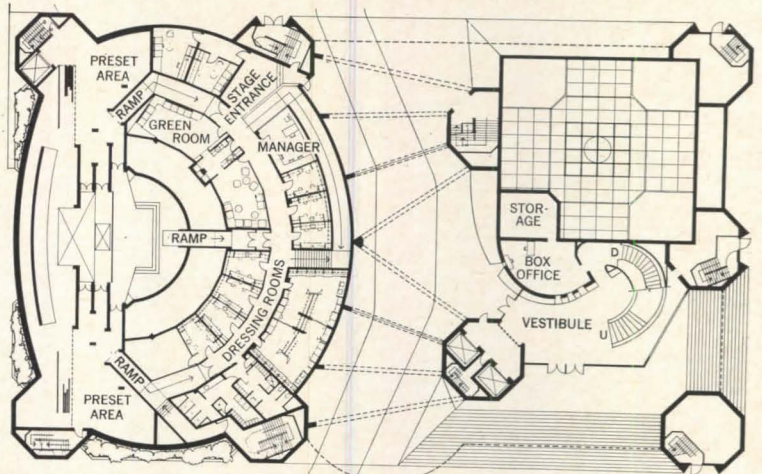
Visually, the Alley had to take its place in the cultural center, standing next to the vast, 3,000-seat Jones Hall. For all of their obvious differences, the theater has been carefully related to the imposing hall. Its walls echo the curves of the auditorium visible behind the Jones Hall colonnade, and its main front—seen straight-on (top photo)—has a hint of classical regularity in its uniform towers and its level roof line. And finally, the Alley's cream-



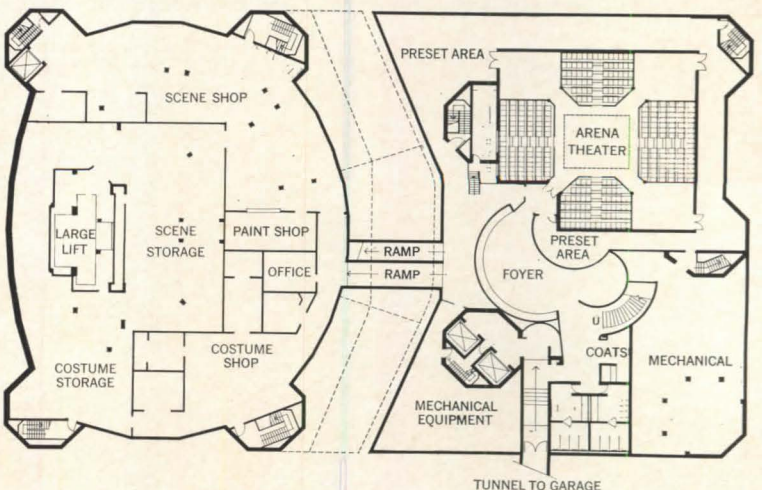
SECTION



LOBBY LEVEL



ENTRANCE LEVEL

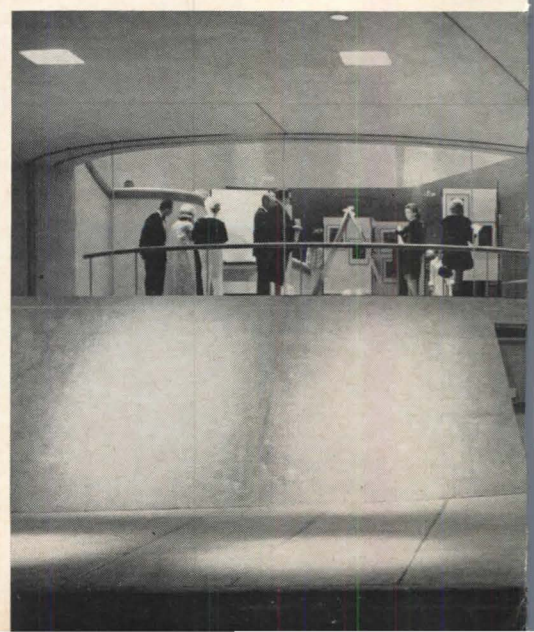
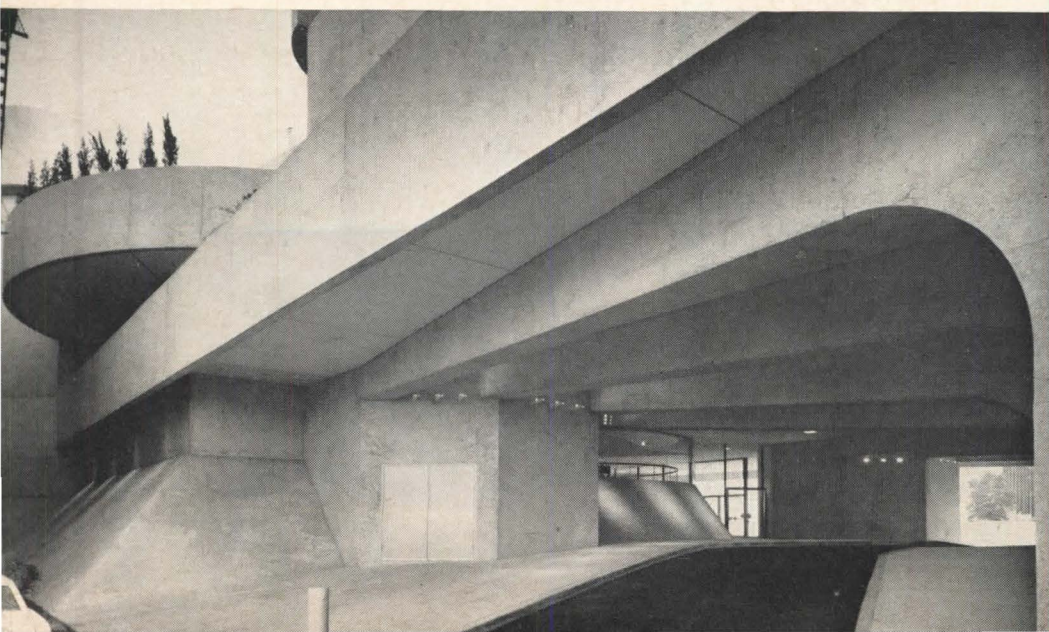
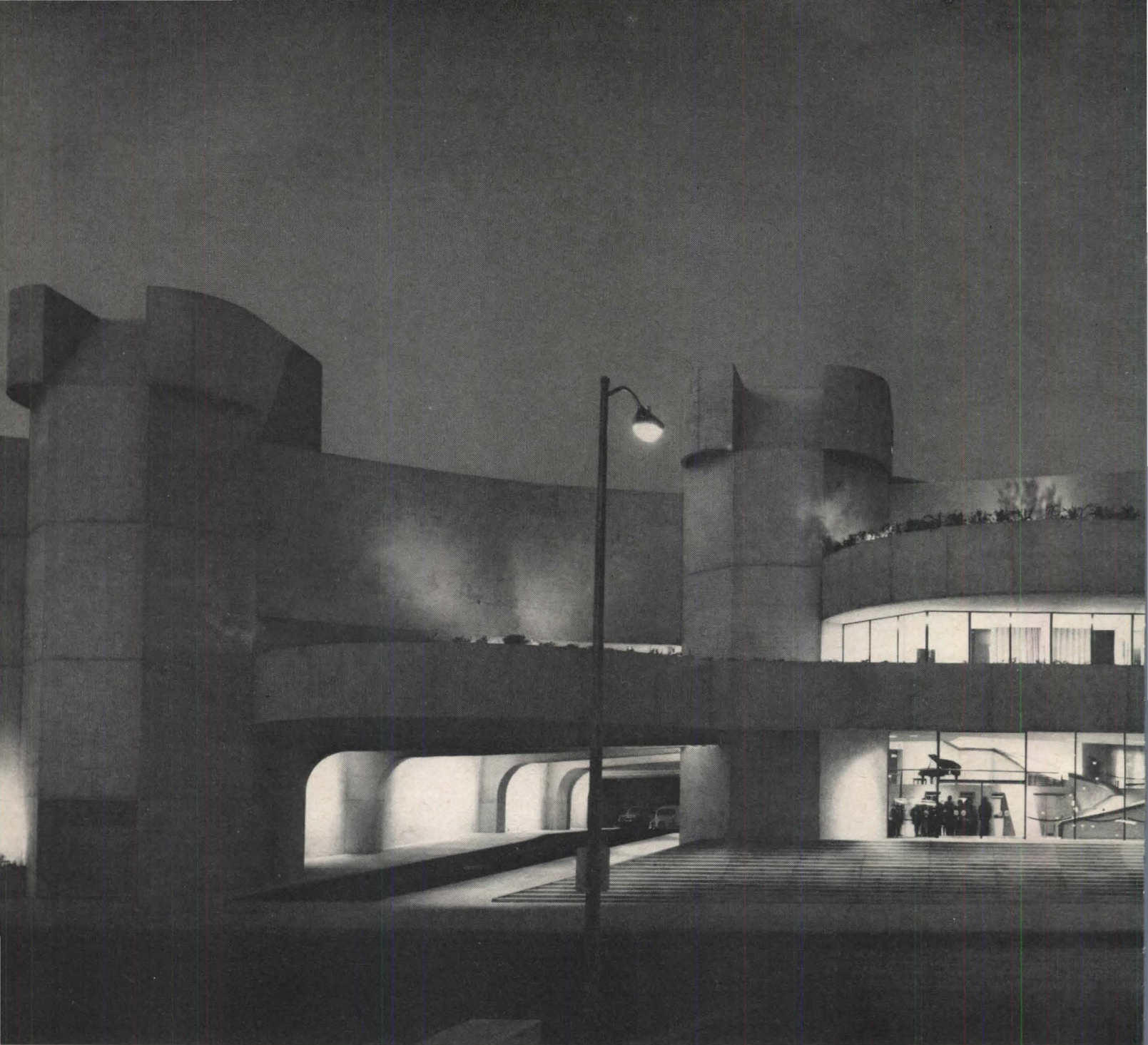


LOWER LEVEL

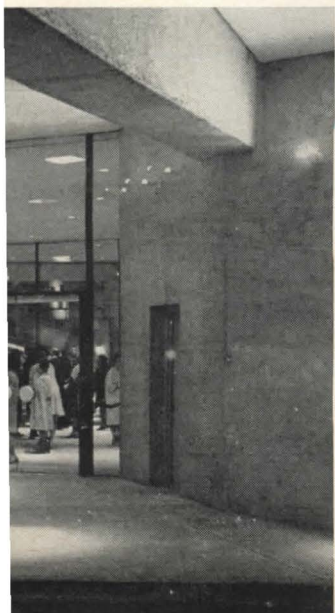
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The Alley's turrets and parapets (top photo) give it enough prominence for its position in Houston's new cultural center (bottom photo)—and among the office towers that may soon replace surrounding parking lots. Other completed portions of the center include the 3,000-seat, multipurpose Jones Hall (right in photo), a public square, an exposition hall (left in photo), and a public garage (beneath both square and exposition hall), all of them designed by Caudill, Rowlett & Scott. Inside the Alley building (drawings, right) are two theaters, separated by a covered driveway and linked below it by shared dressing rooms and shops. From the entrance level, stairs lead up to the 800-seat house and down to the 300-seat arena.









Broad openings in the front of the theater (top photo), for both pedestrians and automobiles, make the activity of arrival and departure visible to the public. The covered drive through the building (far left) serves ticket office by day and main entrance in the evening, and doubles as a ramped pedestrian approach. The massive concrete beams framing the passage spring from haunched columns along the wall of the main theater and converge on two of the octagonal towers. At performance time (near left), the circular ticket office becomes a passive hub for audience movement. Its sloping walls emphasize its role as a base for the elevated exhibition-entertainment platform in the lobby.

colored concrete, flecked with black aggregate, looks remarkably like Jones Hall's travertine.

The Alley's move to a focal position in the city's new cultural center did not mean sacrificing its independence, for this center is not one of those pre-packaged ones designed for a committee of patrons. The site for the theater was a gift from the Houston Endowment, which had contributed to the other buildings, but from there on the Alley was on its own.

Two-thirds of the building cost was met by a grant from the Ford Foundation, based entirely on the company's two decades of solid achievement. The rest of the cost was contributed by about 20,000 appreciative Houstonians.

The design of the building was left entirely to Nina Vance and the architect she chose. With her staff, she interviewed 30 architects before deciding on Franzen. He had the one qualification that Miss Vance valued most: he was willing to analyze the theater's needs without imposing any preconceptions. Franzen proved to be "a good student," she recalls, but he also turned out to be a painstaking investigator, ruthlessly probing the preconceptions that the Alley people themselves brought to the task.

#### Vitality in the building forms

Like any theater, the Alley is—to all appearances—inactive most of the time. But its bold projections help to overcome the blankfaced look that makes most theaters so forlorn as civic landmarks. These same projections shelter the broad entrances that make the building inviting for those who do enter it—or even for those who pass by car, the usual mode of travel in Houston.

A covered driveway running straight through the building makes the ticket office easily and comfortably accessible by car. At performance time, the same passage becomes a *porte-cochère* for the audience. (The playgoer who has to park the car can drive into the garage under the square and return to the theater through a tunnel.)

From the entrance level, the

route to the large theater follows a curving stair up to a circular platform on top of the ticket office. This area was originally earmarked for a large-scale sculpture, but so far it has been used for temporary exhibitions or for musical groups. Hopefully, it will remain free for a variety of displays, performers, environments, etc.

From this platform, another stair (see following pages) leads up to the main lobby, which bridges the covered drive and extends out onto a terrace overlooking the square and the towers of the downtown core just beyond it.

#### Playgoing as an event

The whole sequence from the street to the theater proper has been determined partly by the need to move people from level to level, but it has also been designed to make them enjoy the climb. (There is an elevator for those who don't.) Both the architect and the theater staff wanted this procession to be an *event*—a festive event which all can share, not an intimidating one.

The Alley's two performing spaces have an apparent simplicity common among highly refined instruments. The unspectacular open-stage form of the larger theater came as a surprise to followers of the company's development. The Alley had pioneered the four-sided arena form back in 1947 and was considered committed to it. But early in the design process the arena was ruled out for the 800-seat house; speech could not be heard well from all points, and performers would have to be seen against a large, distracting mass of spectators.

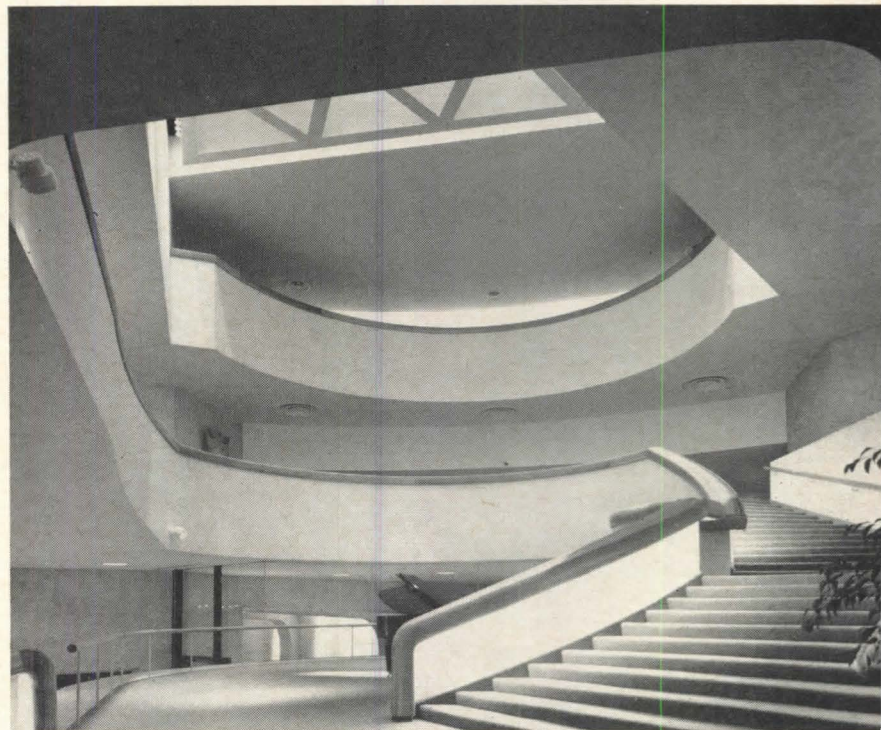
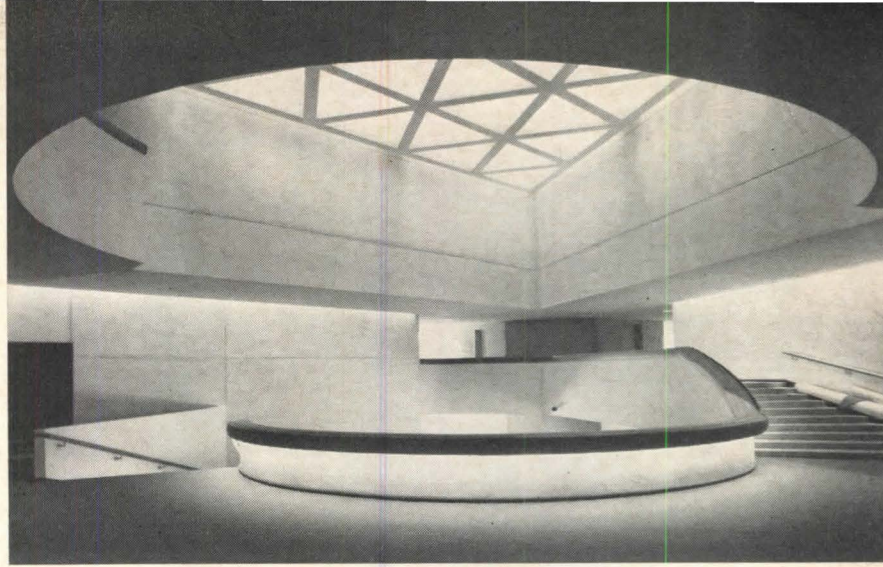
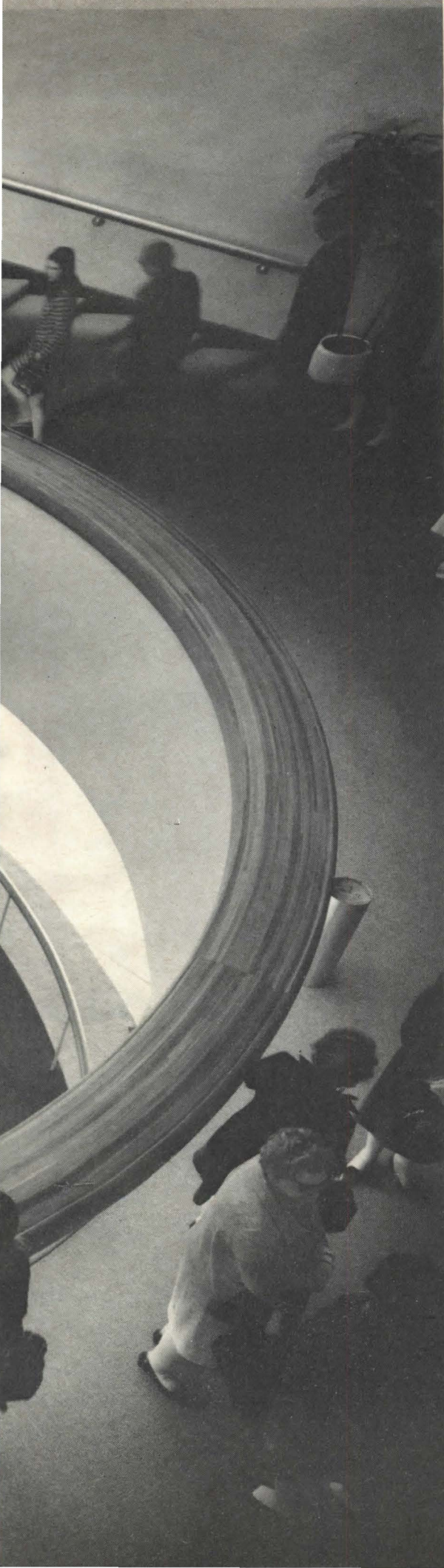
A 90-degree seating arc was selected as ideal. It allows for shrinking or expanding the acting area, and it permits use of backgrounds—real or projected—and a variety of lighting effects. Yet it preserves the sense of the audience and actors occupying the same room.

Nina Vance was intent on making the theater a *room*, with clearly defined walls—and a low ceiling, rather than an indistinct void. She also insisted that the

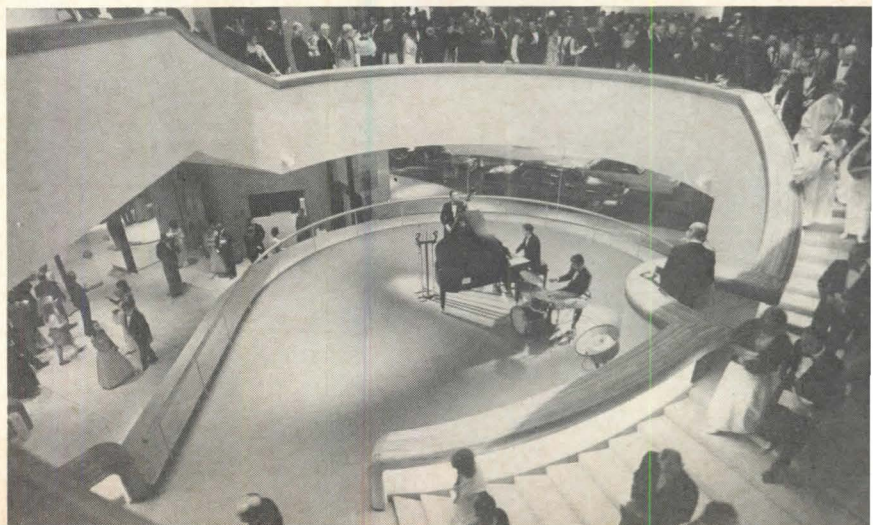








Red-carpeted stairs leading up to the main lobby (foreground, left) curl around the platform on top of the ticket office. A view across the stairwell at lobby level (top) shows the 4-ft.-deep grid that diffuses clerestory light (artificial at night). A view back up the stairwell from platform level (above) shows the balcony above the lobby, which links penthouse offices and board room. Departing first-nighters (below) are entertained by a combo. The opulence of the lobby's curves and indirect lighting is offset by the textures of concrete, sand-finished plaster, and oak handrails.





room be simple and symmetrical, with no arbitrary irregularities.

The stage has very few moving parts, but gains flexibility instead through the wide range of choice—of lighting effects or entrances, for instance. A total of 17 approaches allows actors to make instant entrances from side stage (on either of two levels), below stage, or down front—beneath the audience. Processional entrances can be made along the elevated “calipers” on either side of the room. The only major regret of the theater staff concerning the stage is that the fixed size of the principal (side) entrances—4 ft. wide by 7 ft. high—severely limits the scenery that can be moved on and off the stage during a performance.

The lighting grid above the playing area is the first of a new type designed by George Izenour. Instead of the usual catwalks, it has a continuous walking surface woven of steel cable in tension, which is, in effect, completely transparent.

The small theater is a considerably refined and slightly expanded (from 230 to 300 seats) version of the Alley's old arena. Enclosures can be erected in any of the three vacant corners of the room, either as scenery or merely to permit actors to make quick entrances and exits (or slam a door on the way out). The grid above its stage is of the same new type as the one in the large theater.

#### Theaters to grow into

These two theaters and the dramatic building around them are great assets to the Alley company, but they are also a severe challenge. The larger quarters have already dictated an increase in the subscription list from 9,000 to 21,000 to meet operating expenses that are approaching \$1 million a year.

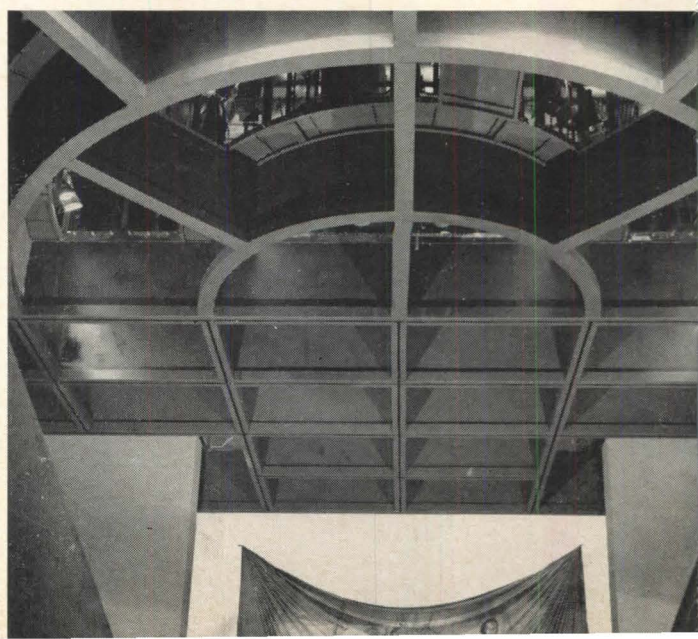
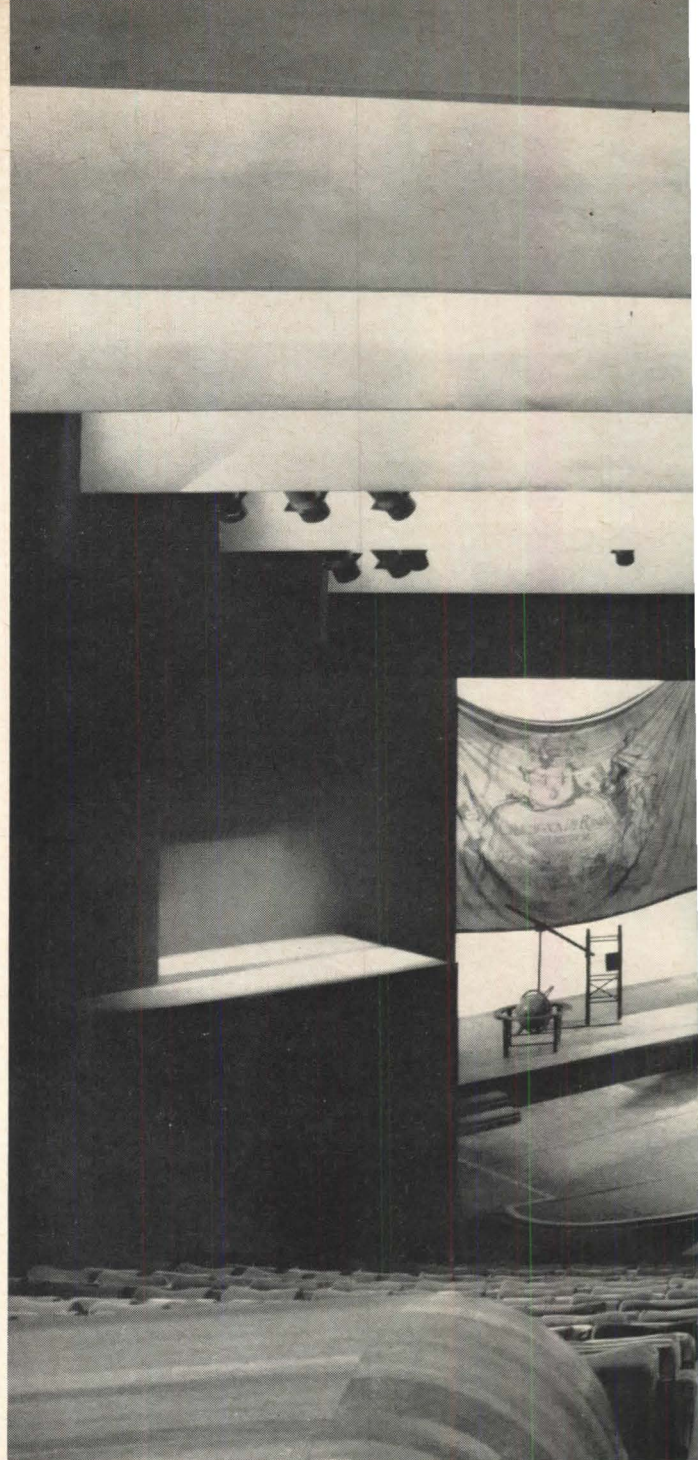
The cautiousness of the first productions in the new house is understandable. But the client and the architect worked hard to produce a civic theater that is not a monument to timidity. Hopefully, the new scale of operations will not inhibit the company. —JOHN MORRIS DIXON

The 800 seats of the Alley's main theater (top photo) spread out in a 90-degree arc around the open stage. Higher side stages, which can be linked by raising the rear stage, extend out in “calipers” along the sides of the room. The lighting grid over the acting area (near right) is framed in a distinct yet unobtrusive pattern, related to the shape of the room. The arena theater has its own foyer (middle right) below the main entrance. Its 300 seats are in four separate blocks (far right), leaving corners of the room free for scenery.

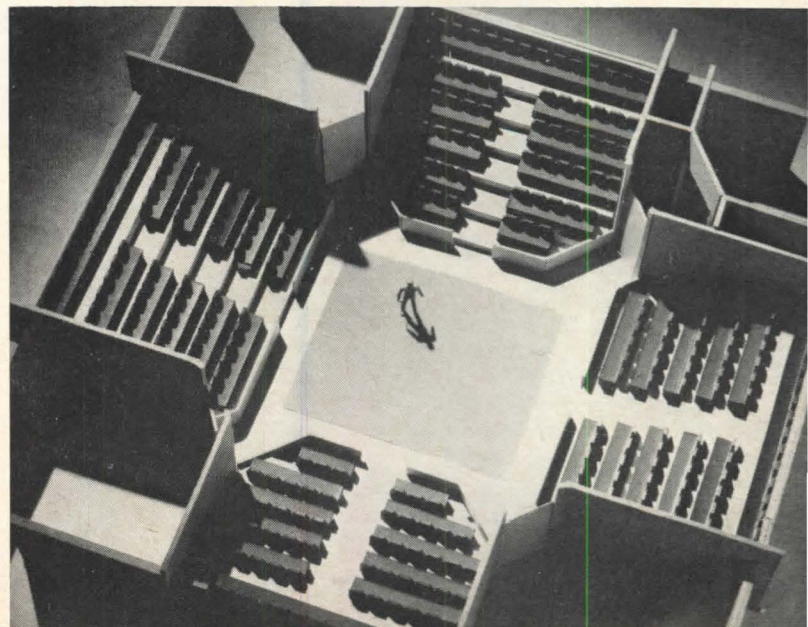
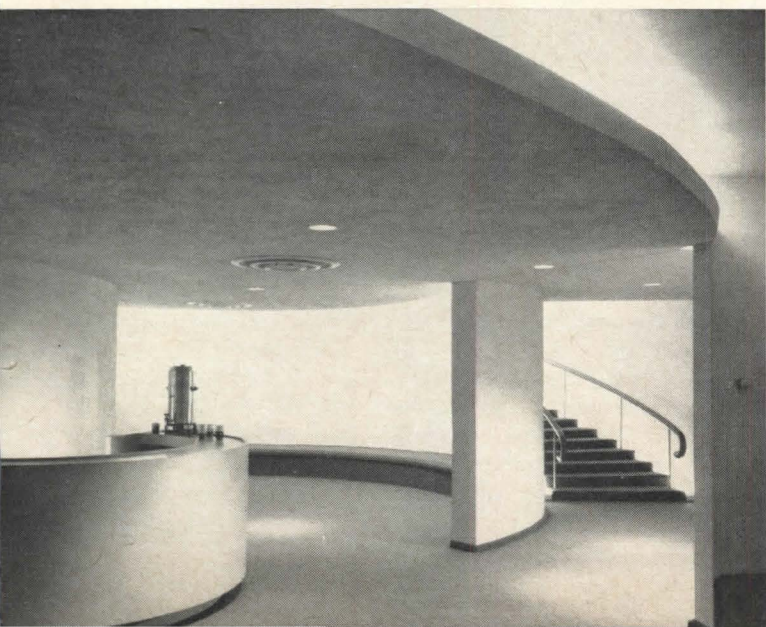
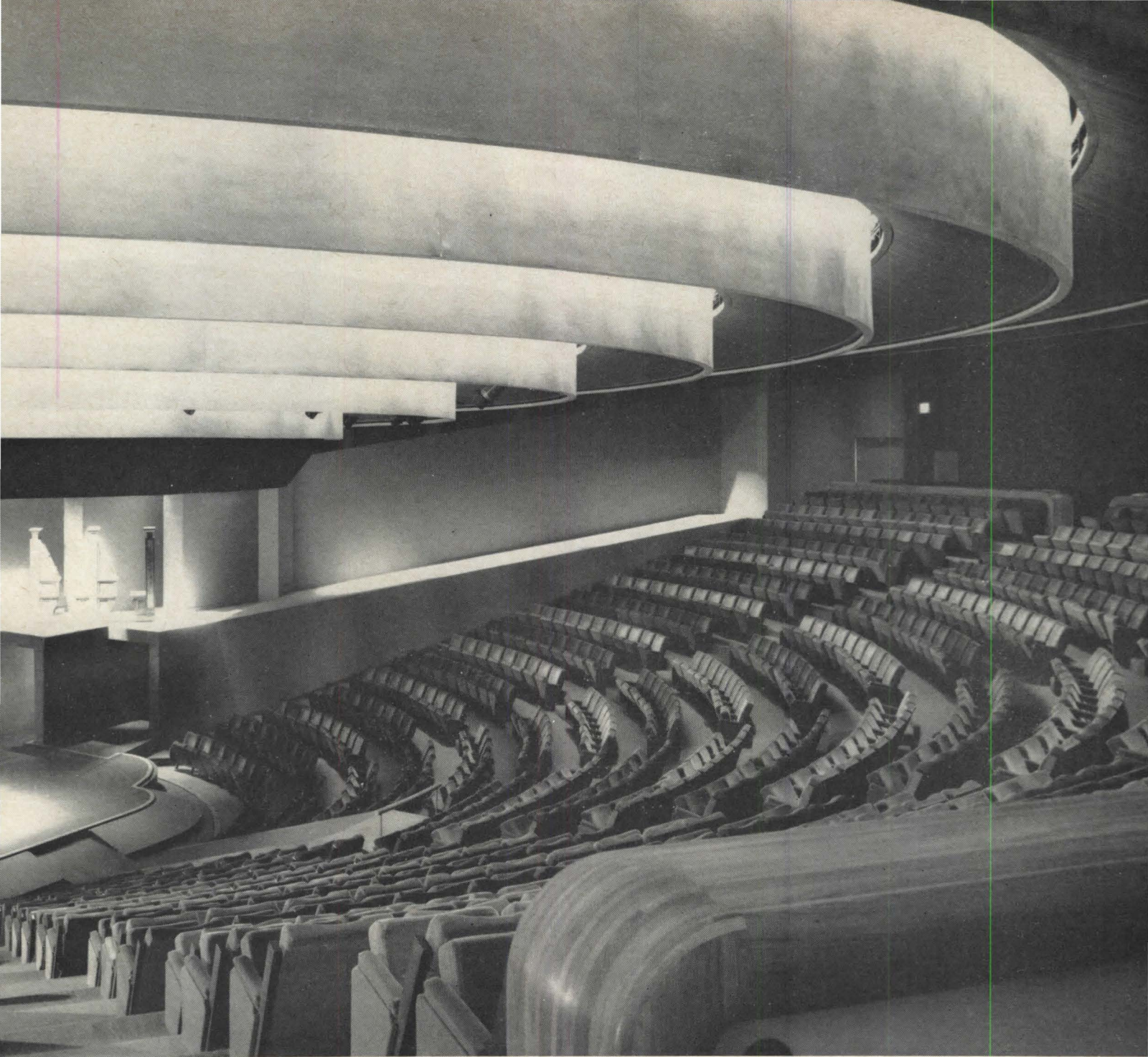
#### FACTS AND FIGURES

Alley Theatre, Houston, Texas. Architects: Ulrich Franzen & Associates; Keith Kroeger, job captain. Associate architects: MacKie & Kamrath. Engineers: Weiskopf & Pickworth (structural); Cosentini Associates (mechanical). Lighting systems and theatre equipment: George Izenour. Acoustical consultants: Bolt, Beranek & Newman. General contractor: W. S. Bellows Construction Corp. Building area: approx. 104,000 sq. ft. Cost: General construction, \$3,150,000; special theatre equipment, \$287,000; interior furnishings, \$109,000.

PHOTOGRAPHS: ©Ezra Stoller (ESTO), except page 34 (bottom right) John Morris Dixon and page 37 (bottom right) Houston Chronicle.











# HOW S.O.M. TOOK ON THE BALTIMORE ROAD GANG

A couple of years ago, when the San Francisco office of Skidmore, Owings & Merrill dispatched a small band of urban missionaries to Baltimore, a lot of people predicted that they would never be heard from again; or worse, that they would make a laughing stock of architects and urban designers.

SOM was being hopelessly naive, they said, in taking on the all-powerful Baltimore Road Gang, which for years had been terrorizing the citizens with plans for turning the historic heart of the city into one big interstate highway interchange. Besides, they pointed out, SOM had foredoomed its mission by agreeing to accept, without question, the route dictated by the Road Gang.

Well, they were wrong. Last December, Baltimore's Mayor Thomas D'Alesandro III overruled the Road Gang and adopt-

ed a new highway plan favored by SOM. The new scheme eliminated most of its predecessor's worst features, and it softened the impact of several others. In January, it was approved by the Federal Bureau of Public Roads.

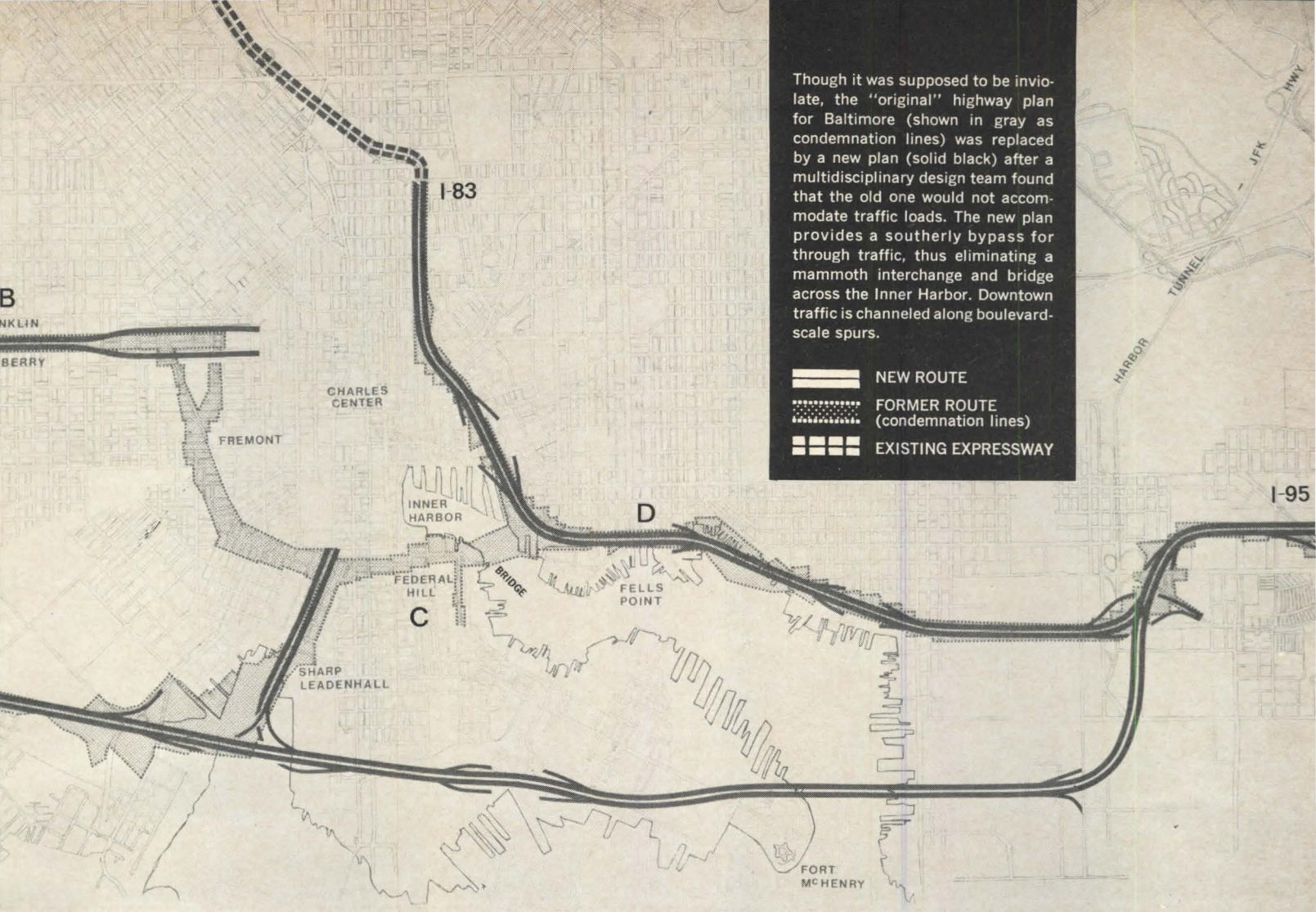
## After two years

The map above shows what was accomplished during SOM's two-year stint in Baltimore. The former route (shown in gray representing condemnation lines) would have converged three interstate highways—I-70N from the northwest, I-95 from the south, and I-83 from the north—into a gigantic, 16-lane interchange and bridge crossing the Inner Harbor (see photo above). Among other things, it would have slashed through (A) Rosemont, a stable, middle-class Negro neighborhood of handsome, well-maintained houses; (B) predominantly Negro slum areas

bordering the Franklin-Mulberry and Fremont segments; (C) historic Federal Hill and the carefully restored 18th-century townhouses at its base; and (D) equally historic—though less affluent—Fell's Point, just across the Inner Harbor from Federal Hill. Moreover, the three highways would have devastated their surroundings as they crossed through the city to converge at the Inner Harbor. Eight to ten lanes wide, and elevated in most sections, they would have overpowered the intimate scale of Baltimore's neighborhoods.

The new route (shown in solid black) replaces the Inner Harbor interchange and bridge with a southerly bypass that diverts through-traffic (an estimated 47 per cent of the total) away from the heart of the city along a mostly vacant industrial area. Having thus freed the former segments of much of their traffic





roads, the new route eliminates the Fremont segment altogether and halves the width of the others, turning them into boulevard-scale spurs for traffic headed into downtown. The northwest spur spares Rosemont by crossing through a cemetery and connecting with the highway at an abandoned rock quarry. Only the I-83 segment, cutting through Fell's Point, remains intact from the former plan.

Not only does Baltimore's new highway plan (officially designated as Route 3A) accommodate expected traffic loads better than its predecessor (1A), it surpasses it on all other counts. Route 3A would have uprooted some 10,000 residential structures housing 3,800 families; 350 commercial and industrial buildings providing 4,500 jobs; and taxable property assessed at \$28 million. In contrast, Route 3A displaces some 800 residential structures

housing 1,200 families; 200 commercial and industrial buildings providing 3,000 jobs; and \$14 million in taxable property.

#### In the end: people

How was all this accomplished when SOM's assignment, as laid down in its contract, was merely to make the old route look as nice as possible? SOM's "liberal" interpretation of its contract and the help of a few key officials in high places had a lot to do with it, but the prime movers were the citizens of Baltimore, rich and poor, black and white. SOM's most valuable role in the two-year process was that of supplying "significant options for community choice," in the words of Norman Klein, SOM's director of urban design for the project. In other words, SOM gave the public the kind of hard, factual information it needed in order to fight the highwaymen on their

own technical grounds.

Ironically, SOM was invited to Baltimore in the hope that it could help dispel the violent public opposition that had been blocking construction of the highway for more than two years. Acting on a proposal offered by Architect Archibald Rogers on behalf of the AIA's Baltimore chapter, highway officials at city, state, and federal levels agreed to the formation of the nation's first "urban design concept team" composed of engineers, architects, land planners, sociologists, and assorted political, environmental, and behavioral scientists. The team's job, in the words of State Roads Commissioner Jerome B. Wolff, the nominal head of the Road Gang, would be "the blending of the expressway construction into the city fabric."

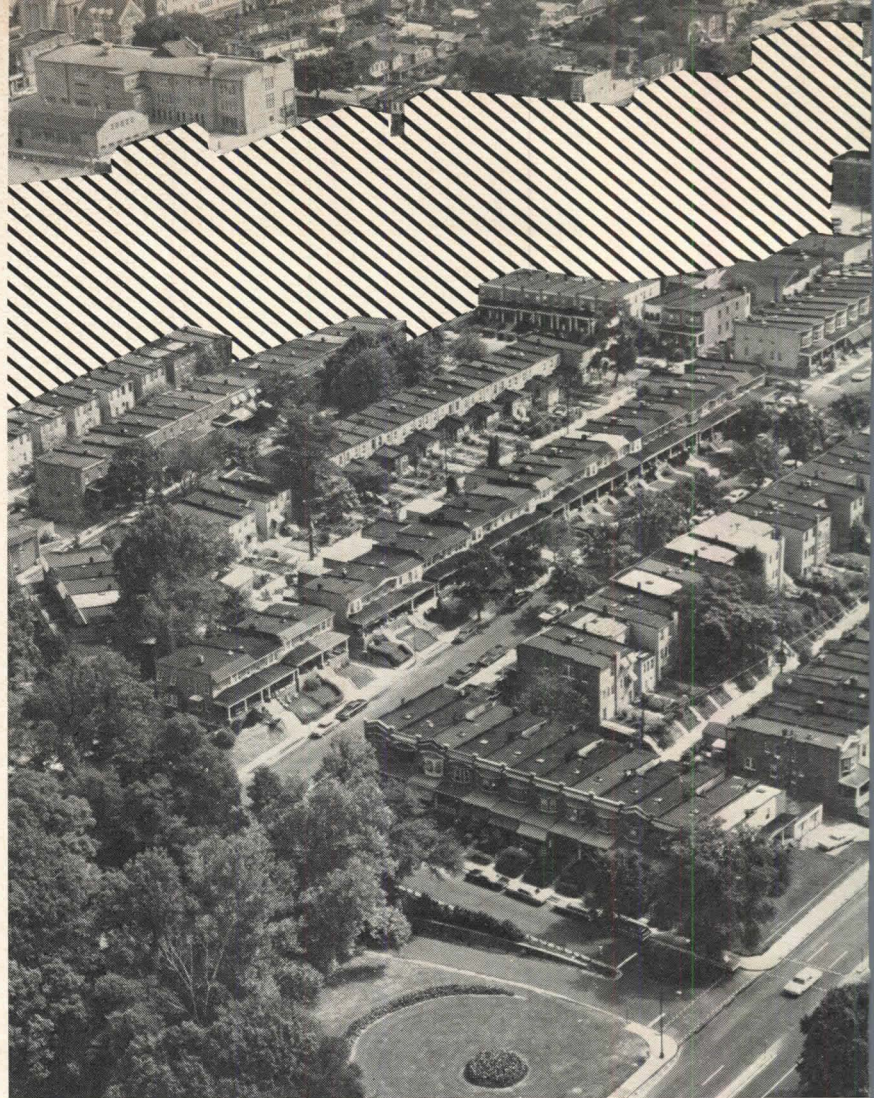
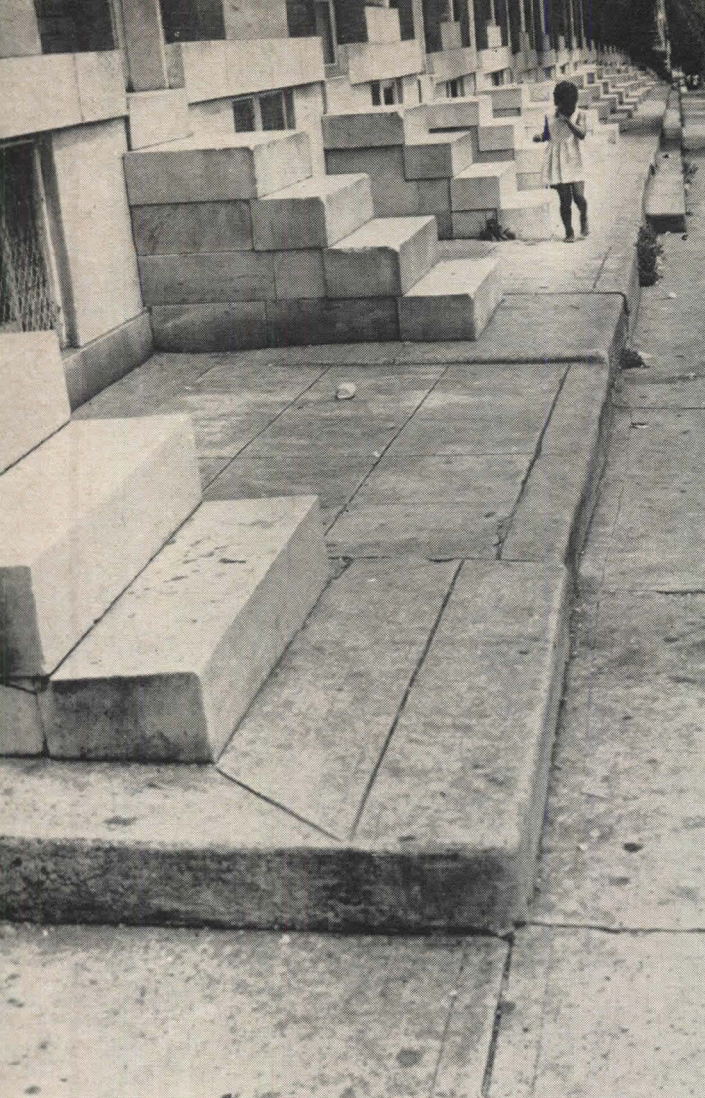
After a year of negotiation, SOM agreed to serve on the

team, along with Wilbur Smith & Associates, traffic consultants; Parsons, Brinckerhoff, Quade & Douglas, transit consultants (to coordinate the highway with plans for a future transit system in Baltimore); and, last but not far from least, J.E. Greiner Co., engineers. The Greiner firm is a formidable power in Maryland, and the actual leader of the Road Gang. It has received more than \$20 million in fees over the past five years from the State Roads Commission alone, and it had produced the Baltimore highway plan that the concept team was to work with.

#### Thou shalt not

To get itself on the team, SOM had to accept a couple of other "givens" besides Greiner and the route (for which the city council had just passed all the necessary condemnation ordinances). For one, the contract stipulated that





no team member could "confer with or seek the advice or assistance of any federal official or agency" without permission of the State Roads Commission (the "client"), even though the Bureau of Public Roads was putting up the team's entire \$4.8 million fee. Another clause prohibited any team member from giving information to the public.

Small wonder that many people expected SOM to fall flat on its face. It looked as though SOM had not only allowed itself to be bound, but gagged as well.

The contract did, however, contain one "sleeper": a vaguely worded clause which stipulated that the highway had to "provide for the social, economic, and esthetic needs of the city's environments." The clause was SOM's ace in the hole, and it provided the justification for most of the firm's subsequent actions.

In order to determine what

these "social, economic, and esthetic needs" were, SOM staff members (especially Norm Klein and Stewart Bryant, the project's resident planner) represented the concept team at dozens of meetings staged by neighborhood groups and other concerned community organizations. Ostensibly, SOM's purpose at the meetings was to gather information which the concept team could use to "blend the highway into the city fabric." But, in the process, SOM managed to dispense quite a bit of information itself.

#### Opening up alternatives

Says Walter S. Orlinsky, a delegate to the State Legislature from Baltimore's Second District: "They let us know that we didn't have to have it that way. Without their help, no citizen group could have gained the expertise to understand the technical alternatives. They opened

up fantastic alternatives for us."

By opening up alternatives, did SOM's representatives violate the "no information" clause of the contract? They say no, that they merely responded as honestly and candidly as they could when asked about the technical feasibility of alternatives suggested by the citizens themselves—and SOM never promised anything. Says Stew Bryant: "We reacted out of a sense of integrity. This is an accepted part of professional ethics."

Meanwhile, the concept team, having opened an office in Baltimore, was carrying out its contractual obligations. (Strangely enough, SOM set up its office in Washington, the home of all those federal agencies with which SOM was not supposed to confer. Only Stew Bryant represented SOM full time in the team's Baltimore office.)

The concept team (and it *did*

work as a team) divided itself into four separate design units each one assigned to do an in-depth study of a different segment of the highway and its surroundings. An important part of their job, says Klein, was to "identify with and understand not only the lay of the land, but the needs and attitudes of the people on a block-by-block basis throughout the stretch of each corridor."

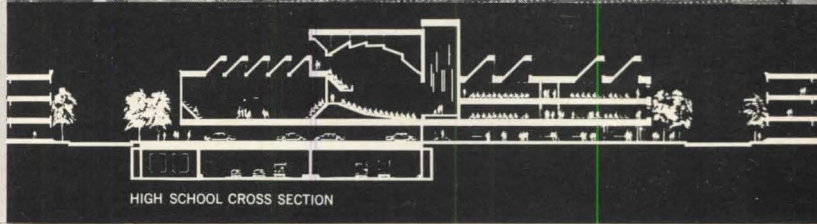
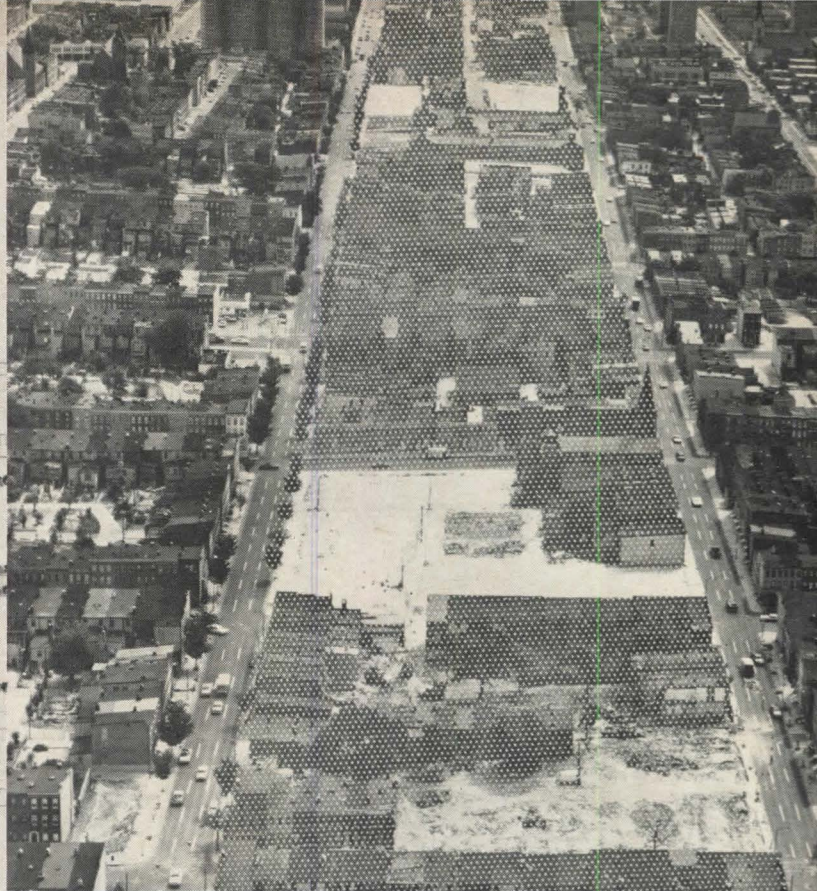
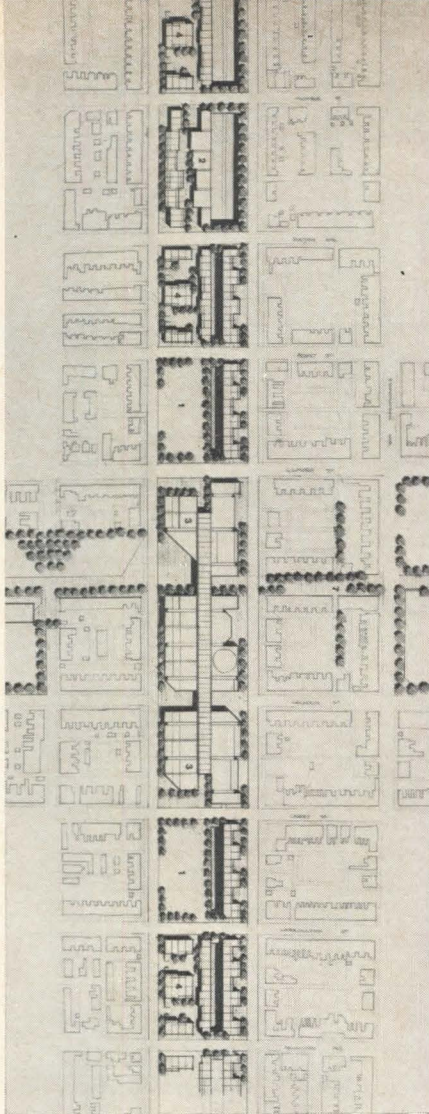
#### Dead vs. live bodies

It soon became apparent that all members of the concept team that the corridor cutting through Rosemont (see above) violated every conceivable principle of good planning. Rosemont was one of the city's finest, best maintained middle-class neighborhoods. Obviously, the highway would never have been routed through Rosemont if it had been a white neighborhood, instead of



ROSEMONT (left), a stable, middle-class Negro neighborhood, was saved from being bisected by the highway (aerial view) when Baltimore's Mayor Thomas D'Alesandro agreed to accept the concept team's recommendation that the highway be routed through a cemetery instead. (The bypass segment shown on the map, page 40, is one of several alignments being considered.) Among the landmarks preserved by the action are blocks of well-maintained row houses with solid marble steps—a design feature unique to Baltimore (far left).

THE FRANKLIN - MULBERRY area (right), a predominantly Negro slum, is less fortunate than Rosemont. The city had already vacated a corridor one block wide and 20 blocks long (aerial view) before the concept plan was formed. However, the Federal Bureau of Public Roads has agreed to pay part of the cost of building a new high school on air rights above the depressed highway (see plan and section). The school is one of several "joint development" projects being explored by the concept team for areas along the path of the highway. As shown on the plan, one possibility is the development of new housing and community facilities atop the road.



0 per cent black. (The design team also disliked the segment running through the Franklin-Mulberry Negro slum [above], but there was nothing it could do about that. The 20-block corridor had already been vacated, and demolition had begun—ten years in advance of scheduled highway construction!)

The team asked and was granted permission to study alternative routes for the Rosemont segment. It came up with three, one of which it recommended unanimously. The team's route would have missed Rosemont altogether by cutting through a corner of nearby Western Cemetery, displacing some 3,600 bodies. Its cost would have been some \$400,000 less than a road through Rosemont, but it was nevertheless rejected by the Policy Advisory Board, a group of city and state officials which had been set up as the

concept team's overseers.

The sole reason for the turn-down given by the board was a century-old Maryland law that prohibited the taking of cemeteries, although there was nothing to prevent the federal government from doing so. The decision led to charges from Rosemont residents that the board considered dead white bodies more important than live black ones, but they went unheeded. Bodies, dead or alive, weren't the real issue; the board simply didn't want to set a precedent that might encourage others to seek deviations from the established route.

#### So much for people

The Rosemont battle was the concept team's first and last attempt at getting the route altered on "social, economic, and esthetic" grounds. From then on, it attacked the highway plans on

the one basis that the Road Gang could understand: traffic service. As part of their work, the engineer members of the concept team had conducted a detailed analysis of their own route's ability to accommodate anticipated traffic loads, and they had discovered (much to their embarrassment) that almost every segment of the route failed to meet the requirements.

Armed with these statistics, the concept team unanimously requested permission to look for alternatives that would serve traffic better. Permission was granted, and the team was given less than two months to come up with recommendations.

The team produced two alternative plans. One was 3A, which, at that time, still included the segment cutting through Rosemont. The other, designated 3C, was a combination of 3A and the official plan (1A). Route 3C in-

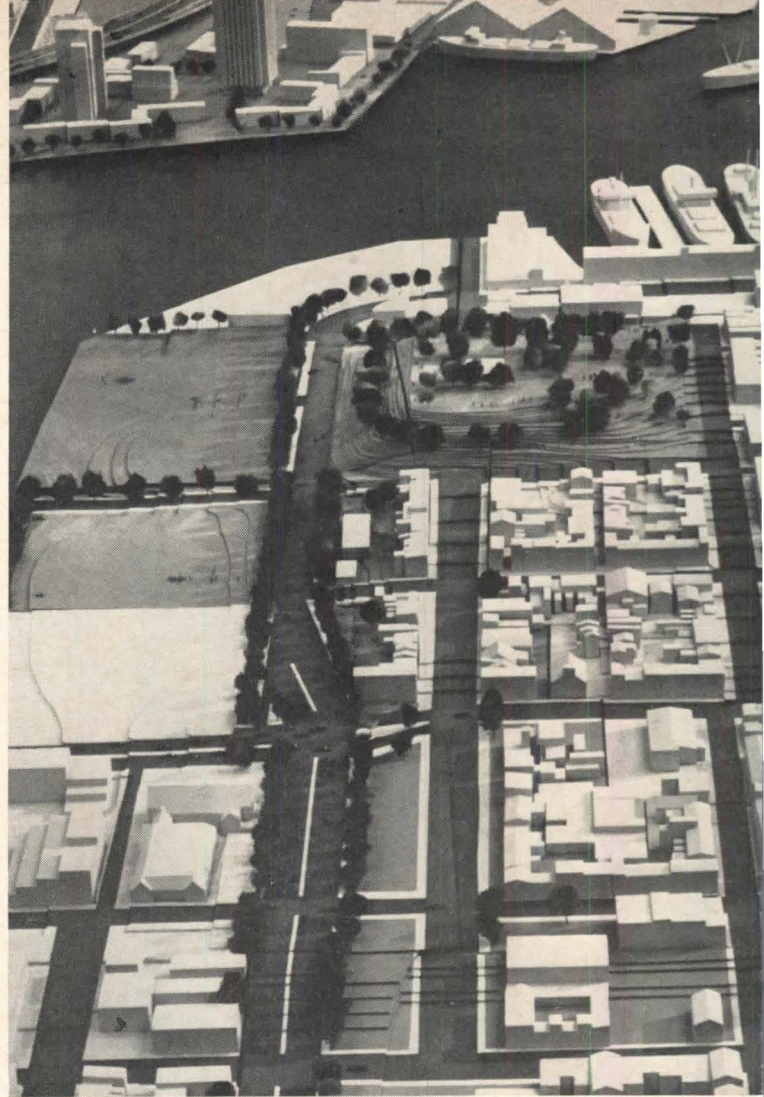
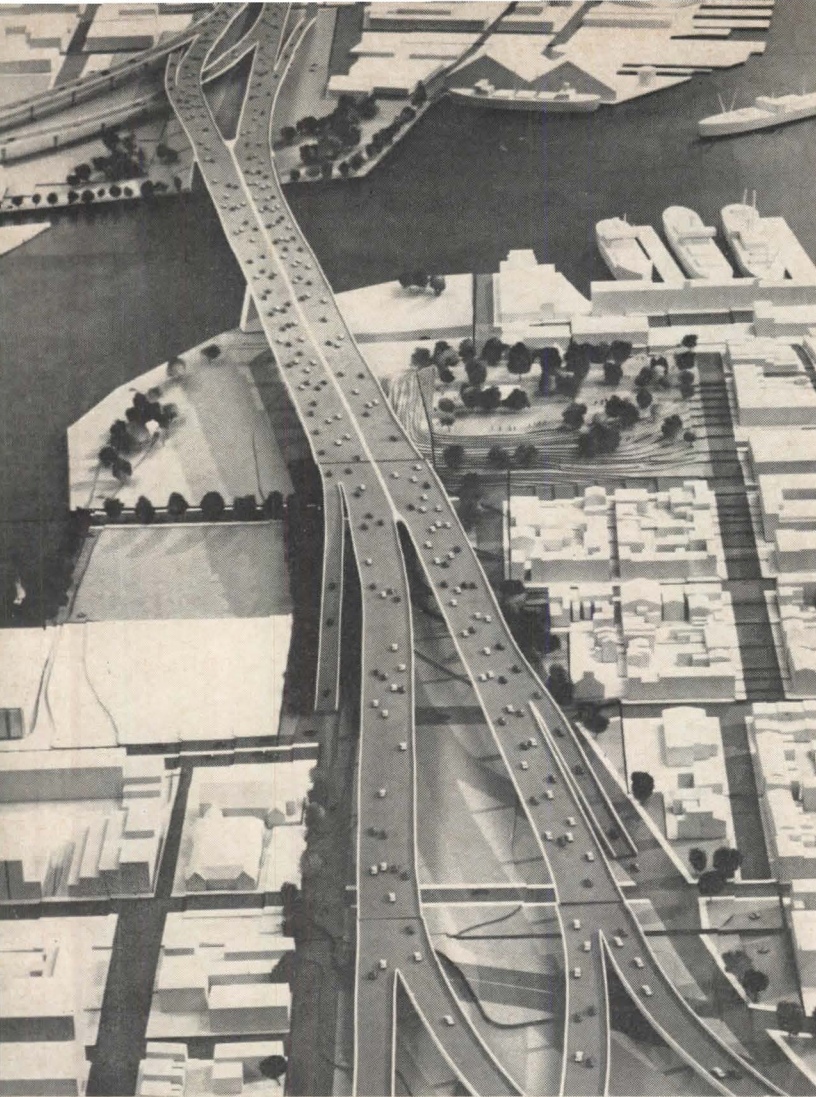
cluded 3A's southerly bypass for through-traffic as well as 1A's interchange and bridge across the Inner Harbor. The bridge, however, was reduced from 16 to four lanes.

#### If you believe in miracles

The engineer members of the concept team favored 3C, which added about seven miles of highway to the original plan. SOM favored 3A, which would have accommodated traffic at least as well as 3C and had the further advantage of softening the highway's negative impact on the city's neighborhoods. It was then that the fur really began to fly.

SOM's Nathaniel A. Owings, realizing that his firm was outnumbered in the vote, decided to put the matter before a public forum. (This is Owings' first appearance in this report, but he had been up to his ears in the project from the beginning.





As chairman of the concept team, he did most of the political infighting—the kind of behind-closed-doors maneuvering that rarely leaks out to the press.) Just two days before the Policy Advisory Board was scheduled to act on the concept team's alternative plans, Owings addressed a dinner meeting sponsored by the Citizens Planning and Housing Association. The meeting was attended by more than 500 local dignitaries, including Mayor D'Alesandro and several city councilmen.

Owings said some pretty outrageous things that night, such as: "The concept team has unanimously agreed that the original [route] fails as an efficient transportation system"; and "If you believe in miracles as I do, then you can hope that a more ideal system than any that have been proposed to date will be devised—one that does

*not cross the Inner Harbor*"; and "I consider that our job as a concept team is to provide Baltimore with information and an unprejudiced solution to her problems"; and "I believe in my optimism that, given the facts, the people will make the right decision."

#### Owings on the carpet

The Road Gang was furious, and it wasted no time in retaliating. Wolff of the State Roads Commission called Owings on the carpet and gave him an ultimatum: either recant his position on 3A and back 3C, or be fired.

Wolff's ultimatum wasn't the first time he had put the screws on SOM. Two months before that he had cut off all of SOM's fees—a matter of some \$700,000—because he had not approved of the consultants that SOM had called in on the project. It seems

that the consultants (such as housing expert Charles Abrams and sociologist George Grier) had been exposing too many embarrassing flaws in the original route and in the Road Gang's relocation procedures.

But this time, in a scene that Galileo would have understood, Owings confessed his sins and appealed for mercy. When the Policy Advisory Board met to consider the alternative routes, the concept team unanimously recommended 3C. And the board, in turn, unanimously accepted the team's choice.

That took care of SOM, but the Road Gang still had the people to contend with. They had learned a lot about "significant options for community choice" over the previous two years, and they were determined to make the most of their gains. Literally dozens of citizen groups began applying pressure where it

counted most: on Mayor D'Alesandro, who had the unenviable responsibility of making the ultimate decision on the highway.

The most effective of these groups was Movement Against Destruction (MAD), a coalition of more than 25 separate associations representing a broad cross-section of the community, from black militants to the upper-class white establishment. The different groups were often worlds apart on other community matters, but they all opposed the highway, and they formed MAD for the specific purpose of waging an all-out battle against it.

#### Day of decision

One indication of MAD's influence came on December 23, when Mayor D'Alesandro invited MAD Chairman Arthur Cohen, young lawyer, to attend a meeting of the Policy Advisory



THE FEDERAL HILL area (shown in model form at left) will be affected little by the new highway plan. The original plan (far left) would have slashed through blocks of beautifully restored 18th-century row houses and taken off a corner of Federal Hill before it continued across the Inner Harbor to Fell's Point. The new plan (immediate left) calls for a boulevard pur which will displace none of the houses and will skirt around the hill.



FELL'S POINT (right) remains in the path of the highway. Though less affluent than Federal Hill, the area has historic significance as the spot on which the city was founded. Local groups are still fighting the highway and hope to get Fell's Point declared a national historic site by the Interior Department. Such action would rule out the possibility of a highway.

PHOTOGRAPHS: Hans Halberstadt, except Page 40, Maps Incorporated.

Board. D'Alesandro had decided to make his decision that day, and he had called in representatives of the concept team and city and state officials to present their final arguments. (The federal view had already been handed down by Lowell K. Bridwell, the lame-duck Federal Highway Administrator, who said he favored 3A, but that it was the city's decision to make.)

After two and a half hours, D'Alesandro emerged from the closed-door meeting and announced that he had decided on Route 3A as the most "compatible with the environmental, commercial, and social development of the city." Moreover, he said, the Rosemont segment would be shifted to bypass the neighborhood. "As mayor," said D'Alesandro, "I don't want to be responsible for what may be regarded as idiocy or worse in years to come." And his decision,

he said, was "final."

It may not be. The residents of Fell's Point, whose historic neighborhood (above) still lies in the highway's path, are continuing the battle to save their 18th-century homes. They think there is a good chance that the Department of Interior will declare Fell's Point a historic site. If it does, the Road Gang will be forced to find a new path for that segment, since highways are not allowed through official historic areas.

#### We will continue

MAD is also continuing its battle. "Nobody has ever given us sufficient evidence to show that a highway is needed at all," says Arthur Cohen. "Until they do, we will continue to oppose all highway routes through the city. Period."

Still in doubt at this point is the role that SOM will play dur-

ing the coming months. There are ominous signs that it may not be as constructive from a public standpoint. Owings' capitulation to the Road Gang has been accompanied by a number of other retreats, the most important being a downgrading of SOM's relations with neighborhood and community groups.

John Weese, SOM's partner in charge of the project, recently ordered Klein and Bryant to stay away from neighborhood meetings and replaced them with two other staff men. SOM's representatives continue to provide honest, straightforward answers to questions, but they are careful not to encourage anyone to entertain ideas that might threaten the status quo. (For good measure, a representative of the Greiner company attends every meeting and audits all of their statements.)

Weese's action came after

Joseph M. Axelrod, chief of the State Roads Commission's interstate division, accused SOM of being "professionals who forgot their assignments . . . and got emotionally involved with the people." He added: "We're not looking for feedback where [residents] don't want an expressway, because they're going to get an expressway."

#### Walking a tightrope

Now that the new route has been adopted, SOM obviously has a certain obligation to defend it. But it would be ironic indeed if, after having accomplished so much, SOM began talking and acting like just another member of the Road Gang.

It would also be foolish to predict flatly that it will. After all, SOM was written off by many people two years ago. And look what happened.

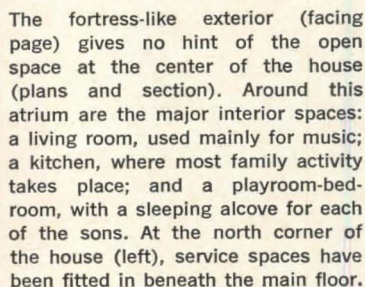
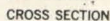
—JAMES BAILEY





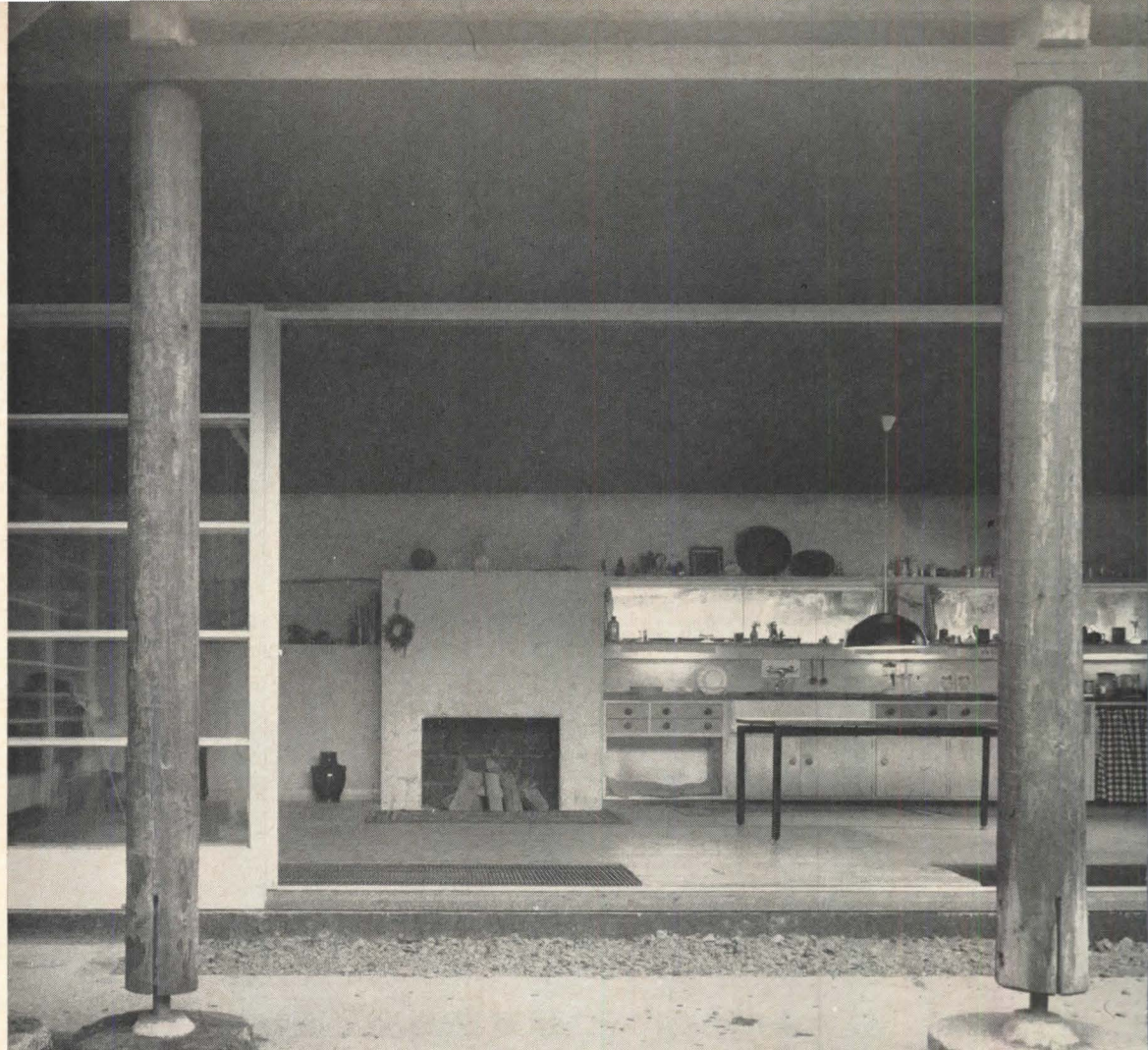


## A black and white photograph of a landscape. In the foreground, there is a field of tall, dry grass. In the middle ground, a line of trees stands on a slight rise. The sky is filled with large, dramatic clouds.



Although the house is absolutely square, and its walls rise to a relentlessly straight parapet, it does not seem like a man-made intrusion in the landscape. Perhaps this is because the uniformly masonry walls, with window openings scattered high and low, offer no strong indication of floor levels inside. Visually, at least, it seems as if the gentle slope of the hillside could continue without interruption inside this rough-textured brick enclosure.





In the atrium (left), telegraph-pole columns support the corrugated asbestos roof; attenuated metal sculptures stand among potted plants against a plastered wall outside the parents' bedroom. The kitchen (top right), actually the center of family life, opens onto the atrium through sliding glass doors. Except for the cylindrical concrete chimney (right), no part of the house projects outside the square defined by the brick walls.

#### FACTS AND FIGURES

House near Dublin, Ireland. Architect: Joachim Schürmann. Engineers: Felix Varwick (structural); Georg Klöcker (mechanical). Building area (not including court): approx. 2,900 sq. ft. PHOTOGRAPHS: Henk Snoek.









# THE CASE FOR SPECIALIZED REGISTRATION

BY PAUL B. FARRELL JR.

This hypothetical legal case has been brought in behalf of four fictitious employees of a large (pseudonymously identified) architectural firm. The suit sought an injunction directing the examining boards to give a special exam to the four plaintiffs. Only a specialized exam, argues this decision, will be appropriate to the specialized education and current activities of these four representatives of "a new generation of architects." Anyone interested in appealing this decision may address his comments to the Editor.

Donnellson, et. al. v. NCARB, et. al. 372 F. 2d 117 (3 Cir. 1969)

The defendants in this suit are the National Council of Architectural Registration Boards and the State Board of Registration of Architects (whom we shall refer to jointly as the Boards). The plaintiffs, four employees of the architectural firm of Tomson, Raymond and Walrek (TRW), seek an injunction directing the Boards to grant them a special registration examination.

The defendants have stipulated that each of the four plaintiffs has satisfied minimum statutory requirements for educational experience including the required eight year total professional experience. The plaintiffs, therefore, are qualified to take the written examinations annually administered for registration as architects.

The plaintiffs, however, claim that the standard written examinations bear little relationship to the highly specialized practice they have participated in at TRW, a large diversified architectural firm. They have requested a special examination based on their actual experiences. The Boards' refusal to grant this request has resulted in this suit for an injunction on the grounds that the Boards are acting in an arbitrary and unreasonable manner in the administration of their statutory duties defined in Article 49 of the State Acts.

The court believes that this injunction should be granted.

The plaintiffs claim that they represent a new generation of architects. Their education tends to support this assertion:

**Plaintiff Donnellson** had a degree in business administration and became a Certified Public Accountant before returning to work on a degree in architectural engineering. He attended various universities for a total of seven years before receiving his degree in architecture. Upon graduation he worked for two years as a construction superintendent and then came to work for his present firm where he has spent three years developing a sophisticated construction management system using cost accounting and computerized techniques.

**Plaintiff Baliss** received masters' degrees in urban planning and public administration after completing his degree work in architecture. He became registered as a community planner after a year with the City Redevelopment Authority. He began working for his firm four years ago where he has been primarily involved in feasibility studies and master planning for governments and institutions.

**Plaintiff Sparkman** has a bachelor's degree in architecture and a doctorate in the computer sciences. He has developed many of the firm's computer programs in all areas of project cost accounting, structural, mechanical and electrical design, financial analysis, graphics, and specifications. Since joining the firm four years ago he has spent most of his time managing its computer systems.

**Plaintiff McCurdy** is a graduate architect and a member of the State Bar Association. He has spent three years with the firm as an assistant to the president conducting research for a variety of management responsibilities. He has also been involved in numerous economic and financial analyses for the firm's clients, and in drafting various contract documents.

TRW is described by the plaintiffs as a large, progressive firm which makes extensive use of specialists in many areas: vertical transportation, structural design, air pollution control, economics, industrial processes design, urban renewal, systems analysis, market research, airport planning, medical technology and other specialized areas. The officers and other principals in the organization are, for the most part, business and technical managers who coordinate this diverse team of specialists. While the plaintiffs might have been better prepared to take the Boards' standard written examinations if they had not concentrated on their particular specialties upon

Mr. Farrell is a graduate architect, urban planner, economist, and attorney currently involved in the management and economic services of Smith, Hinchman & Grylls Associates Inc. He understands that the NCARB is currently studying the problem of registration procedure.



entering their firms, we think that these employers exercised good business judgment in making full use of the skills of the plaintiffs.

The question here is simple: Have the Boards acted arbitrarily and unreasonably by insisting that the plaintiffs can become registered architects *only* if they take the standard written examinations prepared by the Boards?

The statute creating this state's Board of Architectural Registration defines "architect" and "architecture" in section 4905:

*The term 'architect' as used in this act shall mean a person who, by reason of his knowledge of mathematics, the physical sciences, and the principles of architectural design, acquired by professional education and practical experience is qualified to engage in architectural practice as hereinafter defined.*

*The practice of architecture within the meaning and intent of this act includes any professional service such as consultation, investigation, evaluation, planning, design or responsible supervision of construction, alteration or repair in connection with any public or private structures, buildings, equipment, works or projects wherein the public welfare or the safeguarding of life, health, or property is concerned or involved, when such professional service requires the application of the principles of architecture or architectural design."*

These sections are quite broadly worked. Prior interpretations of this section are not very helpful since no prior case has dealt with the question of specialist architects as presented in this case.

The Boards claim that section 4916 of the act gives them the discretion to decide which examinations are appropriate for professional registration:

*An applicant upon payment of the fees required under this act shall be granted an examination in such appropriate subjects as the board may require."*

However, the plaintiffs emphasize that the act is not specific as to the nature of the examinations nor does the statute specifically require a written examination. Indeed, architects registered in other jurisdictions and holding an NCARB certificate may apply for an oral examination in this state.

This brings us to section 4919 of the statute, a key section:

*When examinations are required, they shall be held at such time and place as the Board shall determine. The scope of the examinations and the methods of procedure shall be prescribed by the Board with special reference to the applicant's ability to design and supervise architectural works, which insure the safety of life, health and property."* [emphasis added].

The specific examinations selected by the State Board for this purpose are the standard seven written examinations of NCARB. These are defined in outline form in NCARB Circular of Information No. 68: (1) History & Theory of Architecture, (2) Site Planning, (3) Architectural Design, (4) Building Construction, (5) Structural Design, (6) Professional Administration, (7) Building Equipment.

A more specific outline of these seven examinations is provided in appendix to this opinion.

The Boards' main argument is that unless the plaintiffs successfully pass these seven *specific* written examinations, the Boards will be unable to certify the plaintiff's abilities "to design and supervise architectural works, which insure the safety of life, health and property," without exposing themselves to charges of malfeasance because they registered persons unqualified to practice architecture.

We do not think this is a valid argument. Our jurisdiction requires that all officers and directors of professional architectural corporations must be registered architects. However, the record shows rather clearly that in many cases these officers and directors are primarily

business managers who, for the most part, are not themselves involved in the technical details of design and the supervision of construction. Where they are so involved, they typically operate in the capacity of a specialist in one particular area. In no case are these managers ever retested after initial registration. Moreover, we take judicial notice of the fact that other jurisdictions permit unregistered persons to hold top management positions in architectural organizations. There is no evidence to indicate that these organizations are any less responsible in protecting the safety of life, health and property.

The practice of architecture must be defined by the *changing customs* of the profession itself. There is substantial evidence here that the profession of architecture is rapidly developing a large number of firms such as TRW, firms composed of numerous highly specialized individual architects, and a group of architects acting as the business managers of the team of specialists. The excellent performance records of these firms strongly suggests that they are responsibly serving the needs of today's clients and the public.

We believe that the Boards' examinations should reflect these current trends and customs within the profession of architecture. The examinations cannot reflect some narrowly restrictive view of architecture as practiced in some earlier decade, even if a majority of today's architects adhere to that view of practice. The Boards can not arbitrarily ignore the very real changing customs of the profession without excluding a substantial minority of the profession from the public they serve. To do so, they would be failing in their administrative duties.

It is evident that the plaintiffs were employed to work, and did work, as specialists for one of the larger, more progressive architectural firms in the United States. It would have been a serious misuse of talent, and mismanagement of organizational resources, if the officers of TRW had not used each of these plaintiffs within their specialties. Thus it is apparent that the practicing architects are willing to accept these plaintiffs as an important part of their architectural team, and so also should the Boards.

The Boards should consider these broad guidelines in administering the registration examination to the plaintiffs:

**General Education.** Each of the plaintiffs has a degree in architecture and more than three years of experience working with registered architects. Their general knowledge of the principles of architecture can be examined. The Boards have not generally demanded that other previously registered architects should be retested periodically, nor do they attempt to reclassify the qualifications of registered architects who may change positions after long periods of specialization. Thus, the logical assumption made by the Boards is that any architect, once tested, has demonstrated the general ability to *re-educate himself* to meet the challenges of his changing profession. The same assumption can be made with these plaintiffs. It flies in the face of reason to assume that these men would permit their architectural licenses to be used indiscriminately or irresponsibly in areas which are not their specialties. It can be assumed that they too would re-educate themselves to meet new challenges or team up with other specialists in order responsibly to provide architectural services to their client.

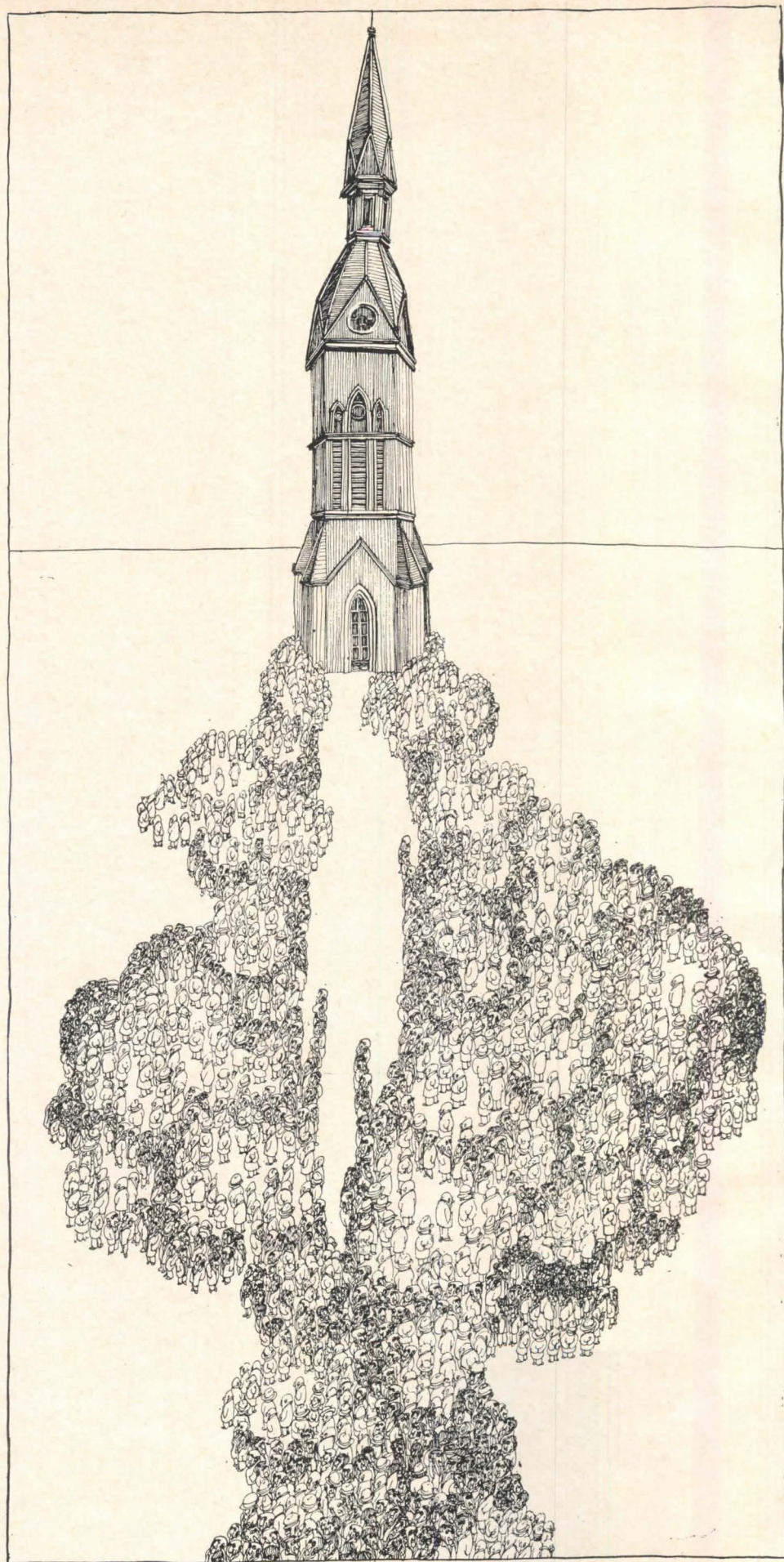
**Specialization.** Secondly, the Boards should examine the plaintiffs' competence in each of their particular specialties as these special areas relate to the practice of architecture.

In summary, then, we find that the written examinations required by the defendant Boards are not reasonably related to the practice of architecture in which these four plaintiffs have been involved. We, therefore, grant the plaintiffs' injunction and direct the Boards to give these plaintiffs special examinations based on their education and their professional experiences.

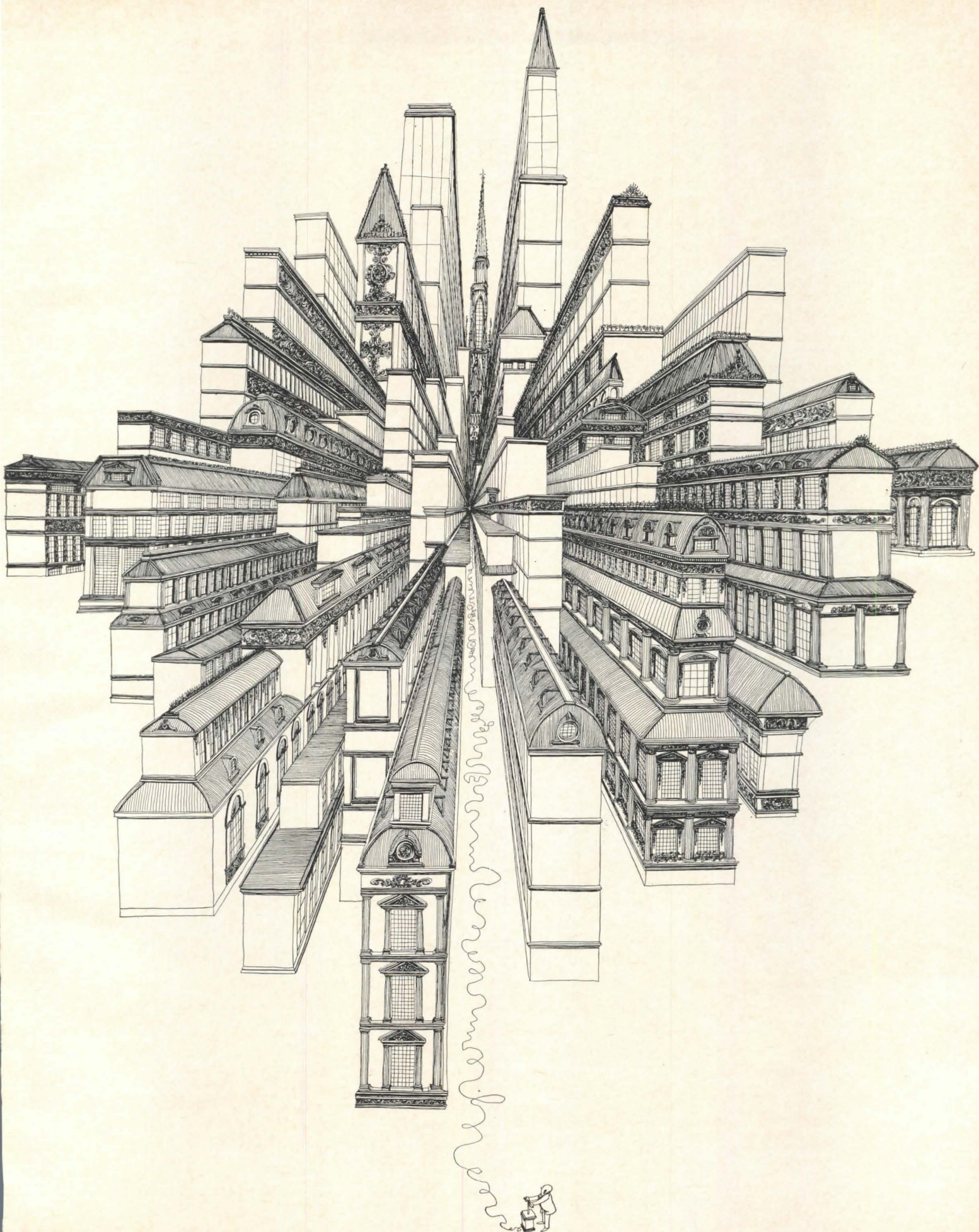


## URBAN INDIVIDUALIST

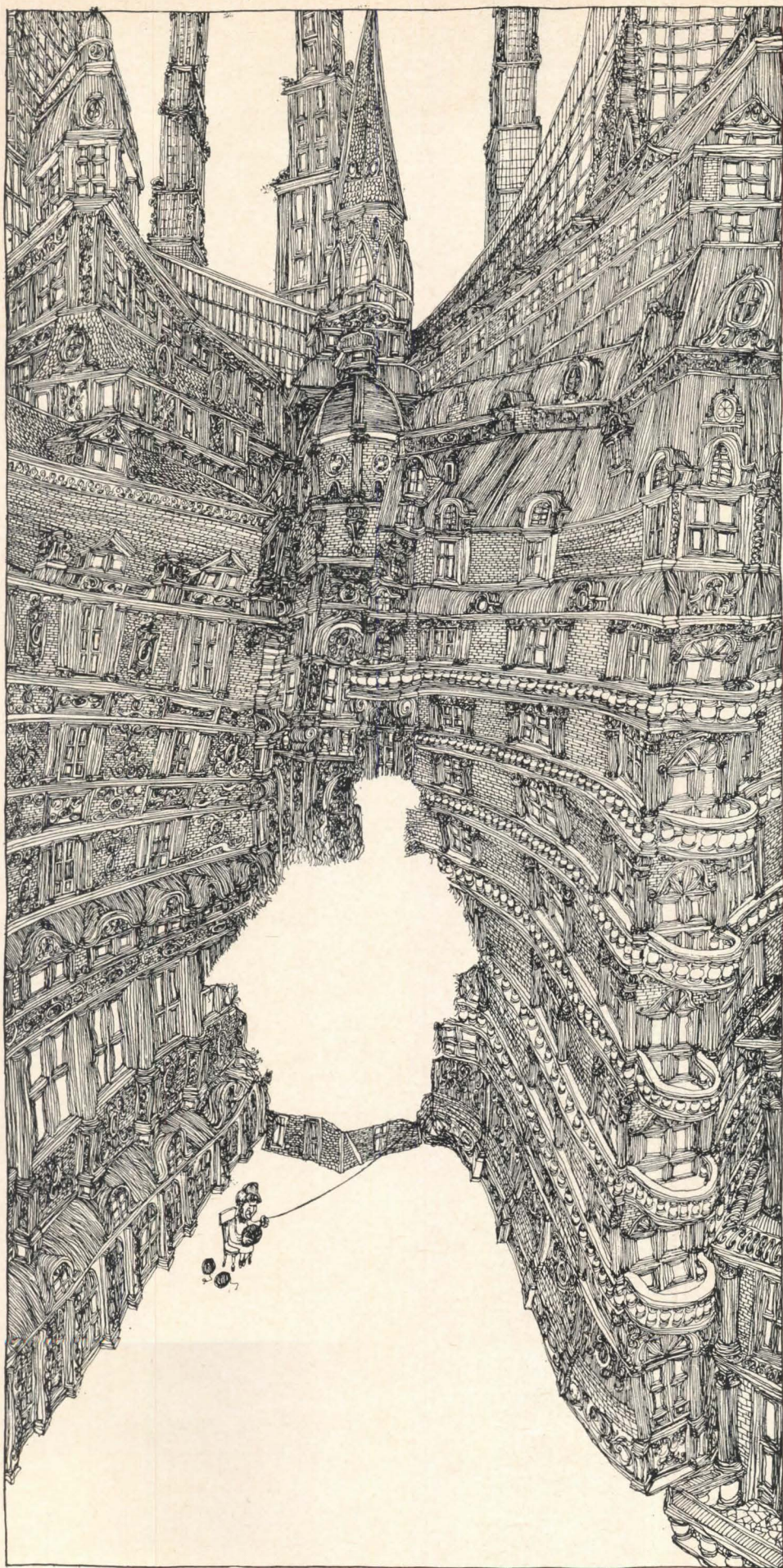
*Hans-George Rauch is the young German genius responsible for the drawings on these pages. They are part of a series, which he has entitled "The Individualist", and they contain much more than that which meets the eye—initially.*





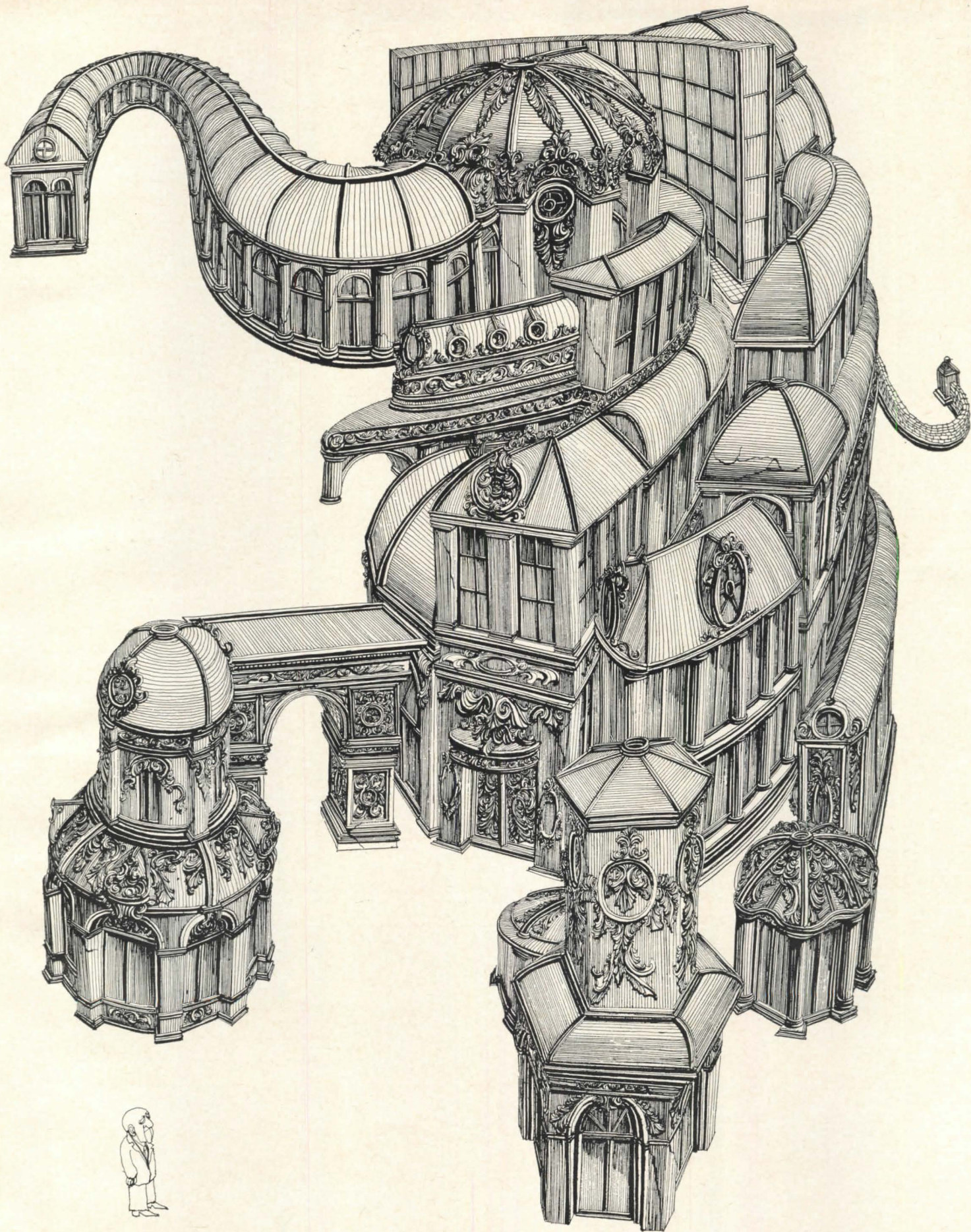




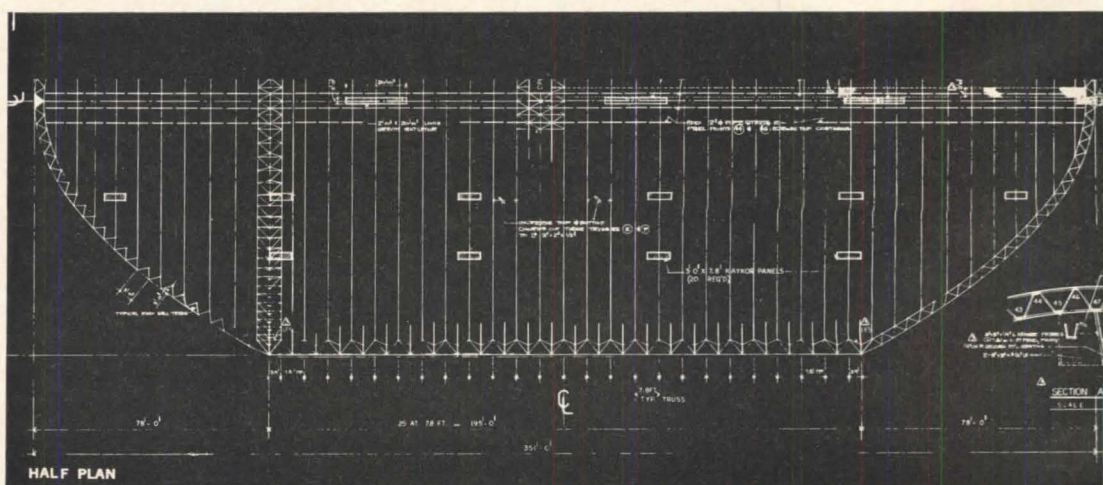


Hans-George Rauch, from Lithopinion #12,  
published by Local One, Amalgamated  
Lithographers of America, New York





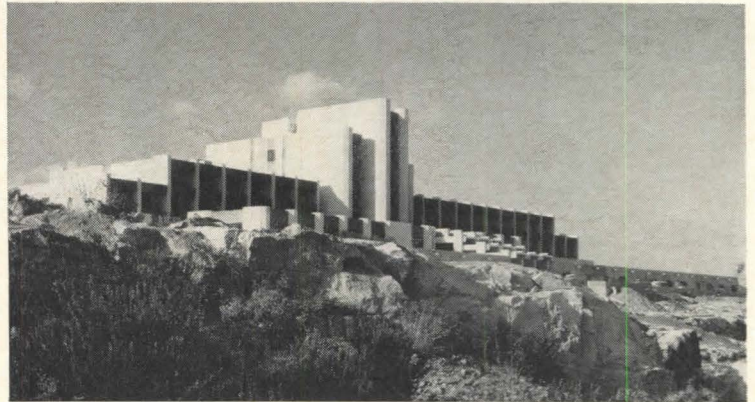
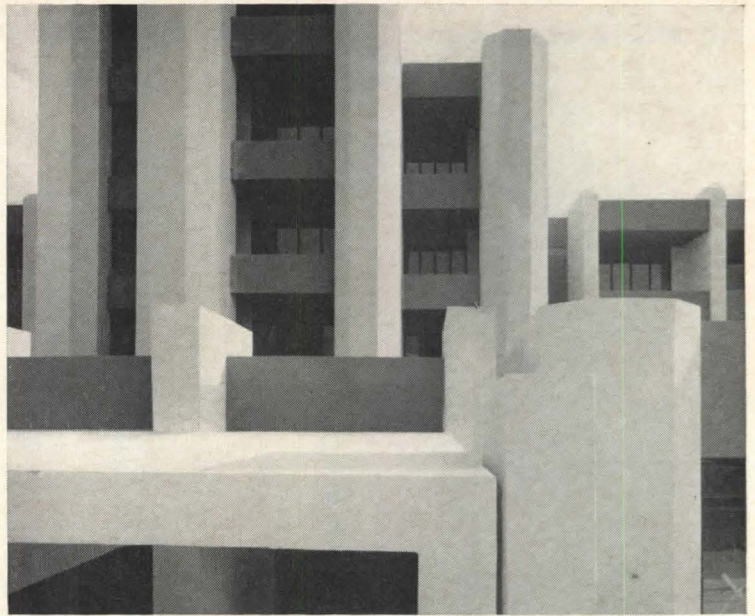
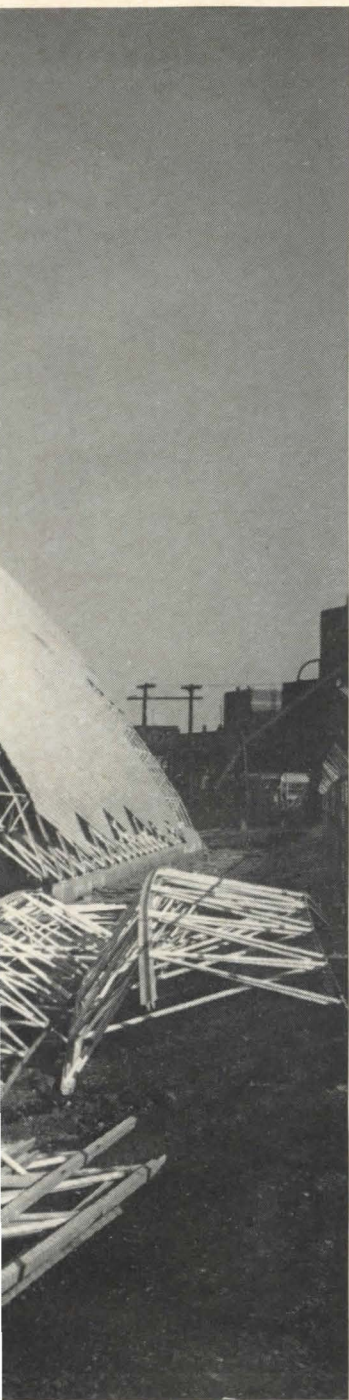






#### SHED SHEDS THE JOINT

An also-ran proposal for the U.S. Pavilion at Osaka's Expo 70 (by William J. Mouton Jr., with Philip Johnson, Oct. '68 issue, page 54) is going up for a more mundane use in Baltimore. The American Sugar Company's remarkable new shed for raw sugar (which is stored at a 35-degree angle of repose) will be 180 ft. by 351 ft. by 85 ft. The structure is a continuous space frame of welded trusses made of steel angles and pipe. Designers are William J. Mouton Jr., structural engineer, and Goldreich, Page & Thropp, consulting engineers. Each parabolic section, 7.8 ft. wide, is assembled first from prefabricated two-dimensional sections (shipped 500 miles to the site), then from 40-ft. lengths of the three-dimensional truss. Steel decking for roofing provides a stiff horizontal top-chord diaphragm. The structure needs no erection towers or scaffolding, and goes up for less than \$1.50 per sq. ft. of surface (without decking).



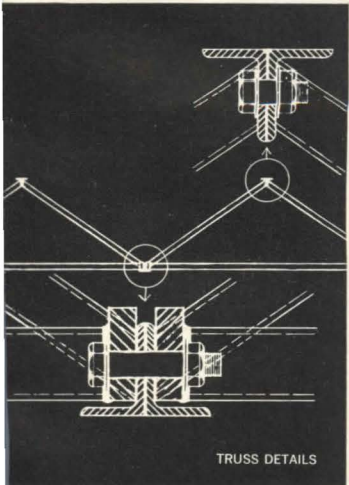
#### MALTESE VERNACULAR

On the rocky coastline of Salina Bay in Malta, Architects England & England have created a strong isolated sculpture in the landscape. From the bay and road, the 100-bed hotel appears as a horizontal mass composed of individual vertical elements, the whole dominated by the mas-

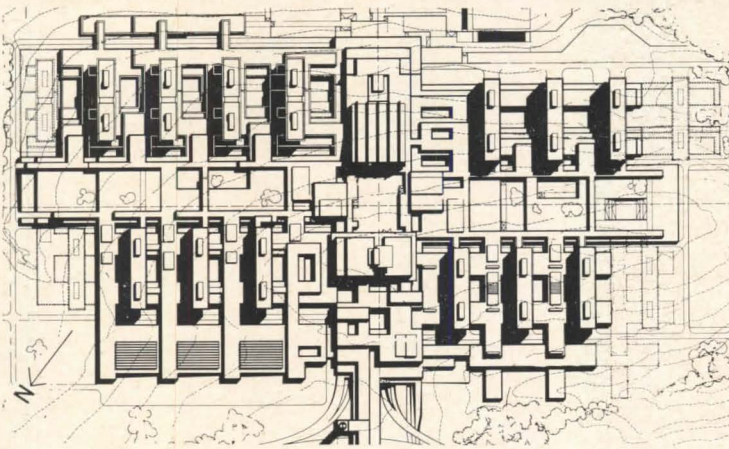
sive central towers. From the back, only the upper two floors of the tower are visible, and the apparent scale is that of the traditional farmhouse. The character throughout is the chunky primitive style of Maltese architecture; the colors are the bright ones that are dominant in the Maltese vernacular.

#### BRAZILIAN BOX

Already the world's eighth largest city, and growing by 300,000 persons a year, São Paulo opens its first art museum on March 12. The building is essentially a box slung from four concrete piers. Interiors are column-free, with paintings displayed on a series of floor-to-ceiling panels of transparent plastic. The architect, Lina Bo, is the museum director's ex-wife.







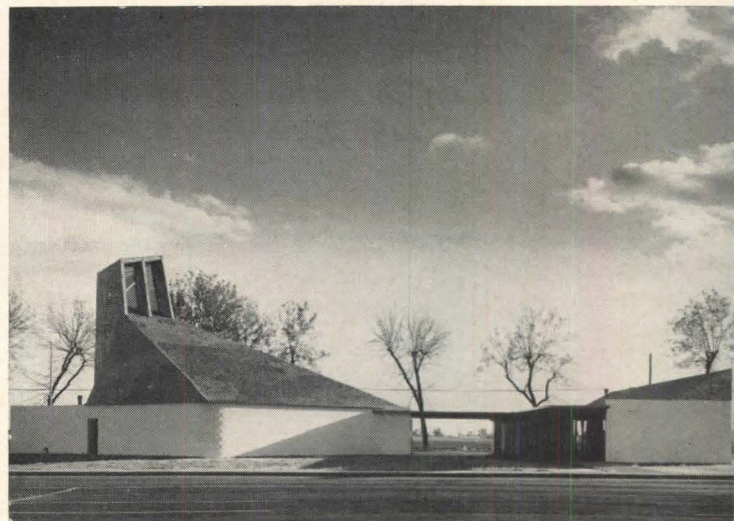
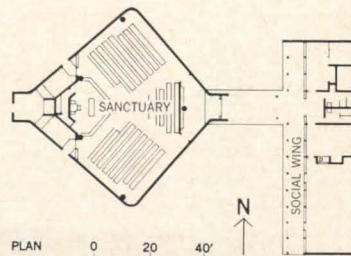
#### TEUTONIC TECHNOLOGY

Working towards its first 10,000 students, the new Bochum University is proceeding on well-ordered principles. Developed from the 1963 competition-winner of Architects Hentrich & Petschnigg, the plan separates the four academic departments (engineering, science, humanities, medicine) into distinct branches, two on each side of the trunk that has joint facilities. (Dormitories are separate.) Circulation is also designed with precision:

a highway with limited access feeds the campus; a local system, separate from pedestrians above, feeds all parts. A typical floor in the tall buildings is divided into student and faculty precincts by an off-center corridor. Floor area is partitioned freely, and the modular window sections and opaque sections are interchangeable. For all its up-to-date flexibility, however, the new university at Bochum looks like the old stereotype of Teutonic regimentation.

#### SIMPLE FORM FOR WORSHIP

The subdued sanctuary of a new church in Davis, California, contrasts markedly with the strong light of the Sacramento Valley. The roof of the new Lutheran Church of the Incarnation is a tent-like wood structure of strong and simple form; it rests on a continuous serpentine wall of concrete block. A social wing, linked to the sanctuary by a covered walkway, repeats the same materials. A classroom wing will be built between sanctuary and parking area, enclosing a quiet garden. Architects were Ostwald & Kelly.



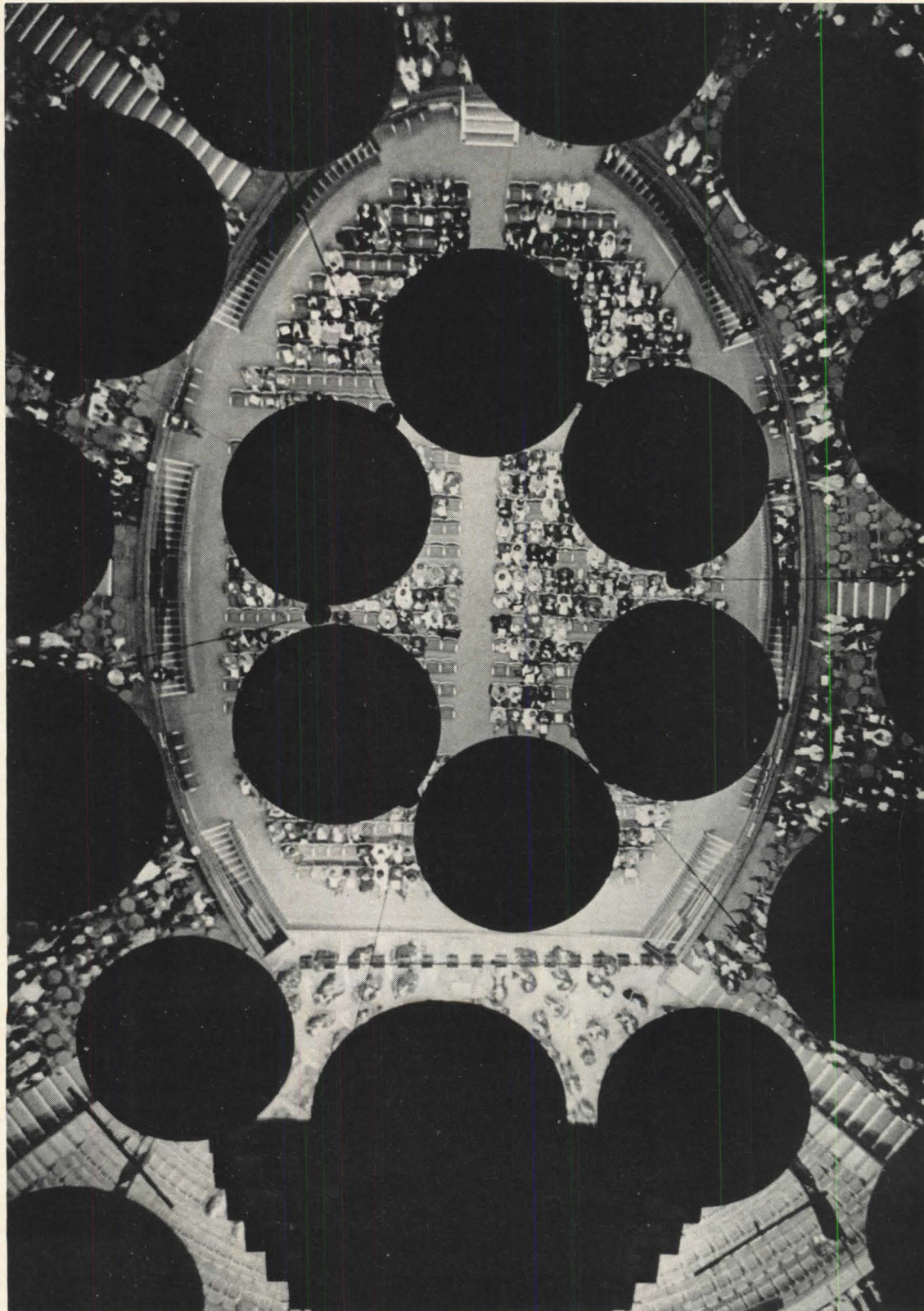
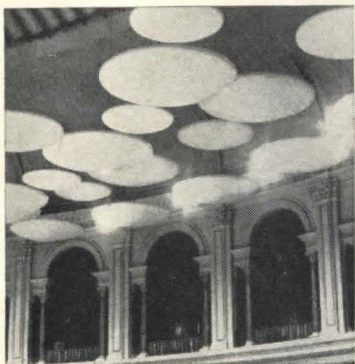


#### SOUND REMEDY

Queen Victoria would probably be horrified, but the Royal Albert Hall, monument to her beloved consort, now has a squadron of flying saucers inside its dome. The 109 glass-fiber discs, suspended on cables 70 feet above the floor, are an attempt to deal with the notorious echo

in the 98-year-old hall. In some seats, the echo was louder than the original sound. Tested during a recent concert (below), the saucers were deemed "a complete success," for removing the hall's echo without affecting its volume or its resonance. (An alternate proposal would have created a full ceiling, cutting off the dome

and, incidentally, cutting off one-third of the sound's volume.) The discs range from 6 to 12 ft. in diameter. Each saucer has tiny holes for water drainage, in case the roof should leak. Cost of the remedial work was only \$19,200. Acoustical consultants: Acoustical Investigation and Research Organization Ltd.



PHOTOGRAPHS: Page 56, Hughes Co. Commercial Photography. Page 57 (bottom), Robert S. Crandall. Page 58 (top), D.P.A.-Pictorial Parade Inc.; (bottom), Kurt E. Ostwald. Page 59 (left), Central Press; (right), The Times, London.



# A HEALTH CENTER WITH MUSCLES

BY ESTHER McCOY

The Hollywood-Wilshire District Health Center cannot be taken out of the context of Melrose Avenue or of the diseases most frequently treated in the clinics: venereal disease and alcoholism. Nine VD clinics are held each week in the Center and only two on pre-natal care. Melrose Avenue is the most uniformly dismal of all the east-west through streets between Mulhol-

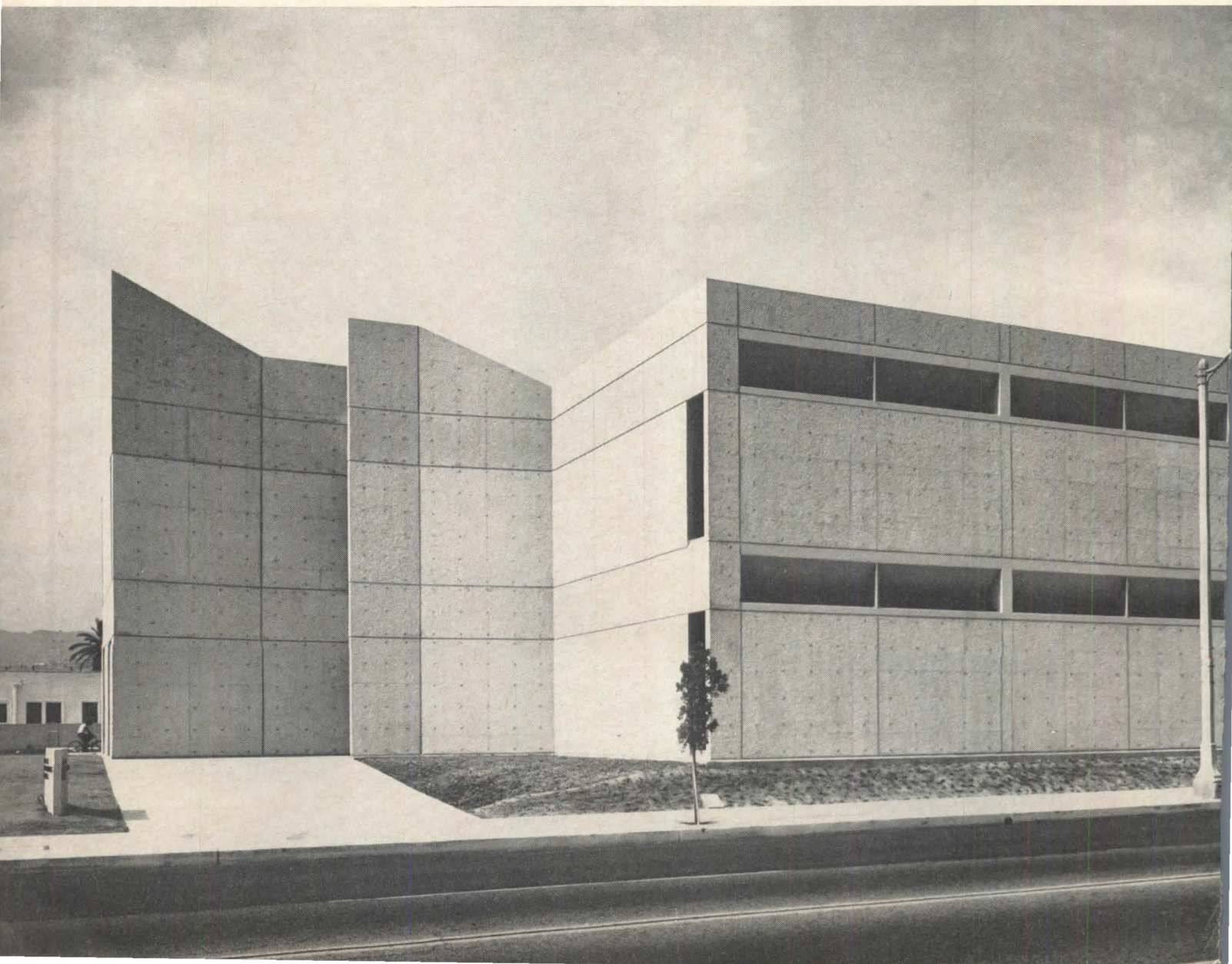
land on the north and Washington Boulevard on the south—the north and south limits of the area which the facility serves.

Long stretches of plaster one- and two-story commercial buildings set close to the street are so true to themselves that Ed Kienholz or Ed Ruscha could cut a slice out at almost any point for an assemblage or photographic study. Hollywood Boulevard,

now cut-rate, attracts leisurely walkers and talkers and lovers shopping for wedding ring sets; Sunset accommodates the socio-architectural middle class, and The Strip is a stage for the picturesque middle-class tensions of the young; Pico and Washington have the remnants of neo-Gothic wood houses.

Melrose has the Health Center, one of the few gifts to the street.

Mrs. McCoy is a well-known architecture critic, and teacher, also the author of numerous books on architecture.





The Honnold and Rex office is at the Beverly Hills end of Melrose, which picks up affluence as it moves west.)

A building without considerable muscle could not survive the setting of power poles, neon signs and billboards. A typical design for a health facility is a pretty building on a 4-ft. module with filling between posts of panels floor-to-ceiling glass facing

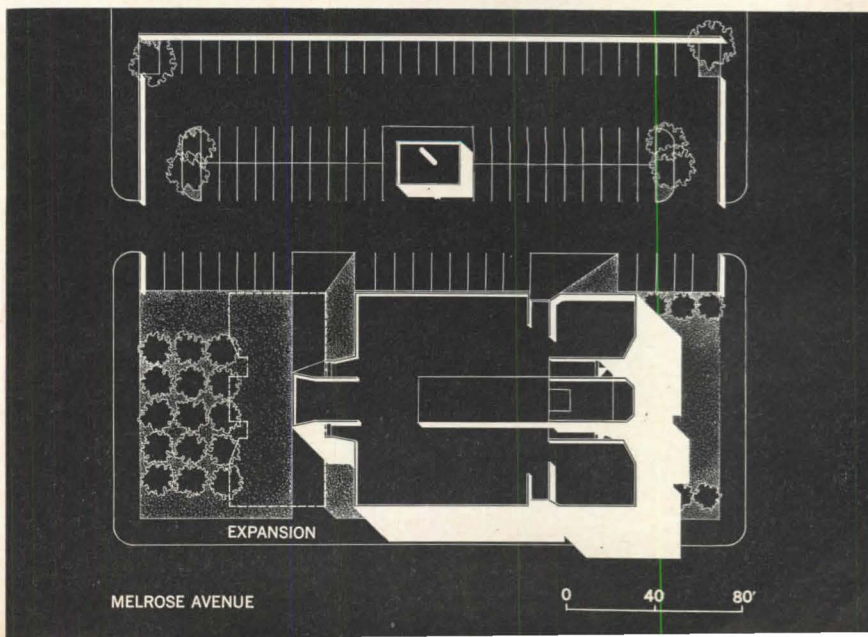
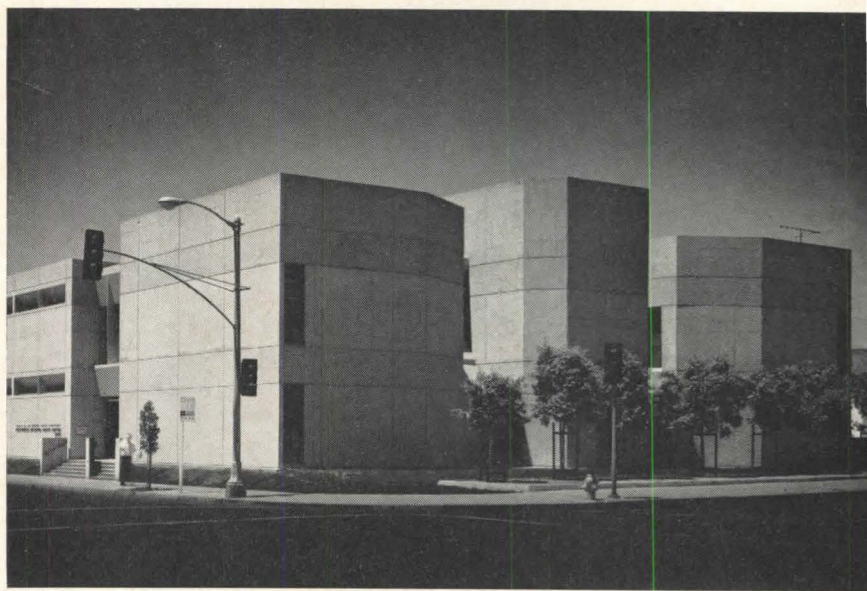
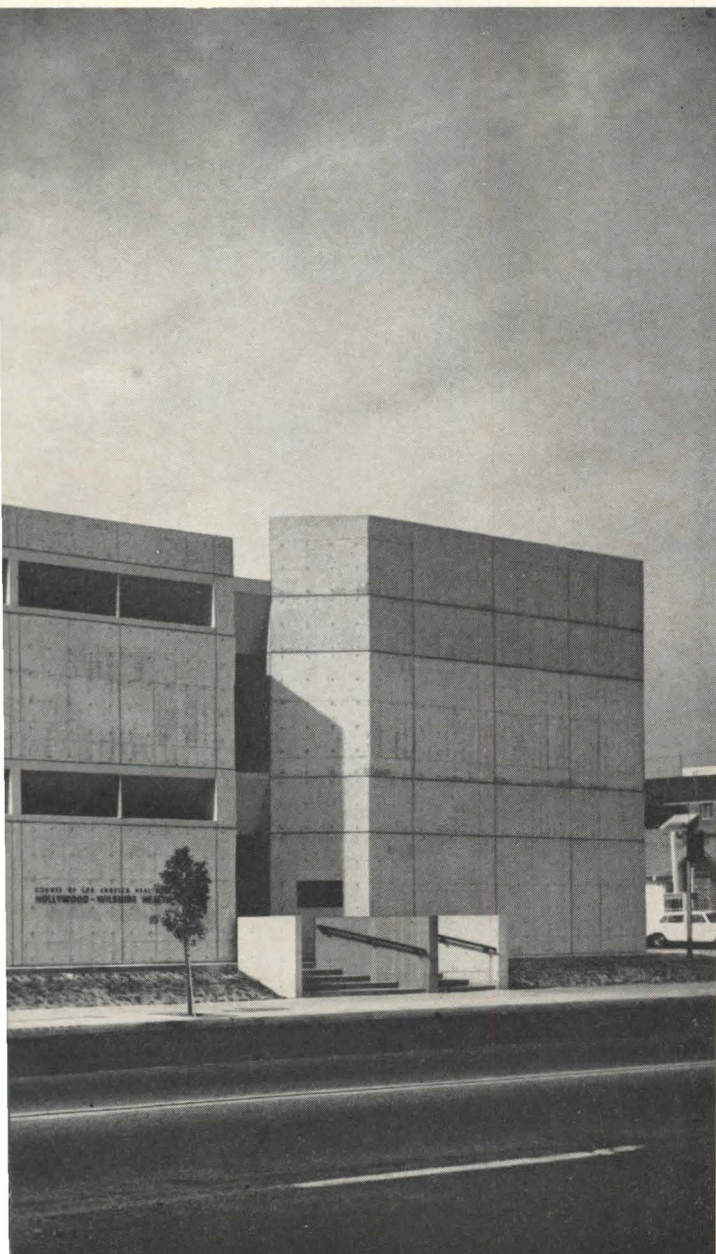
low-maintenance planting. This would hardly have worked on Melrose, nor would it have fulfilled the request for a building "you'd like to be able to wash out with a fire hose."

Like its neighbors, the building is set close to the street, which provides for parking in the rear, preserves the continuity, and avoids scraggly civic landscaping. The groves of Ficus

retusa at both ends of the building, set within curbed rectangles with recessed lighting at the base, will add up to something important when they grow into solid masses of foliage.

The 40,000 sq. ft. building is of load-bearing concrete poured in place, with a concrete pan joist floor system. The form work was neatly laid out, the pour lines articulated and snap

tie holes filled with lead. The long facade on the Melrose Avenue side is broken into masses which define the three functions: to the east (right in photo below left) are the business offices and quarters for the staff working in the building and in the field; the central block houses clinics and waiting room; in the small west section (the direction in which the clinic will expand) are





the administrative office and mechanical wing.

The plan grew out of the point of view that VD patients, alcoholics, and the young as a group use public health facilities reluctantly, and therefore the plan must be immediately legible. Sam Carson, in charge of design in the office, mentioned the increase in the number of minors treated at the Center since doctors are

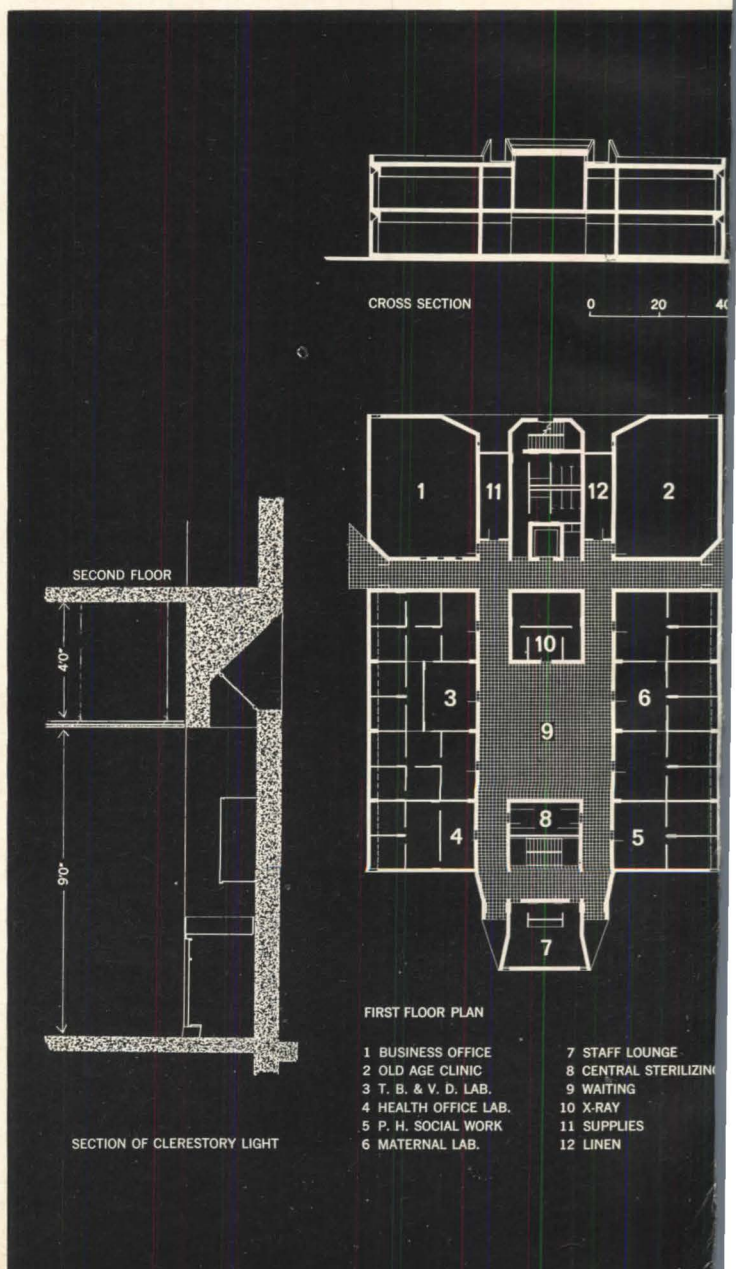
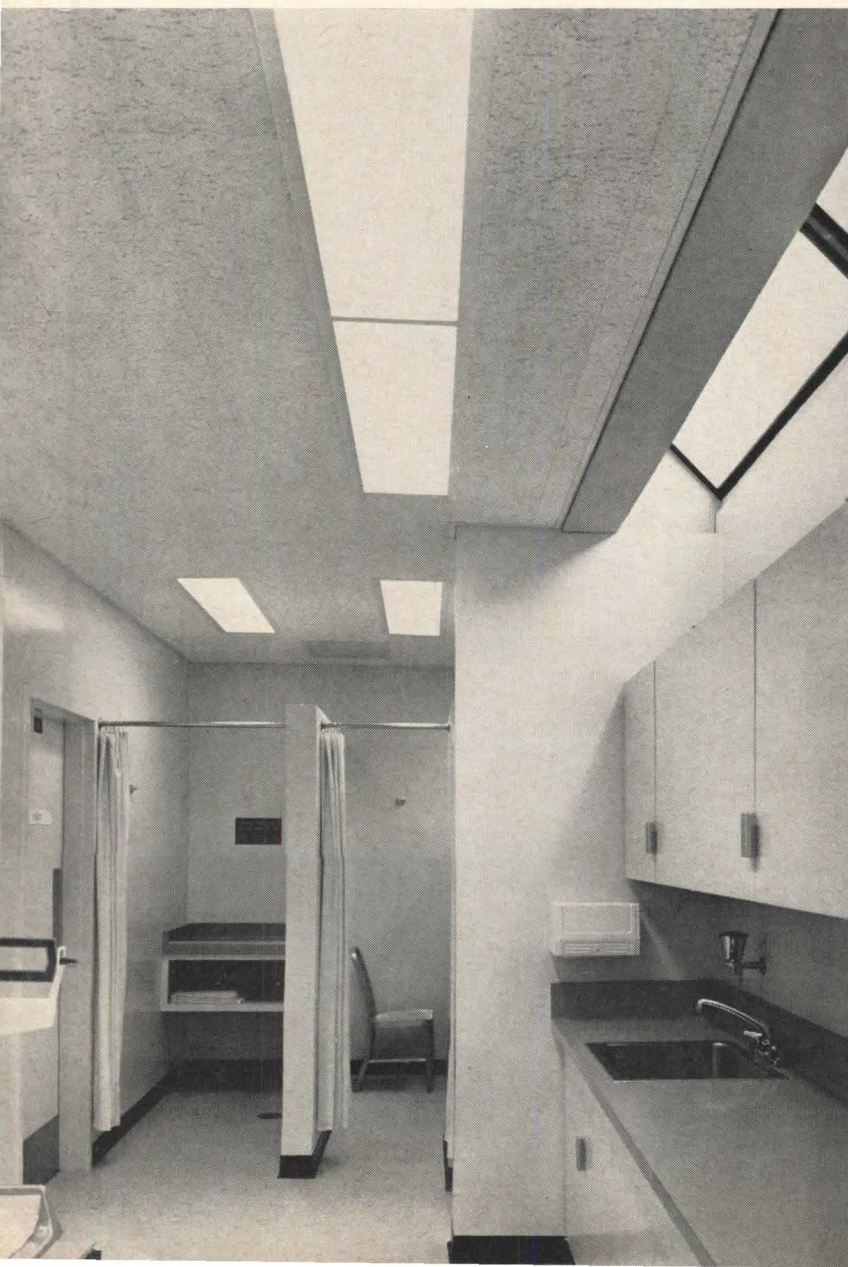
no longer required to report cases of VD to parents. Carson spoke of this as if it were a design factor, as indeed to him it was.

The pattern for reaching admission windows is lineal; the windows must be passed by anyone entering from the parking lot or from Melrose. A central corridor, daylighted at both ends, extends from one entrance to the other. A patient turning from

a window faces the waiting room; however, the sterilizing room screens the waiting patients. Clinics surround the waiting room, and nurses stand at the doors of the clinics to call in the patients. The circulation pattern is extraordinarily clear. Wall colors are also used to guide patients. Instructions for finding the director on the second floor can be followed simply: Go to

the blue wall. The clinic for alcoholics, on the second floor at the request of the Health Department, is reached by an entrance defined by an orange wall.

The handsomeness of the shell carries through to the interiors in the material itself and the careful detailing. A budget building in which the plumbing and cabinet work gets the lion's share is lifted into the luxury category





y the detailing. Good detailing, fortunately, costs only talent and conscience. To the dismay of the architects, the building came in under estimate, and they regretted that in trimming cost they lost the waiting-room skylight.

The unsurfaced concrete walls of the interior are offset by red panish paving-tile floors in the entrance corridor and waiting room, and stainless-steel panels

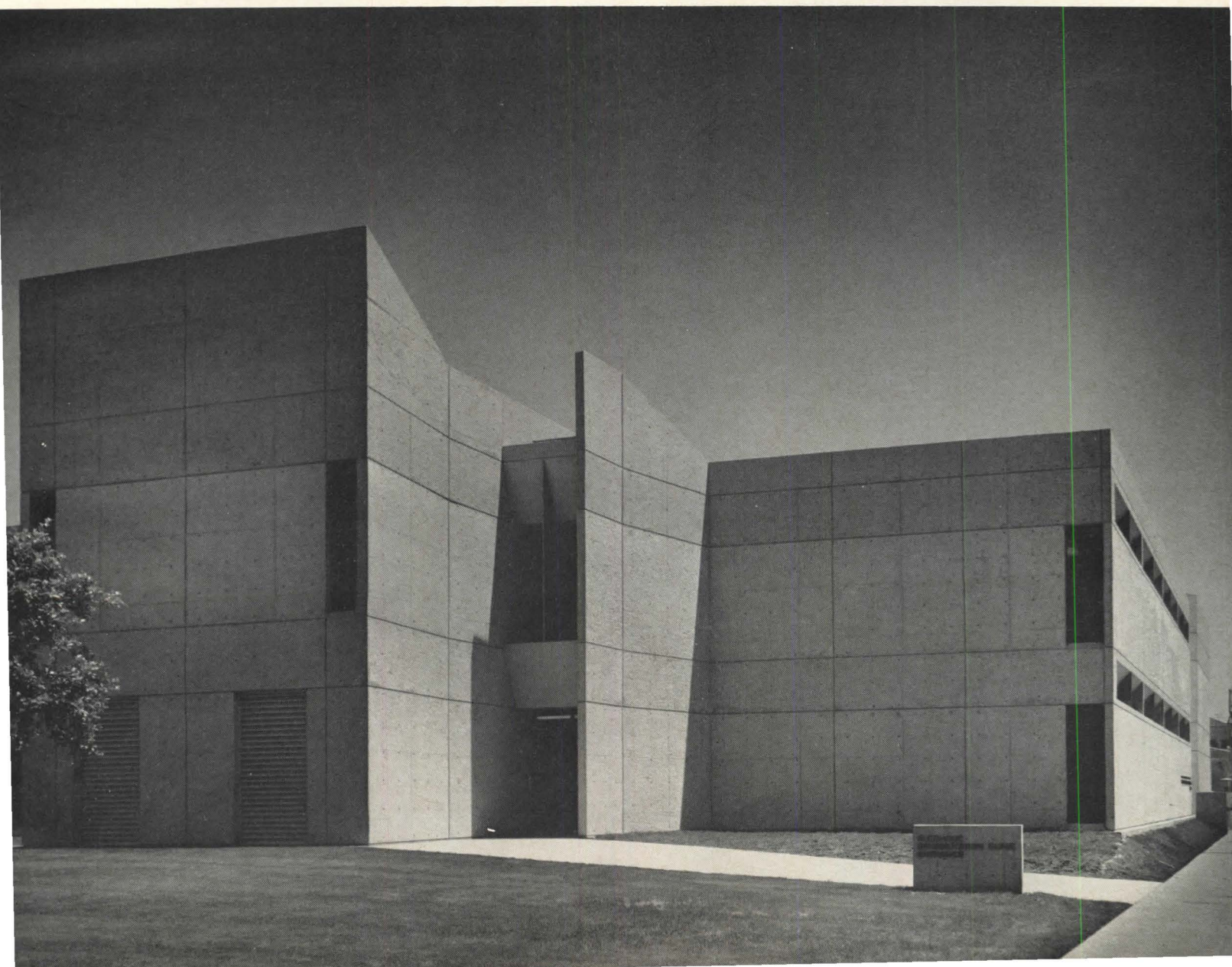
below the registration windows. A shadow line detail separates the concrete from other materials; it appears around the fire extinguisher box set flush with the wall, the cast-in-place metal door frames, etc. The Center sets a new standard for the public building in Los Angeles.

The size of the building, the concrete material and the strip windows, which the International-

alists would have liked, is something of a bridge between the present and, say, Lescaze's 1938 concrete CBS Building on Sunset. And, although three decades have changed the profile of Los Angeles, and during this time Lou Kahn has demonstrated new ways to disjoin concrete masses, the Center does have some of the plain stubborn virtues that gnawed away at the Internationalists.

#### FACTS AND FIGURES

Hollywood-Wilshire District Health Center, Los Angeles, Calif. Owner: County of Los Angeles. Architects: Honnold and Rex (P. K. Reibsamen, partner-in-charge; Sam Carson, design architect; Satoru Nakatani, production architect). Landscape Architect: Raymond E. Page. Engineers: Greve and O'Rourke (structural); Ayres and Hayakawa (mechanical). General contractor: Reingardt and Smoak. Building area: 37,425 sq. ft. Cost: \$799,000 (excluding land, fees or furnishings). PHOTOGRAPHS: Pages 60, 62, Richard Koch; 61 (top right), 63, J. Lagman.





# KAHN IN VENICE

A month ago, in the cavernous *Sala delle Mappe* in Venice's Doge's Palace, Louis Kahn presented the project he has designed for the site of the city's *Esposizione Internazionale d'Arte*—better known as the Venice Biennale. The presentation, grandly advertised over the entrance gates of the Palace (left), was attended by some 500 architects, students, and critics assembled from all over the world; and it consisted, in addition to a suitably poetic verbal description, of an exhibition of models and drawings presented by Kahn himself (top right).

The project contains three buildings: one for the Biennale proper; a second to be known as the "Palace of Congress," a theater-in-the-round—a place of confrontation between people from different nations and different disciplines; and a third structure, the "entrance building" by the lagoon.

The Biennale building is the more conventional of the three. It consists of two identical, rectangular blocks, each measuring 200 ft. in length, 60 ft. (and three stories) high, and 60 ft. wide. The two blocks face each other across a rectangular courtyard that is 80 ft. wide and 200 ft. long; the open ends of this courtyard can be closed off from the existing canals and gardens by huge sliding walls.

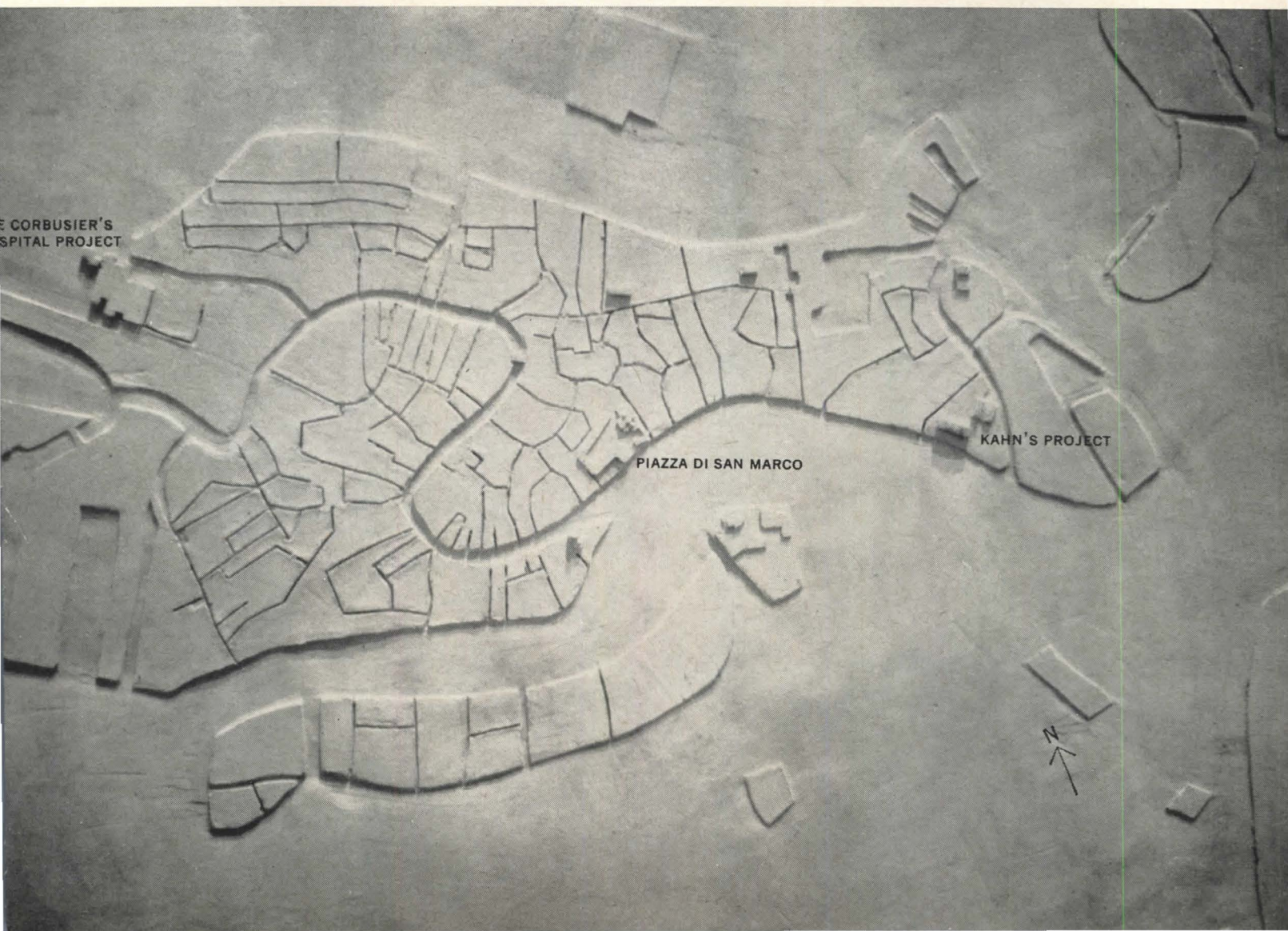
On the ground floor, the Biennale building is to contain workshops and studios; on the next floor are to be exhibition galleries; and on the third floor would be studios for resident artists. The court between the two blocks would be a meeting place, and Kahn suggested that this courtyard might be covered by a glass and metal roof, not unlike that of the Galleria in Milan—but movable.

Unlike the present facilities for the Biennale, Kahn's proposed *building* would be in use at times "as a free, self-supervised academy, as a free community of involvement and exchange."

The proposed Palace of Congress is a much more dramatic building—if only because it is much bigger: 460 ft. long (almost as long as the Piazza di San Marco itself), 78 ft. high, a

Left: Entrance to Doge's Palace, with sign announcing exhibition of Kahn's project for Venice. Opposite page: Kahn in Doge's Palace exhibit, describing project to architects and students (Model shows Palace of Congress at left); and plaster relief map of the city of Venice, with locations of key existing and projected structures. Le Corbusier's hospital is to be built near the causeway leading to the city.

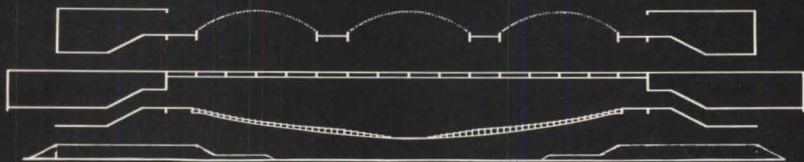




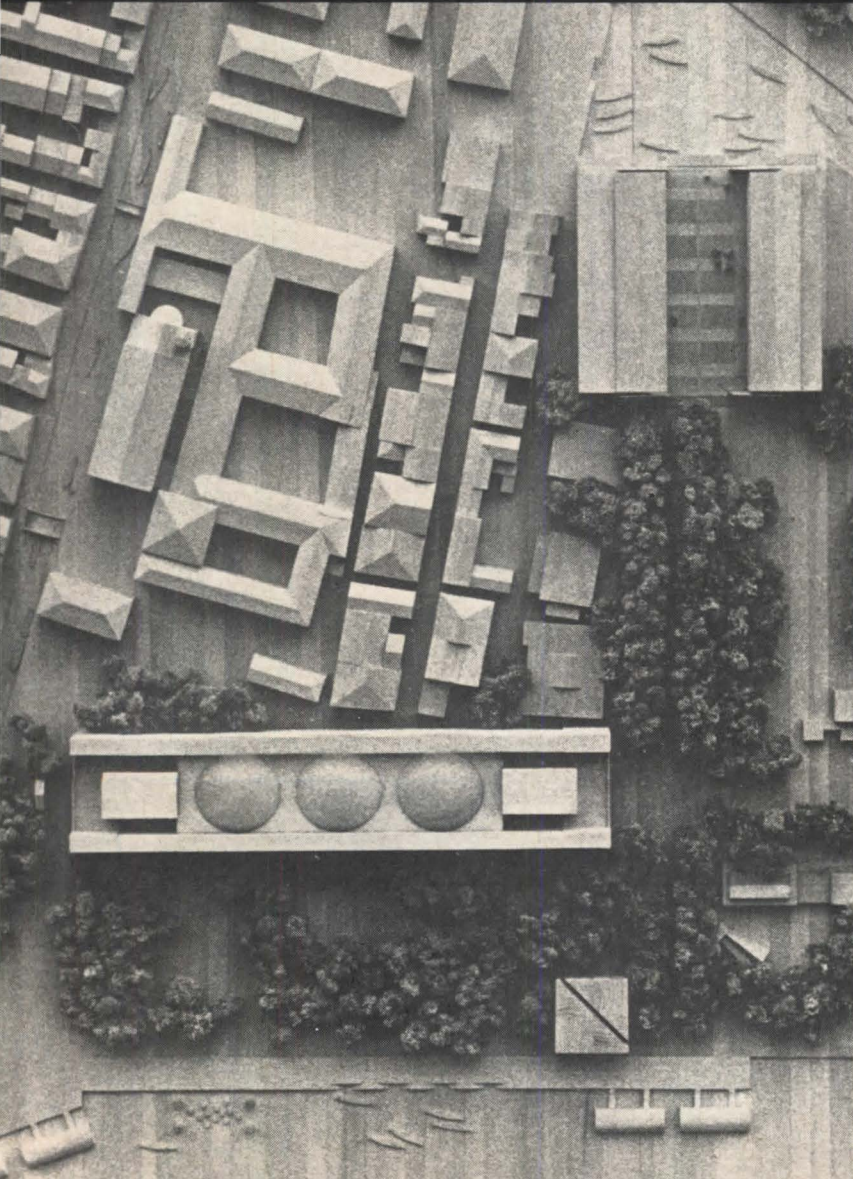




ELEVATION



SECTION



100 ft. wide. It is, in effect, a vast auditorium slung, in the manner of suspension bridges, between two towers; the auditorium is a two-faced space—a center stage, with seats (for a total of 2,500 people) ascending from that stage toward the towers from which the structure will be suspended.

Above this space, there will be a great reception hall, topped by three glass-and-steel domes. And, on top of the domed reception hall, there is to be a great piazza-under-the-sky—a roof garden, subdivided by the three protruding domes, and opened up (by means of cutouts in the surrounding parapet walls) to selected views of Venice and the lagoon in which it floats.

Beneath the suspended auditorium there is to be a huge, covered piazza. The sweep of the suspended hall above the piazza will shape this space.

Finally, by the lagoon, and close to the Palace of Congress, there is to be a sort of arrival building, a glorified version of the stops for the water buses that are the mass transit system of this extraordinary city.

Kahn's project is the second modern development now proposed for Venice (see previous page)—the first being Le Corbusier's hospital, now redesigned by the late master's assistant, Guillermo Jullian de la Fuente. Corbu's hospital seems fairly certain to get built. Kahn's project is not so clearly assured of realization: so far, all that has happened is that the City of Venice has succeeded in persuading Kahn to donate his services, and in persuading Alitalia and various Venetian hotels to invite "foreign dignitaries" to attend the unveiling in the *Sala delle Mappe* in the hopes that that revelation would generate a copious flow of funds from far and wide. The chances are that it may.

Meanwhile, Kahn's project raises at least one question: the students at the unveiling clearly felt that what the city of Venice ought to be doing is to save the city from drowning—rather than to add to the load by building additional tourist attractions. (Those additional tourist attrac-

tions might, of course, also help attract sufficient funds to re-float the city.)

As for the quality of Kahn's project—this raises one or two questions as well: the Biennial building, with its two blocks surrounding a central court, is not the most original concept Lou Kahn has produced over the past couple of decades; but it may, in fact, be an exceedingly lively sort of building; for it contains within its concept some very intriguing potentials.

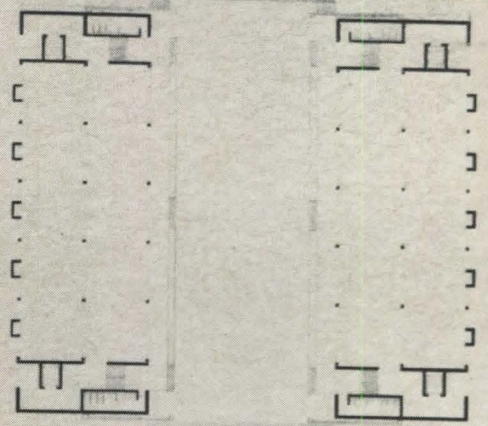
But the Palace of Congress, which is, quite obviously, a much more exciting piece of architecture, may have to prove itself in terms of use. Here, according to Lou Kahn, two great audiences are to meet face-to-face, in a dramatic confrontation. But what will there be to say? Do great Palaces of Congress necessarily produce great confrontations?

Perhaps, because this would be a truly amazing building, it may generate such confrontations. The very theme of Venice—repeated annually, by the Dukes of Venice—has been the theme of confrontation between the land and the sea.

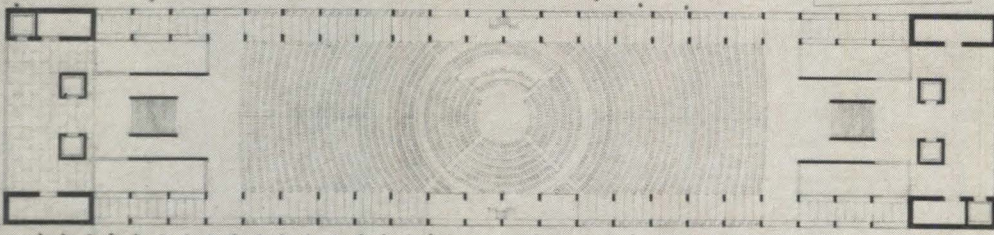
Admittedly the sea has been acting up in recent years; and this is the real problem of Venice. But perhaps the sort of poetic gesture made there by Lou Kahn will give new vitality to the city as a whole, so that the class confrontation that has always marked Venice will, indirectly, be resolved in his great "theater-in-the-round."

Illustrations at left show side elevation and section of Palace of Congress building, which is intended to measure 460 ft. in length; and bird's-eye view of the entire site with the three projected buildings in place. Plans on opposite page identify the three buildings and describe the principal floor areas.

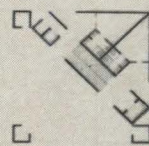




BIENNALE BUILDING



PALACE OF CONGRESS

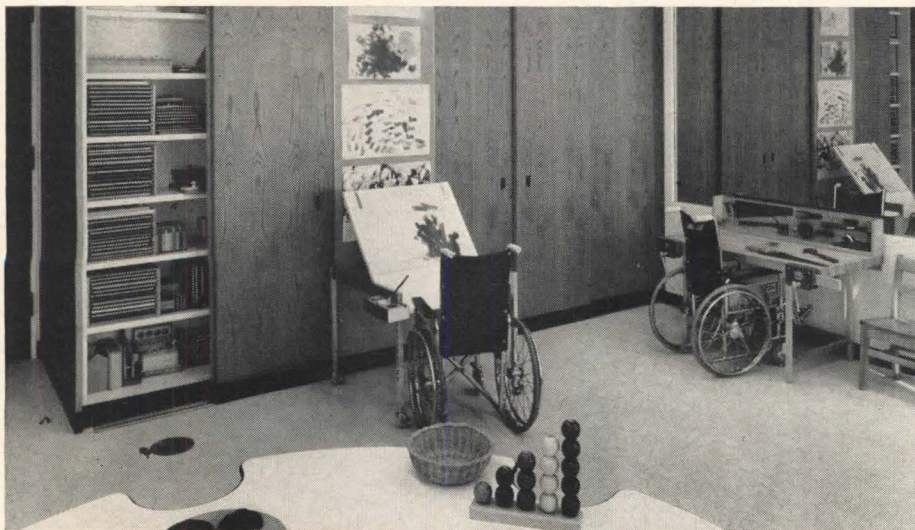


ENTRANCE BUILDING

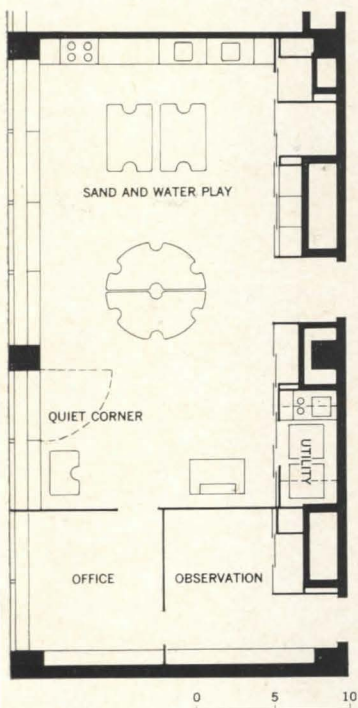




# PIONEERING NURSERY SCHOOL







A remarkable one-room nursery school, intended for no more than six children at a time, has opened at the New York University Medical Center's Institute of Rehabilitation Medicine.

The nursery school is unusual in that all its children are handicapped, with physical and mental disabilities ranging from minor to severe. It is also unusual in that the architects, Skidmore, Owings & Merrill (and, in particular, the project designer, Jack Dunbar), have turned this minor job into a major labor of love, studying in detail the needs of the handicapped child. Consulting with Dunbar and the school's director was Miss Jessie Stanton, a pioneer in early child-hood education.

A make-shift nursery school had been in operation since 1962, set up and taken down each day in the children's dining room. The new facility now has its own full-time space, which is indicative of its importance to these children who are hospitalized for diagnosis and therapy. It is located in the institute's new research wing, which is indicative of its value to hospital staff and children alike. (SOM had designed the whole building, but the firm had no contract for the interiors. The nursery school developed as a special job, funded on an almost open-ended basis by a woman who was mildly handicapped, herself, as a child.)

The nursery school is essentially one large room, plus a small utility area for teachers, an office for the teacher-director, and an observation room with one-way glass for teacher training, staff, and visitors.

The whole approach is to treat the handicapped children as much as possible as if they were

normal. Thus, the open shelves along the window wall, with a grab rail at the near edge, encourage the children to get their own toys. The single large table in the center of the room encourages interaction; its height is adjustable, and its edge is notched so that wheelchairs can come in close to the work surface. The housekeeping corner, a standard part of any nursery school, has its small sinks angled toward the rear, to minimize water splashing out onto wheelchairs and metal braces. Water play and sand play are also traditional; here, the two specially designed tables are notched and shallow to permit play from a wheelchair. The easel is another unique design—it can be lowered to the floor for use by children who have no arms and paint with their feet. The aim, throughout, is to give each child as much room for development as possible, despite his disability. These designs are not patented, but belong to the hospital; any further manufacture of them will benefit the hospital. Many of the ideas, in fact, originated in sketches brought to the designer by Mrs. Ronnie Gordon, cofounder and director of the facility.

The variety among the children—cerebral palsy, brain damage, mental retardation, etc.—makes it necessary to put together each half-hour group with great care. For the child who needs a one-to-one relationship with the teacher, there is a separate area in one corner, free from distraction. (The door of a wall cabinet swings out to give some enclosure to this corner.)

The designer has also closely considered the teachers in their demanding situation. Many of the children have an extremely

short attention span, and the room soon becomes chaotic if toys are not removed as they are discarded. Storage on open shelves and in transparent plastic trays enables a teacher to find and return items easily.

Mrs. Gordon says, "Our initial reservations about the quantity of 'learning' possible in a transient nursery school were not justified." She sees improvement in almost all the children—an increased span of interest, a beginning of group awareness, a greater independence and initiative, a feeling of increased worthiness, a mastery of simple skills, an aroused curiosity.

A major difficulty, however, adds Mrs. Gordon, is finding nursery schools for these children after they leave the hospital. (The average stay is six weeks.) "If a handicapped child is not offered *more* than the non-handicapped child in stimulation, training, and opportunities to learn the lessons of socialization, the effects of his disability are almost certain to increase even though his original disability is not progressive." In this carefully designed nursery school, handicapped children are certainly being offered more, and the visitor—far from being saddened—is heartened by the large amount of devotion poured into this small place.

—ELLEN PERRY BERKELEY

#### FACTS AND FIGURES

The Katherine Lilly Conroy Preschool Learning Laboratory, in the Research Rehabilitation Wing of the Institute of Rehabilitation Medicine, 400 East 34th Street, New York, N.Y. Owner: New York University Medical Center. Architects: Skidmore, Owings & Merrill; Jack G. Dunbar, interior designer. Building area: 882 sq. ft.

PHOTOGRAPHS: Luigi Pellettieri.



# DOWN A HILLSIDE IN NAPLES

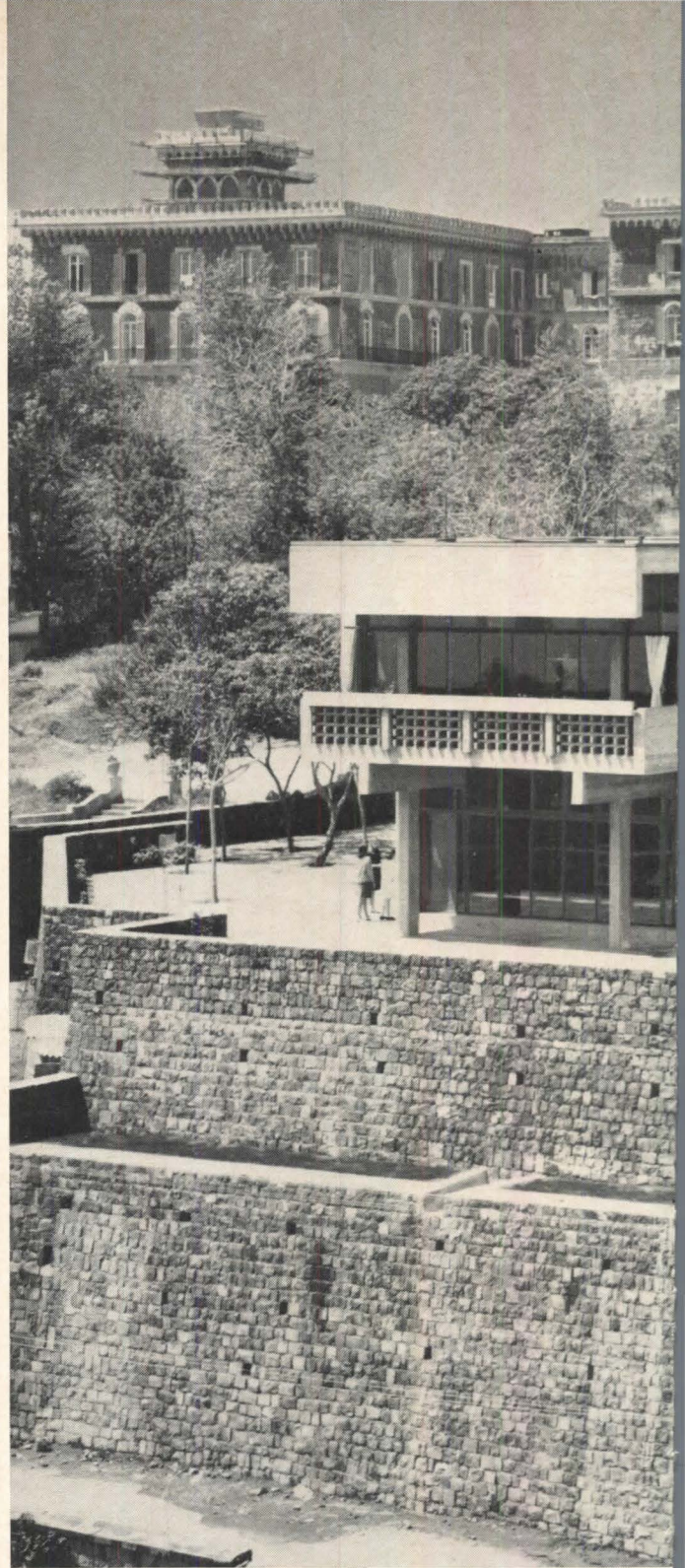
When the Swiss government held a national design competition for a new school to serve the Swiss community in Naples, it unwittingly played right into the hands of Dolf Schnebli.

Schnebli, a young Swiss architect, was already a past master at designing schools around a progression of sharply varying levels (even on flat sites), and the site for the Swiss School was a precipitous strip of hillside overlooking the Bay of Naples. (Schnebli, who teaches part time at Washington University, St. Louis, was a member of the team which won the 1965 competition for a Law School and Science Center there—April '66 issue.)

Not surprisingly, Schnebli's winning design exploits the site for all it is worth. The separate elements of the school—classrooms, dining facilities, gymnasium—are organized into a series of terraced blocks punctured by open courtyards which serve as play areas during recess. In the mild Neapolitan climate, the courtyards usually double as the major means of circulation, though an interior corridor runs downhill along the building's west side (left in photo).

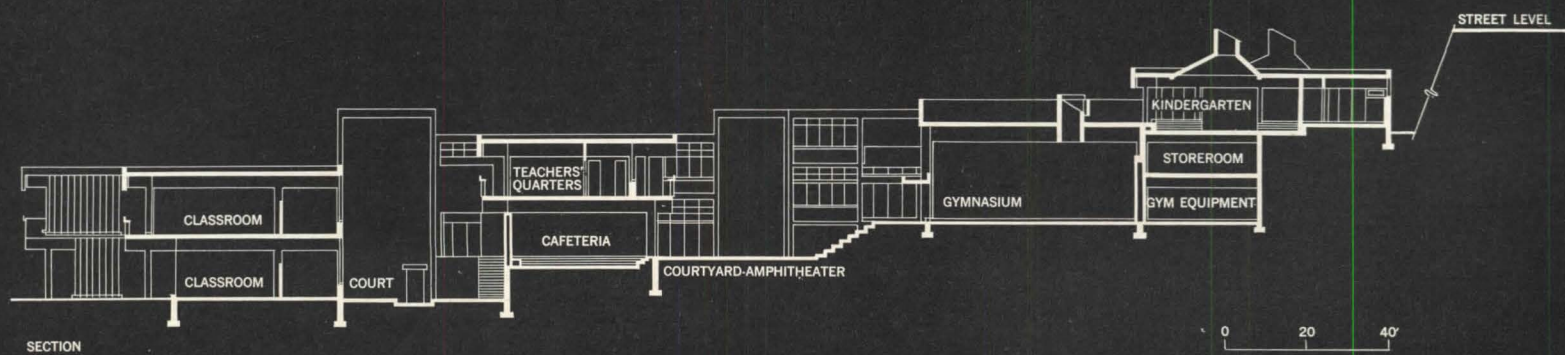
Schnebli considered it important that educational activities be spread over the entire school complex, so he placed classrooms at the highest and lowest points of the site (see section). At the top is the kindergarten wing and at the bottom a two-story wing for older students. Between them are the gymnasium and dining hall, which flank two sides of a spacious outdoor courtyard. The amphitheater-like courtyard is the nucleus of the complex—the "public square" around which all activities revolve.

Schnebli's design represents a diplomatic victory for the Swiss government, which cared enough about international good will to hold a design competition. The same cannot be said for the U. S. government, whose new school for U.S. citizens in Naples is just above the Swiss School (top right in photo). It was designed and built for the U.S. by a local speculator—and looks it. The two schools confront each other like Beauty and the Beast.

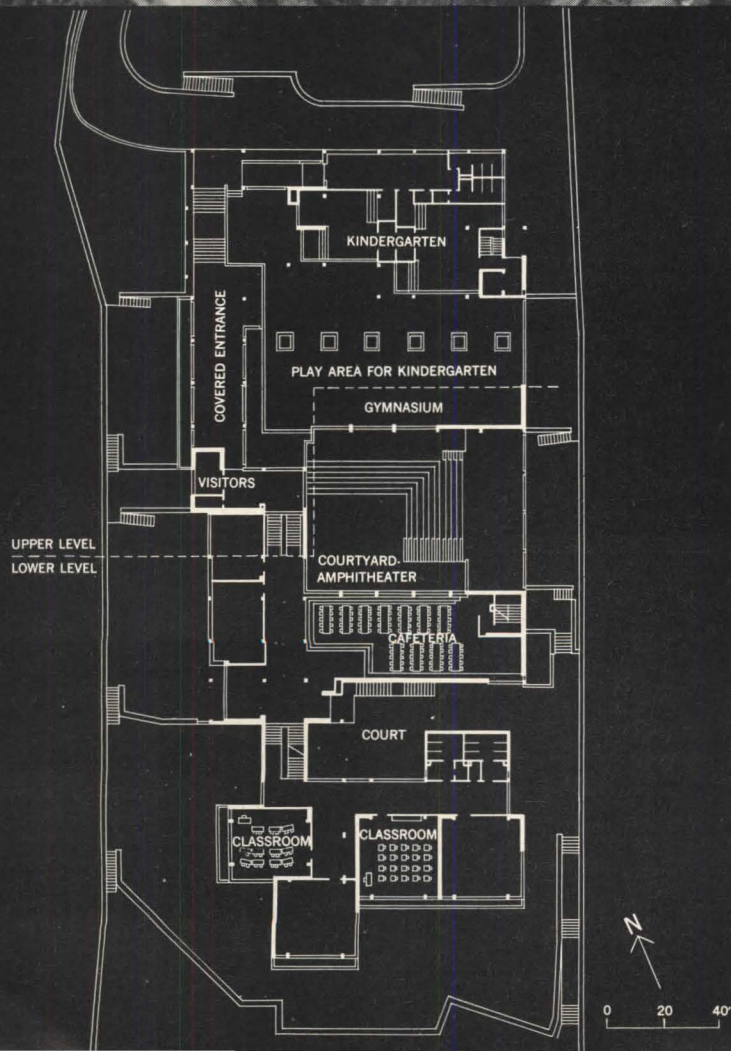
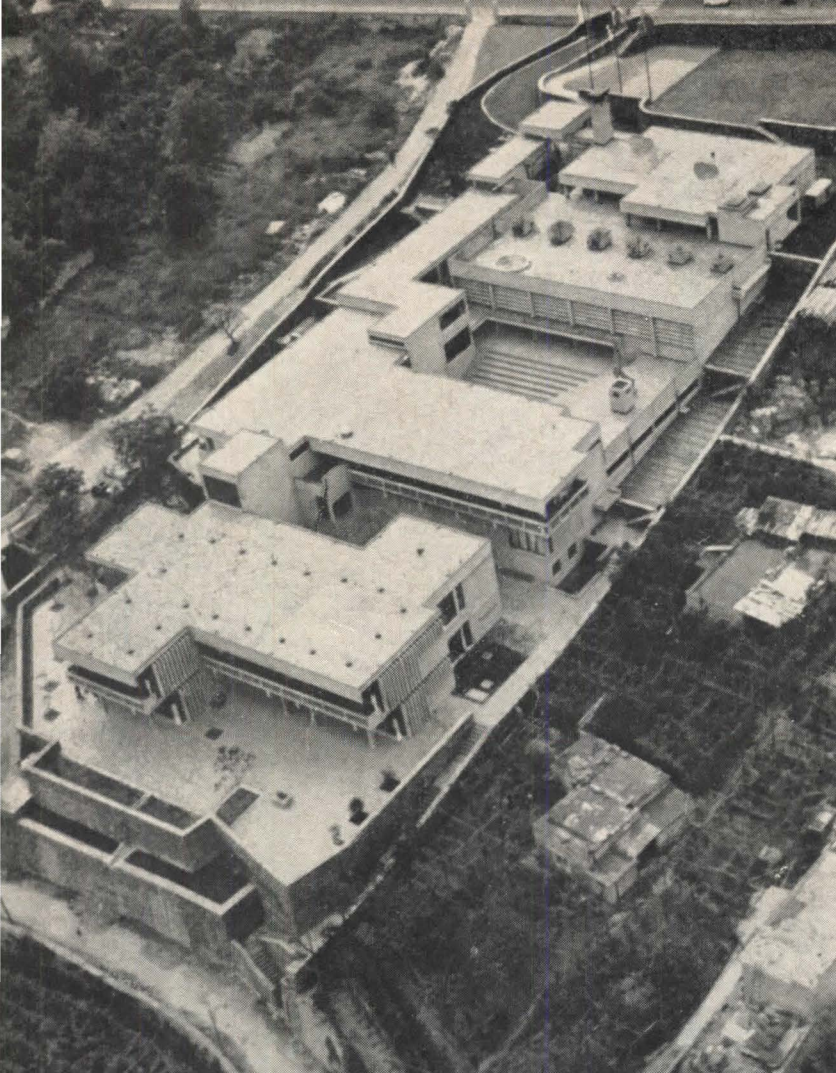


The Swiss School in Naples steps down a steep, narrow hillside lot in a series of terraced levels around open courtyards. To preserve the view from buildings above, the school's highest level is lower than the approach street.

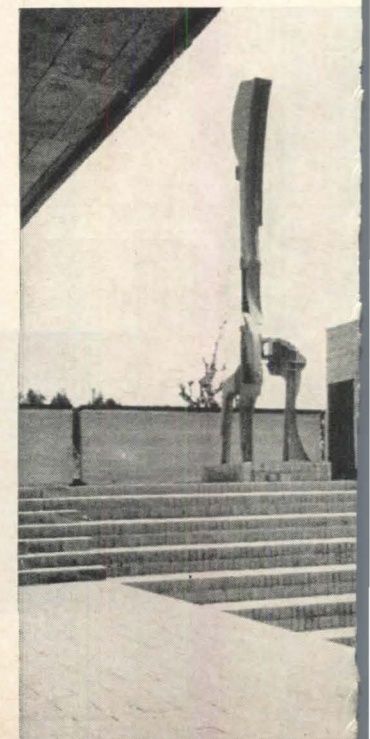
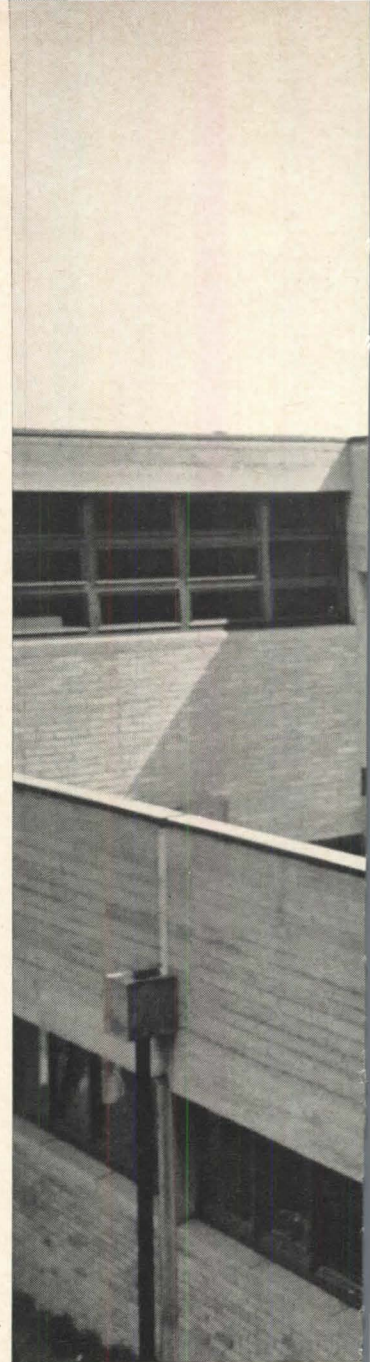




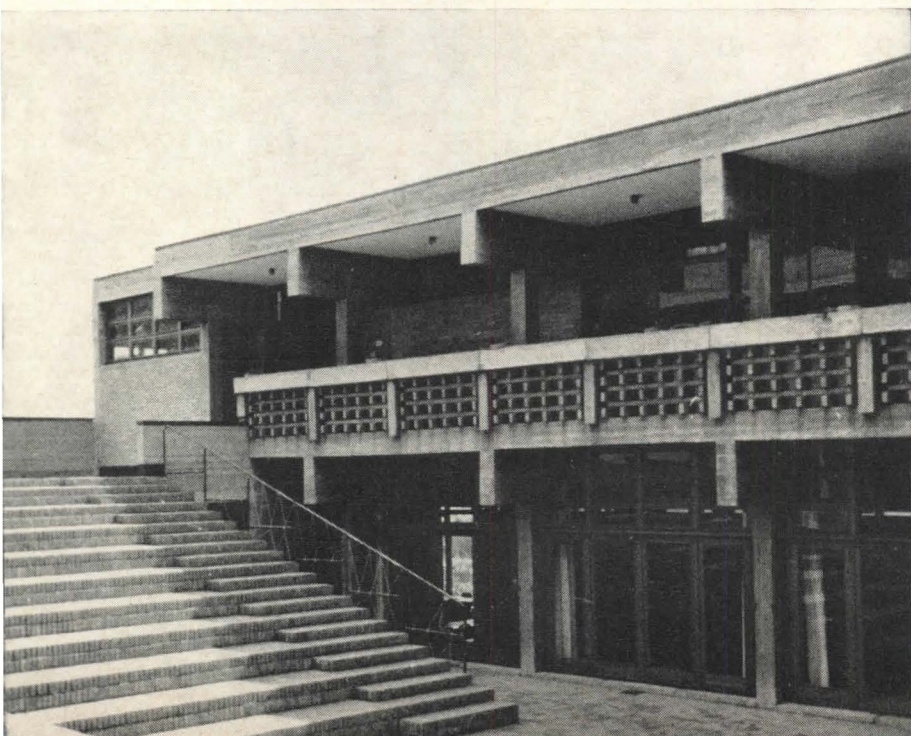
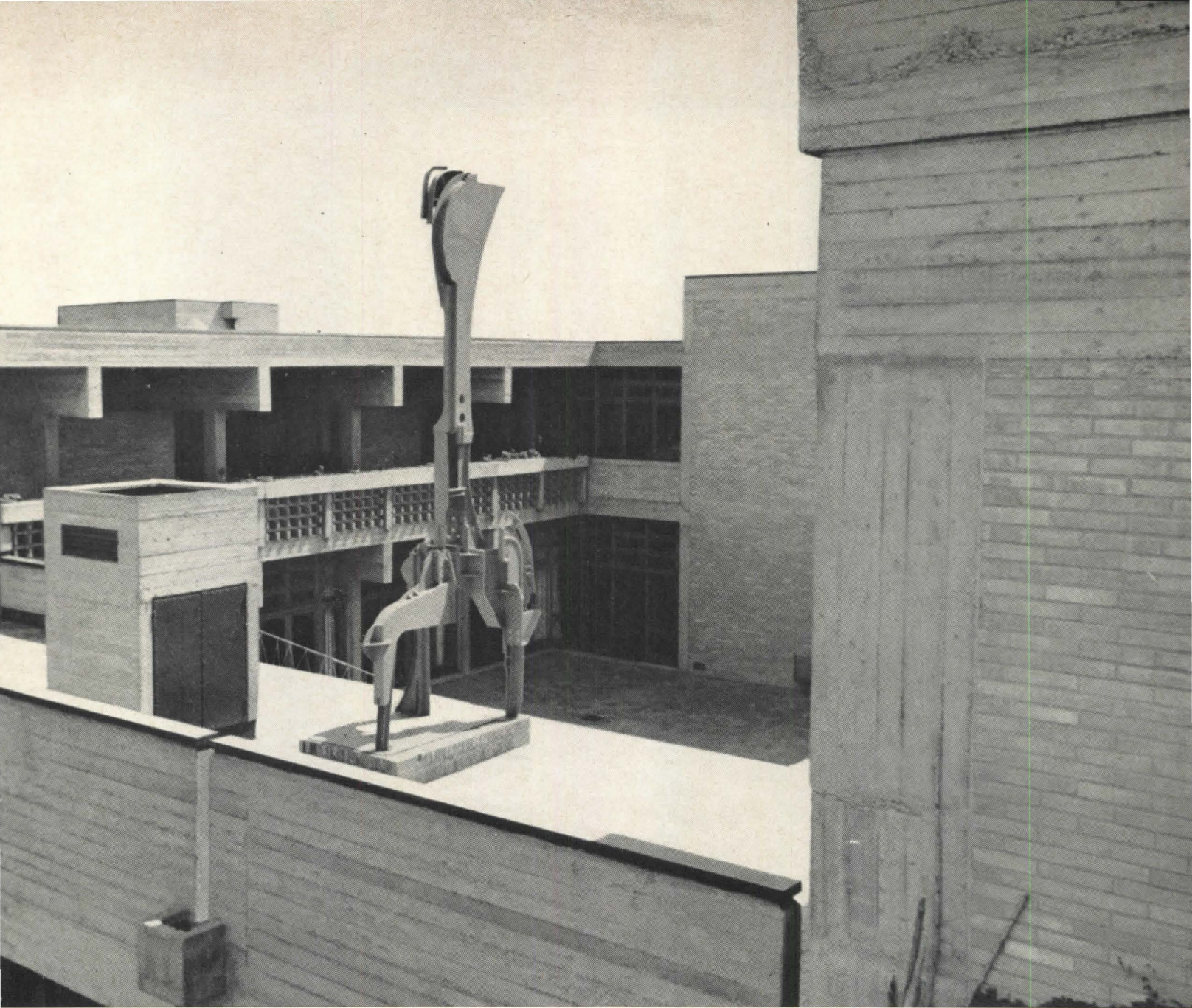




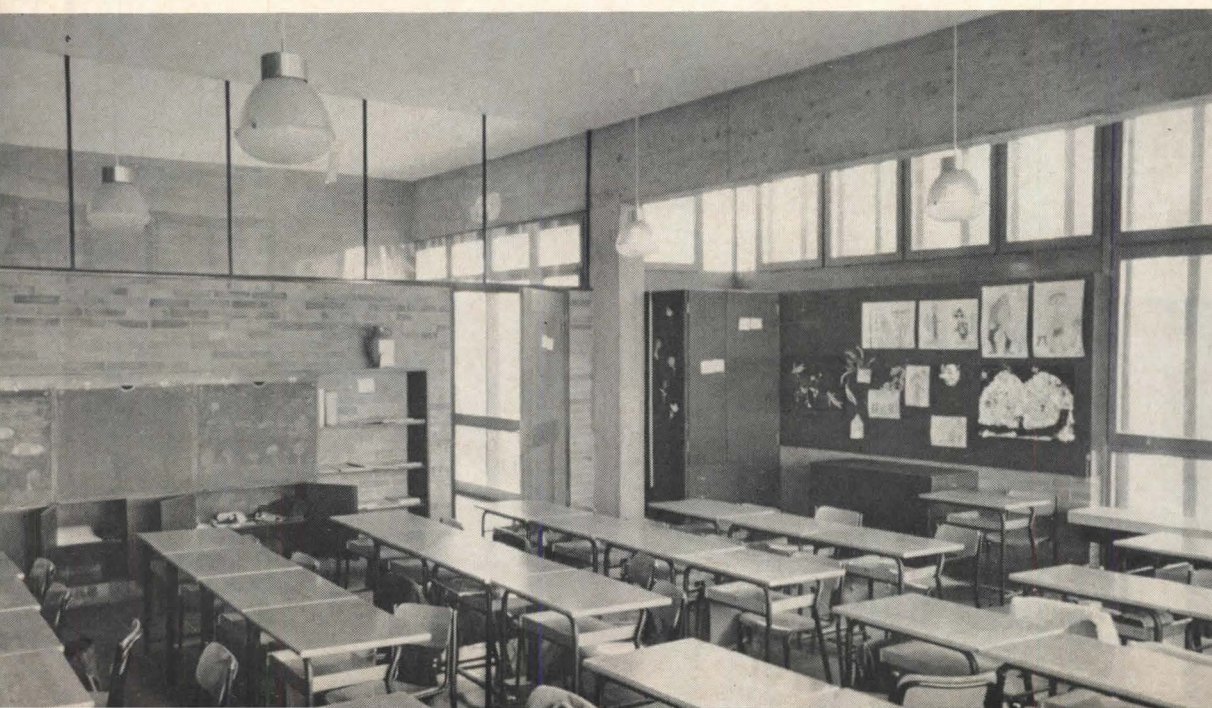
A small playfield at the top of the site (aerial view) acts as a buffer between the school and the street above. A kindergarten occupies the uppermost wing of the complex. Its playground is on the roof of the gymnasium below (louvered windows), which encloses the north side of the school's major focal point, the courtyard-amphitheater (photos, right). The courtyard, with its large metal sculpture by Bernard Luginbühl, is bounded on the south by a two-level wing containing a cafeteria on the ground floor and living quarters for unmarried teachers above. At the bottom of the site is a two-story classroom wing with wide roof overhangs and balconies that serve as sunshades. The school is constructed of reinforced concrete with hollow brick infill; no other insulation is needed in the mild climate that Naples enjoys year-round. The school also functions as a community center for families of Swiss citizenship.











From its site on Posillipo Hill, the Swiss School commands a panoramic view of the Bay of Naples and Mt. Vesuvius beyond (top left). Center, far left: the cafeteria, with a brightly colored mural by Artist Heinrich Eichmann. Center, near left: the kindergarten. Bottom left: a typical classroom; the open court next to the classroom wing (opposite page) allows natural light to flow into the corridors and over the low partitions that separate the classrooms.

#### FACTS AND FIGURES

Swiss School, Naples, Italy. Owner: Swiss Government. Architect: Dolf Schnebli. Engineers: Benito DeSivo (structural), S. Dubin Associates (mechanical). General contractor: Giuseppe Savarese.

PHOTOGRAPHS: Dolf Schnebli, except page 72 (top), Agenzia Fotografica Industriale.







# BOOKS

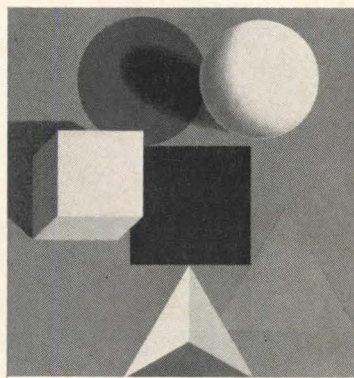
**HERBERT BAYER: VISUAL COMMUNICATION, ARCHITECTURE, PAINTING.** Published by Reinhold Book Division, New York, N. Y.; Studio Vista Ltd., London. 211 pp. 11 by 9 in. Illustrated. \$18.50.

**50 YEARS BAUHAUS.** Published for the exhibition by the Wuertemberg Arts Association, Stuttgart. 370 pp. 8½ by 8½ in. Illustrated.

REVIEWED BY ROBIN BOYD

There is plenty of architectural precedent for it, but, even so, it is not an act of especially deep humility to produce a book enshrining one's life's works, major and minor, real and projected, interlaced with samples of the verbal pearls one has dropped along the way. However, within the genre, Herbert Bayer—ex-Bauhaus man and resident sage of Aspen, Colorado—has produced *Herbert Bayer* with consistent modesty. The book is a review of his works from Bauhaus days on, and a certain air of humble resignation is detectable even in a remark on the jacket flap: "The material for this book has been assembled by Herbert Bayer with the hope that it will have meaning for the younger generation."

What on earth does the younger generation make of the Bauhaus? This year a massive exhibition, marking the 50th anniversary of its founding by Gropius at Weimar in 1919, is touring the world with the support of the German Government. It is accompanied by a heavy paperback book called, like the exhibition, *50 years Bauhaus*. This is dedicated to Walter Gropius and is much more than a catalogue (jacket below).



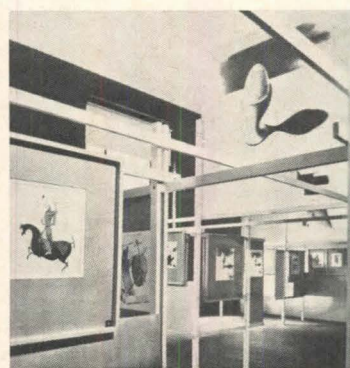
Mr. Boyd is an architect practicing in Melbourne, Australia, and a well-known critic. He is a member of the Forum's Board of Contributors.

The exhibition has already drawn thousands of visitors on the Continent and in England, including a high proportion of practicing architects who were not yet born when the first Bauhaus died and Gropius, and Bayer, and the others left Germany. Now, two generations later, the young architects and designers love it! But how can they? One of the basic Bauhaus ideals, of total design through teamwork, must sound like horse-and-buggy thinking if you are dreaming of plug-in megacities shaped by computer. The protest behind those white butterbox houses can have no meaning today. The idea of one man, like Bayer, working in so many fields—graphics, sculpture, architecture, painting (including house-painting at one time)—is out of sympathy with the modern necessity for the sharpest possible focus of individual talents.

Admittedly *50 years Bauhaus* brings the story up to date. In addition to a thorough collection of those familiar historical pictures—the Schlemmer theatrics, Mies' glazed skyscraper drawings, that line-up of the staff with all the stars in overcoats—the story extends to the brief unhappy adventure of the "New Bauhaus" in Chicago in 1937, to the latest Gropius and Breuer buildings, and, still spreading, carries into hard-edge painting, SOM skyscrapers (per John Rodgers), and to Japan (per Iwao Yamawaki).

However, these glimpses of today are not what draws the crowds. Most of the fascination is surely in the decorative side of the early Bauhaus, in the discovery of a style so old it is new again. Herbert Bayer's extraordinary prototype pop is something more Now than Art Nouveau!

Bayer's book is perfectly timed for this Bauhaus revival. It contains many of the pictures that are in Bayer's section of the exhibition. To the older generation it is a nostalgic journey, like flipping through a stack of old 78s in an attic. Here are visual hits of the 'twenties and 'thirties: Bauhaus exhibition posters with the hand symbol recurring like a



Works by Herbert Bayer (top to bottom): book jacket, 1938; traveling exhibit of advertising art, 1945 (with Stamo Papadaki); stairs at health center, Aspen Institute, 1955; "lonely metropolitan," photo-montage, 1932.



Paul Whiteman rhythm; multi-image photo-montages like a Benny Goodman orchestration. But is such flippancy fair? Could the Bauhaus revival be not a ghost but a real living influence as it was one generation ago, an inspiration to old and young? Bayer's life and art, like the Bauhaus, stand for a timeless quality which is as necessary now as ever, and still in as short supply as ever: the quality of the idea.

The idea of a community of ideas attracted Bayer, when both he and this century were 21, to the Bauhaus at Weimar. The same prospect attracted him again in 1946 to Aspen, and though he is said to have watched that town sink into the careless ways of any resort, still the Aspen Institute for Humanistic Studies, the design conferences, and the music retain, in an independent colony beside the town, something of the original Bauhaus idealism.

An idea—a sharp intellectual answer to a design problem represented in visual terms—illuminates all Bayer's most successful works, and it is often strong enough to break through the generation barrier. However, sometimes it is not, as, for instance, in the restaurant building at Aspen Meadows, social center of the colony. And this is a pity because that is a restaurant with ideas even in its cuisine. It deserved better than a diagonal pattern of cinder blocks projecting from the walls. However, *50 years Bauhaus* reminds us that, despite Gropius' architectural leadership, the Bauhaus did not enthrone architecture. Undoubtedly because of lack of opportunity for building 50 years ago, graphics dominated the curriculum. So Bayer is one of the most representative of Bauhaus men, treating architecture almost as a sideline.

At best his ideas are rational, definable, and as personal as can be in the Bauhaus manner. They relate to every field he touches, from painting to typography. The latter is one of his special interests and carries him fairly far out towards an "optofonetic alphabet". Throughout the book, he practises other theories for

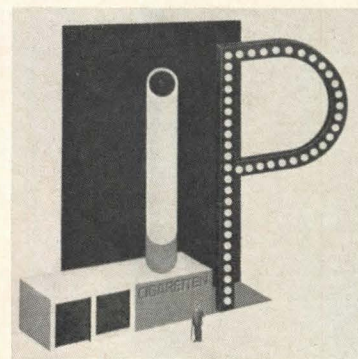
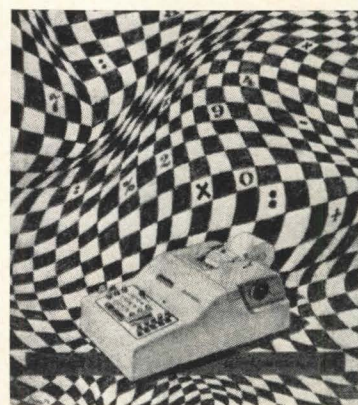
easier reading, including the elimination of hyphenated words and of all capital letters—even for the first person singular, which always looks unduly modest, I think. Since Herbert Bayer and *Herbert Bayer* make much of typographical reform, a gross inconsistency in the book should be mentioned. Bayer's rationalistic approach to typography led him early to one of his several genuine inventions. He revolted against the printer's esthetic convention of justifying the length of lines of type to give a trim straight right edge at the expense of even spacing between words. In 1926, he designed an historic Bauhaus advertisement which he claims to be "the first known application" of the "flush left, vignette right" method of typesetting, with equal spaces between all words. This style is of course still familiar in well-designed typography today.

Several times in *Herbert Bayer* the point is made that the whole text of the book is set in this style. In fact this is not so. Mr. Bayer must have endured awful difficulties with the typesetters who insisted on justifying most, but not all, of the shorter lines, adding more space between words to get a straight right edge, while at other times they unaccountably cut lines short when there was still plenty of room for the word which started the next line. The result of all this inconsistency is that the text of *Herbert Bayer* alternates unpredictably between sections with a ragged right edge and blocks of conventional solid type with the uneven word spacing which Bayer deplors. The worst of both worlds. (On the other hand, *50 years Bauhaus*, printed in Germany, is set in the same style and gets it right).

What makes one suspicious about the Bauhaus revival is that some of Bayer's visual ideas—like the op distortion of an Olivetti ad of 1953 (above right)—were so many years ahead of their time that they are still practically the height of fashion. They frequently anticipated pop by nearly fifty years. See Bayer's cigarette kiosk project of 1924 (right). See, hear, and inhale

his exhibition pavilion of the same year, which simultaneously projected film, flashing signs, sound from a loudspeaker horn and letters of smoke. It is easy enough to understand a revival evoked by such imagination calling loud and clear across a couple of generations and half a dozen intermediate fashions. But what of the Bauhaus principles, combining Rationalism, Functionalism and Humanism? Are they about to be restored as a sort of design conscience and guiding light for the 20th Century? I think not; not just now.

The Bayer book is more than a record of a highly intelligent designer. It is a timely reminder that the influence of Gropius through the Bauhaus, which was the most intellectual and least visual of all the major pioneers' influences, will almost certainly be the longest lasting. Not just because of that marriage between art and the machine—someone else would have performed that ceremony sooner or later—but because of the humanity at the foundation of the Bauhaus. It promised a world in which all intelligent art is made for popular enjoyment, which is different from one in which everything made for pop enjoyment is considered to be intelligent and art.



**STUDY IN NEW SYSTEMS OF URBAN TRANSPORTATION.** Future Urban Transportation Systems: Final Report I: Descriptions, Evaluations, and Programs. Final Report II: Impacts on Urban Life and Form. Prepared for the U.S. Department of Housing and Urban Development by the Stanford Research Institute, Menlo Park, Calif. 426 and 380 pp. 8½ by 11 in. Illustrated.

REVIEWED BY BRIAN RICHARDS

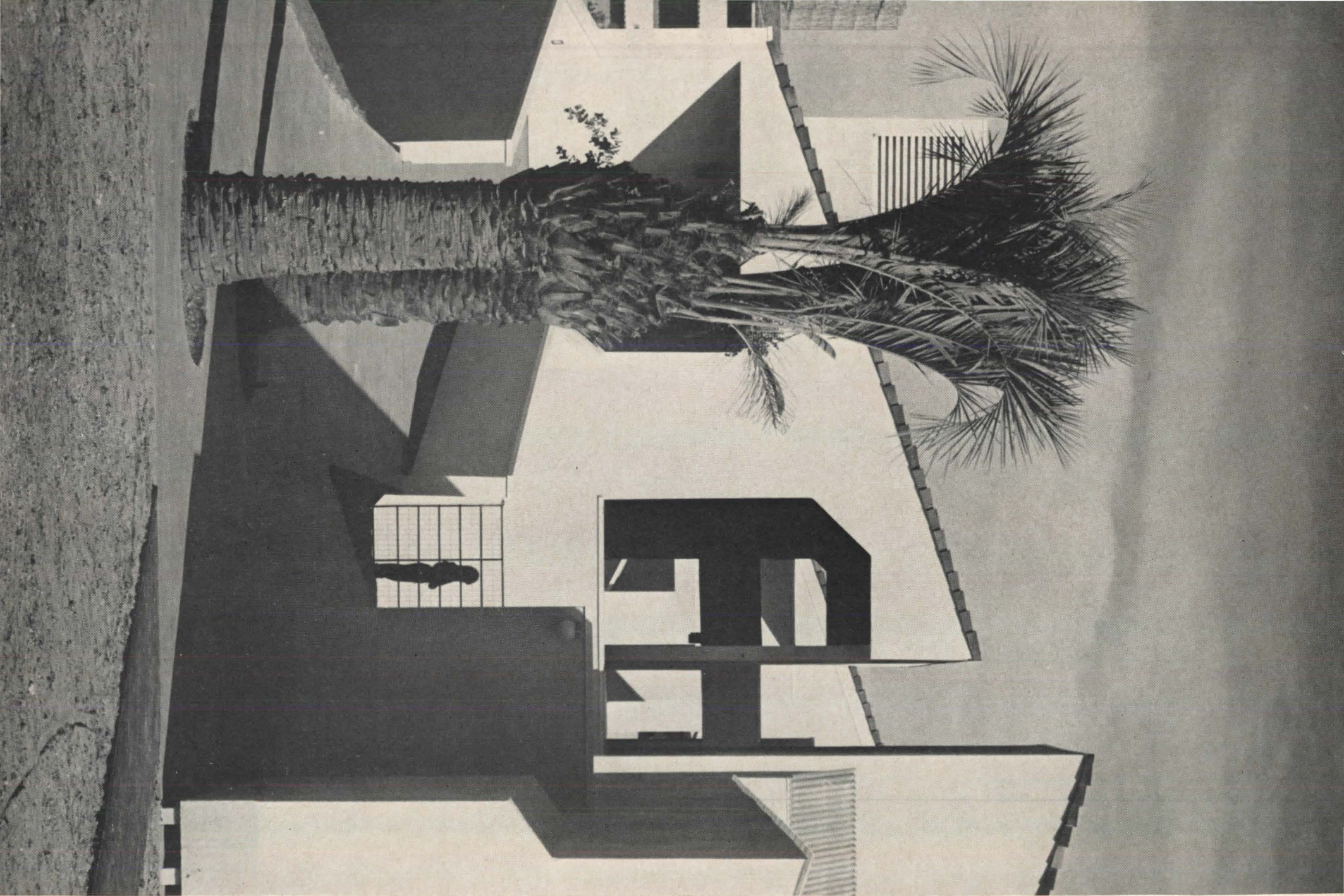
In 1968 it is estimated that around 50 per cent of the population of urban America have only limited mobility, either because they do not have first claim to an automobile, cannot drive or find good public transport at reasonable cost. Many people are too young or old to drive, or too poor to own a car, yet 80 per cent of all American families own one. So much for the anachronisms of the Automobile Age.

For years it has been generally recognized that, while transportation is an essential part of the life-blood of the American city, there has largely been a failure to keep public transport running in any except the most densely populated corridors of movement. Work places have tended to spread over wide areas outside of the city core, easy to reach by car, tedious by public transport. A 16-mile bus trip across Los Angeles, for example, can take 1 hour 50 minutes and requires three transfers. Conditions of travel, other than by auto, are steadily worsening, and only gradually is it being accepted that a solution must lie closer to considerations of movement of people rather than just vehicles. A solution to this problem must involve the planning process first of all; the proper coordination and disposition of land uses with both public and private transportation. (Results of such planning can be seen to be beneficial in New Town development. At Columbia, for example, 24,000 of the 30,000 jobs and 40,000 of the 110,000 people will be within three minutes walk of a transit station.) In the existing cities

Mr. Richards is a British architect and author. His influential book, *New Movement in Cities*, has had worldwide distribution in several languages.

(continued on page 104)





# POP SCENE FOR PROFS

Faculty Club at the  
University of California,  
Santa Barbara  
Charles W. Moore and  
Wm. Turnbull Jr. Architects



*"The combination of strict functionalism and bold symbolism in the best roadside stands provides, perhaps, the most encouraging sign for the architecture of the mid-twentieth century."*

This was not written in 1968 by Robert Venturi or Tom Wolfe, but in 1936 by Henry-Russell Hitchcock in the concluding chapter of his scholarly study, *The Architecture of H. H. Richardson and His Times*. Although the visual vitality of the 20th-century roadside was recognized by Hitchcock 33 years ago, only in the past half dozen years have architects and theorizers let their eyes stray from the precious sequestered world of the architect's architecture to the real world in which we live. A visit to Kahn's Salk Institute is, in fact, identical to an afternoon's experience at a La Cienega gallery or the Los Angeles County Museum of Art. The reality of Southern California is the freeway, the strip, and suburbia.

Nowhere in America (or for that matter anywhere else) is there such a rich tradition of openly using architecture as programmatic advertising as in Southern California. Since Los Angeles and its suburbs near and far (from Santa Barbara to San Diego to Palm Springs) are basically fake (i.e., man-made), it is only natural that architecture there would be more openly programmatic than anywhere else. Other regions of America have attempted to recreate tidbits of their past with generally tedious and dull results. In striking contrast, California's "revivals" have succeeded again and again for the simple reason that the whole affair—the tradition as well as the buildings—has been fake. Thus, the myth of the Mission (1890-1910) produced not only the "Mission Revival" but also the non-Mission California bungalow; the "Spanish Colonial Revival" (1915-1930) spawned Hearst's Castle and the zigzag Moderne of the 20s; and

the streamlined Moderne of the 30s lived as much in the movies as in real buildings.

Why have architects been so slow in responding to the rich commercial vernacular of California? At least unconsciously, the early California moderns—Maybeck, the Greenes, and Gill—felt perfectly free to sample this tradition. In the 20s and 30s, both Wurster and Schindler drew heavily upon the builder's world around them. In the post World War II years, Esherick and Moore (with his associates Lyndon and Turnbull) indirectly sought out elements of California's vernacular tradition through the earlier work of Maybeck and Wurster. Only later, and very slowly, did they turn to the vernacular of their own day—of the 50s and 60s—and begin to substitute this for their earlier vision. Moore, Lyndon, and Turnbull's Sea Ranch Condominium (1964) immediately met with favorable response from the architectural establishment for the simple reason that it was architect's architecture—a logical continuation of the "Bay Area Tradition" of Maybeck and of Wurster. Far less sympathetic was the professional response to other examples of their work, such as the Talbert house (Berkeley, 1964), where the paramount source drawn upon was the builder's vernacular.

#### The Santa Barbara look

Moore and Turnbull used the opportunity of the commission for the Faculty Club, University of California, Santa Barbara, to sample and comment on the tasty architectural fare of Southern California—which was far less sedate and academic than that of the north. The location of the building in the community of Santa Barbara was a delicious and added enticement, for here was a place whose whole imagery (as reality and as wish) was the most impressive stage set to be found in Southern California. No other community of the Southland had, over such a long period of time, more passionately embraced the Spanish Colonial Revival tradition than Santa Barbara. It was during the 20s



Top to bottom: Santa Barbara County Courthouse (1929, William Mosser & Co.); Arlington Hotel, Santa Barbara (1910, Arthur B. Benton); Hearst Estate, San Simeon (1919-1947, Julia Morgan); roadside, Long Beach, 1933; NBC Hollywood (1939, John C. Austin Co.).



that Santa Barbara created the image of herself as the Hispanic city of the New World. This creation was accomplished with such force that the image still exists today. Few cities, even in California, can boast such monuments as the Santa Barbara Courthouse (1929), the Lobero Theatre (1922-24), El Paseo (1922)—or the numerous smaller buildings which were designed by George Washington Smith, Edwards & Plunkett, and others.

Moore took note of this tradition when he wrote: "Santa Barbara is a resort city on the Southern California coast which owes its considerable charm equally to a magnificent site and to a building idiom which has been consistently employed over the past 40 years; a white stuccoed Spanish superecolonial of simultaneous simplicity and flamboyant verve."

#### The secrets of the 20s

In one stroke, Moore and Turnbull have reinstated the Spanish Colonial Revival tradition and have made it a part of our contemporary architectural scene. These architects have perceived that the real guts of G. W. Smith's work was contained, not in his use of this or that historic remnant, but in his sensitive manipulation of simple direct volumetric shapes, knowingly punctured with holes for windows and doors. With amazing dexterity Smith played off the fakeness of the Hollywood stage set against the polished learnedness of the Academy. Moore and Turnbull have gone even further. Like antique collectors they have dug into the past and the present with unbridled enthusiasm. They remind us that their world and ours is made up not only of the two-dimensional facades of Brunelleschi and the directional spatial pathways of Bernini, but equally of the thin false fronts of mid-19th-century America and the tinny qualities of our roadside motels and restaurants.

The Faculty Club seems to embrace an encyclopedic array of relevant historical fragments. It is a learned building, but its language is of the roadside, not

Mr. Gebhard is an architectural historian and Director of The Art Galleries at the University of California at Santa Barbara.

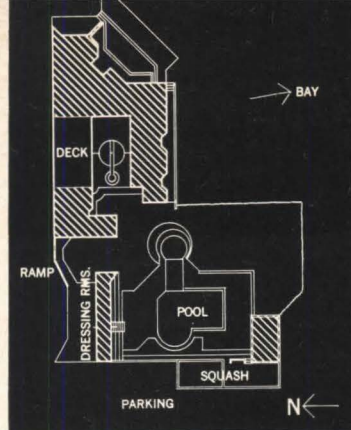


the Academy. Moore and Turnbull's roadside vernacular is transformed in quite a different way from that of Robert Venturi. The subtleties and innuendoes of a Venturi building lie well hidden behind the purposeful commonplace and prosaic quality of his designs. Moore and Turnbull employ the commonplace, the awkward, and the ugly as a visual language to create a highly complex and sophisticated series of volumes, surfaces, and spaces. The immediate impact of their building is that of architect's architecture—the vernacular and other historic fragments have to be sought out.

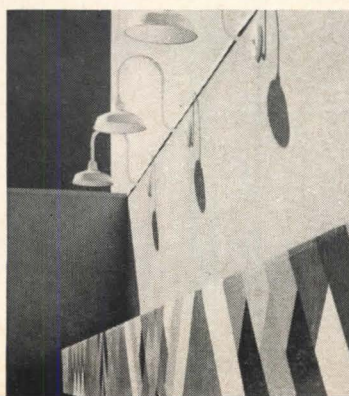
### A sequence of surprises

One's entrance into the Faculty Club is theatrical (à la Hollywood) and planned, even though on the surface everything appears haphazard and disjointed. A person is thus exposed not to a visual world which seems to be well in hand and controlled, but to one which is hammishly theatrical and at times even irritating. After alighting from one's car (for this is the major method envisaged by the architects for reaching the club), one is first greeted not by the building itself, but by a low, ticky-tacky, tent-like building which houses the men's and women's dressing rooms and showers for the adjoining swimming pool. (The suggestion, one assumes, is that one should have a handball game and a swim in the heated pool before one's meal).

The next processional event is a low ascending ramp which brings one to a metal gate (reminiscent of the "Cabinet of Dr. Caligari"), and an angular passage then leads one into a circular pavilion which would seem to be a perfect termination point of one's passage. The pavilion, which is partially sliced off here and there, ceremonially serves the same function of transition that the marquee-lobby did for the modern motion-picture palace of the 30s. The reception office is the ticket booth, and the horizontal band of bare light bulbs is pure dated Hollywood. In the next stage of the journey, one goes diagonally across a deck



Above: site plan of the Faculty Club. Below: Romanesque arch in a fireplace mantel; animal heads on a wall; crystal chandelier; white-painted outdoor lighting fixtures.



court where one is greeted by a row of light fixtures reminiscent of turn-of-the century street lights. White epoxy-like paint has transformed these fixtures—suggesting that they are really plastic, not metal. One then proceeds through an angular claustrophobic box, three walls of which are lined with a band of coat hooks—again a “pop” transformation of an everyday object, for there is little likelihood in sunny Southern California that the hooks will see many coats. On the fourth wall of the entrance box, high up, are a fierce group of mounted animal heads which add a club-like atmosphere. From the box, one arrives at the main balcony, which overlooks the dining area. Here, once more, the architects have returned to the moving-picture palaces of the 20s and 30s, complete with dripping chandeliers; we are treated to a Piranesi-like space with ascending and descending stairways and passages leading off in one direction or another.

Within the building, one finds historic fragments, most of them gathered from Hearst's collection at San Simeon: a stone fireplace mantel (actually the arched top of a Spanish Romanesque window) set out in front of its fireplace box; pieces of a Spanish ceiling which seem to wander randomly over walls and ceilings. These elements are played off against neon and corduroy banners, motel carpeting, and shiny black vinyl chairs.

### Spoofing the old-time club

As a piece of programmatic architecture, the Faculty Club abounds in subtle satire which—though it is penetrating—is never grubby or bitter. The pretentious illusions of the academic, like a 19th-century men's club, are satirically suggested in the reference to the main dining area as a baronial hall, in the group of animal trophy heads, and in the medieval banners transformed into the everyday world of neon and corduroy. The library has now been entirely turned into a bar; and the orientation of the club around the swimming pools (used as much—or even more—by wives and children as by

faculty members) denies the male exclusiveness which has always been associated with the private club.

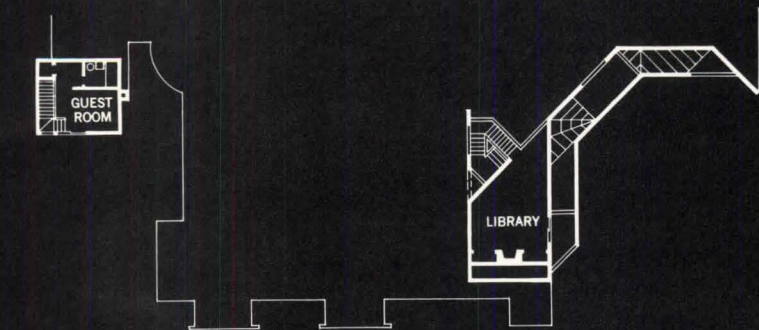
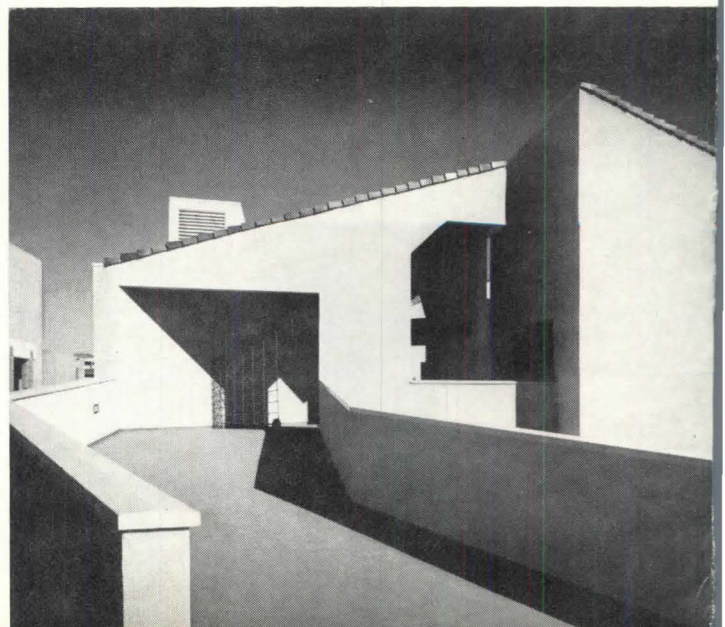
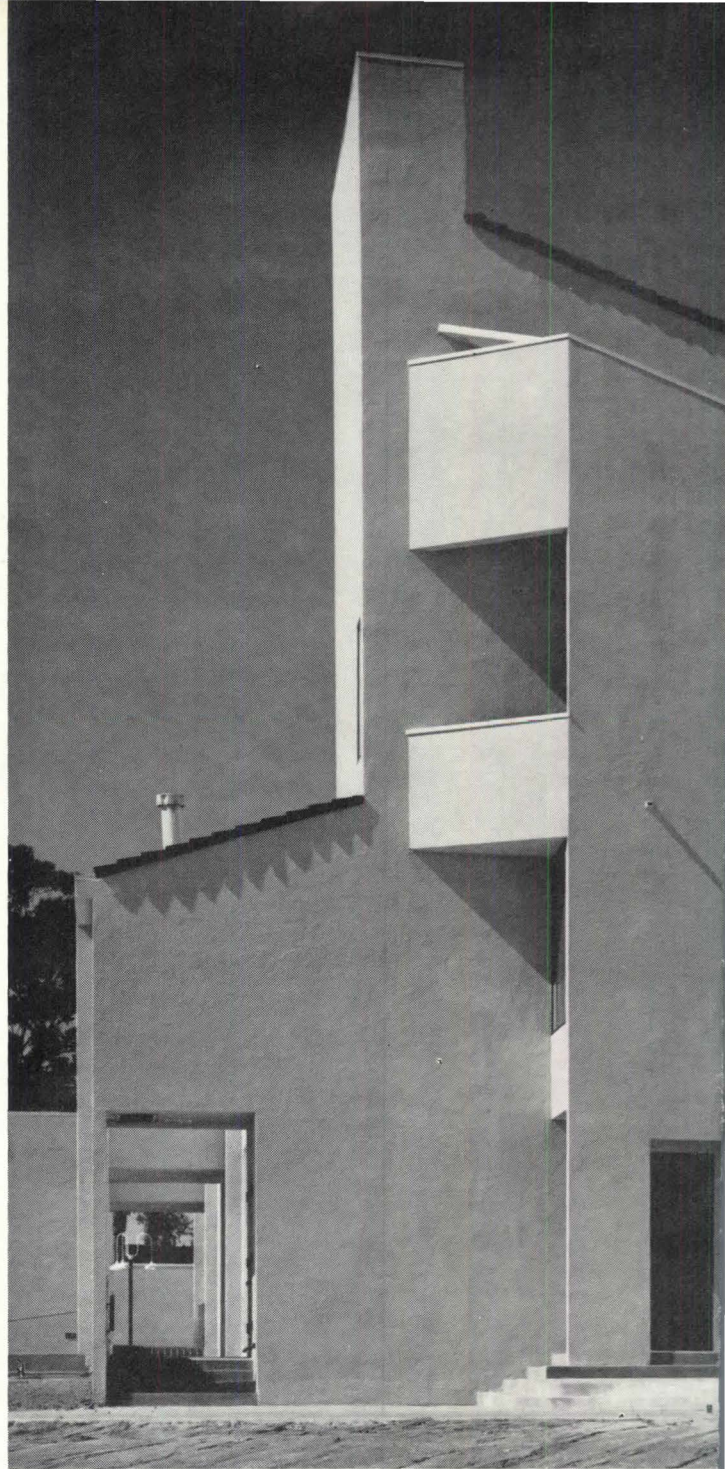
Every corner of the building oozes with comments on the world of architect's architecture. The detailing and the stucco covering of the building strongly suggest that it is ticky-tacky, nonpermanent, and nonmonumental. It all seems very familiar, and indeed it is, for this is the familiar visual world of the motel or restaurant whose fashion and investment lifetime should not exceed 25 years. The exposed and the nonexposed aspects of structure are placed in pointed opposition to one another. Certain exterior and interior surfaces of the building are knowingly laid out as *de Stijl*-like compositions. Yet these tidbits of the art world are used in the way in which one would expect a contractor-builder to employ them. One wonders, too, just how many specific references to contemporary architecture are hidden away in the many nooks and crannies of the building. Is the entrance ramp, with its irregular passage, a parody on Le Corbusier's ramp at the Visual Arts Center at Harvard? What of the accepted axiom of modern architecture that demands unification of indoor-outdoor spaces? Sliding glass door units occur throughout the Faculty Club, yet they never really lead directly into exterior space—always a wall, porch, or courtyard spatially intervenes.

This is not to say that Moore and Turnbull's essay is simply a large-scale joke in the Charles Addams fashion. As programmatic architecture this building does question the heavy seriousness and pretentiousness which are acted out around us under the guise of being architecture. Through this building Moore and Turnbull show modern architecture—and specifically the International Style—for what it really is, namely a style or fashion (as all architecture is or should be). Even more to the point, it asks why only the commercial vernacular world is “for real,” while the architect's world lives out its life in a hygienic art gallery.

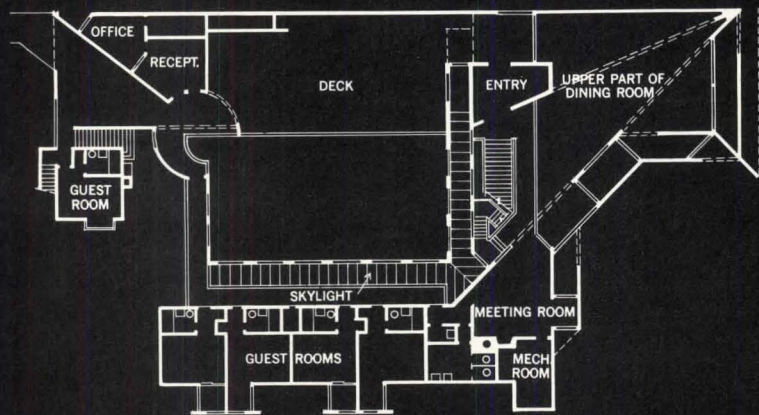




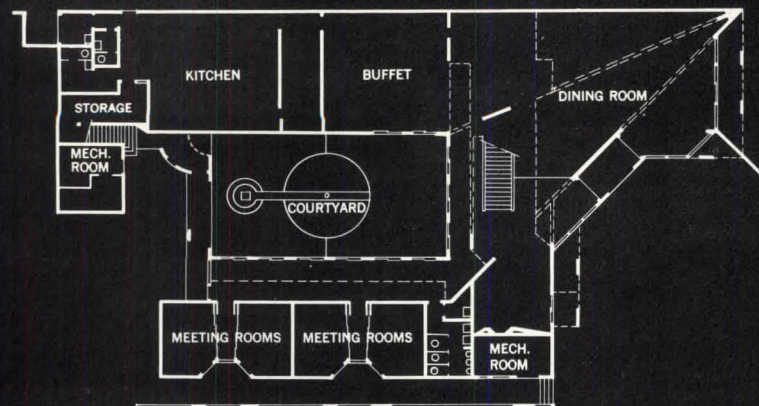




PARTIAL THIRD FLOOR



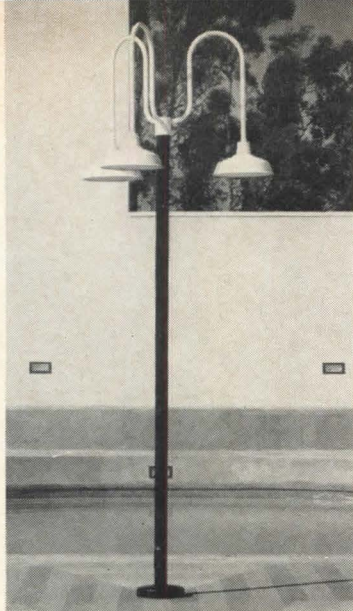
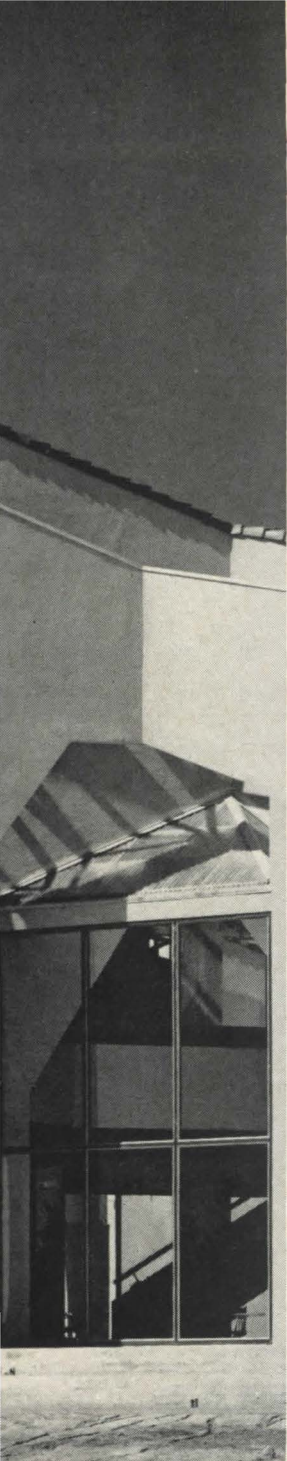
SECOND FLOOR



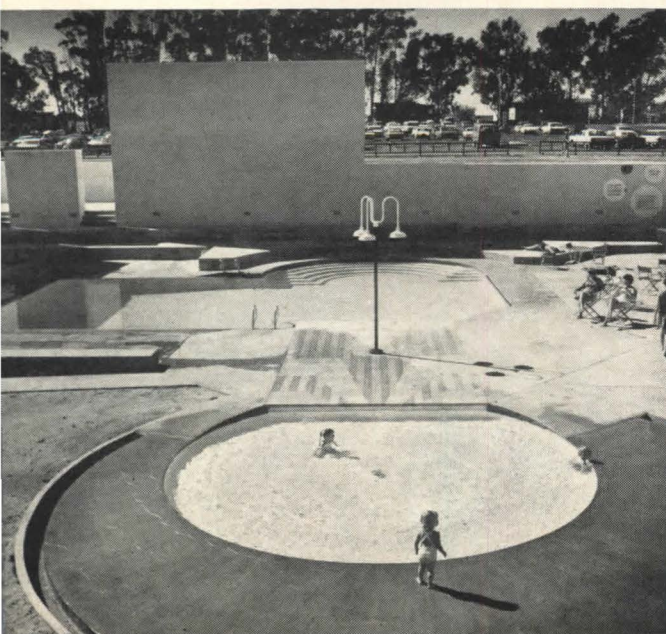
FIRST FLOOR

0 20 40'





The south front of the club (far left) faces the bay. Screen walls (near left) shield glass areas from intense sun; bracing trusses between the parallel wall planes cast shadows on the inner surface. The club is approached by a ramp (bottom left) leading up to second-floor level, where a gate of exaggerated-perspective design marks the entrance. The wading pool and the swimming pool (below) are separated by an area of bright-colored tile; at its center is a neo-Baroque lamp post (above) assembled out of pipe, bent conduit, and industrial reflectors. Seen from the west, the dressing room shed and pool enclosure (above left) look like extensions of the club itself. The central court (right) has no plants; instead, there is one enormous abstract flower, painted on sloping concrete surfaces and watered by an oscillating lawn sprinkler at its center.



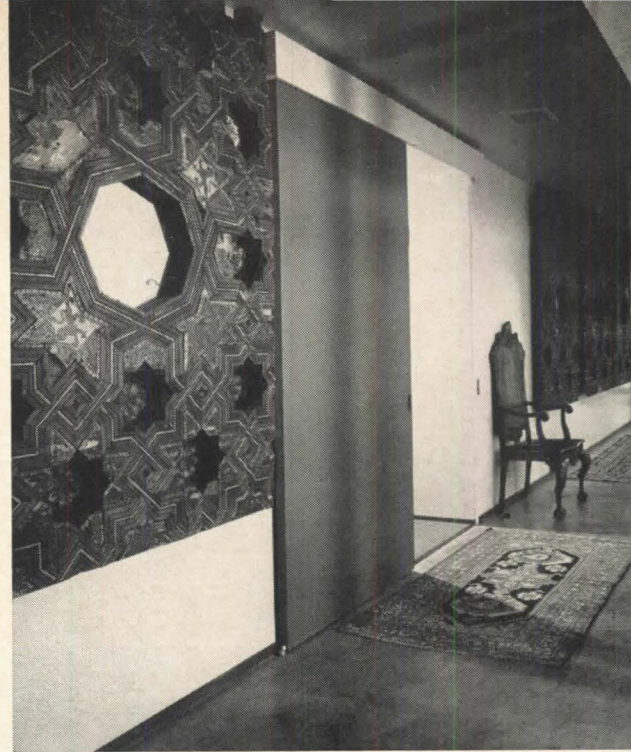




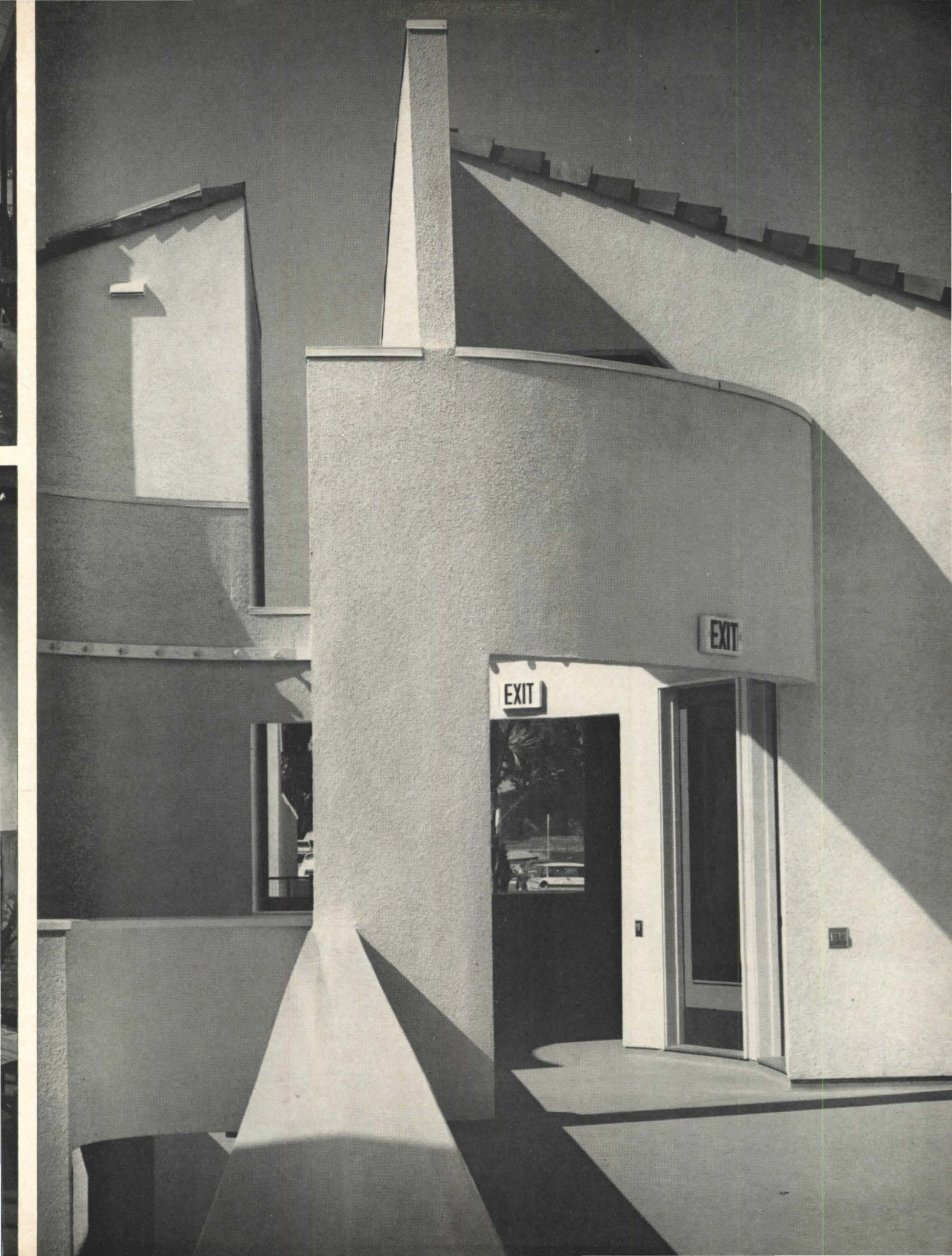
Inside, the club is full of visual surprises. The top-floor library (left) has an "arch" above its fireplace which is actually a semicircular mirror. On the wall to the right of the fireplace are "liquor lockers" (below left), identified by large white figures indicating column and row. The meeting room below the library has a Spanish Romanesque arch built into a mantel, which is separated from the firebox. In the hall outside the first-floor meeting rooms (above right), carved wood ceiling panels from Spain coexist with ordinary director's chairs. Boxed-in trusses spanning the dining room (below right) are outlined with carbon-filament lamps mounted on wood baffles. A view out toward the parking lot from the entrance deck (facing page) shows the rotunda—defined by fragments of cylindrical wall—at the main traffic control point.

#### FACTS AND FIGURES

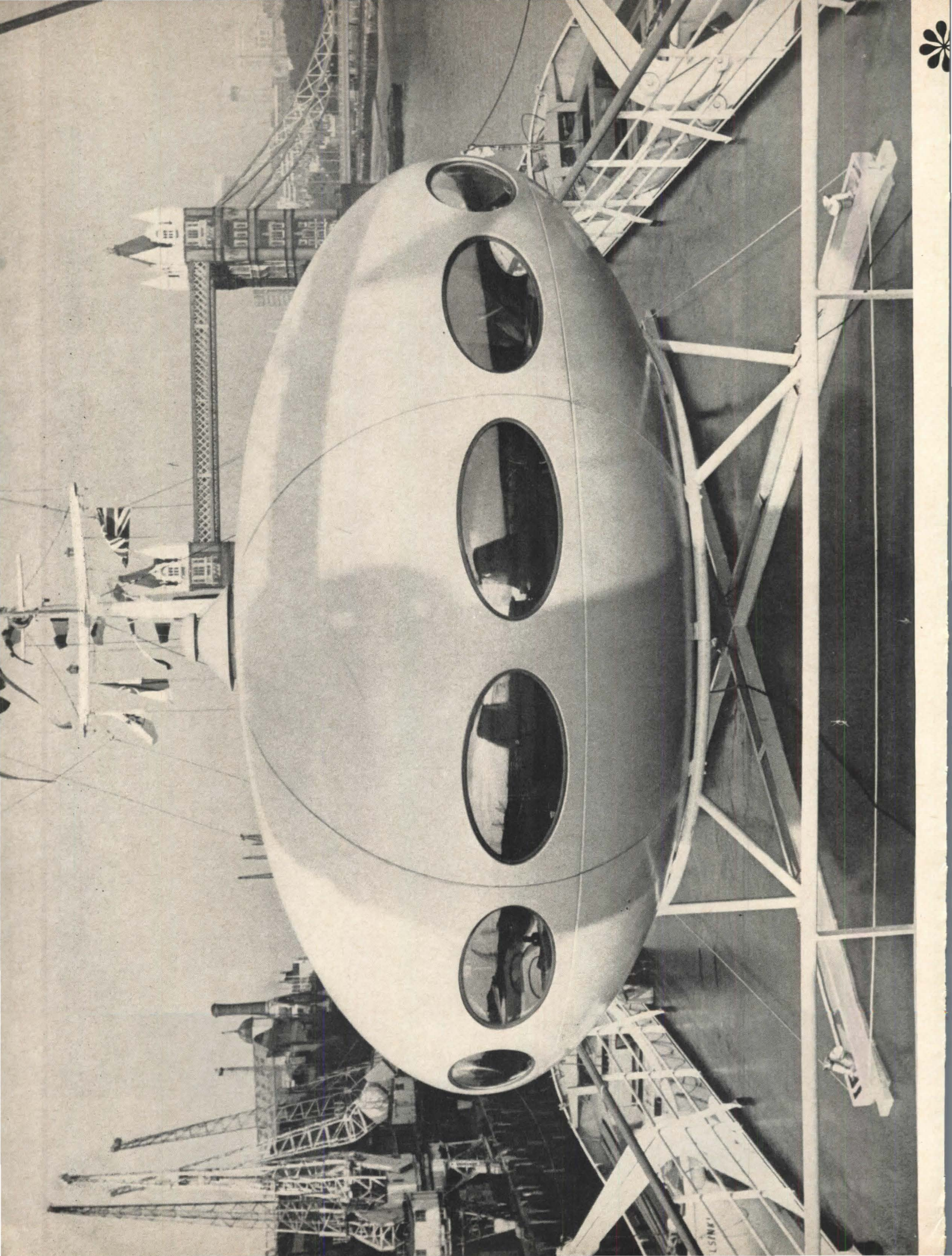
Faculty Club, University of California at Santa Barbara, Calif. Owner: Regents of the University of California. Architects: MLTW/Moore Turnbull (Charles W. Moore, partner-in-charge; William Turnbull Jr., Donlyn Lyndon, Bruce Beebe, Marvin Buchanan, associates). Consulting architect: Thore H. Edgren, UCSB Office of Architects and Engineers. Engineers: Davis and Moreau (structural); Archer-Spencer Engineering Associates (mechanical). Lighting consultants: Elm City Electrical Light Sculpture Company. General contractor: James I. Barnes Construction Co. Cost: \$545,250 (excluding land, fees, furnishings). PHOTOGRAPHS: Morley Baer.













tary) to local governments at less than market value, or even as a gift, provided the locality will tie in its use to job-training programs.

Possession was by permit, not actual title to the property. Title will become the city's upon approval by Congress of the purchase contract between city and GSA for the agreed-upon price of \$23.5 million. No payments would be due for the first six years so that the obligation could be set aside entirely should Congress pass legislation to be submitted by the Administration that would make the Yard (right) eligible for transfer free of charge.

The Commerce, Labor, and Industry Corp. of the County of King (CLICK), a nonprofit organization of civic leaders, has leased the property for sub-let to industrial concerns. Chief among these is Seatrain Lines Inc., a shipbuilding and operating company committed to hiring some 3,200 indigenous, hard-core unemployed by the end of the year and training them in shipbuilding.



\$700,000, the exhibit at least will survive for a year, starting April 11.

The structure is being installed in the huge space of Roosevelt Memorial Hall and will measure 110 ft. long, 62 ft. wide, 45 ft. high, and weigh 110 tons. The Japanese Takanada truss will rest on structural supports at the perimeter of the hall, leaving the space beneath the exhibit chamber free for access ramps and general circulation. It was brought here from Japan by Dr. David Geiger, engineering consultant to Dimensional Communications Inc, designers and builders of both structure and exhibit.

The multimedia show is described by DCI as "increasingly inhospitable and oppressive," but you mustn't let that turn you off. They go on to make their 25-minute torture sound tantalizing: from "the gentle sounds of the lapping sea, a rote that stirs forgotten times in the minds of men . . ." to "blood flowing

through capillaries in the web of a frog's foot," to man, of course, to a flock of sheep lying dead from nerve gas, where "the music will be hard to listen to."

## EASY ON EYES AND EARS

The First Annual Environmental Design Awards program of the New York Chapter, AIA, was "designed to cite superior design." It was also "intended to stimulate the profession towards better goals."

Of the 12 awards, the two which went to non-architects for non-architecture both touched on one



ugly environmental fact—garbage. Cited were the Citizens for a Quieter City Inc. for inspiring a sound-deadened, galvanized steel garbage can (above).

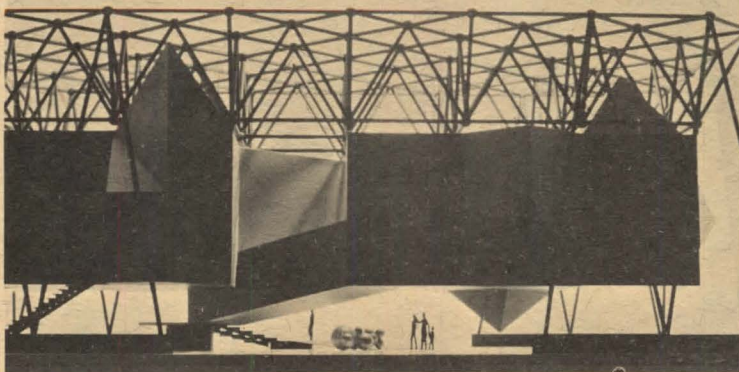
The can was developed by James H. Botsford, noise control engineer at Bethlehem Steel Corp. It gives out a dull thump rather than a reverberating clang when it is thrown, dropped, or kicked.

## MILIEU

### WHAT EVER BECAME OF . . .

"The museum used to concern itself with vanishing species such as the dodo, the passenger pigeon, and the great auk," said New York's American Museum of Natural History President Gardner D. Stout. Since all three are now extinct, the museum moves on to the next most likely subject: man.

In celebration of its centennial, a specially constructed exhibit chamber, suspended from a space-frame truss (below), will house an exhibit that asks the question, "Can Man Survive?" Costing



## FOOTNOTE

**Weekend Saucer**—The glass-fiber capsule, opposite, is a prefabricated vacation cottage by Finnish Architect Matti Uuronen recently shown on an exhibition boat anchored in the River Thames. It (the capsule) comes in 6 sections that are joined together on the site, and contains integral plastic seating, storage, etc. Good in hurricanes, too. Photo: Central Press.



The other award went to Walter Kacik Design Associates for their "Curb Your Dog" signs and garbage-truck graphics for the New York City Sanitation Department.

#### LEFT SHAKEN

A "Water Sculpture" by Canadian Artist Armand Vaillancourt, 180 ft. long and 31 ft. high, is the competition-winning design for a fountain in San Francisco's Embarcadero Plaza, designed by Joint Venture Architects, whose chairman is Lawrence Halprin. The fountain will be walked over, under, and around, and will circulate one million gallons of water hourly to drown out traffic noise on the Embarcadero Freeway (below). It has already made waves.

Said Architect Nathaniel A. Owings: "[It] looks like nothing more than a pile of junk which the Embarcadero itself would resemble if it were demolished"—an improvement, incidentally, already suggested by Mayor Joseph L. Alioto (Sept. '68 issue, page 92).

The Art Commission approved the design, with one nay vote from Sculptress Ruth Asawa, who believed that a fiasco of great consequence was in the making.

And, wondered the *San Francisco Chronicle*, "Should not the . . . mysteries and creatures of the sea be given artistic recognition?" Can their memory be so short? Only last spring, a fountain sculpture depicting mermaids, turtles, and frogs, designed by Ruth Asawa—the same—was unveiled in that city's Ghirardelli Square (May '68 issue, page 38). Halprin—the same—promptly fired off a broadside calling for its removal. It remains, and should be "creatures" enough for the *Chronicle*.

Then William C. Blake of the Board of Supervisors got into it, pleading for art "somewhere be-



tween the generals on horseback . . . and the far out Vaillancourt monstrosity designed, as the artist himself says, to leave us 'shaken.'

#### QUICK CLIPS

● Highways, air pollution, and suburban sprawl, reports the *Wall Street Journal*, are the bane of fox hunters, but a boon for foxes.

"Foxes are crazy about developments," says Mrs. H. Nelson Slater Jr., master of Essex Fox Hounds, Peapack, N. J. "They adapt to civilization much better than we do." One wiley ploy of the fox is to lead the hounds into backyard swimming pools and leave them floundering there at the mercy of the homeowner. Another is to run along highways. Concrete will not hold the fox's scent, and auto exhaust fumes foul up the hounds' noses.

Oscar Wilde—who called fox hunting "the unspeakable in full pursuit of the uneatable"—would have been delighted with one such spectacle last winter down a main street of Reston, Va. Reston, which had gobbled up 7,700 acres of former hunt territory, was the foxes' finest hour.



● The Japan National Railway has hired 506 additional pushers to shove passengers into its commuter cars (left and right), beefing up its force for "Operation Push Bottom" to a total of 2,577. Of these, 754 are college students skilled in judo, karate, or soccer. This winter has proved difficult, since heavy coats and a healthy economy have added to the average passenger's weight.

● The *San Francisco Chronicle* reports that Walter Fehr, owner of an outdoor advertising company who was fined recently for poisoning trees which blocked the view of his billboards, was named by Governor Reagan to an advisory group charged with preserving and enhancing the beauty of the state capital area.

## ACADEME

#### SHAKEUP AT THE ECOLE

The Ecole des Beaux Arts, that last major stronghold of architectural conservatism, appears to be heading for a traumatic shakeup. Reports from Paris indicate that the Ecole will be split into 18 financially autonomous schools over the next few months, though it will continue to operate under its existing name.

In January, five separate architectural ateliers were set up within the Ecole in Paris, three of them operated by progressive elements of the school, and two by conservatives. But the centralized, classical method of study was retained in all five, and the Direction des Etudes, which had been working on a reform program for two years, was disbanded for "ideological reasons."

The action came as bitter disappointment to the students who had demonstrated for reform during the violent uprisings of last May. The riots had been followed by a conservative "backlash" movement, which seems to have squelched the student demands—for the time being, at least.

#### BACKLASH AT LA CAMBRE

Meanwhile, in Brussels, the neo-progressive school of La Cambre is also being threatened by a conservative backlash. Robert Delevoy, who became director of the school three years ago and has since taken a series of steps to include human sciences in the curriculum, has been buffeted by a press campaign organized by professors and parents of the students.



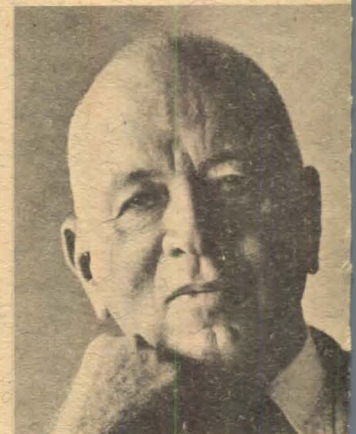
All but three of the school's professors in architecture and city planning have signed a letter to the Minister of Culture demanding Delevoy's resignation. They claim that Delevoy has been "metaphysical" in his attempts to break away from the school's formal traditions.

Delevoy, who has the backing of most of the students, has announced that he will fight back.

## AWARDS

#### AIA AND RIBA

● This year's Gold Medal of the AIA will go to William Wurster (below), one of the originators of the Bay Area Style and former dean (now dean emeritus) of the School of Environmental Design at the University



of California in Berkeley. Wurster's rural vernacular houses of the '20s and '30s brought about changes in popular attitudes toward domestic architecture.

Before becoming dean at Berkeley, Wurster spent seven years in the East as dean of architecture and planning at MIT—the first dean there who was not Beaux Arts oriented. He is now senior partner in the firm of Wurster Bernardi & Emmons.



Other AIA awards for 1969: Architectural Firm Award to A. Quincy Jones and Frederick E. Emmons of Los Angeles; Fine Arts Medal to Sculptor Jacques Lipschitz; Craftsmanship Medal to tapestry designer Henry Eastwood of Memphis; Kemper Award (for contributions to the Institute and the profession) to Philip J. Meathe of Smith, Hinchman & Grylls, Detroit (formerly with Meathe, Kessler & Assocs.); Allied Professions Award to Structural Engineer John Skilling of Seattle; Architectural Photography Award to Julius Shulman of Los Angeles; Industrial Arts Medal to Architect Carl Koch of Boston for his work in prefabrication systems; Citation of an Organization to the New York State University Construction Fund (see July/Aug. '68 issue); Architectural Critic's Medal to Ada Louise Huxtable of the *New York Times* ("Building the Soviet Society," Nov. '67 issue).

Like the AIA, the Royal Institute of British Architects often gives its annual Gold Medal to an internationally prominent figure (recent recipients: Buckminster Fuller, Kenzo Tange). This year, RIBA too has chosen a Gold Medal winner from within its own territory: Jackomo (Jack) Coia, Scotsman of Italian parentage who is little known outside of Great Britain. For more than 30 years, Coia (the surviving senior partner of Gillespie, Kidd & Coia of Glasgow) has contributed ruggedly independent buildings to the British scene. Regardless of passing trends, the firm's work has been characterized by bold forms of great mass—as in St. Peter's College, Cardross (Sept. '67 issue).

## PEOPLE

### UDALL TO A NEW FIRM

Stewart L. Udall, former Secretary of the Interior, has formed an international consulting firm that will work for the betterment of the total environment. Joining him as officers of the new Overview Corporation are Lawrence Malprin, landscape architect and planner, and three of Udall's former assistants from Interior—Henry L. Kimmelman, Henry S. Bloomgarten, and Mrs. Sharon Francis (Mrs. Francis was, more recently, conservation and beautification assistant to Mrs. Johnson). The group will have 25 advisors, among them Edmund Ba-

con, I. M. Pei, Kenzo Tange, and Moshe Safdie.

Our emphasis, says Udall, is "not on paper plans or futuristic studies, but on the now, the practical political implementation of concepts, plans, and projects." The group will do no basic research but will concern itself with ways in which specific governments, cities, and industries can best fit into their environment without abusing natural resources. On each project, a team of experts will be assembled. Although the new enterprise will attempt to make a profit, says Udall, it has "a good deal of idealism" at its base. Initially, the corporation is being financed by its major officers.

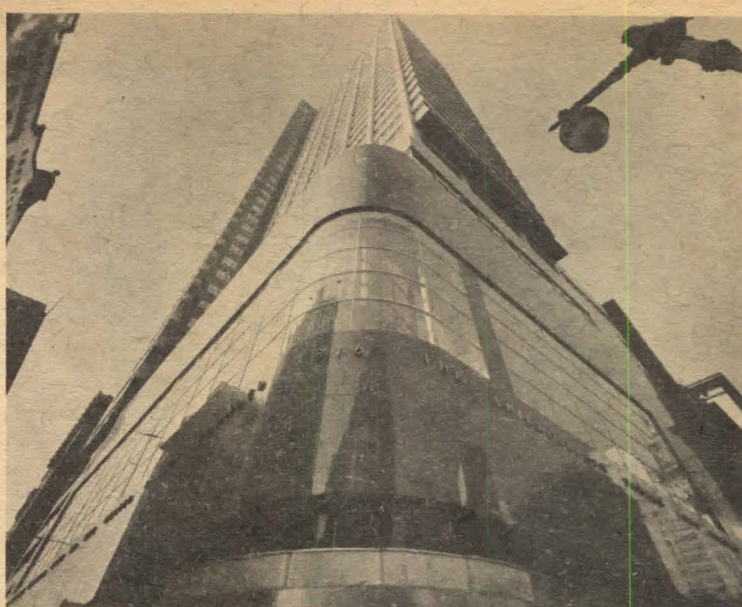
In addition to being chairman of the board of Overview, Udall will return to the practice of law in Washington, D. C. and Phoenix, Ariz. This may seem a busy life, but the previous eight years have been busy, too, with such conservation advances as the creation and expansion of the Federal



Land and Water Fund, enactment of basic legislation for the control of water and air pollution, establishment of the National Water Commission, creation of the wilderness system, wild and scenic rivers system, and national system of trails, and addition of 50-odd units to the national park system and 39 areas of wildlife refuge.

### WOOD TO AN OLD HOME

Former HUD Secretary Robert C. Wood has become Director of the Harvard-MIT Joint Center for Urban Studies, replacing Daniel P. Moynihan who joined the Nixon Administration as head of the new Council on Urban Affairs. For Wood, who was Undersecretary of HUD until a month before he left, the new job is a return home. He was formerly professor of political science at MIT.



### DEATHS

William Lescaze died on February 9 in New York. He would have been 73 this month. Born in Geneva, Switzerland, in 1896, he came to this country when he was 24 at the prompting of the pioneer Swiss modernist Karl Moser, under whom he had studied at the Ecole Polytechnique Fédérale in Zurich. Moser felt that America offered a better chance than post-war Europe for Lescaze to exercise his flare for the "monumental."

He got that chance as design partner in the firm of Howe & Lescaze, formed, ironically, in the disastrous year of 1929. George Howe had left the firm of Mellor, Meigs & Howe, dismissing its French manorial houses as "Wall Street Pastorate," and bringing with him to the new firm the commission from the Philadelphia Saving Fund Society which was to propel Lescaze into national prominence.

William H. Jordy, in a detailed analysis of the PSFS building (above and May '64 issue), writing 30 years after its completion in 1932, said: "It stands as the most important tall [U.S.] building between those of Sullivan in the 1890s and the Seagram Building built 60 years later."

Mr. Lescaze established his own practice and introduced his work to New York City in 1933 with the design of his townhouse-office on East 48th Street where he died last month. Buildings designed by his firm in New York include the U.S. Plywood office building on Third Avenue, the Williamsburg, Elliott and Manhattanville Houses—all low-cost housing—and the 50-story 1 New York Plaza, now

under construction at the tip of Manhattan Island.

Welton Becket, president of Welton Becket & Associates until two weeks before his death when he became board chairman, died on January 16 in Los Angeles. His early career, designing expensive homes for film stars, took a sharp turn with Bullock's Pasadena, beginning a long association with large corporate clients.

His practice, which began in 1933 with Walter Wurdeman, has grown to where it now employs 500 in offices in Los Angeles, San Francisco, Houston, and New York, and has totaled \$3 billion in projects completed or nearing completion throughout the world.

He is succeeded, as president of the firm, by his nephew, MacDonald Becket.

Kenneth Kingsley Stowell, editor of *THE ARCHITECTURAL FORUM* from 1927 to 1935, died on January 19 in San Francisco, where he had lived since his retirement in 1958 as an eastern vice president of Giffels & Vallet Inc. and L. Rosetti, engineers and architects of Detroit.

Mr. Stowell, a native New Yorker, received architecture degrees from Dartmouth and Harvard and then became associate professor of architecture at the Georgia Institute of Technology from 1924 to 1927.

Following his years at *FORUM*, he became editor of *The American Architect and Architecture*, a short-lived Hearst publication that folded in 1936. In that year, he moved to another Hearst magazine, *House Beautiful*, and from 1942 until 1949 he was editor-in-chief of *The Architectural Record*.

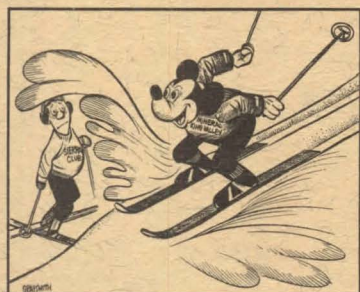


## WALTER McQUADE

### LIFE IN BOXES

"It's as if modern man were fighting to get out of a set of Chinese boxes," reflects John Le-Carre, the spymaster. "After setting one's life up in one frame of reference, one finds it expanded and altered into another." These architectural remarks were quoted in the *New York Times* January 28. In the same issue of the *Times* were enough other items to support his idea. Some of the boxes, however, seemed quite difficult to break out of.

Exhibit One: On the front page of the *Times* was a report that the U.S. Forest Service had approved a "master plan" by the Walt Disney organization to put a \$30-million, year-round recreational development in the Mineral King Valley area of Sequoia National Forest—a set of small boxes within the large dome of nature. The point of the proposal is that



man cannot bring himself to enjoy the outdoors, especially in winter, unless he is provided with ski lifts, and housing in which to pose silhouetted in front of massive stone fireplace walls, martini and Marlboro in hand. The announced Disney intent is to construct an "Alpine Village." Full scale; not a charming shrunken head such as Disneyland.

The Sierra Club is suing to stop the project. The issue narrows, as it often does in such boxes, to the necessity to construct an expressway through the Sequoia National Forest, to allow easy access from Los Angeles, 170 miles south, 8,000 ft. below. The Disney people and the Forest Service maintain the expressway can be laid out so that it will not damage a single sequoia. The Sierra people hold it likely that the highway's drainage will undermine and otherwise injure large stands of sequoias on the slopes below the expressway.

Such boxes are often full of alienation. The Sierra Club lawsuit is based on the assertion that the scope of the proposal exceeds the Forest Service's administrative authority, and constitutes an "alienation" of public land that should be brought about only by action of Congress after hearings. Some of the proponents as well are concerned about alienation—that of people trapped in cities, unable to hop in the car and roar forth to sample the lyricism of skiing or summer camping. Of course, the Disney company's Al-



pine Village might gimmick the whole business up so that there would be not much lyricism left. It is a more delicate commodity than sequoias, at that.

Exhibit Two, from that same issue of the *Times*, is very different: On the other side of North America, in the unnaturally majestic Wall Street canyons of Manhattan, U.S. Steel and SOM's Roy Allen are planning a 54-story, block-square headquarters building on the site of the old Singer Building, which has, of course, sung its last. It will be a good, unsentimental building, with 1.8 million sq. ft. of floor space. The city is permitting unusually dense coverage of the site in return for a pledge to build a small park across the street on land also owned by U.S. Steel.

But U.S. Steel and SOM are in a real box with a counter-lunch-



shop chain called "Chock Full of Nuts" which has a lease running until 1980 on the ground floor of an old building on the park site. Chock Full makes crockfuls of money from that busy shop, and has resisted all financial lures to evacuate. So, at present, the 12-story building in which they operate is being reduced to house only them on the ground floor, to let them live out that lease before becoming parklike. Holdouts are, of course, a notoriously difficult problem in the physical progress of cities. Also in Manhattan is a hotdog stand with a total floor area of 240 sq. ft. which recently fell into an office building assemblage and brought a price of a million dollars, without mustard or sauerkraut.

One final box from that issue of the *New York Times*, a letter to the editor, indicated that some frames of reference are not expanded or altered even when blasted into space. We take our boxes with us.

### A Negro to the Moon

To the Editor:

Later on this year we will send three men to the moon. Will one of them be a black man? I certainly hope so.

There are qualified blacks in the space program. I know that the three men for this moon landing have tentatively been chosen—and all are white. But it would take little to change that. This opportunity only comes once.

Mr. Nixon could have a splendid beginning if he made this decision one of his first orders of business.

JERRY L. KAZDAN  
Philadelphia, Jan. 15, 1969

PHOTOGRAPHS: Page 27, The New York Times (left); UPI (right). Page 29, Ed Pacheco (bottom right). Page 37, The New York Times (top). Page 38, Keystone (top, left and right). Jeremiah O. Bragstad (bottom left). Page 39, Ralph Steiner (top right). UPI (center). Page 90, The New York Times (top right); Graysmith, The San Francisco Chronicle (lower left).





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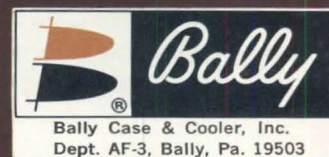




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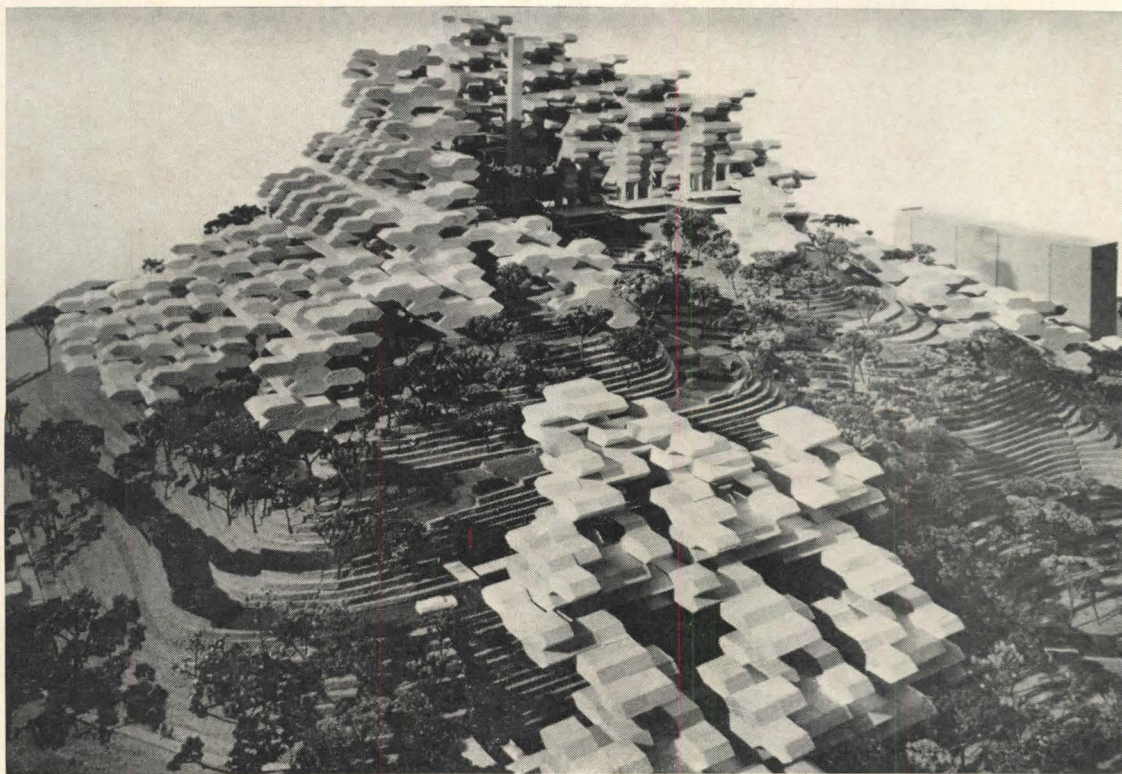
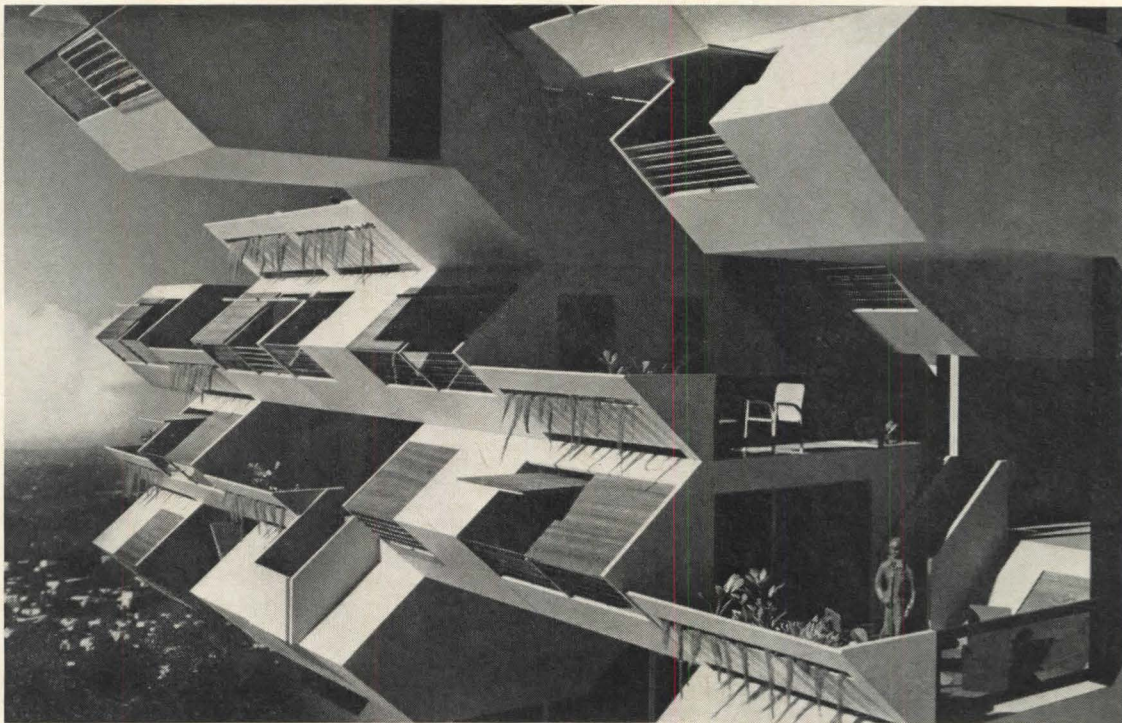
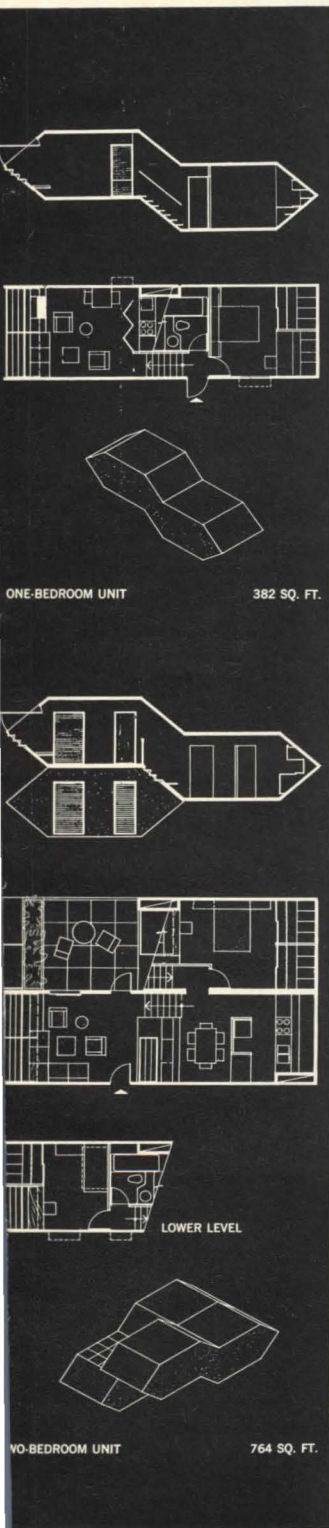
# PREVIEW

## HABITAT LIVES

Modified for a warm climate and moderate-income (221d3) construction, Moshe Safdie's Habitat of Expo 67 will soon be reincarnated as "Habitat Puerto Rico." The prefabricated modules, now split-level (and 12 ft. wide for highway transport) will be prefinished at the site on an assembly line at the rate of five per day. Each house will have its private patio on the roof of the unit below, but shaded by the houses above. Each

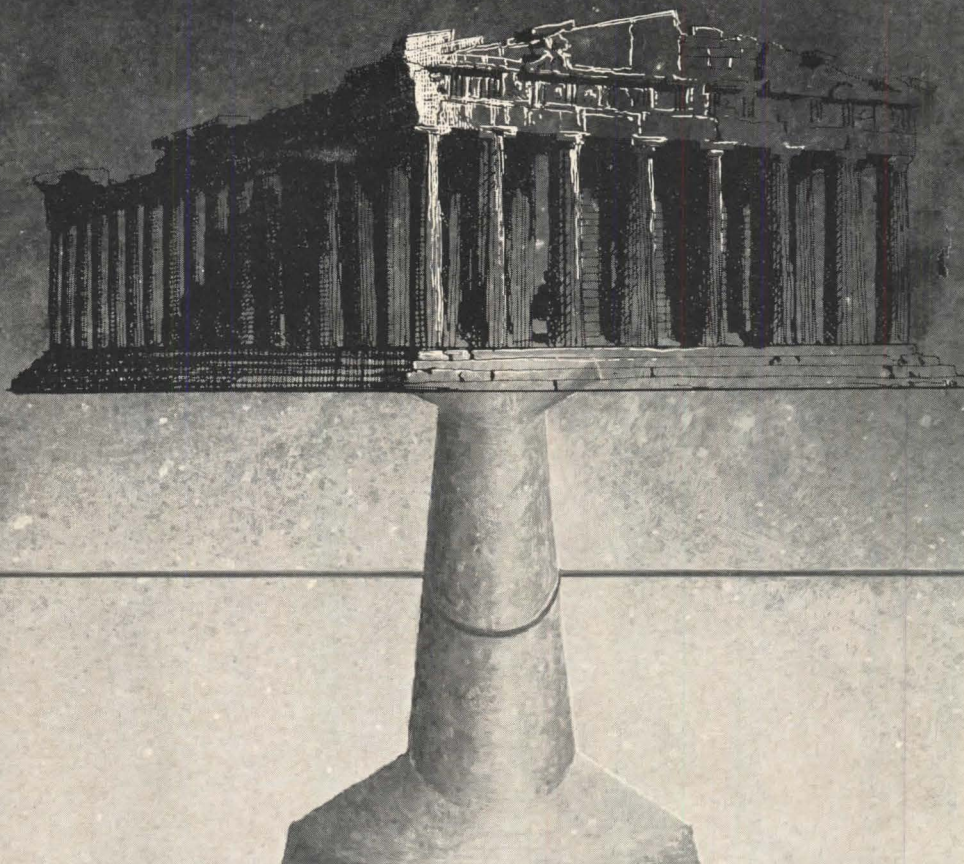
house will be self-contained, with its 3-in. concrete walls and 4-in. floor slabs duplicated in adjacent units, giving full acoustical privacy. A major change from Habitat 67 is the reduced module weight—90 tons to 22. Montreal's 158 units cost \$15 million; Puerto Rico's 800 units will cost \$13.5 million—one eighth the square foot cost. The site is a typical steep hill in San Juan, the kind either unused or flattened for use. Spiral-

ing roads will make 80 per cent of the units accessible without elevators, but pedestrians will be completely separate from vehicles. Playgrounds will be plentiful, smaller ones located on roofs, and larger ones built out on the terraced hillside. At the hilltop, 14-story buildings will contain housing, shops, cafes, offices. Units will be sold as coops, for an average price of \$17,000. Consulting engineers were Conrad Engineers.



(continued on page 95)





## The Greeks had an "I" for it

In the fifth century B. C., Callicrates of Athens built the Parthenon without mortar to join the massive marble elements. Where gravity alone was not enough, he joined blocks by pouring bronze into I-shaped grooves cut across the joints. They have held for 2,500 years.

Callicrates was one of the greatest ancient architects. He chose to build with marble because it was beautiful, lasting and available. He probably never considered its extremely low maintenance cost or its resistance to airborne dirt and pollutants. Though the contemporary builder must consider cost of maintenance and may choose from construction techniques more sophisticated than the bronze "I", one fact remains—marble is still beautiful, lasting and available.

Shouldn't your building be a thing of lasting beauty? Shouldn't it be marble?

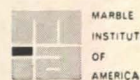


With no intention to low-rate Callicrates, we'd like to mention that Georgia Marble Company has developed a system for attaching thin marble veneer that gives marble a versatility that Callicrates never dreamed of.

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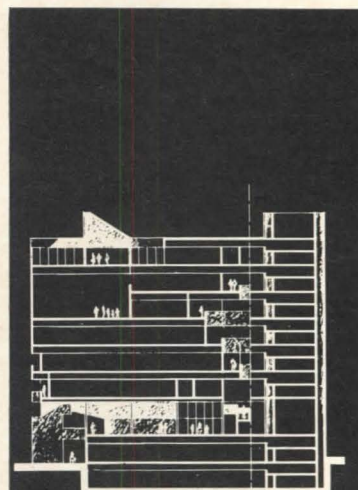
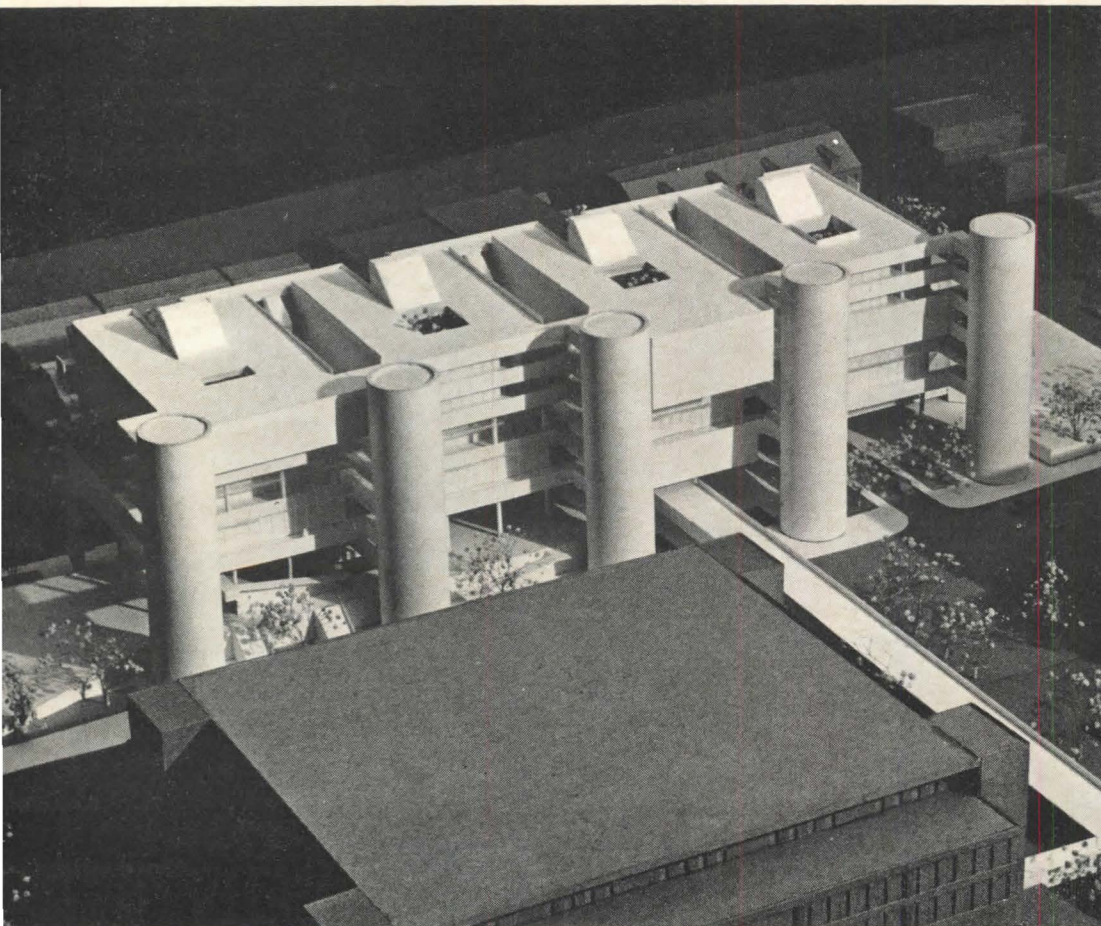
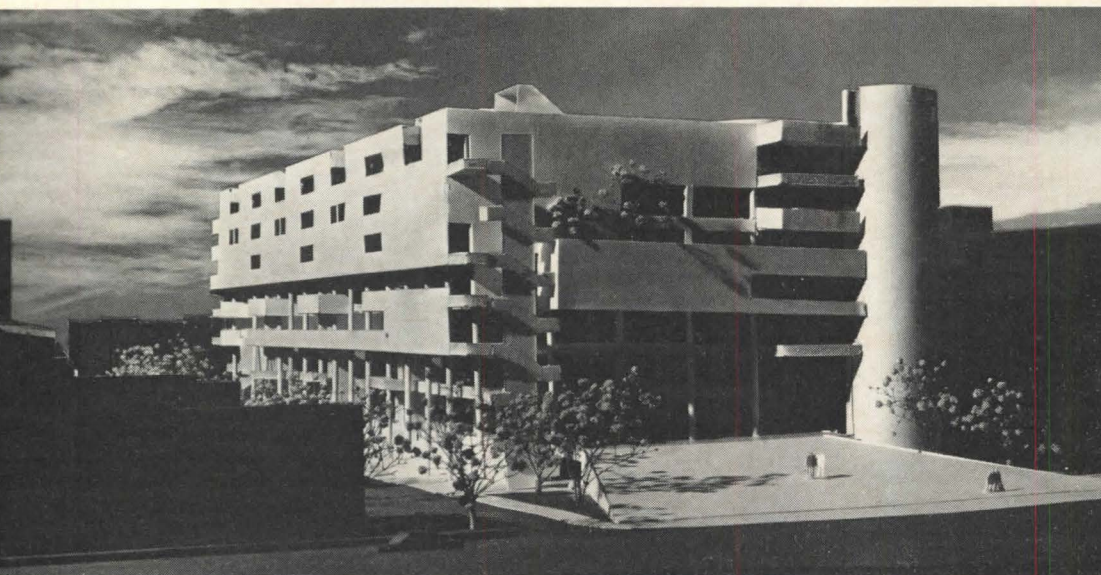
# PREVIEW

## OPENED-UP HEALTH CENTER

The first U.S. center for combined treatment of mental illness and retardation, to be built a few blocks from Baltimore's Charles Center, will be an integral part of its community. Since its major premise is to treat the patient as a continuing member of his community, the center will have a plaza occupying the full floor one level above the street, with shops, outdoor movies, swimming pool, psycho-drama, self-expres-

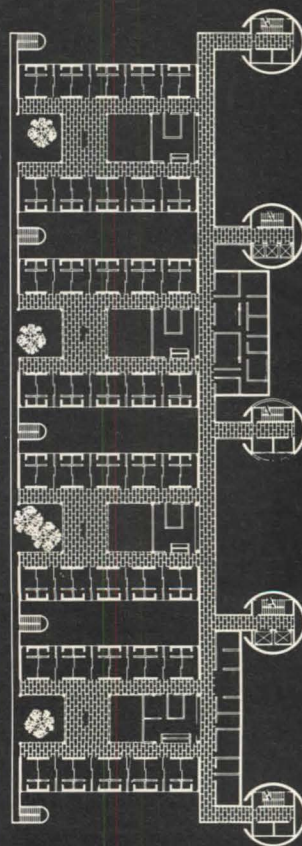
sion walls, etc. This complete openness, of the plaza and of the building's elevated streets, is intended to bring openmindedness to the problems of mental illness and retardation, encouraging people to become familiar with the building before they need it. The exterior is a skillful blend of small-scale elements facing the row houses on three sides (top left) and of larger scale facing the University of Maryland medical

school (bottom left). In addition to outpatient services, the \$10-million center will operate as a 24-hour teaching center, and will have living units for patients on the top two floors (see plan), where the scale is reminiscent of the row houses of Baltimore. The reinforced-concrete structure will have masonry skin to recall the existing environment. Architects: Caudill, Rowlett & Scott. Associate architects: Fenton & Lichtig.



SECTION

0 30 60'



EIGHTH FLOOR



# Who do you think handles our handles the most?

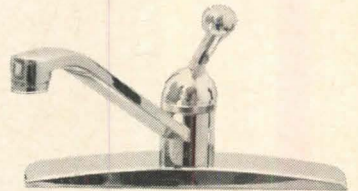
Or any faucet handle for that matter.

The household faucet handle is the one who contends with laundry, dirty kids and dishes day in, day out. And we figure there are just two things she needs to know about faucets. How good they look and how well they work.

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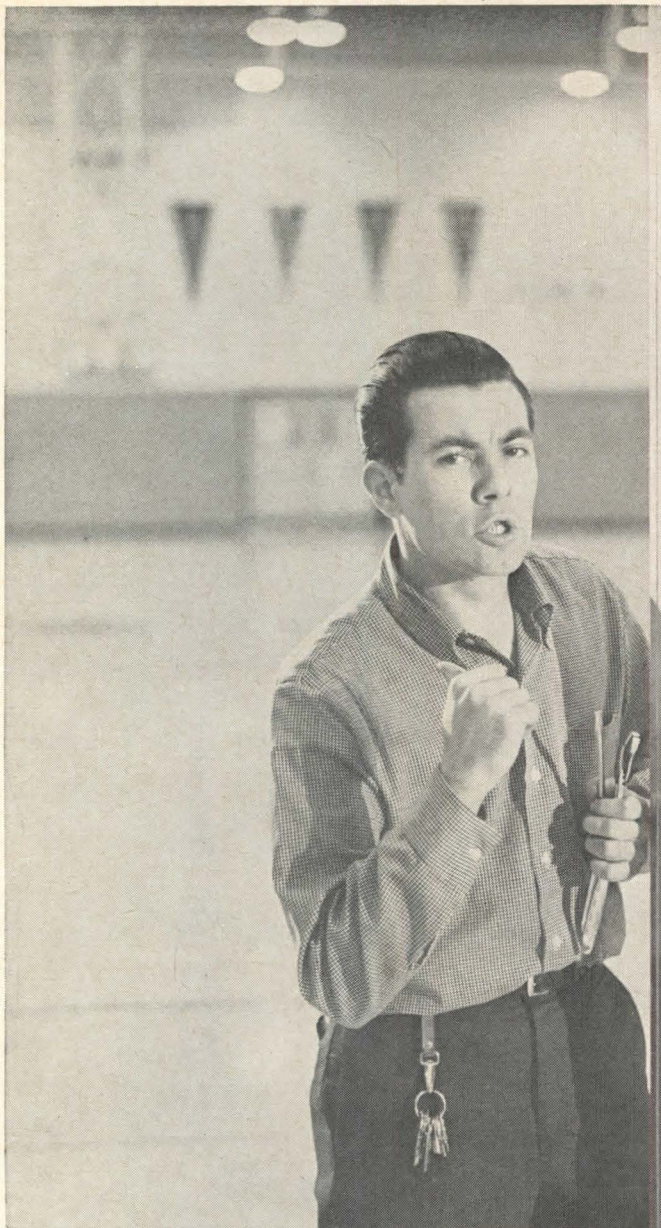
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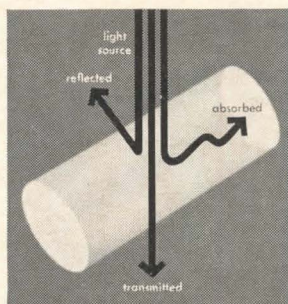
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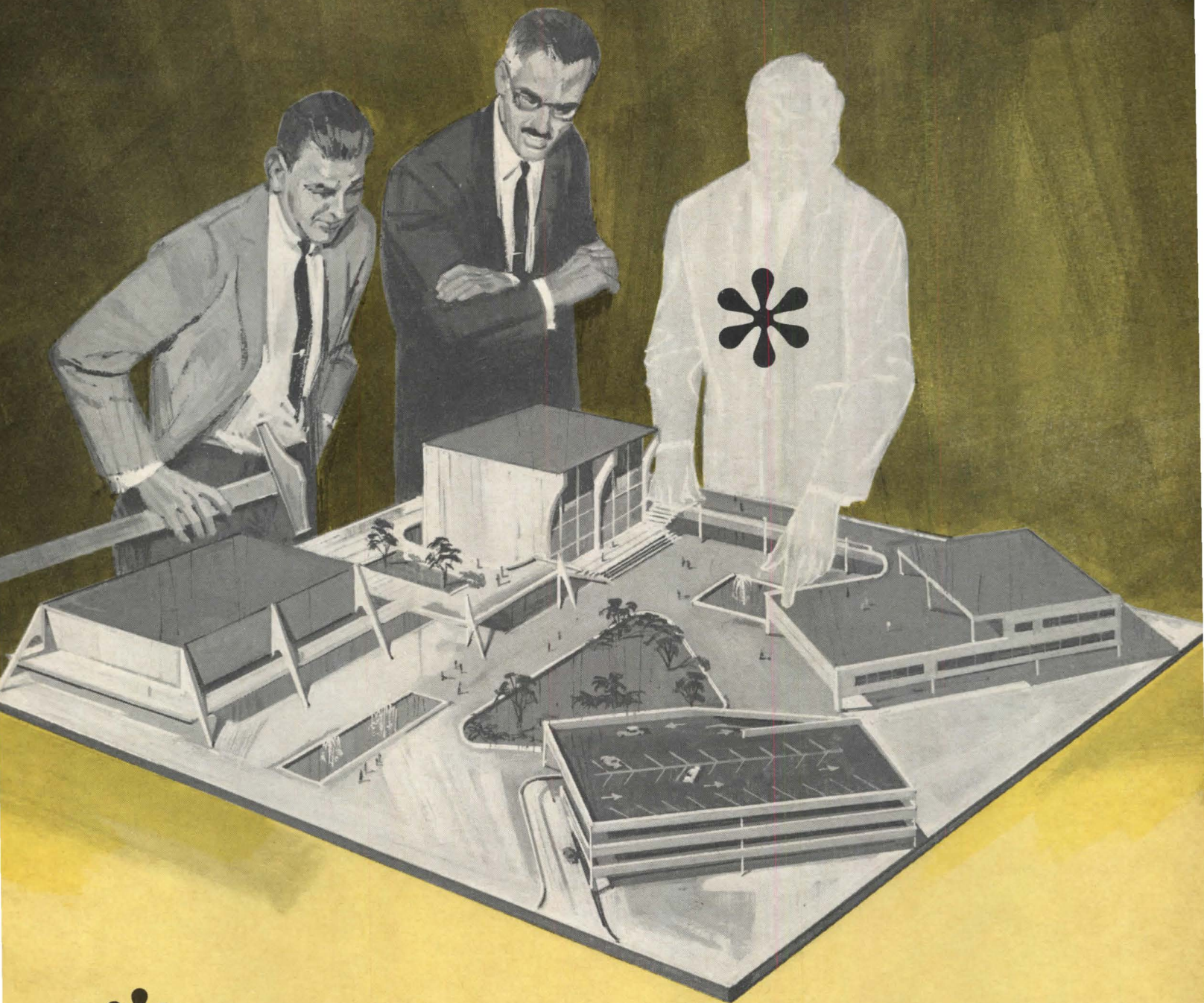
"Antron" is the optimal carpet fiber for high traffic areas and is available in a wide variety of contract styles from leading mills. For a free brochure on "Antron" (and Du Pont's other contract fibers) write: Contract Carpet Specialist, Du Pont Company, 308 East Lancaster Ave., Wynnewood, Pa. 19096.



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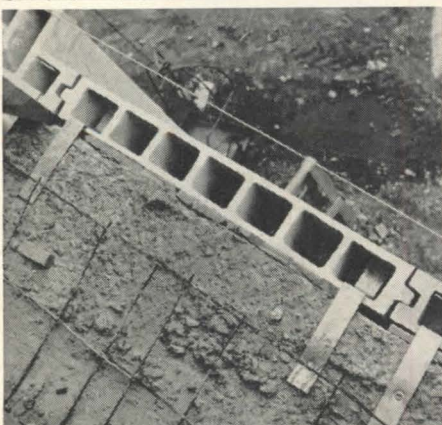
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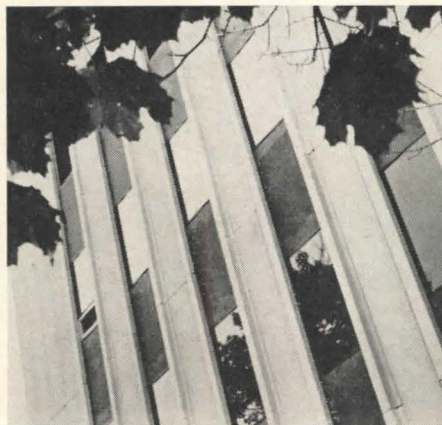
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**Johns-Manville**

20 Walnut Street Building, Wellesley, Mass. Architect: Donaldson Ray McMullin Associates.



Construction photo shows tongue and groove arrangement of Ace Corspan panels and specially extruded Corspan mullions.



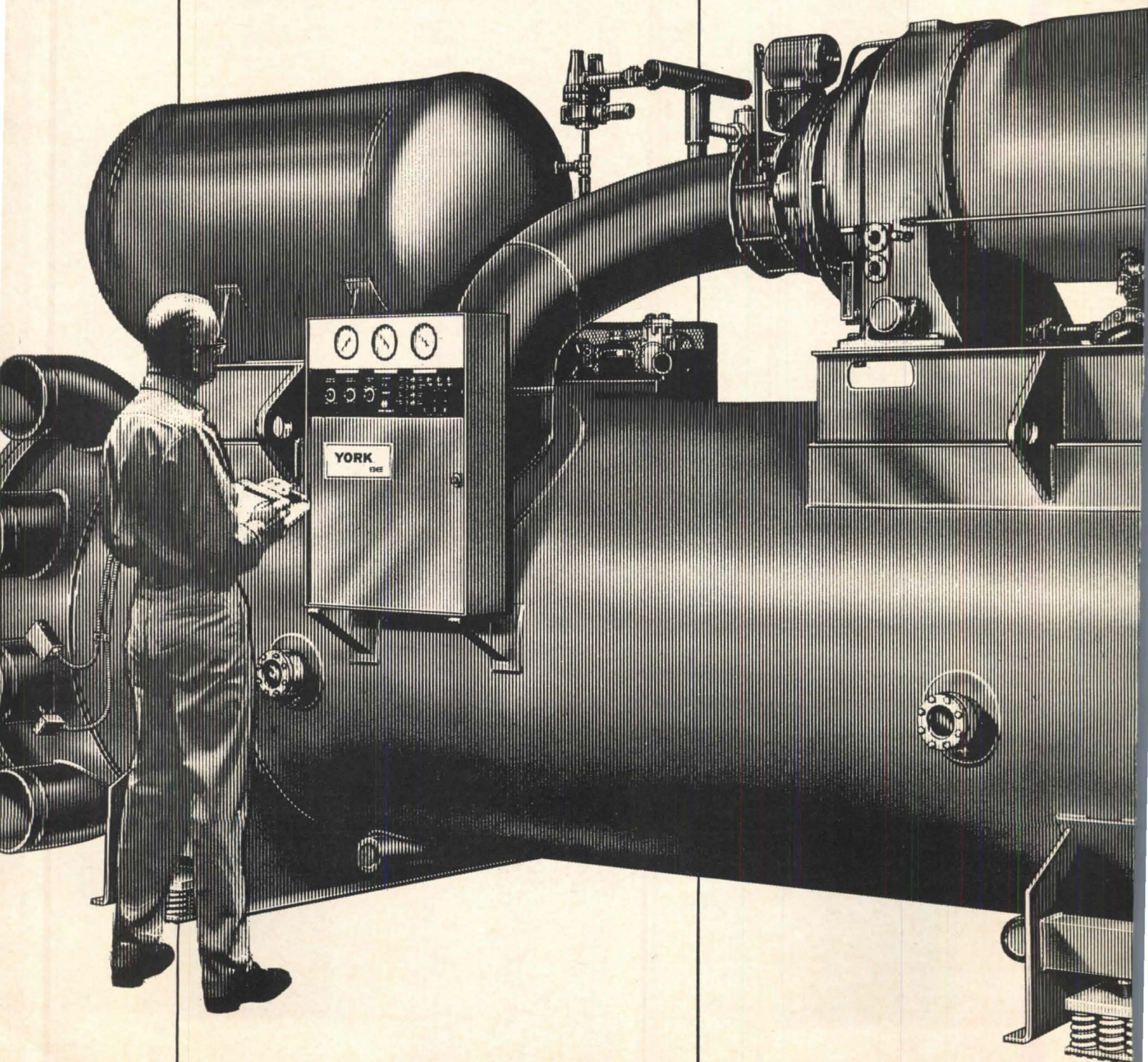
Thermal pane glass was inserted directly into the mullion slot using glazer tape and a neoprene wedge gasket.



Over-all view of structure reveals pleasing contrast between Ace Corspan panels and Ace Colorlith<sup>®</sup> window spandrels.



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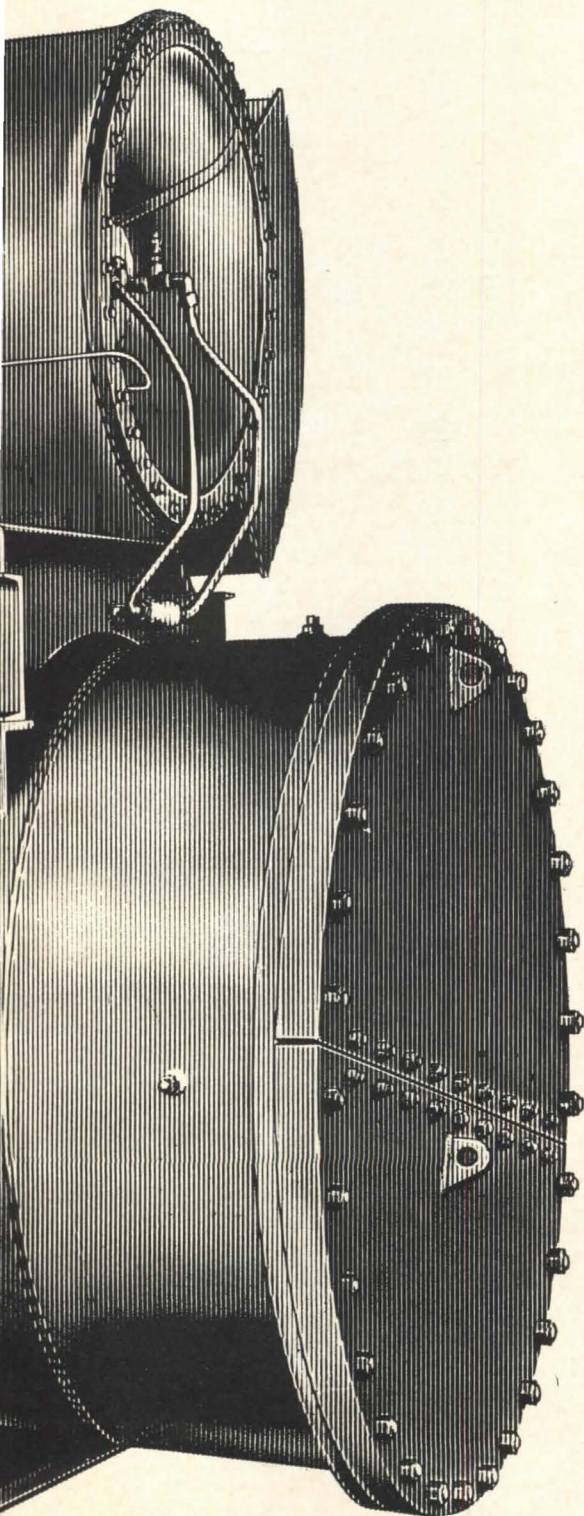




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# YORK

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AF-39

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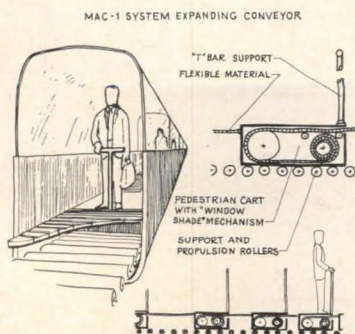
(continued from page 77)

such land-use-transport coordination may take many years to show beneficial results. The role which public transport of an improved quality can play in an auto-oriented society (or more limitations on use of the vehicle) is still relatively unknown.

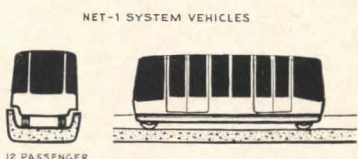
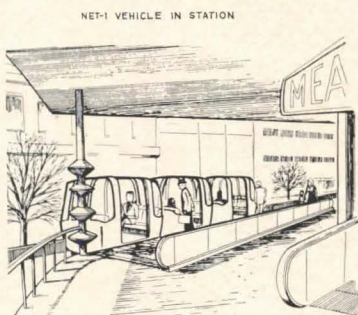
In the past 18 months, HUD has sponsored a program of research by 17 different organizations concerned with all aspects of the urban transport problem (cf: HUD's 1968 report, *Tomorrow's Transportation: New Systems for the Urban Future*, a summary of all 17 studies). Stanford Research Institute was commissioned to develop concepts for future systems which could be introduced within 5-15 years (Final Report I) together with a study of their likely impact on urban life and form (Final Report II). With American urban areas expected to double their population in 40 years, the program of action discussed in these books comes none too soon.

Case studies were made into the travel patterns of typical urban areas of varying densities and, from this, analyses were made of the kinds of transport systems their populations might sustain. The range of systems which evolved are nothing new, but it is interesting to see the results of the first serious study into practicality. Five basic systems of hardware are recommended for development:

(1) Conveyor or automatic car systems for short distance movement within major activity centers [MAC]; (2) dial-a-bus



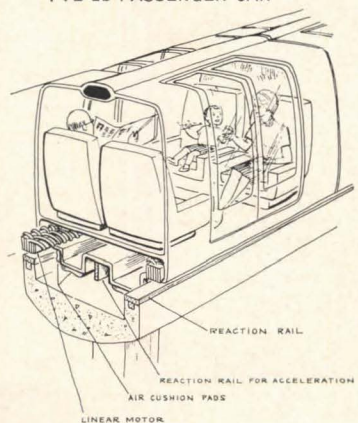
systems for use in lower density residential areas [DART]; (3) minicars, possibly electric, for short-term hire from suburban parks and stations for short distance use at slow speeds [PAS]; (4) a range of fully automated small-scale vehicles [NET] not unlike the Teletrans



system (see Jan./Feb. '68 issue); (5) a high-speed 125-200 mph small-scale air-cushion train for extended area travel [FTL].

Travel patronage likely to be found on all these systems was assumed to range from 20 per cent of the total cost traffic volume up to the most densely used system, MAC, with 80 per cent. PAS and DART might have good patronage since both require no investment in special track, using ordinary roads. The NET

FTL-1b PASSENGER CAR



and FTL systems, however, require heavy investment in track and stations, and are highly specialized systems. The NET system, though, would be small-scale and require only lightweight track which could be cheap; this

could mean that a fine mesh was possible, unlike traditional rail.

Some real problems, particularly those of how to insert such systems inexpensively into the existing built environment, might arise. For example, elevated conveyors in the city center will surely never be acceptable against existing facades. Do enough buildings on pilotis really exist for rights of way to be found for systems beneath them? Undoubtedly they could in the future, and so also the pathways for the grade and below-grade systems. (Actual studies on the feasibility of applying such systems are now under way at Columbia and Fort Lincoln, D.C., so that it should be possible to assess how truly automated, safe, and vandal-proof a system can be built.)

In Final Report II, a distinguished panel of sociologists, planners, and architects were asked to comment on all aspects of the various systems proposed. While there was unanimity about the need for such development, several raised the question of the benefits that might accrue from heavy investment. Will enough car owners really switch from driving in enough numbers for the systems to be used sufficiently? Can such systems be made to work economically without raising the densities, and is this what people really want? There was complete agreement, however, about the importance of encouraging development around node points, and a belief that the systems would encourage such development to cluster in a way that expressways cannot. The reports raise interesting questions and go a long way towards showing the role these systems could play. It rests now with the federal government to demonstrate their capabilities.

The whole process of environmental design is inexorably bound to the transport field, and these studies are important because they show to some extent where both architect and planner could play a useful role, if the application of such systems to urban America are to make any contribution to improving the quality of urban life.

**TWO FILMSTRIP-LECTURE SERIES**  
Produced by the Royal Institute of British Architects. Prepared for distribution by Diana Wyllie Ltd., London. Strips may be cut and mounted as slides. \$7.75 per filmstrip and text. Series totals: \$23.25 and \$31.00.


The first series, *ARCHITECTURE* (Materials, Construction, and Design) is a very simplified introduction to the process, history and substance of architecture: what materials were available to and developed by man; what methods of construction evolved, and how they became increasingly more sophisticated; what designs were conceived for individual buildings and for total complexes. Each aspect of the three subdivisions is described fully in itself, and in terms of its historical function and context. (The arch, for example, is first pictured as an aqueduct in Segovia, Spain, and, finally, as a span in the roof of the ice rink at Yale University.)

The second series, *MAN-MADE WORLD* (Environment, Man and Machine, Who Cares?, Change is Normal), on the other hand, is decidedly British in point-of-view and in presentation. This is unfortunate as the general themes of the series are relevant to other countries: themes such as man's creation of his own environment and his destruction of the natural landscape; how methods of transportation have affected environment; the dilemma of renewal and/or conservation. Of 147 slides, only five are not British subjects. The bibliography is British, and the questions following the text blocks are directed to British students (e.g.: "What are the great country houses in your locality?")

Both series demonstrate the value of the audio-visual teaching method. They are concise and informative, and yet dramatic. The picture-emphasis causes the student to link ideas and examples, and come to his own conclusions more easily and directly.

The first series could be useful to the American market, dealing as it does with broad concepts and with world architecture. The second could only serve as a guide for a similar or parallel course in this country.—B.T.





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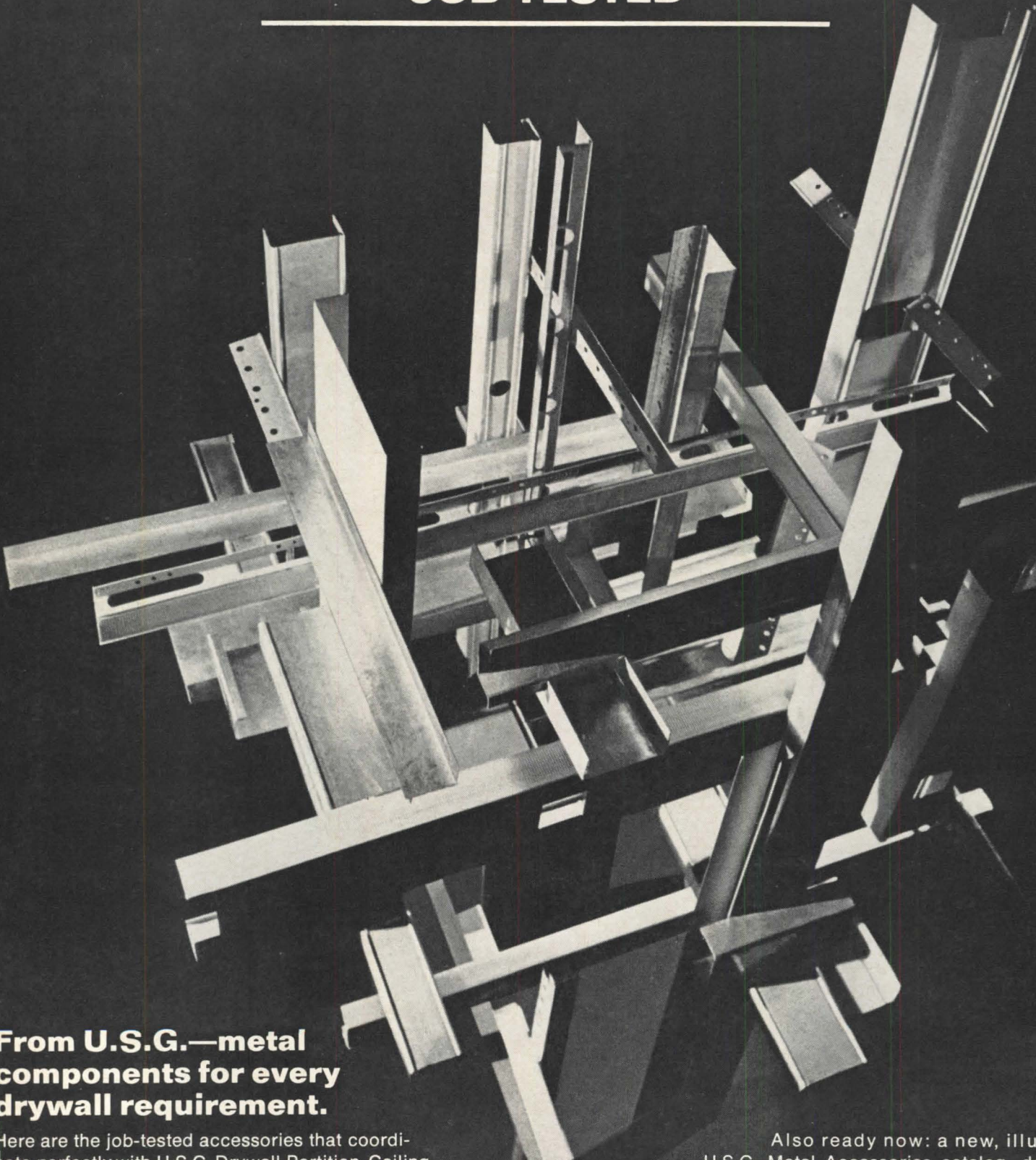
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# UNITED STATES GYPSUM



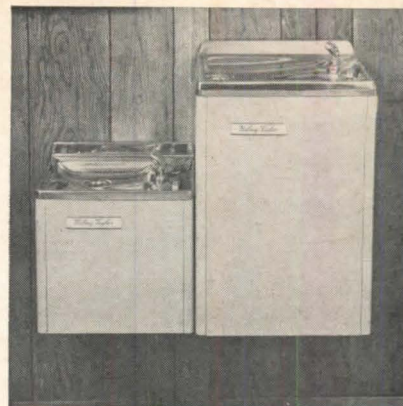
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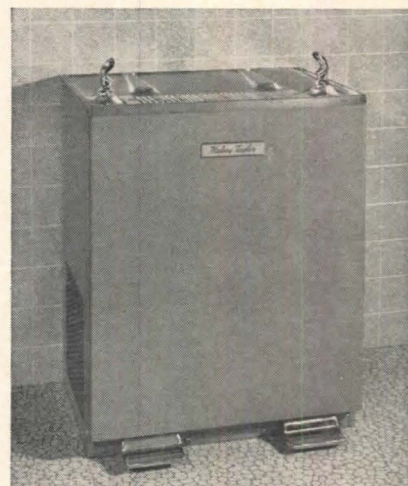


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1. "Glas-Wich by Dearborn" 12-pg full-color catalog on specialty laminated glass for exterior and interior environmental control. Dearborn Glass Co. Please request **A-1**.
2. 4-pg 4-color brochure on "The Executive", a premium all-steel door. UL fire door test for 3-hour "A" classification. Fenestra, Inc. Please request **A-2**.
3. COMMERCIAL & INDUSTRIAL FLAT GLASS — Drawn Sheet, Tinted, Stopray, Figured Rolled, Float, Diffusing, Enamelled, and Mat-O-Bell diffuse non-reflecting. 8-pg color catalog. Glaverbel. Please request **A-3**.
4. Catalog includes technical information on LOF glass; includes Vari-Tran (TM) and Vigilpane (TM) SA 68. Libbey-Owens-Ford Co. Please request **A-4**.
5. Literature contains general information on Pilkington Glass products. Pilkington Brothers, Ltd. Please request **A-5**.
6. Plexiglas in Architecture—24-pg full color catalog shows full range of architectural uses for acrylic sheet: glazing, fascia, sunscreens, domes. Rohm & Haas Co. Please request **A-6**.

## D. FLOOR COVERINGS

1. "Successful Contract Carpeting With Du Pont Fibers" a practical guide for the specifier seeking fiber knowledge color guidance before making carpet decision. E. I. Du Pont de Nemours & Co., Inc. Please request **D-1**.

## E. FURNISHINGS

1. New Sundberg Chair. Full line. Durable cast nylon. Many colors, mounting options. Specifications. American Seating Co. Please request **E-1**.

## F. HARDWARE

1. Lever Handles by Corbin. Designs available for mortise locks. Corbin unit locks; Maywood Design combining wood with metal. P. & F. Corbin, Div. Emhart Corp. Please request **F-1**.
2. New bulletin F-283 covering No. 1647 UL Listed Single Point Latch, Lock and Fire Exit Devices; provides complete technical and application data all types commercial and industrial installations. Richards-Wilcox Mfg. Co. Please request **F-2**.
3. Lever handle locksets. 8-pg catalog describes lock functions and illustrates 8 lever handles in 24 design combinations including rose-less trim. Sargent & Co. Please request **F-3**.

## G. HEATING/VENTILATING/AIR CONDITIONING

1. Spec data hermetic and open Turbopak chiller, 670 to 1030-ton capacity range. York Div. Borg-Warner Corp. Please request **G-1**.

## K. LIGHTING FIXTURES

1. AREALUME CATALOG: Ball-light post-tops, pendants, brackets for plazas, malls, parking areas. Stonco Electric Products Co. Please request **K-1**.

## P. OPERABLE WALLS

1. Full color 16-pg catalog on Demountable Partitions. All heights. Technical information. National Gypsum Co. Please request **P-1**.

## R. PAINTS/COATINGS/SEALANTS

1. 4-pg 2-color folder on "Weather Chamber Windows" weatherproofing system combining Neoprene stripping with pressure equalization. Republic Steel Corp. Mfg. Div. Please request **R-1**.
2. New 10-pg brochure, full color, shows details 8 different systems for application All-weather Crete to roof decks, plaza surfaces; illustrates various types of membrane and roof drains. Silbrico Co. Please request **R-2**.
3. New Thoroseal brochure explains how to waterproof basements, foundations, concrete and block buildings; how to eliminate rubbing concrete. Standard Dry Wall Products, Inc. Please request **R-3**.

## S. PLUMBING EQUIPMENT

1. 4-pg color brochure introduces Del-Temp "the safety value" pressure balance integral stops. Includes specs and drawings. Delta Faucet Co. Please request **S-1**.
2. 32-pg color catalog No. 168: drinking fountains, water coolers, includes specs and drawings. Haws Drinking Faucet Co. Please request **S-2**.

3. New 1969 32-pg color catalog illustrates electric water coolers, drinking fountains, fountain accessories; incorporates drawings, specs and rough-in dimensions for units. The Halsey W. Taylor Co. Please request **S-3**.

4. Form C 150. 12-pg color catalog of water coolers. Architect illustrations. Temprite Products Corp. Please request **S-4**.

## T. ROOFING/SIDING

1. J-M Corspan Panels for Sidewalls, 6-pg brochure; contains product description, advantages of panels as sidewalls, includes installation details, physical properties, specs. Folder IAC-79A. Johns-Manville Sales Corp. Please request **T-1**.
2. Metal Wall Panels, including new Foamwall, 20-pg catalog includes complete specs with color photos of walls in place. Elwin G. Smith & Co., Inc. Please request **T-2**.

## U. STRUCTURAL

1. Brochure with general information; client listings, recent projects and color photos on request. Aberthaw Construction Co. Please request **U-1**.

## V. WALLS/PARTITIONS/MATERIALS

1. 1968 laminated plastic solid color series. Easily filed product sampler features '68 solid shades. Formica Corp. Please request **V-1**.



# ADVERTISING INDEX

## By Advertiser

Aberthaw Construction Co. (Cabot, Cabot & Forbes) . . . . .	16	Knoll Associates, Inc. . . . .	21
American Seating Co. . . . .	4, 5	Libbey-Owens-Ford Co. . . . .	11-14
Bally Case & Cooler, Inc. . . . .	92	M.I.T. Press . . . . .	112
Carlisle Corporation . . . . .	22	National Gypsum Co. . . . .	24, 25
Corbin, P. & F., Div. Emhart Corp. . . . .	15	Norton Door Closer Div., Eaton Yale & Towne, Inc. . . . .	Cover IV
Cordley & Hayes . . . . .	10	Patcraft Mills, Inc. . . . .	Cover III
Dearborn Glass . . . . .	109	Pilkington Brothers . . . . .	106
Delta Faucet Co. . . . .	96	PPG Industries . . . . .	2, 3
Dunham-Bush, Inc., Space Conditioning Div. . . . .	9	Republic Steel Corporation . . . . .	6, 7
du Pont de Nemours Co., Inc., E.I. . . . .	98	Richards-Wilcox Mfg. Co. . . . .	97
Electric Heating Association . . . . .	19, 20	Rohm & Haas . . . . .	8
Fenestra, Inc. . . . .	17	Russwin, Div. of Emhart Corp. . . . .	26
Formica Corporation . . . . .	100	Sargent & Co. . . . .	Cover II
Georgia Marble Co. . . . .	94	Silbrico Corporation . . . . .	99
Glaverbel . . . . .	91	Smith & Co., Inc., Elwin G. . . . .	23
Haws Drinking Faucet Co. . . . .	18	Southern California/ Southern Counties Gas Cos. . . . .	100B, C
Hope's Windows, Inc. . . . .	113	Standard Dry Wall Products, Inc. . . . .	114
Johns-Manville Corporation . . . . .	101	Stonco Electric Products Co. . . . .	112
		Taylor, The Halsey W. Co. . . . .	108
		United States Gypsum . . . . .	107
		Westinghouse Electric Corp. (Elevator Div.) . . . . .	105
		York, Div. Borg-Warner . . . . .	102, 103

## By Product

<b>DOORS &amp; WINDOWS</b> Dearborn Glass Company . . . . .	109	<b>MASONRY AND BUILDING STONE</b> Georgia Marble Co. . . . .	94
Hope's Window's, Inc. . . . .	113	<b>METALS IN BUILDINGS</b> Johns-Manville Corp. . . . .	101
Libbey-Owens-Ford Co. . . . .	11-14	Elwin G. Smith & Co., Inc. . . . .	23
PPG Industries . . . . .	2, 3	United States Gypsum Co. . . . .	107
Republic Steel Corporation . . . . .	6, 7	<b>OPERABLE WALLS</b> Richards-Wilcox Mfg. Co. . . . .	97
<b>ELECTRICAL EQUIPMENT/ ELEVATORS</b> Westinghouse Electric Corp., Elev. Div. . . . .	105	<b>PAINTS/COATINGS/SEALANTS</b> Carlisle Corp. . . . .	22
<b>FLOOR COVERINGS</b> Du Pont de Nemours Co., Inc., E. I. . . . .	98	Silbrico Corporation . . . . .	99
Patcraft Mills, Inc. . . . .	Cover III	Standard Dry Wall Products, Inc. . . . .	114
<b>FURNISHINGS</b> American Seating Co. . . . .	4, 5	<b>PLUMBING EQUIPMENT</b> Cordley & Hayes . . . . .	10
Knoll Associates, Inc. . . . .	21	Delta Faucet Company . . . . .	96
<b>HARDWARE</b> P. & F. Corbin Div., Emhart Corp. . . . .	15	Haws Drinking Faucet Company . . . . .	18
Norton Door Closer Div., Eaton Yale & Towne, Inc. . . . .	Cover IV	The Halsey W. Taylor Company . . . . .	108
Russwin Div., Emhart Corp. . . . .	26	<b>ROOFING/SIDING</b> Johns-Manville Corporation . . . . .	101
Sargent & Co. . . . .	Cover II	Elwin G. Smith & Co., Inc. . . . .	23
<b>HEATING/VENTILATING/ AIR CONDITIONING</b> Dunham-Bush, Inc., Space Conditioning Div. . . . .	9	<b>STRUCTURAL</b> Aberthaw Construction Co. (Cabot, Cabot & Forbes) . . . . .	16
Electric Heating Association . . . . .	19, 20	Fenestra, Inc. . . . .	17
York Division Borg-Warner Corp. . . . .	102, 103	United States Gypsum Co. . . . .	107
<b>INSULATION/ACOUSTICAL</b> National Gypsum Co. . . . .	24, 25	<b>WALLS/CELANGS/ PARTITIONS/MATERIALS</b> Formica Corp. . . . .	100
<b>KITCHEN EQUIPMENT</b> Bally Case & Cooler Co., Inc. . . . .	92	Glaverbel . . . . .	91
<b>LIGHTING FIXTURES/EQUIPMENT</b> Rohm & Haas . . . . .	8	Pilkington Brothers, Ltd. . . . .	106
Stonco Electric Products Co. . . . .	112	<b>PROFESSIONAL MATERIALS &amp; SERVICES</b> M.I.T. Press . . . . .	112

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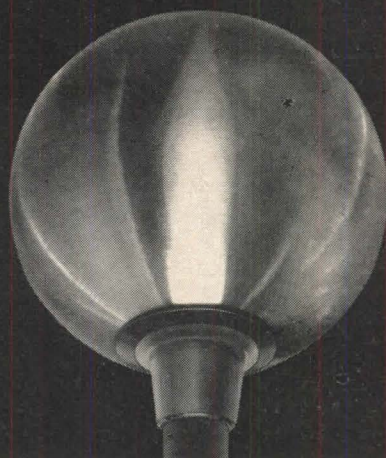
A comparative method for studying the urban environment is attempted in this book, whereby the total environment is successively scaled down to smaller and smaller segments, so that at each stage the segment under study is already placed in its larger physical and social context. Sixteen localities (eight each in North and South America) are examined in a consistent fashion, allowing for multiple cross comparison.

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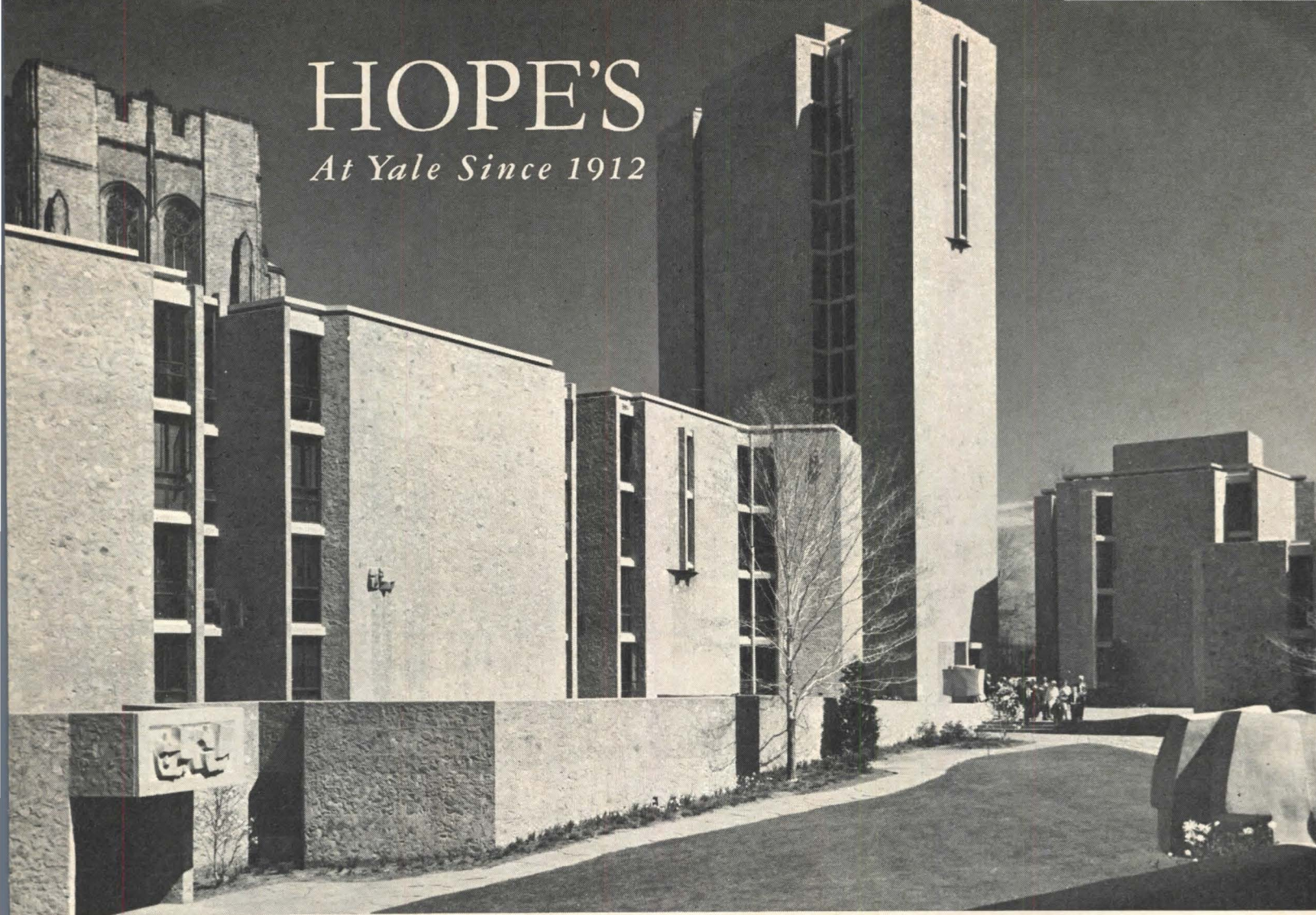


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| 1913 St. Anthony's Hall<br><i>Architect: Charles Haight</i>   | 1952 Art Gallery & Design Laboratory<br><i>Architects: Douglas Orr and L. I. Kahn, Associates</i>                       |
| 1923 Sterling Chemistry Laboratory<br><i>Architects: Delano &amp; Aldrich</i>   | 1952 Accelerator Laboratories<br><i>Architects: Saarinen &amp; Saarinen, Douglas Orr, Assoc. Architect</i>              |
| 1924 School of Medicine<br><i>Architects: Day &amp; Klauder</i>   | 1954 Edw. S. Harkness Memorial Hall<br><i>Douglas Orr, Architect, Gugler, Kimball &amp; Husted, Assoc. Architects</i>   |
| 1924 School of Forestry<br><i>Architects: Delano &amp; Aldrich</i>  | 1955 Josiah Willard Gibbs Labs.<br><i>Architects: Douglas Orr and Paul Schweiker, Associated Architects</i>             |
| 1928 Yale Record Building<br><i>Architect: Lorenzo Hamilton</i>   | 1957 University Theatre Library<br><i>Architects: Davis Cochran &amp; Miller</i>  |
| 1930 School of Medicine<br><i>Architect: Henry C. Pelton</i>  | 1957 Helen Hadley Hall<br><i>Architect: Douglas Orr</i>   |
| 1931 Sheffield-Sterling-Strathcona Hall<br><i>Architects: Zantzinger, Borie and Medary</i>  | 1960 Mansfield St. Apartments<br><i>Architect: Paul Rudolph</i>   |
| 1932 Payne Whitney Gymnasium<br><i>Architects: Office of John Russell Pope — Otto R. Eggers &amp; Daniel T. Higgins, Associates</i> | 1962 School of Art and Architecture<br><i>Architect: Paul Rudolph</i>   |
| 1932 Library & York Dormitories<br><i>Architect: James Gamble Rogers</i>  | 1963 Kline Geology Laboratory<br><i>Architect: Philip Johnson, Assoc.</i>   |
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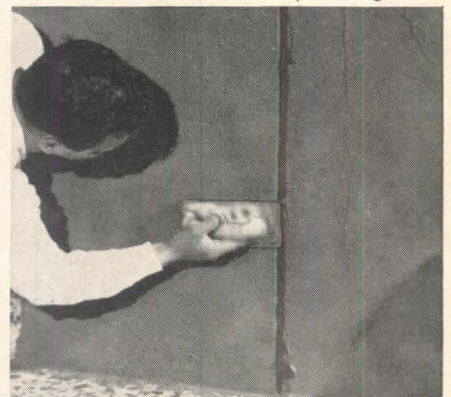
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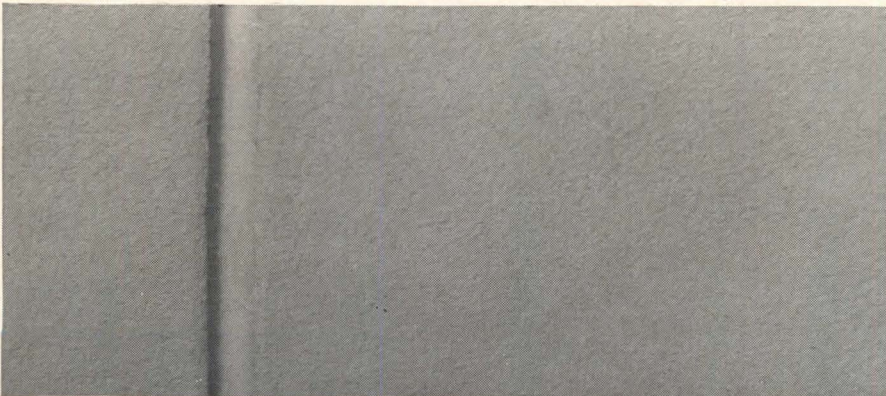
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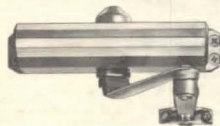


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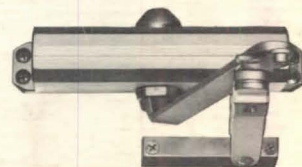
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