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**The National Center for Atmospheric Research** (left) in Boulder, Colo. was designed by I. M. Pei to harmonize with the mesa top site and the sandstone Flatirons which mark the end of the Great Plains and the beginning of the Rockies. Three Dover Geared Electric Traction Elevators were chosen for this building which has been called "entirely appropriate to its site and to its purpose." Architects: I. M. Pei & Partners, New York City; General Contractor: Martin K. Eby Construction Company, Inc., Englewood, Colo. Dover Elevators installed by Dover Elevator Co., Denver, Colo.

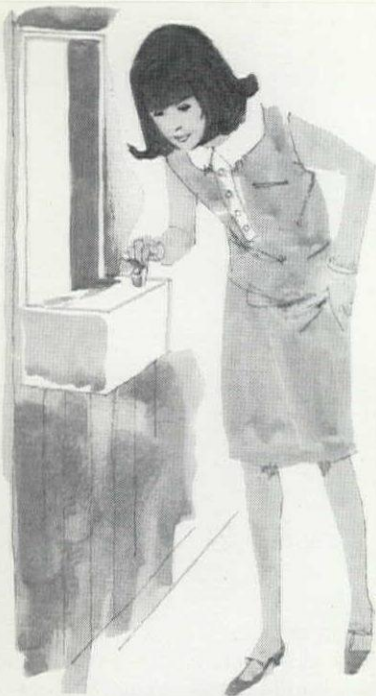
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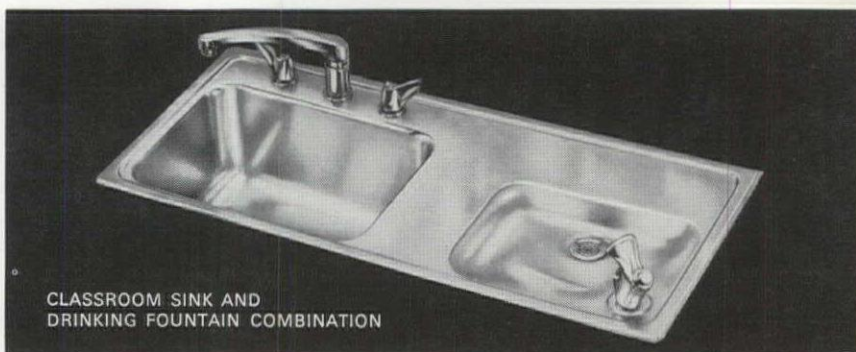
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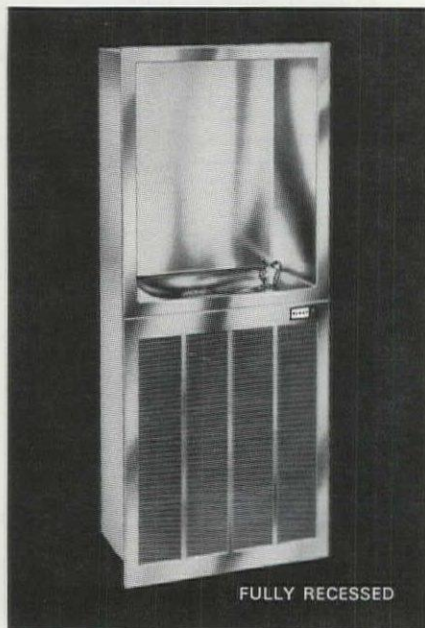




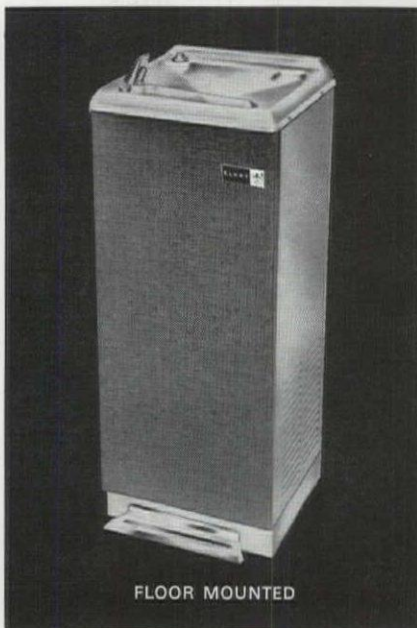
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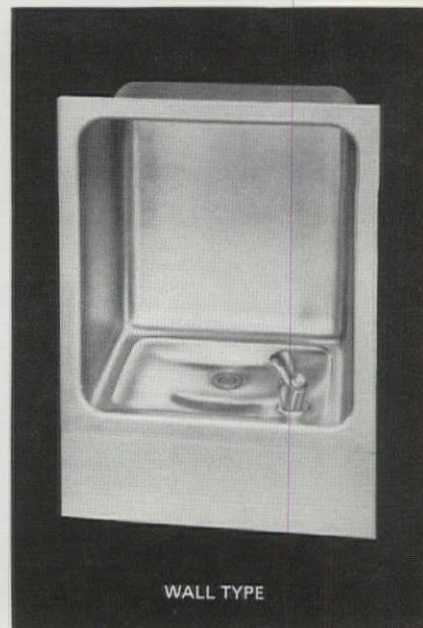
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VOL. XLIX, NO. 4

## Comment & Opinion

**All About Housing:** "We are accused as a profession of having no interest in the single-family housing field. We have almost completely negated any relationship with the homebuilding industry in the last five years. We get a national group together, sit around and talk, but at the end of the day we part, feeling there is nothing we can do."

As every practitioner knows, such indictments are commonplace, but the one just quoted happens to come from the president of The American Institute of Architects. Robert L. Durham, FAIA, made that statement during the Airlie House conference on the future of the profession, the subject of last month's cover article in the AIA JOURNAL.

And to further emphasize his point, the AIA president added: "I realize we have really lost our influence when I fly across the country and see what has been built with no relation whatever to the architect."

A bleak picture, indeed, but all is not lost. Just as President Johnson was delivering his message on housing and cities, the Institute was formulating its own goals, which lead off a special eight-page section entitled "The Architect and Housing" in this issue.

There are those who will take exception to the AIA statement, as developed by the Committee on Housing, pointing out that it does not deal with specifics and that the profession is admitting it is 30 years behind the times—and both of these charges are true.

But the fact remains that the statement represents the most inclusive position on housing taken

by the AIA to date and touches on several aspects that have broad social implications. What it does is offer a framework within which the profession can operate; and the specifics, it is hoped, will logically follow, as evidenced by the testimony being presented by the Institute on Capitol Hill. Two citations from the presentation by First Vice President George E. Kassabaum, FAIA, will suffice.

Referring to the present negative standards in the housing-law language that calls for construction "not of elaborate or extravagant design," the AIA proposed that this phrase be substituted with a positive standard, calling for a *design process which will contribute to the general betterment of living consistent with prudent budgeting.*

Regarding the field of low- and moderate-rent housing, Kassabaum told the hearing:

"I am here to inform you that the architectural profession considers it an obligation to render total assistance to achieving the President's goal. This means that we

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### Cover

An artist's composite interpretation of HemisFair '68, a blend of the old and new.



will provide architectural services individually or through neighborhood design centers to anyone needing design advice. If the client can pay a fee, he will be expected to; but if he cannot, he will still be served if it is physically possible."

Meanwhile, there are positive signs of real architectural involvement in the total housing picture across the land, and the JOURNAL intends to report some of the significant activities in the months ahead.

For example, Paul Rudolph, FAIA, Harry Weese, FAIA, and Moshe Safdie of Habitat '67 fame each will design a demonstration project for a total of 100 homes for the elderly, 175 moderate-income homes and 125 low-rent units on the National Training School site in Washington, D. C.

The three well-known designers "will not only try new construction methods but also put technology into the context of good architecture," in the words of Director Thomas Appleby of the sponsoring Redevelopment Land Agency.

President Durham has on more than one occasion suggested that the profession become involved in "house calls." It is interesting, therefore, to read a newspaper account of a variation of that idea in his hometown of Seattle where local architects and University of Washington students are providing advice on home-improvement projects for central-area residents.

At the once-a-week meetings, projects which can be sketched out on a pad are talked through without charge, while those requiring detailed drawings are referred to a list of architects. Even though the activity has not been advertised up to this point, the architects' group has encountered as many as five projects a night, running the gamut from how to repair a shaky back porch to how to obtain a building permit.

In a much older program that has met with considerable success, the New York Chapter AIA maintains a House Consulting Committee whose members are available on an hourly basis for any phase of a residential problem. Its services are spelled out in a pocket-sized brochure, which lists the members of the consulting panel.

While architects have a long way to go in making up for lost time as far as the housing gap is concerned, it appears they have at least awakened to their professional obligations—and that in itself is a heartening sign. ROBERT E. KOEHLER

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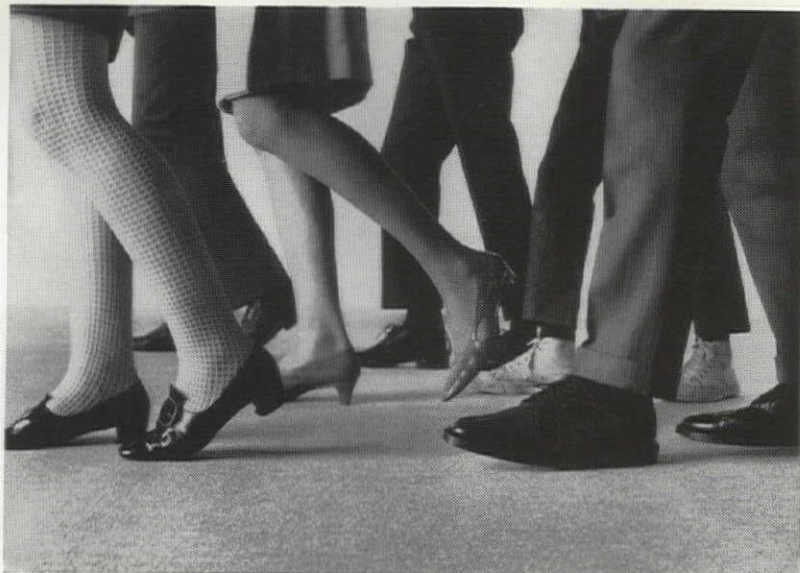
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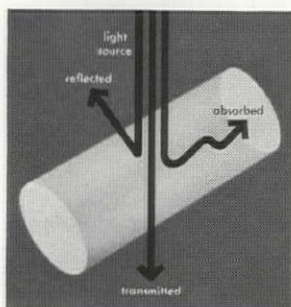
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# Newslines

## Proposed Research Would Delineate Responsibilities In Construction Industry

It might be expected that a complex industry—complex in both its processes and products—would be spared needless confusion. For the building industry, this is far from the case.

The industry for several decades has been undergoing fundamental change without a concurrent development of a logical, cohesive body of law.

So argues Robert G. Cerny, FAIA, who proposes a remedy that would require some 10 years to carry out and as much as \$5 million to finance.

Cerny would have all segments of the building industry join in a long-range research study aimed at

ponents of the industry would negotiate among themselves as to what responsibilities each should accept. In the second, the delineated responsibilities would be submitted to a legal research group for feasibility determinations.

The objective is not to favor or protect any component of the industry, Cerny emphasizes, "but to define responsibilities so that we can live with them."

**A Warning Is Sounded:** In a recent speech before the National Construction Group of the National Association of Credit Management, the Minneapolis architect warned that some banks, deeply concerned with the erosion of responsibility in construction, are considering an embargo on loans to this sector of the economy.

One major source of trouble is getting payments "down the pipeline" to the various subcontractors and material dealers, Cerny told the National Construction Group gathering in Cincinnati.

Delays in payment result in large sums lost through interest charges and at times make it necessary to throw the contractor into receivership, calling on the surety, if there is one, to complete the work, Cerny said. This, he pointed out, balloons the cost to everyone connected with the project.

The research study Cerny advocates would seek first to establish the ideal way in which the industry groups should operate, followed by a restructuring of the rights and duties required by law, revision of industry documents, etc. (General article on document revisions will appear in next month's AIA JOURNAL.)

In the legal study group he would include such personnel as a representative of the US Department of Justice, counsel to the General Services Administration, several eminent jurists grounded in the building law, and a research faculty that would examine existing law and precedent.

**Contributions Are Sought:** Cerny urged members of the National Construction Group to consider contributing \$2,000 each for each of the 10 years of the project. He is also in the process of asking the financial participation of engineers, subcontractor specialty groups, finance companies, banks, sureties and insurance companies.

The AIA Board of Directors has indicated strong interest in the proposal and has authorized Cerny to use the Institute's name in soliciting support and funds for the project.

More than half of the 70 National Construction Group members present for the Cerny talk indicated interest in the project. They include such firms as Honeywell Inc., Otis Elevator and Aluminum Company of America.

Some companies are losing as much as \$200,000 yearly in interest on unpaid bills, it was said.

Cerny said his own firm, Cerny Associates, Inc., spends up to \$30,000 a year just to see that the necessary work is done and that precautions are taken for the protection of the owner.

"Architects, contractors and manufacturers can only benefit, in the final analysis, by a legal and fair division of responsibility," Cerny said in advocating the research.

### AN INVITATION

Since it is the owner who, in the end, pays, the construction industry "should be morally committed to keeping the cost of our collective liability at the lowest point commensurate with our social and community obligations. We can best do this, I am convinced, by ceasing to argue among ourselves and by beginning to cooperate to create industry unity on the liability problem."

This was the challenge laid down by Institute President Robert L. Durham, FAIA, at last month's annual convention of the American Concrete Institute. The AIA has begun a task force study of changing industry legal relationships, Durham pointed out. He invited others in the construction industry to join with the AIA in the study.

determining which responsibilities fall logically to whom.

While the research envisaged is long-term, Cerny believes initial benefits would start to accrue by the end of the project's first year. His concept has already won substantial interest from at least one industry segment.

The study would divide essentially into two phases, as Cerny sees it. In the first, various com-

### GRA DATES CLARIFIED

The National Conference on Religious Architecture will be held April 29-May 3 at the Statler Hilton Plaza in Miami Beach. The Guild for Religious Architecture, with an assist from several other organizations, sponsors the annual conference, which will be followed by a May 3-6 seminar in Puerto Rico at the San Jeronimo Hotel. Dates circulated earlier were based on erroneous information.

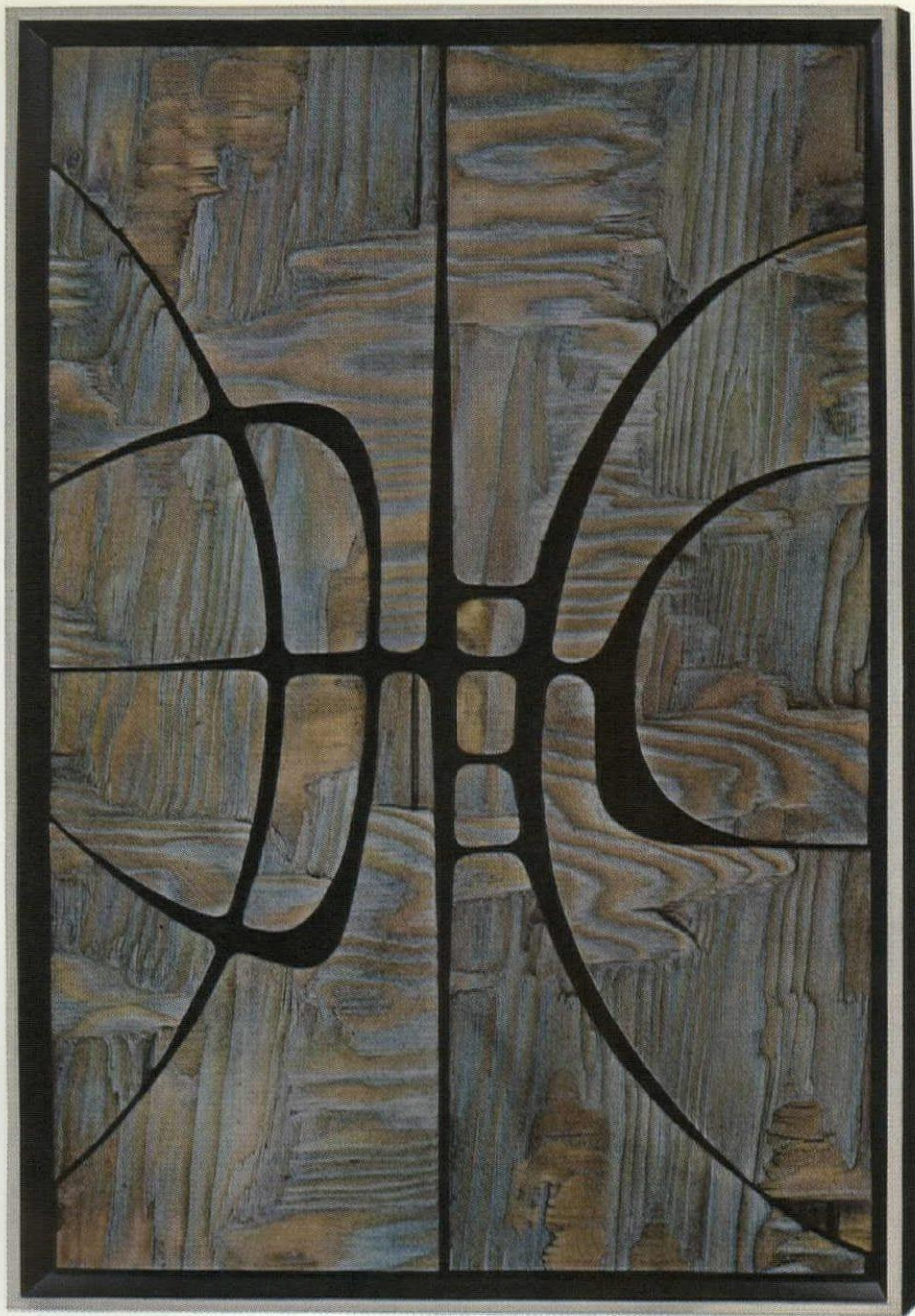
## Barbara Ward to Address AIA's June Convention; Nine Workshops Planned

Miss Barbara Ward, one of England's best-read writers and a commentator of international influence, will deliver the Purves Memorial Lecture at the 1968 convention of The American Institute of Architects.

One of Miss Ward's current concerns is the growing gap between the rich and poor nations. "When the United States economy can grow in one year by the equivalent

*Continued on page 12*





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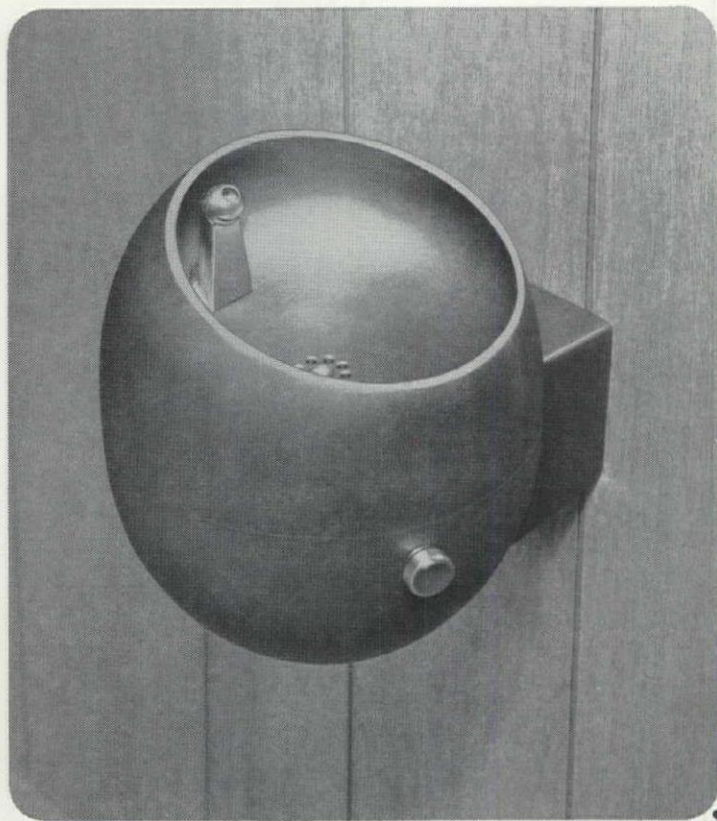
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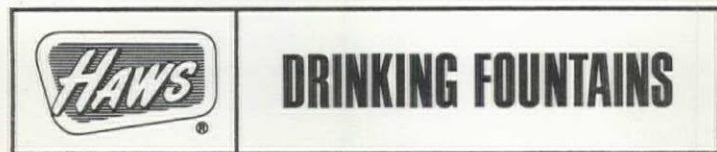




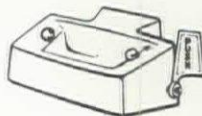
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of the entire national income of Latin America, then something has to be changed," she has said.

"I'm appalled to see the foreign aid figures falling when incomes are all going up. I'm really appalled at what I would call a 'weariness in well-doing.'"

Miss Ward, well turned out but notably unaffected in demeanor, is said to be as much at home on the faculties of distinguished universities as among the working groups of England.

A former foreign affairs editor of *The Economist* of London, she has written numerous articles and books, including, among the latter, *The Rich Nations and the Poor Nations*, from which President Johnson in some of his speeches has quoted.

The lecture will be delivered in Portland, Ore., in the first two-city convention in the 111-year history of the Institute. From Portland, June 23-26, convention proceedings shift to Honolulu, June 27-29.

The "Man/Architecture/Nature" theme will be covered by two sessions ("Man/Nature") and nine workshops ("Architecture").

Portland will host the theme sessions and seven of the nine workshops covering: how to compete with the package deal; automation in the drafting room; design for preservation; the federal government—client and partner; how to set up a design concept team; the community's right to quality design; planning for profit (the foregoing in Portland); architecture for leisure and recreation; and a second workshop on planning for profit (the latter two in Honolulu).

Miss Ward is a speaker of unusual abilities. She is widely known



not only through her writings and lectures but through television presentations, among which was an appearance on "Meet the Press." She has traveled all over Europe

*Continued on page 17*

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and America and spends considerable time in Africa.

In 1967 she was appointed by Pope Paul VI as a member of the Holy See's Commission on Justice and Peace. Recently she was named Albert Schweitzer Professor of International Economic Development at Columbia University. The \$100,000-a-year seat is one of five created by the New York Legislature to attract outstanding scholars to the state's private and public universities.

In private life Miss Ward is Lady Jackson, wife of Sir Robert Jackson, senior consultant to the United Nations Development Program.

### Draft Cutting Supply of Architectural Grads

The supply of recent architectural school graduates to the nation's architectural firms is dipping and will continue to dwindle.

Administration draft policies have the Selective Service Boards taking the oldest first from the age 19-25 draft pool.

In July, older members of the pool in the first year of graduate programs will for the first time become subject to induction.

Indeed, for the year beginning that month between one-half and two-thirds of the inductees will be college graduates or graduate students, the Scientific Manpower Commission says.

The Council of Graduate Schools in the United States interprets this to imply a paring by at least 40 percent in the number of students in the first and second years of graduate programs.

This year's crop of architectural graduates is expected, with the inclusion of the graduate schools' output, to number around 3,000. Most will be able-bodied and male.

### DOT to Get HUD's Role In Urban Transportation

President Johnson might have paraphrased Winston Churchill: "We shape our transportation systems and these then shape our cities," he *could* have said.

But the President, in sending to Congress his urban mass transit re-

organization plan, instead noted that never before have urbanites "faced a clearer choice concerning urban transportation — shall it dominate and restrict enjoyment of all the values of urban living, or shall it be shaped to bring convenience and efficiency to all the citizens in our urban areas."

The plan will go into effect within weeks unless either House of Congress votes disapproval. It would transfer most of the \$190 million urban mass transit program from the Department of Housing and Urban Development to the Department of Transportation.

The President stressed that HUD's overall responsibilities in urban transportation will be undiminished. DOT, however, will set policy and exert the leadership.

If transportation planning is viewed in its larger, form-giving significance, assignment of the federal program to a movement-oriented agency might at first glance seem unfortunate.

But DOT Secretary Alan S. Boyd has shown determined resolve in defending the principle of balanced movement systems. He has

*Continued on page 20*

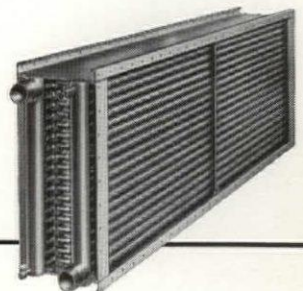


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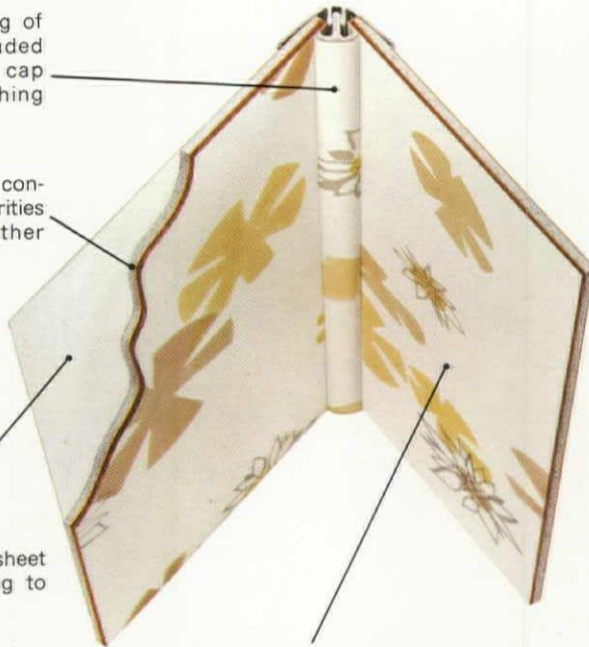


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Surface of Formica laminate . . . maintenance-free; won't chip, crack, discolor; wipes clean with damp cloth.



Panel System 202 installs easily over almost *any* structurally sound surface including ceramic tile. Smooth, seamless panels up to five feet wide. And it's virtually maintenance-free: a wipe of a damp cloth is *all* the cleaning necessary.

Panel System 202 is a totally new concept that lets you create design effects never before possible. It is a *complete system* that includes panels, trim molding and adhesive. Ideal for use wherever water and wear create a problem . . . showers, restrooms, and kitchens. And it's superior to tile in many ways: Panel System 202 can't chip, crumble or crack . . . doesn't have a grain of grout to loosen or get dirty.



# Leadership



# -proof wall

FORMICA® brand Panel System 202 for the paneled look



In this restroom Teak 417 is used for Panel System 202 walls, vanity base and toilet compartment doors. Unique Starflower Gold, 145 accents this feature wall. The full 202 line includes 18 patterns, marbles and woodgrains. Here's color and pattern versatility that lets you create the "total look" of coordinated design.

Write today for free literature on FORMICA® brand Panel System 202. Or consult Sweet's File, 11a/Fo.

There are other brands of  
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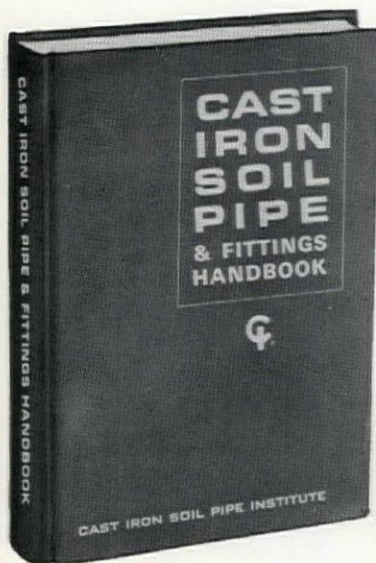
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Circle 282 on information card

Newslines from page 17

shown this in a rail/freeway dispute in Washington, D. C.—a dispute viewed by at least one observer as prototypical for the nation—and has won the festering resentment of powerful political, highway and industrial figures.

Weaver, on the other hand, has been less vigorous.

Moreover, the concentration of highway and rail planning within DOT should yield immediate advantages over the present stagnation of interdepartmental bickering and jealousy.

"The large future cost of transportation facilities and services to the federal government, the state and local governments, and to the transportation industry makes wise investment and efficient transportation systems essential," Mr. Johnson said.

### Three Win First Honors In Transit Design Program

Three top honors have been given in the first urban transit design awards program of the Department of Housing and Urban Development. Cited by a jury for "outstanding excellence in the design

of transportation systems and components" were:

- The San Francisco Bay Area Transit District: For "comprehensive design of a total system," the jury said, crediting the 75-mile system for "good design in all aspects of system planning and development."

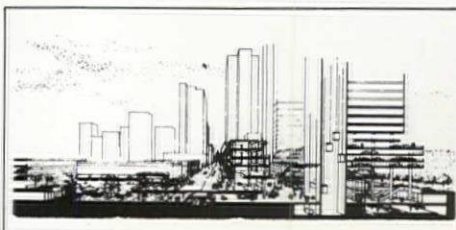
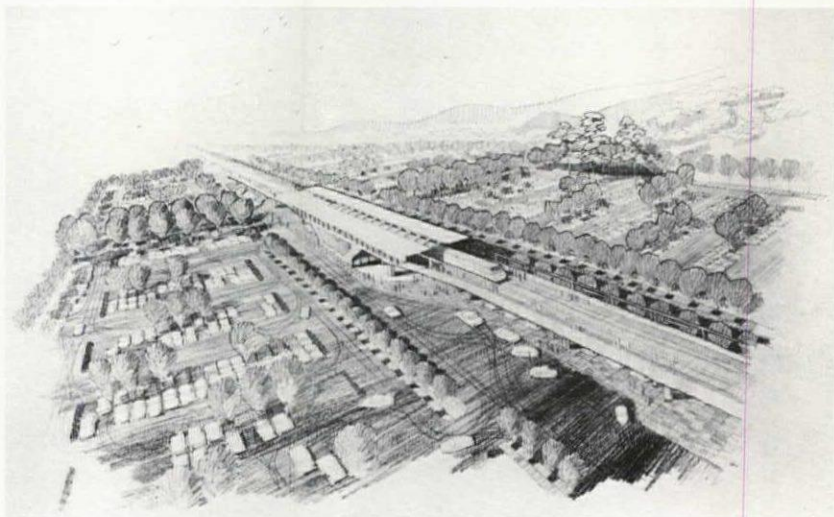
- The City Planning Commission of Philadelphia: For design of the Market East Transportation Center which, the jury stated, "provides an attractive setting for the many regional transportation forces that move passengers to downtown destinations."

- The Massachusetts Bay Transportation Authority in Boston: For excellence "in the comprehensive design of a redeveloped system." The MBTA emphasized passenger orientation in its redevelopment and expansion by the use of graphics, open space and easy access to information points, said the jury.

Merit awards went to Metropolitan Seattle and City of Seattle for a comprehensive system plan concept; Washington State Highway Commission for the Washington State Ferries; the City of Seattle for station design concepts; Metropolitan Atlanta Rapid Transit Authority for its rapid transit system

*Continued on page 22*

El Cerrito Del Norte Station in San Francisco, architects DeMars & Wells, singled out for special mention in the award to the overall BART design; bottom, Philadelphia's Market East Transportation Center concept, Skidmore, Owings & Merrill; and right, Arlington Street Station in Boston, architects Cambridge Seven Associates, Inc., part of 40-station remodeling program.





**AN ARCHITECT LOOKS AT TERNE:** Percival Goodman, one of the foremost living designers of ecclesiastical buildings, has this to say of the eighty thousand square feet of Terne metal roofing recently installed on Shaarey Zedek, the world's largest synagogue: "To be entirely frank, we had originally wanted to use a considerably more expensive material than Follansbee Terne. Now that the latter is in place, however, we are satisfied that no better choice could have been made. Terne not only afforded the widest possible latitude in form and color along with time-tested functional integrity, but it did all this at a figure well below preliminary estimates for a metal roof."



Congregation of Shaarey Zedek, Southfield (Detroit), Michigan  
Architects & Engineers: Albert Kahn Associated Architects & Engineers, Inc., Detroit, Michigan  
Associated Architect: Percival Goodman, F.A.I.A., New York, New York  
Roofing Contractor: Firebaugh & Reynolds Roofing Company, Detroit, Michigan

*Follansbee is the world's pioneer producer of seamless terne roofing*



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Follansbee, West Virginia



plan concept; Southern California Rapid Transit District for the La Brea Station concept; the Metropolitan Commuter Transportation Authority of the Long Island Railroad for its multiple-unit car; the City of Philadelphia Department of Public Property for the 15th and Market Streets subway station; and the Port Authority of Allegheny County, Pittsburgh, for its rapid transit distributor system concept and its transit vehicle.

Members of the jury were Kevin Roche, AIA; Ralph Warburton, AIA; industrial designer Henry Dreyfuss; Rutgers sociology professor Robert Gutman; engineer Lee E. Ham; and landscape architect-planner Robert M. O'Donnell.

### Despite Enlightened Plan, Seattle Mayor Has to Tell Transit Meet of Failure

"I had hoped that when I spoke to you today I could report that Seattle area voters had overwhelmingly approved a rapid transit bond issue to the tune of \$385 million."

That Mayor J. D. Braman of Seattle could not so report was not the failure of the transit proposal's ability to attract majority support, but its failure to attract more than 60 percent of the votes as required by state statute on a ballot money issue.

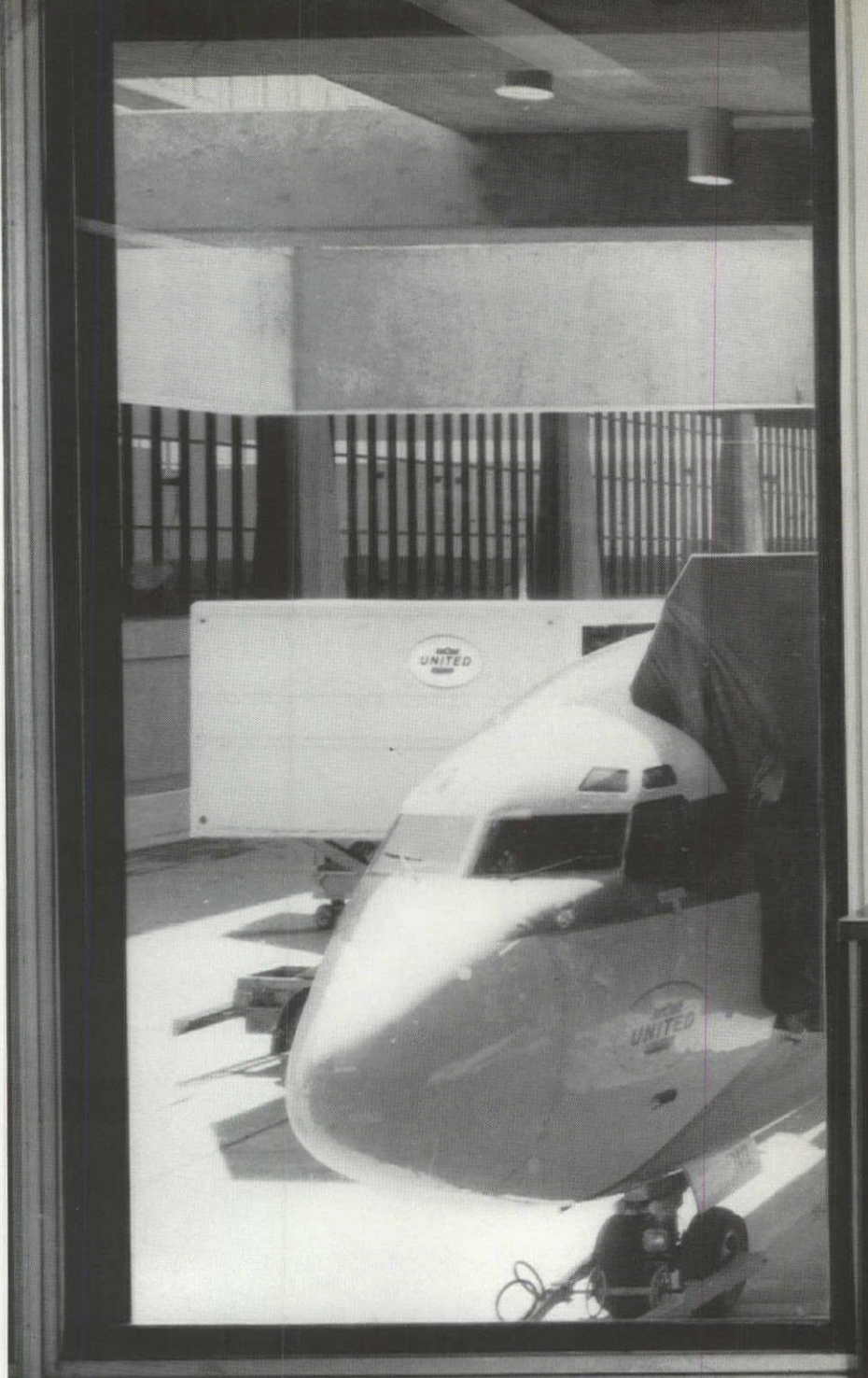
So Seattle's 45-mile rail system is, at least, delayed. Said Braman in his report to the Third International Conference on Urban Transportation, held last month in Pittsburgh:

"All we can say now is that we intend to try again soon, for we are unalterably convinced that an integrated transportation system, using all modes in proper mix, is inevitable in Seattle as well as in most of the other cities of the nation."

The Seattle scheme is not only integrated in terms of mode mix but also in its form-giving and esthetic experience aspects. On the latter score, alignment selection was influenced by vista consideration and visual variety.

"The question was not to just use transportation as a means to move people about in an unplanned environment but to use it as a tool with which to reshape the community to ensure a higher quality of urban life for all its citizens," the mayor said.

*Continued on page 26*



## Door control...



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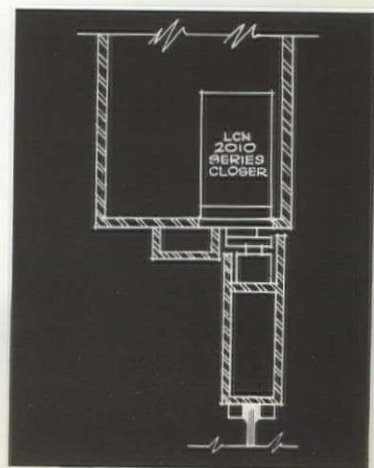


## now you see it, now you don't

Next time you go through the Detroit Airport terminal building take a look at the LCN overhead concealed door closers that are shown in the photo. It's a good, sound installation that gets a lot of hard use—and very little attention. The way LCN planned it.

In the photograph both doors have LCN 2010 Series Closers with mechanisms completely concealed in the head frame. When the door is closed (note left hand door) everything is out of sight. The closer arm only becomes visible when the door is opened. This concealment permits a better looking door without the slightest sacrifice of the complete control for which LCN is noted.

The 2010 is but one of a large number of LCN Closers described in an easy to use new 16 page catalog. May we send you one.





# Ready to talk Electric Heat? Talk to an Electrical Contractor.

One reason: the qualified electrical contractor has plenty of experience with electrical heating systems. But that's only part of the story. Electric heat is an electric function and should be the responsibility of an electrical contractor. He's the one man who can furnish, install, connect and inspect electric heating equipment—and see the job all the way through

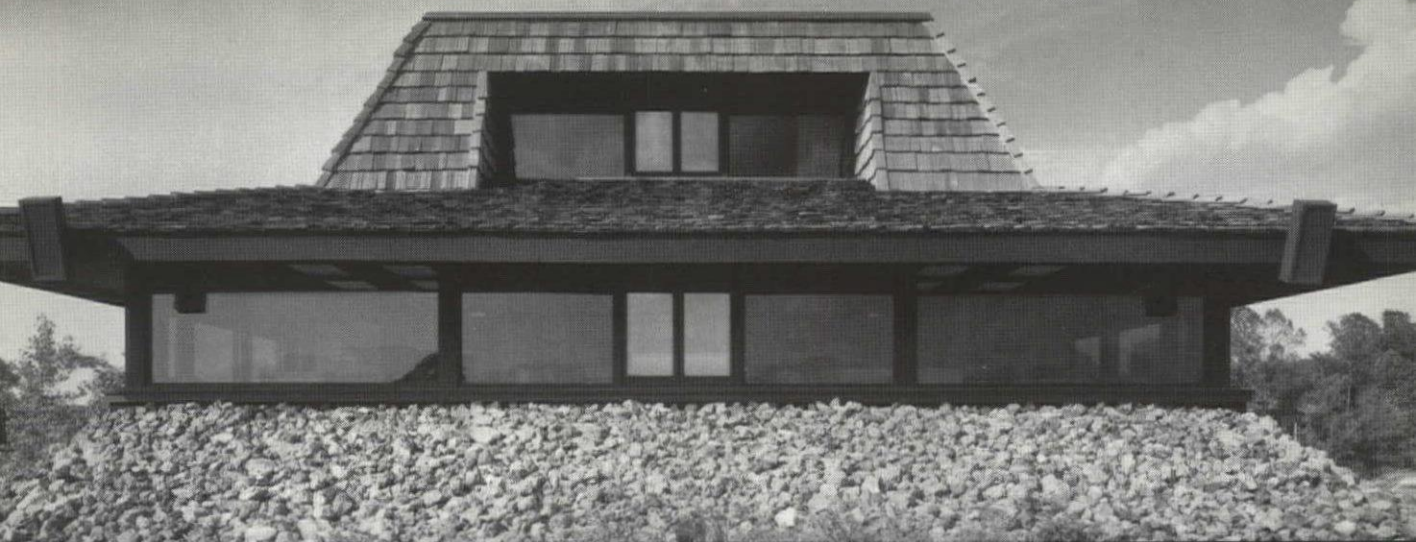
from plans to permit to operating guarantee. So talk to a qualified electrical contractor. Then put the heating specs into the electrical section of your building plan. That way your electric heating system will be furnished and installed by the man able to take single responsibility for the single best heating system.

## Your Qualified Electrical Contractor

NECA—National Electrical Contractors Association, 1730 Rhode Island Ave., N.W., Washington, D.C. 20036

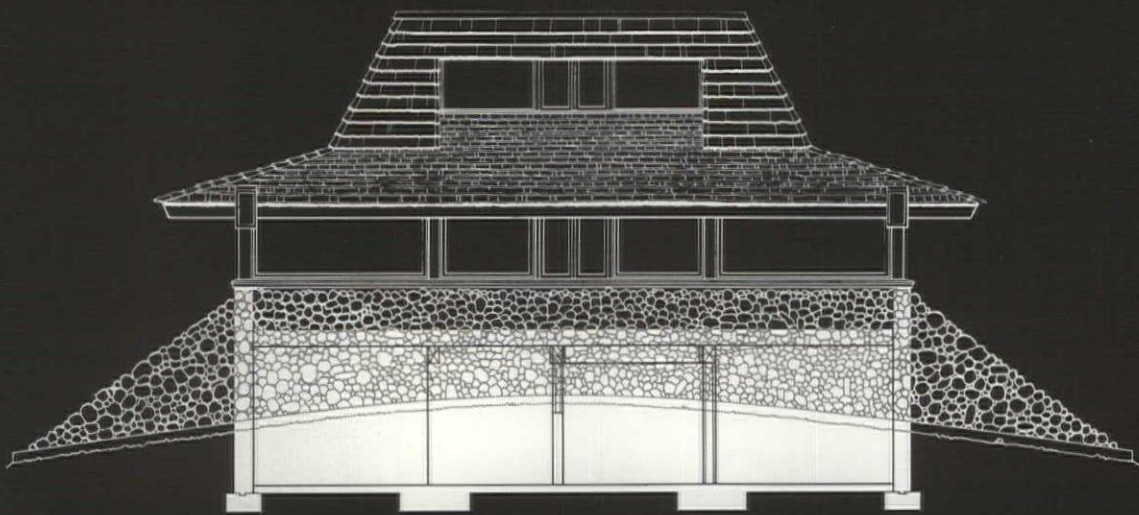






**This is an architect's office.  
Three stories of stone, glass and red cedar.**

**Three stories?**



*Architects' office: Collinsville, Illinois Architects: Architectural Associates Incorporated  
Certi-Split, Handsplit shakes, 24" x 1-1/4" to 3/4" with 10" exposure.*

When Architectural Associates, Inc., designed their new offices in Collinsville, Illinois, their objective was twofold: naturally they wanted their offices to reflect their ability and good taste, but also they needed a maximum amount of floor space—immediately and to provide for future growth.

The solution is a structure that manages to look like a two-story building yet actually has three functional levels. The

third, housing the firm's conference room, printing and storage area, kitchen, future drafting area and rest rooms, is completely hidden by what appears to be a stone foundation. This stone fill, combined with the structure's broad, distinctive, hand-split cedar roof, gives the low, contemporary feel the firm was after.

In addition to its design function, the red cedar shake roof adds the desired extra dimensions

of pattern and rich natural color plus the practicality of more than adequate protection and insulation.

Perhaps red cedar Certi-Split shakes or Certigrade shingles can help provide part of the answer to your next design problem, too. Why not find out? For details, see our Sweet's Catalog listing 21d/Re, call or write: 5510 White Bldg., Seattle, Wn. 98101. (In Canada: 1477 W. Pender St., Vancouver 5, B.C.)



Circle 259 on information card

**Red Cedar Shingle & Handsplit Shake Bureau**



**Beaten But Not Defeated:** Bra-  
man appeared disappointed but  
hardly disheartened. "The revolu-  
tion in urban transportation is just  
beginning," he said. And just possi-  
bly, he added, this revolution  
"may enable the cities of the 21st  
century to once again support hu-  
man life."

There was something ironic  
about the referendum defeat in  
Seattle. Indeed there was some-  
thing ironic about a number of re-  
ports and occurrences at the Pitts-  
burgh conference. For one thing,

many a conference speaker—with  
one most notable exception, Trans-  
portation Secretary Alan S. Boyd  
—seemed to view transportation  
as mere movement.

And yet there was this mayor,  
defeated in referendum, telling the  
conference that "as we investi-  
gated the possibilities and the fea-  
sibilities of rapid transit, there  
appeared a more important appli-  
cation for transportation in the  
total environmental and social  
pattern."

Boyd gave the conference the  
benefit of some of his thinking:  
"For the first time we are seeing

the so-called transportation crisis  
for what it really is—part and par-  
cel of the complex and chronic  
problems that affect all our cities."

### Bush-Brown New Adviser At HUD; Rockrise Leaves

Albert Bush-Brown, president of  
the Rhode Island School of Design,  
is the new design adviser to Sec-  
retary Robert C. Weaver of the De-  
partment of Housing and Urban  
Development.

Bush-Brown succeeds George T.  
Rockrise, FAIA, who resigned the  
post to devote full time to his  
architectural practice in San Fran-  
cisco.

He will serve on a consultant  
basis to "continue and expand" the  
program set up by Rockrise as the  
Secretary's first consultant, Weaver  
said.

The prominent design educator,  
an honorary member of the AIA,  
was graduated from Princeton Uni-  
versity where he later received  
Master of Fine Arts and Doctor of  
Philosophy degrees.

He is a member of the National  
Council on the Arts.

### Capital Chooses 'Metro' And 'M' for Rapid Transit

**M** "Metro" is the name,  
"M" is the symbol  
and Helvetica is the  
typeface for the rap-  
id rail system to  
serve the nation's capital and its  
Maryland and Virginia suburbs.

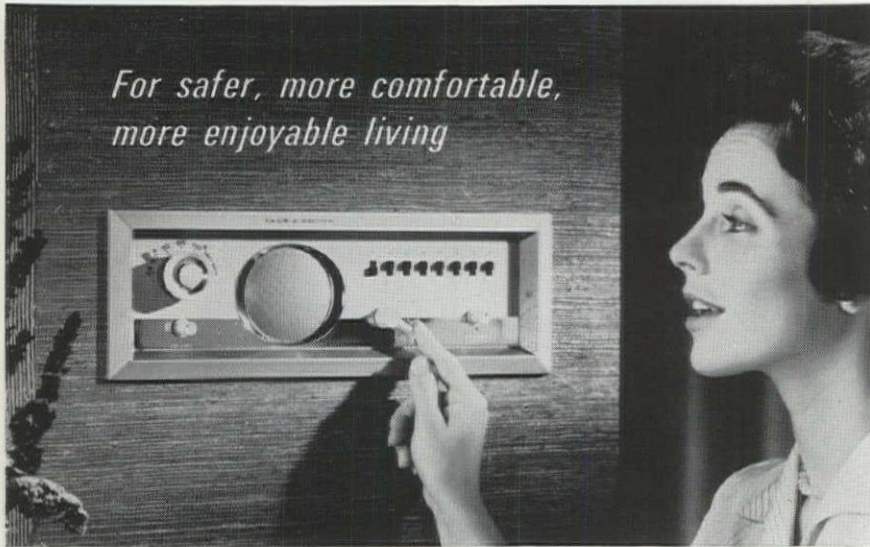
Widely used around the world,  
the term "Metro" will have its first  
application in the United States  
with the Washington area system.

It is a word, said the Washington  
Metropolitan Area Transit Author-  
ity—which came on strong with  
reasons for both the logo and type-  
face—used internationally and thus  
is "appropriate for the internation-  
al flavor of the nation's capital."

"M" is symmetrical about a ver-  
tical axis, WMATA said, and can  
be read from front or back, in sil-  
houette or at an angle, without con-  
fusion. It is also the strongest letter  
in the alphabet structurally in  
terms of its broad base and low  
center of gravity, the agency said.

Helvetica, the sanserif typeface  
similar to the London Under-  
ground's, is recognized as strong  
and highly legible, it was noted.

The well-framed reasons for  
*Continued on page 28*



## TALK-A-PHONE

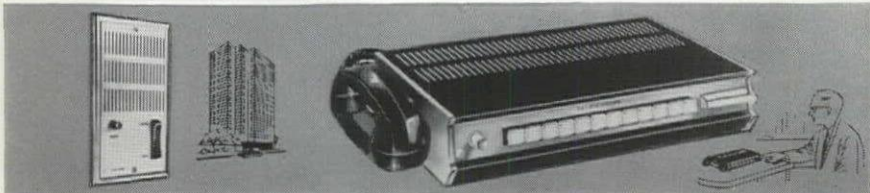
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**Intercom For Office and Industry.** Saves thousands of man-hours, simplifies office routine. Distinctively styled, ruggedly built to withstand continuous day and night use. From 2-station systems to elaborate installations, you can do it better and more economically with Talk-A-Phone. Pays for itself many times over.

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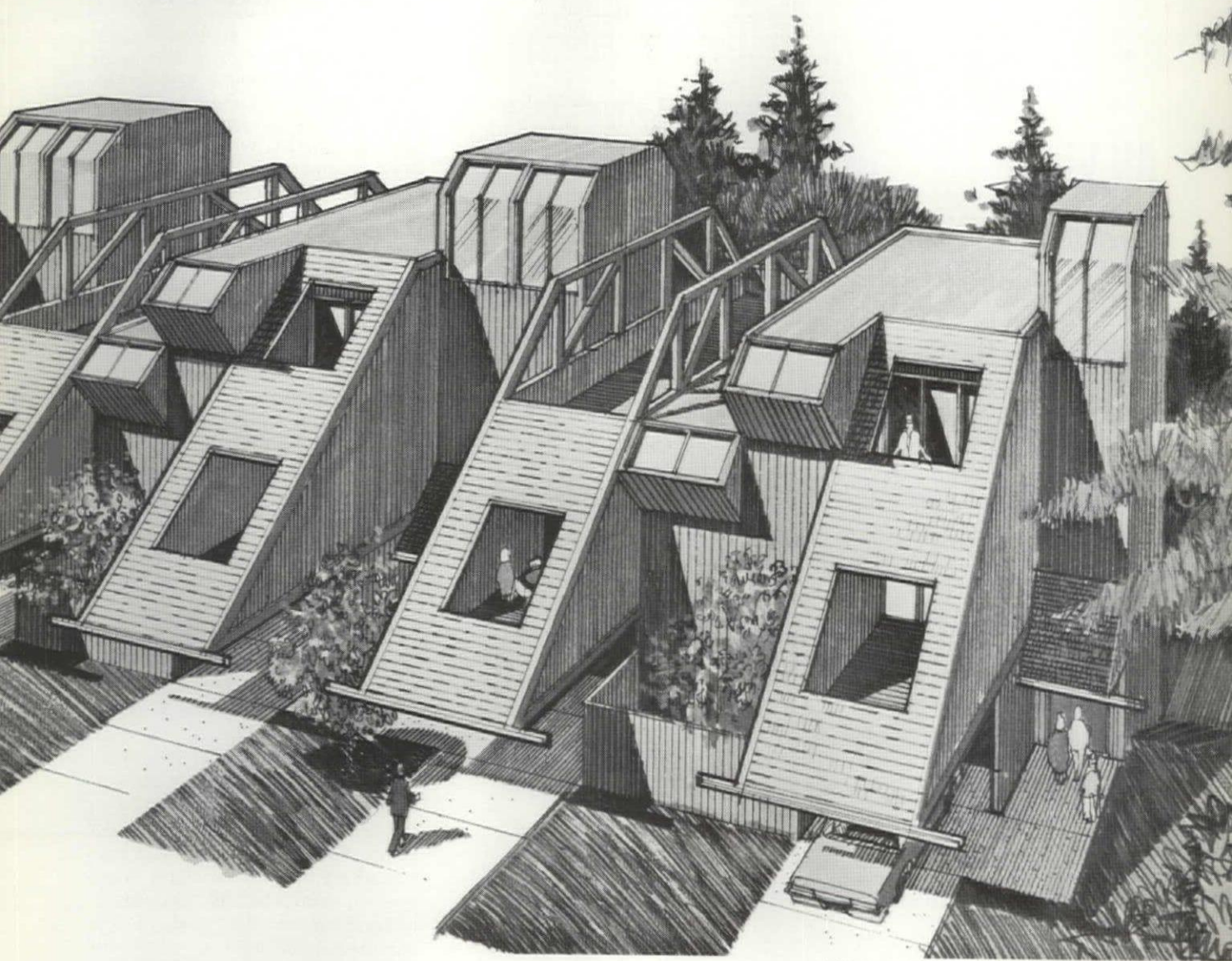
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Architects: Farnham • Peck • Associates / AIA

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product that's available anywhere in many grades and sizes.  
 Exciting ideas on multi-family dwellings are just part of the extensive Western Wood Urban Projection concept . . . a program conceived and sponsored by the Western Wood Products Association to help guide the natural growth, change and renewal that occurs in every community business district.  
 For more ideas, mail the coupon below for the new Western Wood booklet "Western Wood Multi-Family Structures . . . More Profitable by Design." Also, check the coupon for the Urban Projection booklet and information about a 20 minute full color 16 mm movie.

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Urban Projection Book

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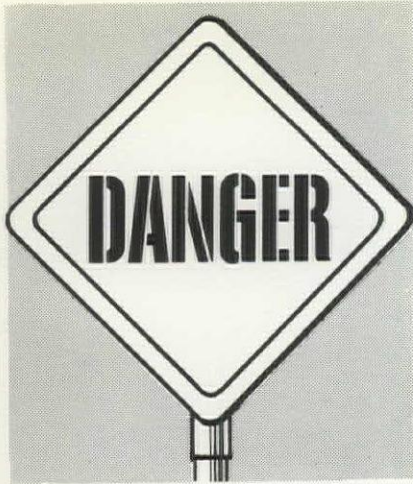
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Western Woods include knotty and clear grades of Douglas Fir, Ponderosa Pine, Western Red Cedar, Incense Cedar, Western Hemlock, White Fir, Engelmann Spruce, Western Larch, Lodgepole Pine, Idaho White Pine, and Sugar Pine.  
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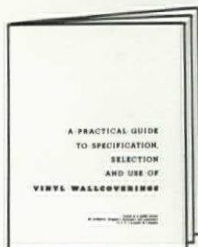
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**Newslines** from page 26

its selections suggested that the WMATA wanted to avoid any adverse reaction such as "BART" generated in some San Francisco circles. Boston, incidentally, recently adopted the "T" as its rapid transit letter designator.

WMATA is hoping to break ground in October. Initial operations are scheduled for 1972.

### **Inflatable Camper Takes Reynolds Student Prize**

The eighth annual Reynolds Aluminum Prize for Architectural Students has been won by two Virginia Polytechnic Institute fourth-year students for their inflatable camper design.

The winners are Charles R. Ansell and John W. Bradford. Their aluminum-impregnated plastic camper is as portable as a suitcase but inflates to an 8-foot-high, 12-foot wide dome with gas, produced by chemical reaction, filling a cellular shell.

The competition, administered by the AIA and sponsored by the Reynolds Metal Co., carries a \$5,000 prize for the "best original architectural design in which creative use of aluminum is an important contributing factor." The cash award is divided equally between the designers and their school.

The design includes an inflatable floor and a "living kit" with water



**Charles R. Ansell, right, and John W. Bradford, exhibit their camper model.**

tank, sink, propane gas light and heat, cooking plate, cleaning system and waste disposal system.

"This modest and witty design appropriately balances feasibility and fantasy in its technique," the AIA jury commented. "Its program is relevant to the growing outdoor and recreational needs of the country, and its form derives easily and elegantly from structure and use."

Jury members were chairman Robert Venturi, AIA, Philadelphia; Ralph Rapson, FAIA, head of the University of Minnesota's School of Architecture; and Evans Woolen, AIA, Indianapolis.

### **Yale Lock Fellowship Won By Open-Door Advocate**

An architectural student at Louisiana State University has won the first Eaton Yale & Towne Urban Design Fellowship, thanks in part to a paper advocating "the introduction of all influences" in urban design.

He is William B. Graham, 23, of Morgan City, La.

Graham, who is in his final year of study at LSU, was awarded the fellowship on the merit of his paper along with his achievement in academic studies and the potential he has shown in urban design.

"Education of the public" is a phrase often used to swing the public around to the urban designer's point of view," Graham wrote. And this viewpoint, he said, is too often based merely on intuition or misconceptions of reality.

Added Graham in his urban design paper, written during a one-hour supervised period:

"To deal with the problems of man in general, one must first begin with comprehensive education and mutual understanding and appreciation. Anything less is superficial and ineffectual.

"Urban design must therefore either develop a more comprehensive understanding of its role or relate its existing role to a more comprehensive structure. The realization of an ideal society, whatever it may be, is not to be understood as the goal of this comprehensive role or structure. No deductive goals are required.

"The problem-solving process must be understood as a continuing activity that allows for the introduction of all influences, not a limited, debilitating concern with only those aspects . . . that conform to preconceptions and intuitions."

The fellowship is sponsored by the Yale Lock and Hardware Division of Eaton Yale & Towne and is administered by the AIA. It provides a stipend of \$3,500 for one year of study in an approved graduate program of urban design, with an additional award of \$1,200 for a tour of foreign urban centers.

*Continued on page 38*

Circle 213 on information card



# These are the commanders.



They're the ones who gave Allied Chemical top command of commercial carpeting.



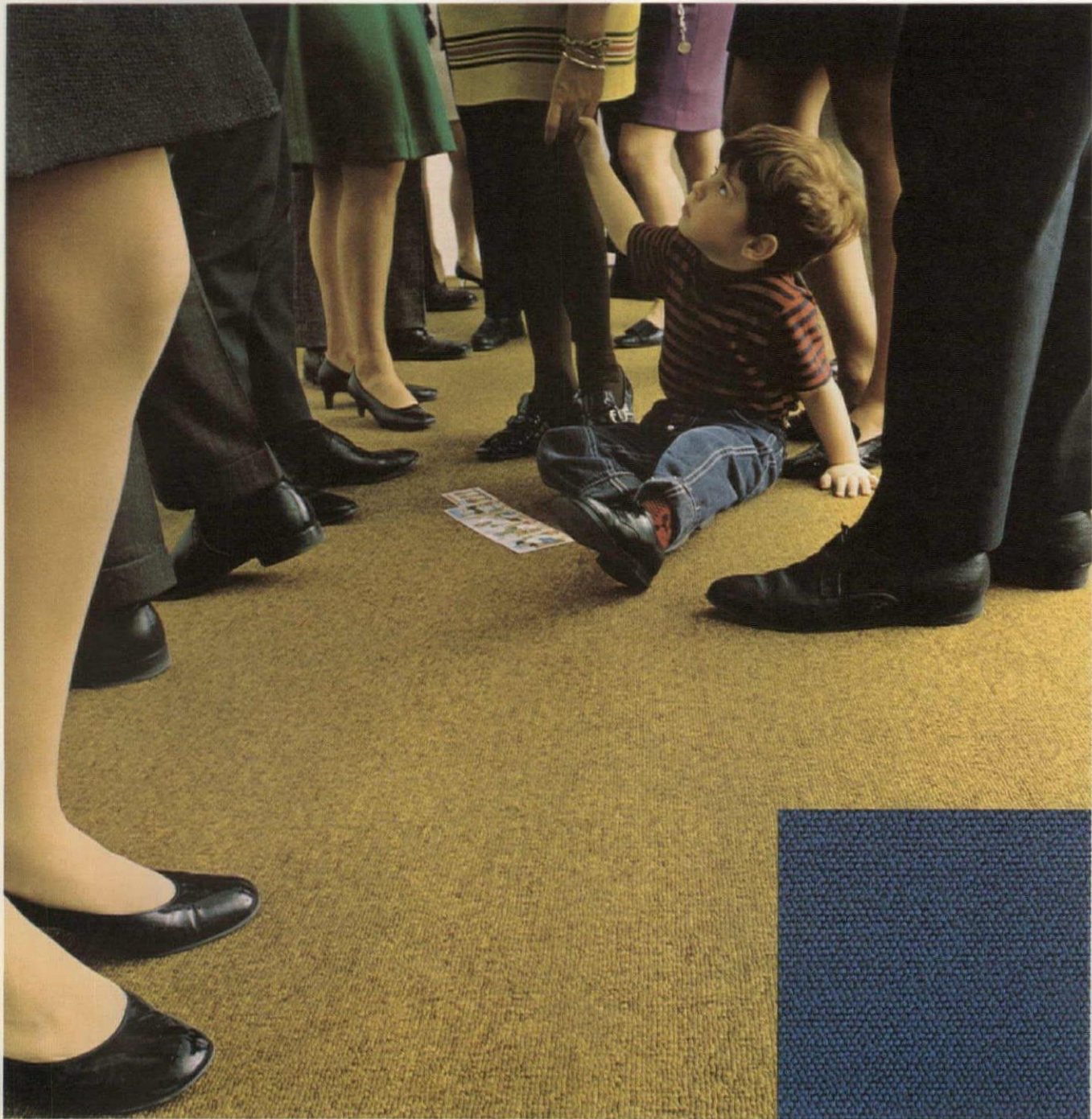
# **Allied Chemical commands in commercial carpeting.**

**6 years ago, Allied Chemical saw the commercial carpet market as a potentially fantastic booming area. Allied Chemical took command immediately with sound product know-how and a total-range market plan. They created a unique new carpet fiber. Not a fiber adapted from residential use, but a round cross-section nylon, specifically engineered for commercial conditions.**

**Today, 6 years of vital experience with every commander from technologists to the man who actually buys carpeting of Allied Chemical nylon has solidly given ALLIED CHEMICAL TOP COMMAND OF COMMERCIAL CARPETING.**



# Proven performance commands.



Allied Chemical nylon fiber has proved itself in conditions far more demanding than the most severe lab tests. For 6 years it has stood up where it really counts. In office buildings, cafeterias, supermarkets. In lounges, restaurants, hotels, industrial installations. In day-to-day living where excessive demands are made, Allied Chemical nylon fiber has met every demand. Its color lasts longer, it wears better, it cleans more easily. In short, it performs. Example: This unretouched photograph of the actual carpet that covered the floor of a major pavilion at the New York World's Fair. If you think you may have some special carpeting problem, take another look. 16,000,000 people walked on this blue carpet!

**In top command of commercial carpeting.**

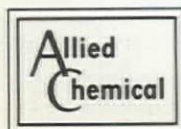
Allied  
Chemical



# Product innovation commands.



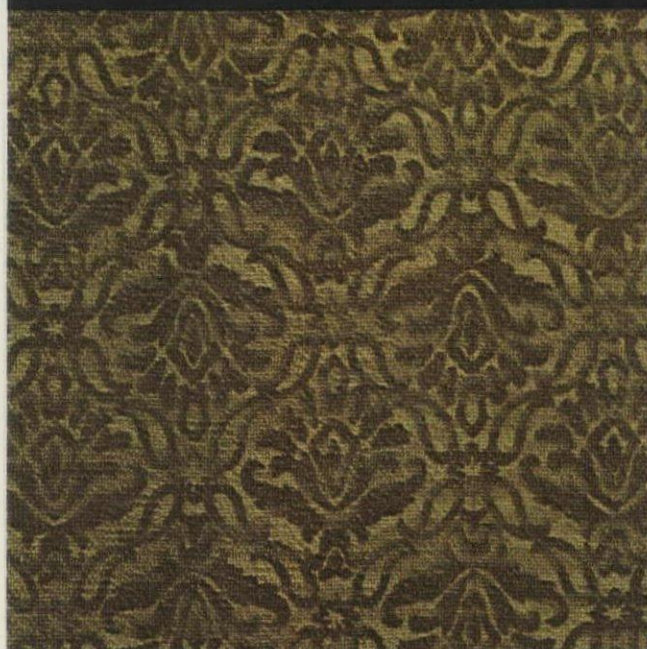
Standing by the dye beck is Lee Rush, technical director at Allied Chemical's Research Center in Petersburg, Virginia. Under examination is a sample of their new tri-dye fiber . . . unique in that it requires only a one-step color bath to achieve a brilliant three-color effect! This is only one of the many new processes developed at the Center which are opening up new styling and performance possibilities for the commercial carpet market . . . another example of how Allied Chemical works consistently toward tomorrow's most contemporary applications.



## In top command of commercial carpeting.



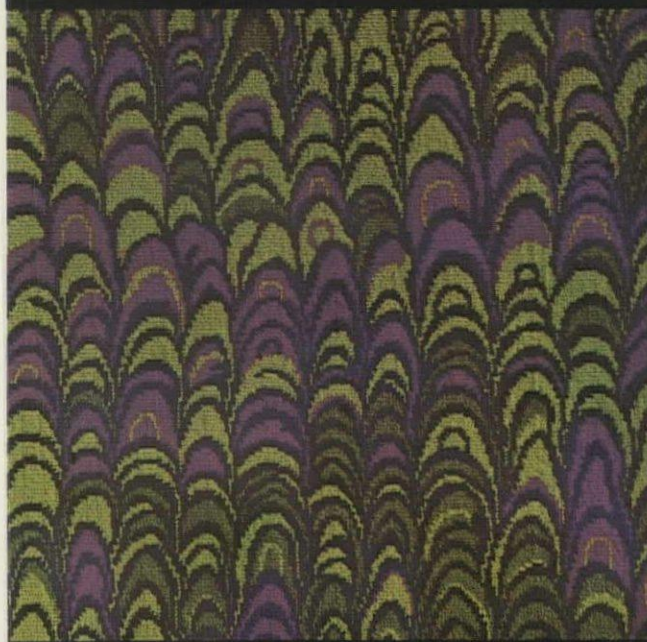
# Design leadership commands.



From Monarch Carpet Mills: The "Viscount" printed pattern.



From Langhorne Mills. Flowered 6-frame woven Wilton carpet.



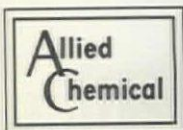
From Langhorne Mills: A modern flame-stitch 5-frame carpet.



From Hardwick & Magee Mills: Custom-designed in the Aubrey Beardsley style, a striking woven jacquard in black and white.

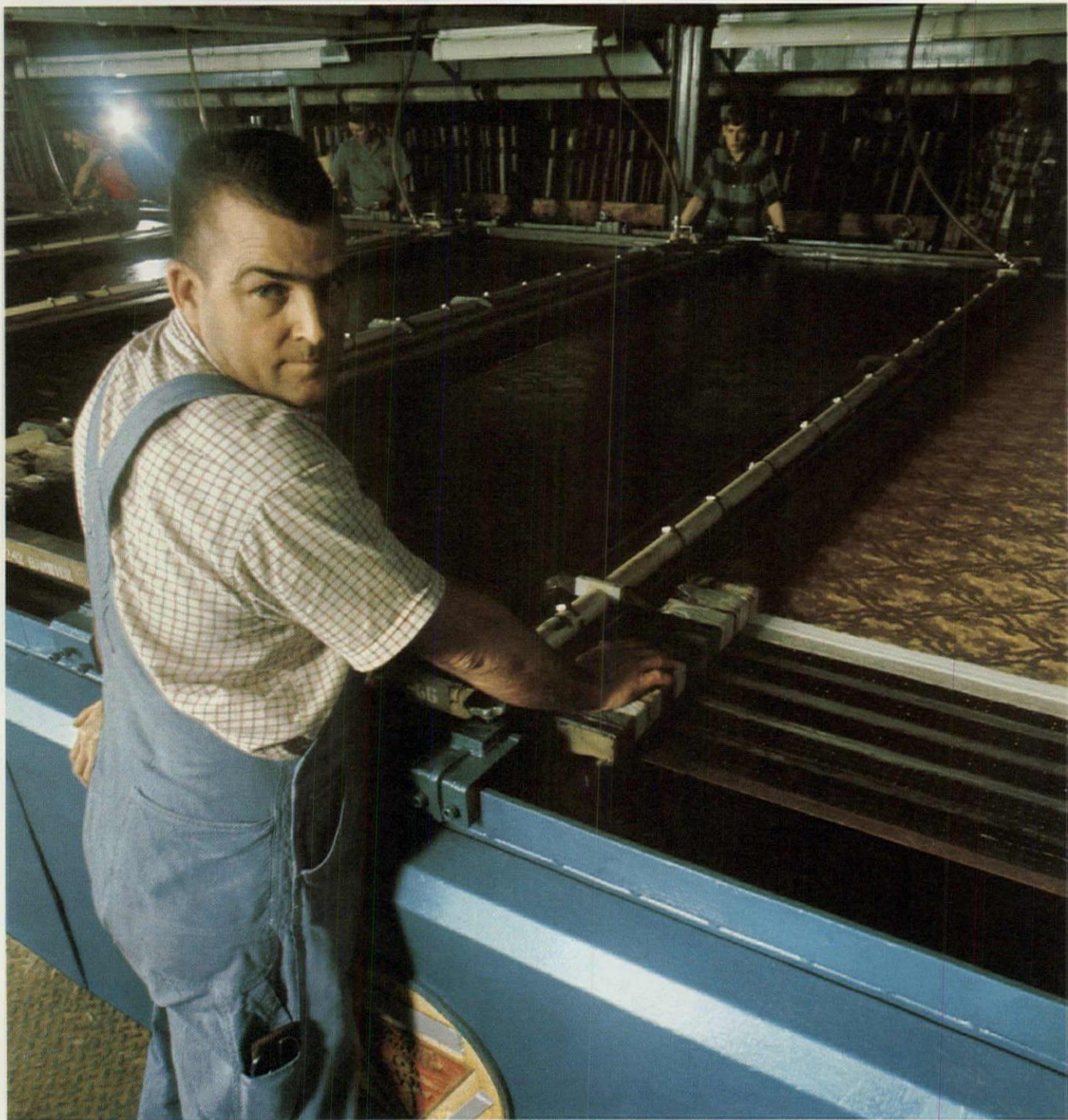
The incredible versatility of Allied Chemical nylon fiber has made it leap into excitingly fresh new design areas. Color so intense . . . because Allied Chemical's round cross-section fiber has superior dye-affinity . . . methods of creating carpet constructions uniquely different . . . these singular properties have created a totally new arena for non-residential carpeting. Beyond Allied Chemical's own talented design staff, now come the mills themselves with inspired ideas! This is leadership. A fiber so distinctive it is in command of continually new design potentials . . . so distinctive it is commanded by others for creating the best of looks in commercial carpetings.

## In top command of commercial carpeting.

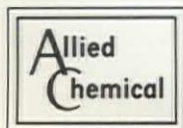




# 35 progressive mills command.



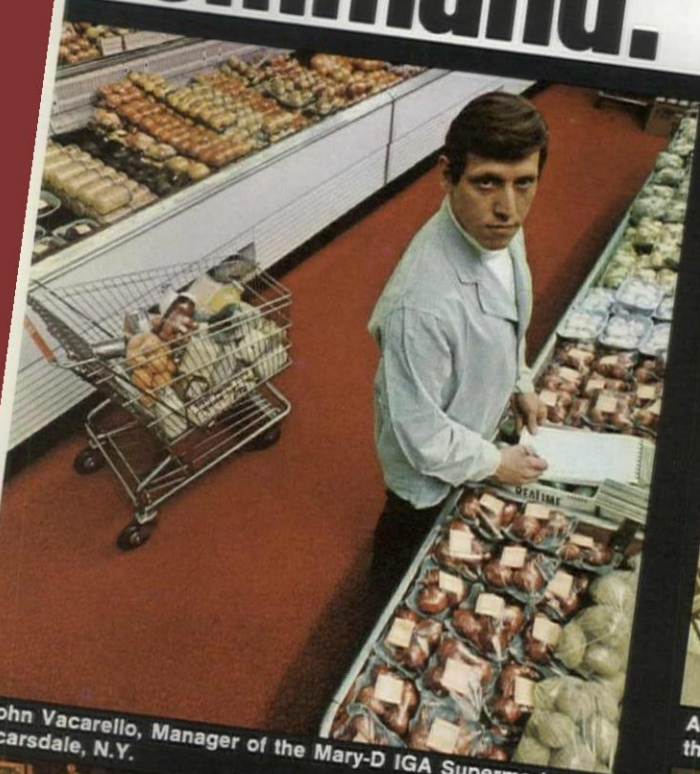
This employee at Barwick Mills, La Fayette, Georgia, is overseeing one of the more recent and progressive developments in the carpet industry. A machine which produces complex 5-screen printed patterns. Barwick Mills is only one of the 35 aggressive mills producing various styles—tufted, woven, printed, dyed—for you to choose from. In fact, because of the limitless capacities of Allied Chemical nylon fiber, these 35 mills produce over 100 fabrics used for commercial purposes!



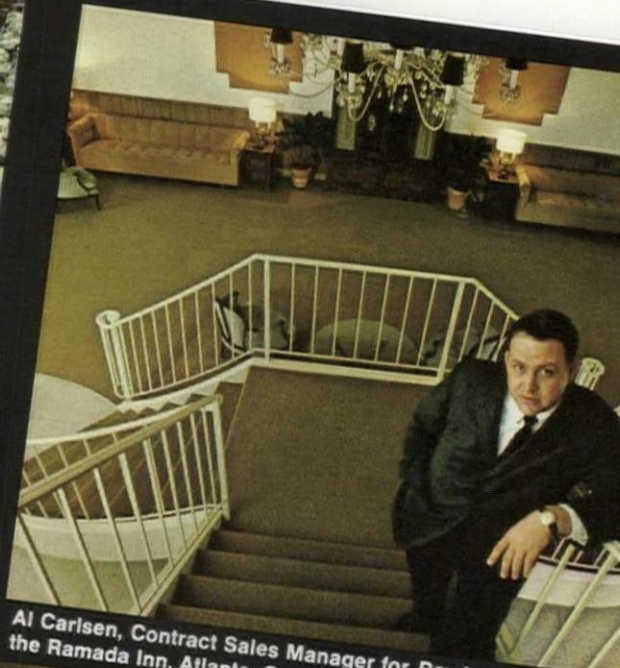
## In top command of commercial carpeting.



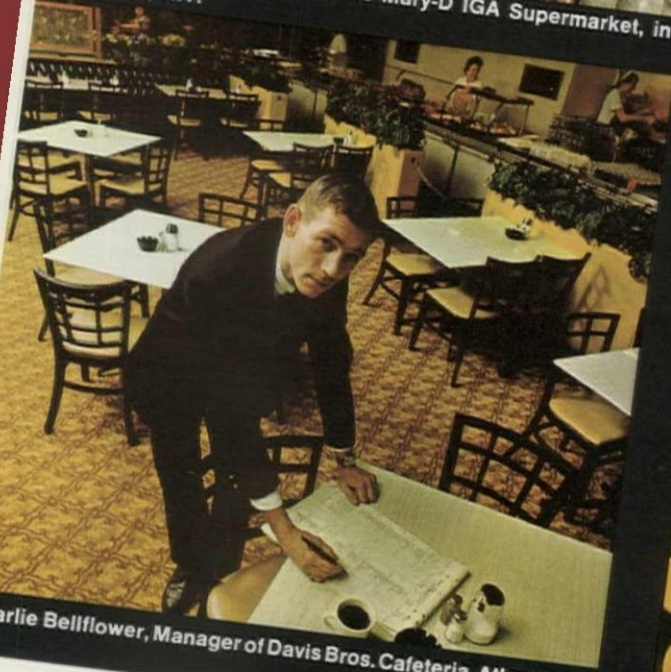
# Forward-thinking people in command.



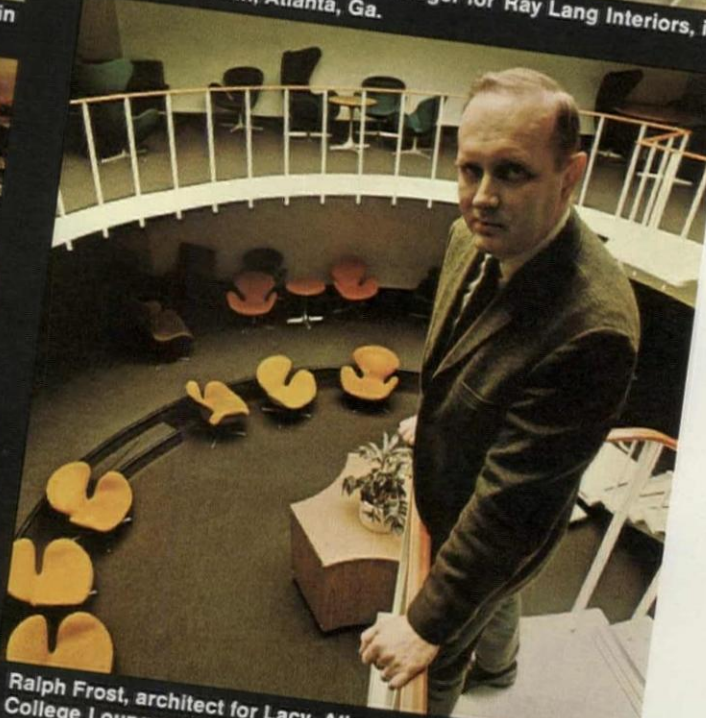
John Vacarello, Manager of the Mary-D IGA Supermarket, in Scarsdale, N.Y.



Al Carlsen, Contract Sales Manager for Ray Lang Interiors, the Ramada Inn, Atlanta, Ga.

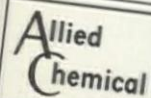


Charlie Bellflower, Manager of Davis Bros. Cafeteria, Atlanta, Ga.



Ralph Frost, architect for Lacy, Atherton & Davis, in the Wilkes College Lounge at Wilkes-Barre, Pa.

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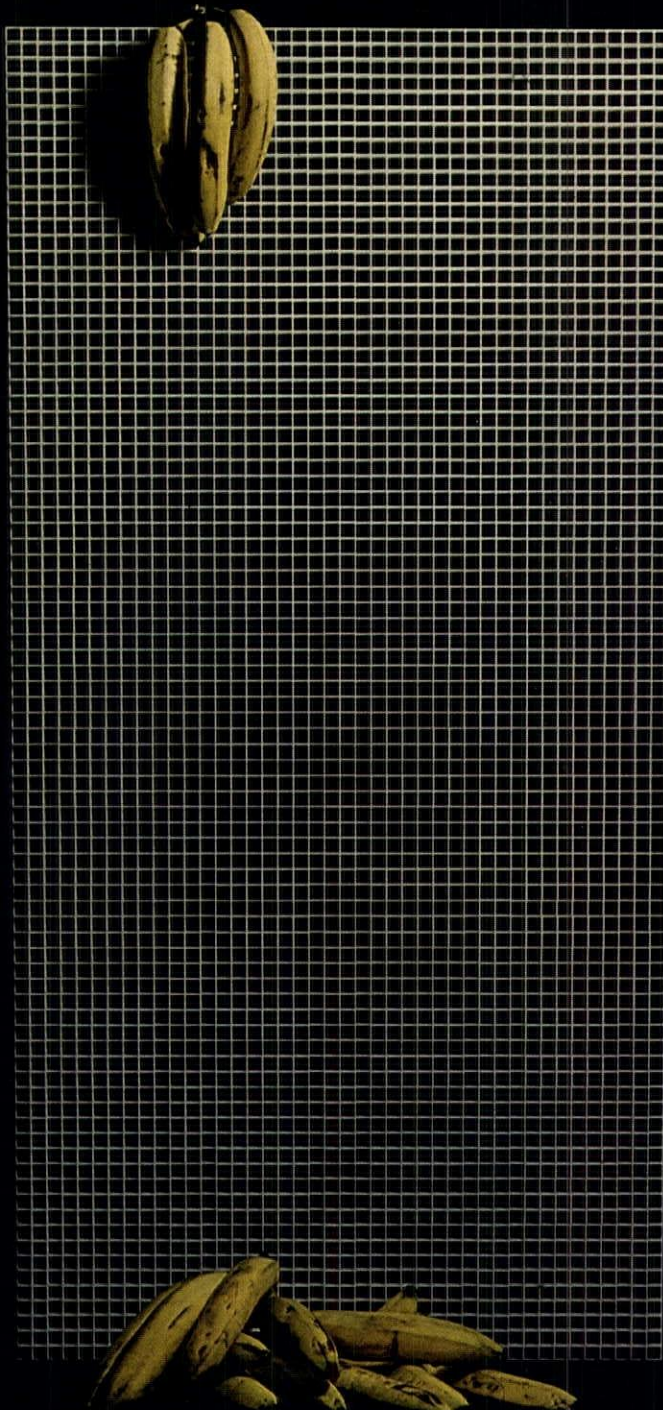
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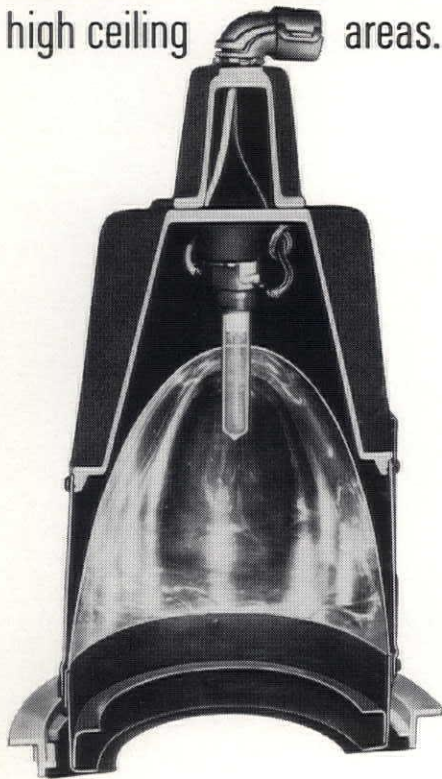
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Newslines from page 28

### Not All Boycott Barriers Are down, Attorney Says

If a factory-made product is specified by someone other than the contractor, do union preserve-work pressures on either the contractor or specifier constitute an unlawful secondary action?

Yes, says an attorney for the American Boiler Manufacturers Association. And a recent case before the National Labor Relations Board supports his contention.

The attorney, Kenneth C. McGuinness, in a speech before the 15th National Airconditioning, Heating and Refrigeration Exposition, said that despite the Philadelphia door case (in which a contractor had to return pre-cut doors when carpenters refused to install them), "substantial restrictions" on unions do exist in the matter of product boycotts.

"If owners, architects and engineers can be persuaded to specify the factory-made product—not necessarily by trade name but with sufficient particularity to establish that it must be a manufactured product—the contractor will not have the right of control over the product," McGuinness said.

Therefore, he added, "union pressures on either the contractor or the person who specifies the product will include an unlawful secondary objective."

In a dispute involving Pipe Fitters Local No. 120, several Cleveland mechanical contractors and the Mechanical Contractors' Association of Cleveland (with whom the union's agreement prohibited certain factory assembly work), the NLRB ruled that the union was without legal basis since the primary employer, the city's board of education, had specified the factory-assembled piping in contention.

The pressure exerted against the contractor, the secondary employer, to force the board to change its specifications amounted to an unlawful secondary action, the NLRB held.

A dissenting panel member argued, however, that "such reasoning makes the incidental factor of control the determinative factor in ascertaining the legality of a union objective in a given case and converts lawful primary activity into secondary."

He also contended that the case "shows that application of such a

test gives the contracting parties carte blanche authority to breach their collective agreements."

But the obtaining view held that the school board and not the contractor made the decision on the piping and that only the school board could change it.

McGuinness listed other "restrictions" against product boycotts:

- For example, he said, the Philadelphia door case pertained to work traditionally done by the union and did not involve union efforts to acquire work for its members. The Supreme Court, in short, did not give the unions a free hand "to prevent the use of any product which it prefers to make on the job site."

- The court did not upset the restrictions imposed by the NLRB and the courts on union efforts to enforce agreements with employers regarding use of manufactured products. He said that "even though a union is successful in obtaining a work protection clause from a contractors' association, the secondary boycott restrictions may well apply to union attempts to enforce that clause."

- The "most significant" restrictions on product boycotts lie in an area which is still largely unexplored. This involves the impact of antitrust limitations, which the Supreme Court did not consider in the Philadelphia case, McGuinness noted. Sooner or later, he said, cases will be filed to probe this "doubtful area."

### Subcommittee Is Offered Words to Replace Verbiage On 'Extravagant' Design

No one wants extravagance in any design, George E. Kassabaum, FAIA, told the Senate Subcommittee on Housing and Urban Affairs. "But one of the most constructive acts this subcommittee could make," Kassabaum added, "would be to eliminate the negative approach to our housing laws."

The first vice president of the Institute urged that federally sponsored housing legislation be purged of the words "Not be of elaborate or extravagant design. . . ." He would insert in their stead words calling for a "design process which will contribute to the general betterment of living consistent with prudent budgeting."

The objective, he said, is to achieve housing for low- and moderate-income families "which is not

Continued on page 40



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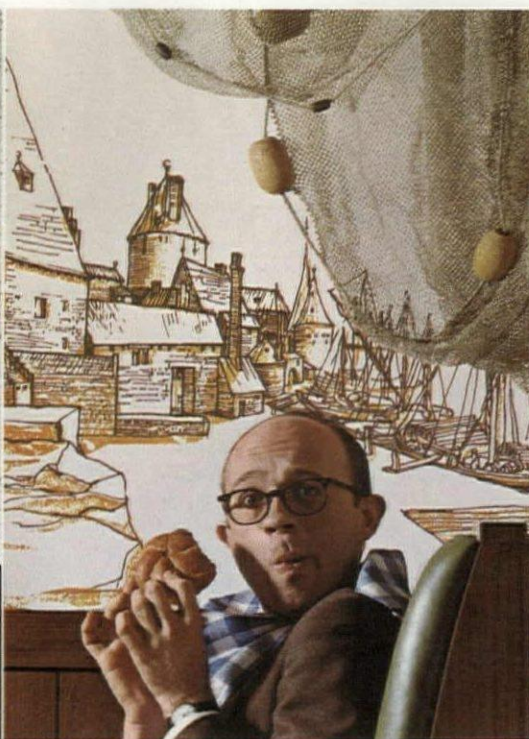
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only suitable and economical but which provides families of moderate means with shelter that is pleasing, that they are proud of, and that adds to their enjoyment of life."

Kassabaum's testimony last month on behalf of the AIA followed on the heels of the report of the National Advisory Commission on Civil Disorders which also found fault with imposed impediments to better design.

The commission praised the rent supplement program but urged several changes, one being the removal of regulations "restricting architectural design, imposing rigid unit cost standards and limiting tenant income to amounts lower than required by statute."

**An Admission Made:** Kassabaum, who in June becomes Institute president, presented wide-ranging testimony that included an admission that the profession in housing "has often been slow in meeting its responsibility."

"But we are aware of our shortcomings and we are now doing something about them," he said. "We now ask you to do a few things

that will make it possible for the nation's architects to do more."

He called on Congress to rid federally-supported housing programs of "frustrating and expensive delays." He charged that past programs have made it easy for mediocrity to flourish while "demanding justification after justification for the bold and the different."

He urged the granting of "seed" money to enable nonprofit organizations to obtain information, advice and technical assistance in sponsoring housing projects. He suggested that government encourage technological experimentation in construction as well as the use of prefabricated products.

**Beyond Housing:** Kassabaum testified in favor of comprehensive programs going beyond "housing alone." He expressed the Institute's support for the development of new communities, and he said the AIA sees rent supplements "as a legitimate assist to private industry and the housing business in certain market areas."

He noted that President Johnson has called for six million new housing units for low- and moderate-income families over the next dec-

ade and declared that the Housing and Urban Redevelopment Act of 1968 would be "an important step" toward meeting that goal by authorizing the construction and rehabilitation of over two million units.

But Kassabaum asserted that private enterprise must pitch in "as never before."

He said his profession considers itself obligated "to render a creative response" to the President's goal. (For the Institute's statement on housing, see the special section in this issue.)

**Design Services Offered:** "This means," he told the subcommittee, "that we will provide architectural services individually or through neighborhood design centers to anyone needing design advice. If the client can pay a fee he will be expected to, but if he cannot he will still be served, if it is physically possible. I add this caveat because there are only about 30,000 licensed architects in this country, and judging from the enormity of the problem we could all be kept busy full-time on low- and moderate-income housing. We do, however, hope to make a significant contribution."

*Continued on page 42*

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## UNFINISHED BUSINESS

BY JOHN CARLSON  
Convention Manager

# On Convention Sites and Dates

On June 23-29, the Institute will stage the 100th national convention in its 111-year history. Its split between two distant cities, Portland, Ore., and Honolulu, Hawaii, is an unusual departure from the standard one-city convention of the past, and you may well wonder what considerations go into the selection of convention sites and dates.

The Institute's method of choosing a convention city differs from that of most organizations. Some associations appoint an individual or committee to investigate several cities in advance, presenting findings to a board of directors or some other body empowered to make a selection. Some conventions enjoy such large attendances that choices are limited to two or three major cities, and perhaps one of these will be selected for a permanent site, especially if certain benefits of dates, accommodations and discounts can be assured.

Most organizations prefer, however, to hold their conventions in different parts of the country for the sake of variety. Until recently, this still meant choosing from a few select cities. Now this group has serious competition from dozens of other cities which have recognized the economic advantages of convention business.

With the Institute's unique method of selecting convention sites, a city may be considered only upon specific invitation from its AIA chapter. The chapter, willing to act as host, must find volunteers in its membership to serve on committees to acquaint convention-goers and their families with the culture, tradition and flavor of the locale. Host chapter-sponsored social events, architectural tours and "at-home" or "at-office" parties all help to accomplish this.

For each convention planned, the Institute may receive any number of invitations. Each invitor presents a rundown of basic information concerning the city, its convention facilities and other pertinent considerations such as the celebra-

tion of a chapter anniversary or the scheduling of some significant local event.

All invitations are carefully considered with special attention to geographical variety; and site selections are made periodically by the Board of Directors, subject to investigation of facilities by the AIA convention staff.

The Institute has already made its selections of convention cities through 1976. Philadelphia was selected some years ago for 1976, in view of the celebrations planned for that year to commemorate the bicentennial of the signing of the Declaration of Independence.

The schedule of other future conventions is as follows: **1969**, June 22-26, Chicago; **1970**, June 21-25, Boston; **1971**, June 20-24, Detroit; **1972**, May 7-11, Houston; **1973**, May 6-10, San Francisco; **1974**, range of May-June dates reserved, Atlanta; **1975**, range of May-June dates reserved, Cincinnati; **1976**, May 2-6, Philadelphia.

How did Hawaii get involved in the 1968 convention? The chapter's invitation came along while Portland plans were being formulated. At that time, prospects for a convention in Hawaii anytime soon were bleak: 1) the convention schedule was filled through 1976; 2) the distance involved would limit full-scale attendance; 3) a large portion of convention expenses is normally recovered through revenues from products exhibits, but the high cost of transporting exhibit materials and personnel to Hawaii could easily discourage all but minimum participation.

The answer? With an early convention already planned for the West Coast, it would be simple to arrange for recessed meetings in Hawaii. Interest is over 100 percent greater than expected!

Annual AIA meetings of the past were held from 1857 to 1866, with an interruption for the Civil War in 1863. These meetings were all held in New York City during winter

months. Conventions up to World War I were held in the fall or winter; after 1918, with the exception of September dates in 1939, all national conventions have fallen in the spring.

The Institute has tried to avoid mid-May through mid-June conventions so as not to conflict with examinations of architectural schools. One exception was last year's New York convention held in late May due to availability of the best facilities. Scheduling often depends on the host chapter's advice regarding the most favorable weather potentials; in this respect, late June dates are preferred, especially in parts of the country which would attract vacationing families. This was evident in 1966 in Denver, where attendance, tied in with vacation plans, rose 60 percent above expectations.

Conventions in large metropolitan centers as a rule still draw bigger attendances than in the smaller cities, due in part to the greater number of architects in the urban core. However, there is a notable trend of heightened attendance in the smaller cities for several reasons. Wider use of air travel is one; another is the growing number of cities able to satisfy convention requirements. Greater general prosperity in the profession is another.

No matter what the location or the time of year, there is still a multitude of considerations in the planning and coordination of the AIA convention. Inevitably problems arise in establishing effective communication with local members and committees, in correlating plans for the various events and activities, in determining needs for personnel and equipment, in spreading the word to members and delegates, program participants and exhibitors—all of which can appear so hopeless and frustrating in the process but so completely satisfying and rewarding when the extraordinary, monstrous conglomerate called "convention" becomes a *fait accompli*. □



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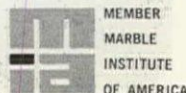
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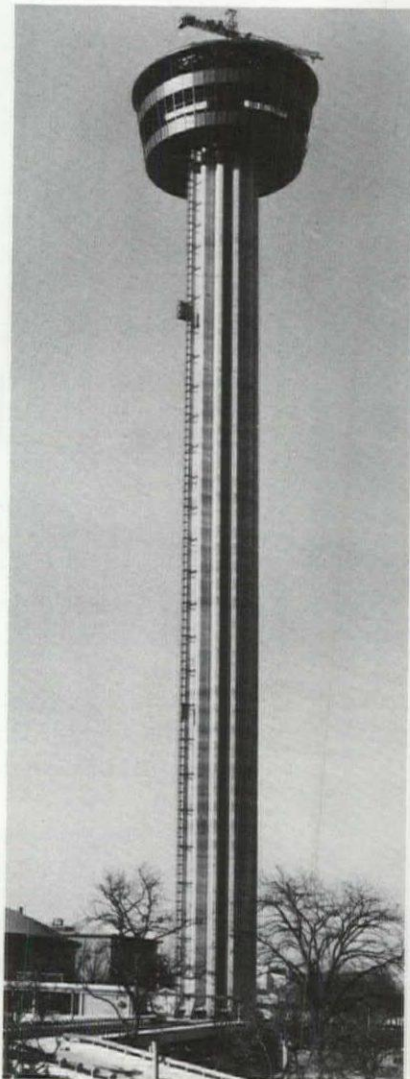
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# Hemis Fair '68

BY JAMES L. MAC KAY

**A retired psychologist, Dr. MacKay, who at 76 has turned his hand to writing, follows the San Antonio River through time, space and HemisFair '68. Ungracious though it be, many another community would go right ahead and celebrate its 250th anniversary, never once pausing to consider an invitation to its river. But not, surely not, a city with a Paseo del Rio!**



San Antonio—one of the few American cities to rediscover its waterfront—is holding an international exposition, and the San Antonio River, by way of a freshly dug channel, is an honored guest.

A river image is suggested even by the theme of HemisFair '68 (April 6-October 6). The theme is the confluence of world cultures which gives San Antonio its cosmopolitan atmosphere—the mingling of the civilizations of North and South America with those of Europe, Asia and Africa.

HemisFair '68 is situated in the midst of downtown San Antonio, within short walking distance of the Alamo and the Paseo del Rio—the river and walkway system. The structures to remain after the exposition—Convention Center, Tower of the Americas, the United States and Texas Pavilions, a portion of the modules in the international area, and a grouping of early buildings sensitively preserved—will compose one of the most significant concentrations of civic structures in America.

The exposition is a part and a natural outgrowth of the rapid development of San Antonio from a wild and woolly cowtown to an extensive metropolitan area that in population ranks 14th among the nation's cities. This maturation can well be explained by following the vicissitudes of the river.

Tradition has it that Alvar Nunez Cabeza de Vaca, shipwrecked near Galveston early in the 1500s and named prophetically for the head of a cow, worked his way to the Indian village where San Antonio now stands.

In 1619, Father Damian Massanet stopped at the same village and said mass. He named the river San Antonio de Padua. Twenty-five years later a Spanish expedition passed by and a few members settled on the pleasant river bank.

The permanent settlement was made on May 1, 1718, when Father Antonio de Valero, with a detachment of 25 soldiers and their fami-



lies, arrived to establish an Indian mission. The mission, San Antonio de Valero, was to become, 116 years later, the Alamo—the Cradle of Texas Independence.

Four other missions were built along the river and are still used as parish churches. The best known of these is Mission San Jose de Aguyo, now completely restored and enjoying the status of a national monument.

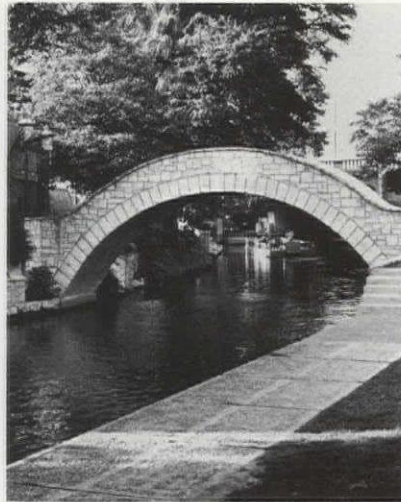
**Unswerving Neglect:** As the mission settlement grew into a town, the river functioned in the traditional duality of rivers the world over—as a watering place for men and animals and disposal carrier for waste and sewage. And as the town grew into a city, the river fell to the typical but incredible treatment of our precious waterways. It was rigidly neglected.

Indeed all natural surroundings were slighted as the city developed a street pattern without regard to contour or other landscape features. As a consequence, the San Antonio River received the backyards and outhouses. A few exceptions occurred along King William Street where some houses boasted of large, landscaped lawns which terminated at the river with summer houses or private boat docks.

Periodically the waterway brought desolation. By 1929 a flood control project, including a cutoff channel at the horseshoe in the central city, was completed.

It was in 1938 that the environmental potential of the river was recognized and WPA and other federal programs were undertaken to construct the broad walks, arched bridges and engaging entryways seen today in the horseshoe area. At the same time, La Villita, the little Spanish village, was restored and opened to the public. These attractions, along with the Alamo, offered natives and visitors alike a distinctive downtown environment.

In 1958 the San Antonio Urban Renewal Program was established. The areas to the east, south and



# and Paseo del Rio '38

west of the downtown section were a conglomeration of substandard housing, interspaced with less-than-desirable warehouses and the like. The slums also contained many interesting old houses and the old market place.

One of the projects planned in the redevelopment program was a civic center that was to include a contemporary convention complex.

With attention again focused on the center of town, the San Antonio Chamber of Commerce set up a Tourist Attractions Committee to study the feasibility of improving the river walk. A plan was submitted, but it proved to be too flamboyant, too lacking in sensitivity to the real nature of the architectural heritage of San Antonio.

In March, 1962, the City Council appointed a River Walk Commission to "review proposed construction concerning appearance, color, texture of materials and architectural design of buildings whereby it is proposed to alter, modify, repair or construct improvements, as well as install signs or proposed lighting arrangements."

Remarkable in the light of two previous attempts in this century to pave the river over! (Both attempts were defeated by townspeople.)

The River Walk Commission and the Chamber of Commerce pooled efforts and commissioned the San Antonio Chapter, The American Institute of Architects, to draw up a comprehensive plan for development of the Paseo del Rio and adjacent areas. This was done in great detail by an AIA committee under chairman Cyrus H. Wagner.

Drawing on urban renewal possibilities, the plan established the objective of an open-space, pedestrian link for the three important spaces already existing in the central business district — Alamo Plaza, La Villita and Main Plaza, the latter closely linked to Military Plaza which contains the City Hall and the Spanish Governor's Palace.

And now much more has been accomplished—92 acres of urban



blight has been turned into a site for an international exposition, and after HemisFair, it is to become a vital urban core.

Total cost of HemisFair is an estimated \$156 million. Local businessmen pledged \$8 million. San Antonio voters approved both a \$30 million bond issue and a special \$5.5 million bond issue for the Tower of the Americas.

Authorized under federal Urban Planning Assistance was \$12.8 million. The State of Texas approved \$10 million, and the US Congress approved \$6.75 million for the United States Pavilion.

Retail sales should total about \$175 million, according to an economics study, and some \$500 million in new construction was forecast.

**Return of the Concrete Boxes:**

Among this construction is San Antonio's "Habitat"—the Palacio del Rio which faces the Paseo del Rio on one side and the Convention Center on the other.

The \$7.5 million, 21-story hotel was built conventionally—up to the fourth floor. Above that, the construction technique was to stack completely prefabricated room units, 500 of them, to flank the slipformed elevator shaft.

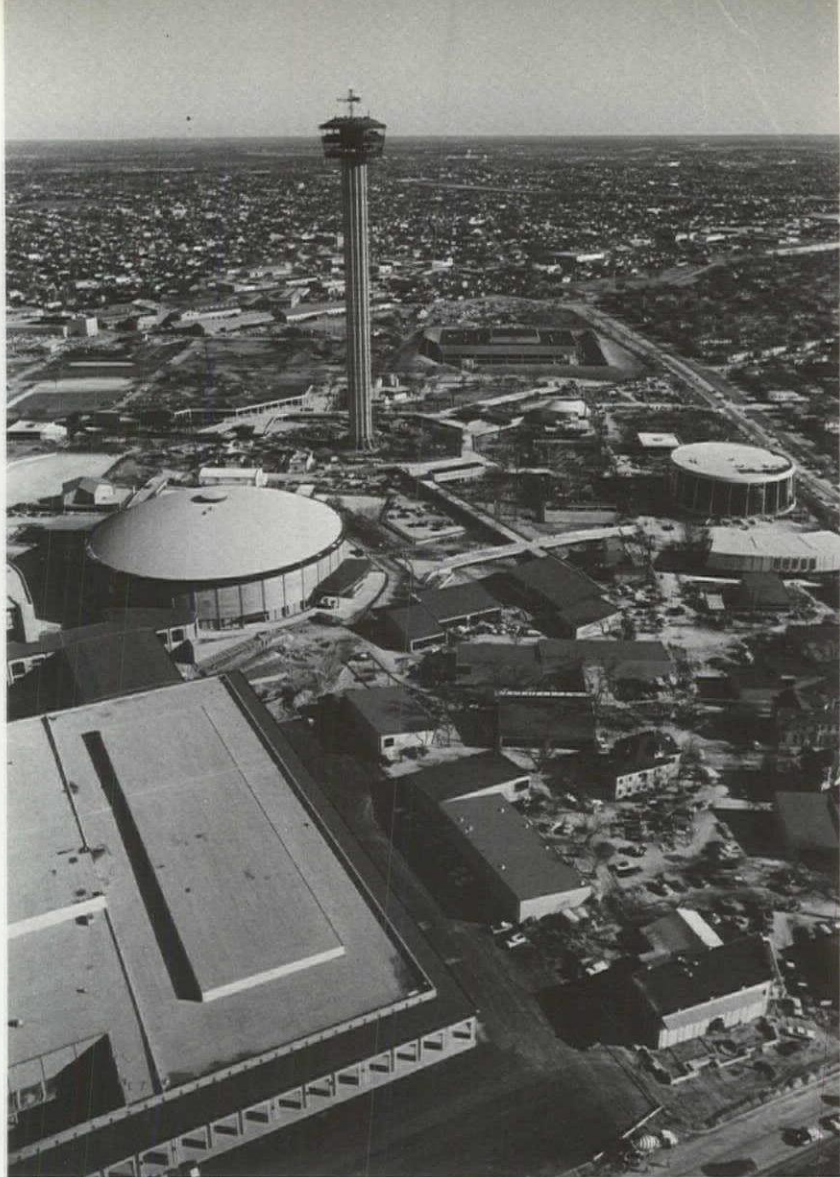
The room units were lifted into place and anchored together atop the first four floors at the rate of 10 per day. Each reinforced concrete unit is finished completely—all the way from plumbing, bathroom fixtures, wiring and interior wall finishing to carpets, furniture and even light bulbs.

The H. B. Zachry Company of San Antonio, general contractor, had several good reasons for choosing the prefab method for the job, the most important being speed. The hotel had to be completed in time for the fair, which happened to mean in just nine months.

Zachry treated the project as three separate jobs. He was able to 1) prepare the foundation and slip-form the elevator shaft, 2) build the room units and 3) finish the units all at the same time the shaft was being constructed.

The units were turned out at a production line eight miles from the site and at the rate of eight per day.

There are two basic room sizes—outside dimensions 13x32 $\frac{2}{3}$  feet and 13x29 $\frac{2}{3}$  feet. The height of the rooms is 9 feet, 1 inch. Forms for casting the units were arranged in two rows of eight each. Rails were installed along the production lines so custom-designed gantries could



In the heart of San Antonio is HemisFair, joining for 1968 such other mid-city favorites as the Alamo, La Villita, Main Plaza and the Paseo del Rio.





move freely to lift the finished rooms from the forms.

First step in casting the units was to place the permanent, hinged outer forms into place. Next, steel reinforcing bar was tied into place for the floor and walls of the unit, then wiring conduit and boxes were installed. After the floor was poured, an inner form was inserted, bar was placed on top of the inner form and the walls and room were poured. The unit was then steam cured for 12 hours.

Wire rope strand was tied into the rebar framing at the top corners of each unit, then looped up to provide permanently cast handles for the gantry and crane.

After curing, the units were lifted from the forms and hauled by truck to the finishing yard. After finishing, they were trucked to the hotel site and lifted into place by a special crane.

This extensive handling posed two design problems: The units had to be light enough to be moved easily and lifted into place and strong enough to resist stresses generated by the movement and to bear the static loads once in place.

The necessary strength/weight ratio was gained by using lightweight aggregate concrete reinforced by rebar. Each unit weighs about 35 tons and uses two tons of rebar. Strength of the concrete is 5,000 psi, and density is 104 lb/cu. ft. Walls are only 5 inches thick—much thinner than Habitat's which bear greater stresses because of random unit placement.

The room units—31 to a floor—were stacked like building blocks on a slab poured over the conventionally built fourth floor. The top floor was also built conventionally; it houses a banquet hall and dining club.

Used was a special crane, with an outrigger fitting completely around the crawlers—the boom seats on the outrigger rather than on the cab to increase the crane's capacity from about 150 tons to some 500 tons on a vertical lift.

A helicopter tail rotor was used to keep the rooms pointed in the right direction during the lift. The crane's lift hook fits into a "strong-back" or metal frame which in turn hooks into the four wire rope handles. Normally the single point contact would have permitted the room to rotate in the wind, but the helicopter rotor, powered by a small gas engine, controlled the unit's direction as it controls a helicopter's course. The rotor could be managed manually or remotely.



San Antonio missions—from top, the Alamo (Mission San Antonio de Valero), the Cradle of Texas Independence; Mission La Purisima Concepcion de Acuna; Mission San Jose y San Miguel de Aguayo, one of the most prosperous; and Mission San Francisco de la Espada.

The contact for the stacked units are steel plates and angles cast into the units as anchors, and welded together after the units were placed. The steel plates act as blocks to create a three-quarter-inch space between the units, made airtight by grouting the perimeter.

The 31 rooms on each floor face onto a central corridor. Corridor floors were poured in place over a base formed by cantilevered projections from the roof of facing rooms. The stacked units automatically provide two shear walls every 13 feet.

Between adjacent rooms is a 20-inch-wide space which serves as a mechanical chase. Plumbing and wiring are run up the chase for quick connection to the individual rooms. No plumbing or wiring goes through the floors of the units. Removable panels in the hotel corridor provide access to the chase for installation and maintenance work.

Architects for the project were Cerna & Garza. James Lang, director of research for Zachry, said the \$500,000 production facilities will be used on other prefabricated projects. As many as 2,000 rooms will be cast ultimately for such jobs as low-cost housing, dormitories, motels and vacation houses, he said. Current crane capacity limits the height of stacked buildings to about 21 stories.

**Along the Waterway:** Over the years, the San Antonio River Authority has had as two principal objectives flood control and beautification of the entire waterway; various projects have been carried on from the headwaters just north of Brackenridge Park to Berg's Mill south of the city limits.

In the park the river provides boating and adds greatly to the scenic beauty. Brackenridge Park also contains a golf course, riding trails, a miniature railroad, a sky-ride, an extensive and well-developed zoo and Witte Museum, one of the nation's outstanding regional exhibits.

The park's greatest design feature, however, is the skillful exploitation of a series of abandoned quarries—transforming them into sunken gardens, open theaters, etc.

South of the urban renewal area along the river is Roosevelt Park, the area in which Teddy Roosevelt trained his Rough Riders for Spanish-American War action. Adjacent to this are the landscaped grounds of the Lone Star Brewery which abound in local history exhibits. The Buckhorn Saloon, containing probably the world's greatest col-



lection of animal horns, was moved to the area from the downtown and was completely restored.

With so prominent a role played by the river in the development of the city, it would have been unthinkable for San Antonio to celebrate its 250th anniversary with a fair and not invite the river.

Thus, a quarter-mile channel was cut to connect Paseo del Rio with a lagoon in the heart of the Convention Center—from which the water is pumped via pipe back to the natural river channel.

The fact is that the City of San Antonio, its history, its river and its "confluence of cultures" set the tone for HemisFair.

The Tower of the Americas rises from a central plaza, the lagoon-encircled Island of Fiesta. Elevated concrete walks and plazas offer the pedestrian easy access to all parts of the fairgrounds. A minirail furnishes quicker transportation, or, if you are more leisurely inclined, gondolas give passage by way of the lake and connected waterway.

Along the perimeter of the exposition grounds are the huge Convention Center, the United States Pavilion, the extensive Institute of Texan Culture, foreign government exhibits, the lake and its industrial and institutional exhibits.

Within this framework, Allison B. Perry, AIA, director of the Department of Design and Architecture of HemisFair; his wife, Mimi, manager of design; John Kriken, chief designer; and Norman Yarbrough, manager of architecture, have arranged the fair's presentations, amusements and amenities.

Carrying out San Antonio's civic design tradition, the foreign government buildings and the food facilities are in clusters surrounding plazas. The commercial exhibits, the concessions and the recreational facilities are scattered along the lagoon and minirail route and thus are easily accessible. Trees indigenous to the site were husbanded.

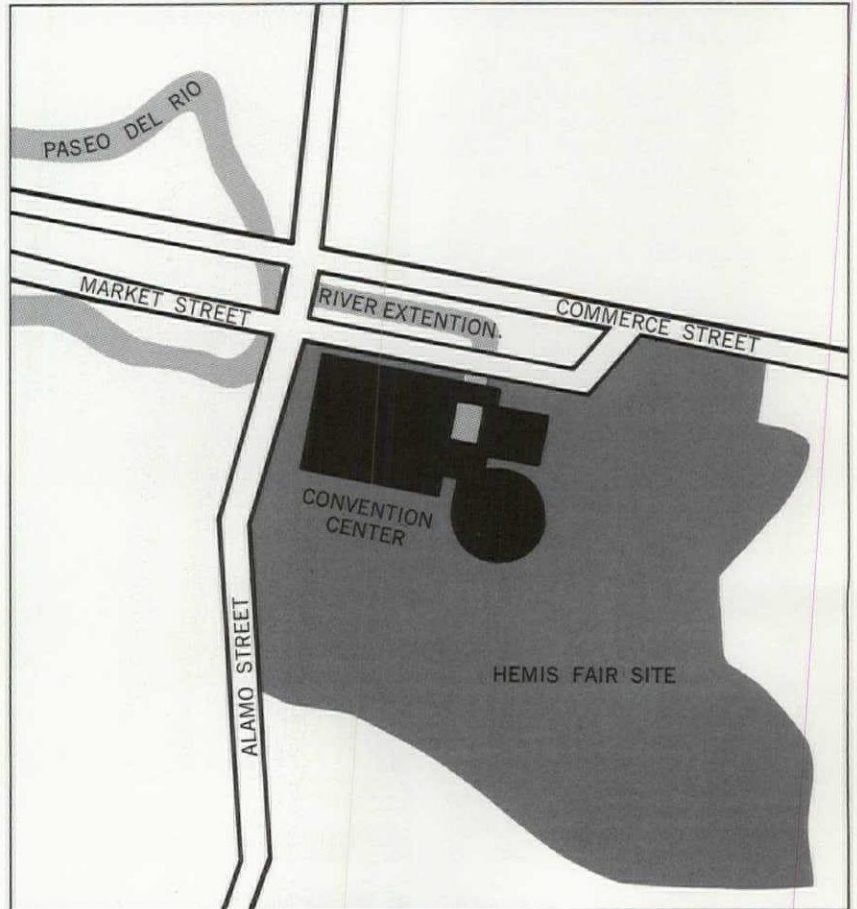
**The River Makes the Scene:**

Since the area through which the San Antonio River was extended had been inhabited for more than 200 years, excavators unearthed no few problems. Building records had not been kept in the early days and workers found masonry walls and foundations in the most unexpected places.

The extension slips under four streets and thus required as many bridges. In constructing the spans, the earth was shaped to serve as arcuate forms for the concrete;



La Villita epitomizes a common San Antonio experience—relief from the massive and monumental. Below, the connection between Paseo del Rio and the fair and the kind of conceptualizing that multiplied the river area's worth.





after the bridges were formed the earth was excavated.

Using earth for forming is not exactly new in San Antonio. It is said that Spanish padres at Mission San Jose, in building a dome-shaped granary in 1730, had Indian laborers construct a mound by bringing in 1,500 cubic yards of earth in baskets.

Over this, they built the masonry building; then the 1,500 yards of earth was removed—again by the basketful.

A little trip on or along the river extension from Paseo del Rio toward the Convention Center is a transition from national and regional architecture, gas lights and sidewalk cafes, to the frankly meant-to-impress arches, curving stairways and murals of the imposing buildings surrounding the Convention Center lagoon.

At the end of the river extension, not far from the entrance to the lagoon, are found various means of travel—by water, land or air. On the river level is a marina and available there are gondola-taxis, sight-seeing barges, or banquet barges for an exciting meal while plying the deep-green waters of the San Antonio. Rising above the marina is a five-storied garage topped by a heliport.

But back to the lagoon, which is destined to be the center for ceremonies, civic and social events. As you step from your gondola, you can turn to your left and enter the theater building, stopping in the luxurious clubrooms for refreshments or descending by elevator to the main lobby. Or you may go to the recital-rehearsal hall on the river level—a small but fully equipped theater in itself.

Or you may take advantage of the balmy San Antonio night and decide to ascend the majestic curved stairway to the ground floor and there enter directly into a carpeted foyer.

Or, if you have an artistic bent, you may turn to the right, enter the arched exhibition hall and enjoy the mural by Carlos Merida as you ascend the curving stairway. From the balcony of the Exhibit Hall you get the full benefit of the mural by Juan O'Gorman which tops the facade of the Theater.

The Theater, the Exhibit Hall and the Arena have a common lobby so future conventioners can pass from one building to another while remaining in airconditioned comfort.

Keeping things cool is what is known in San Antonio as the chill-



**Glimpses along the Paseo del Rio—**from top, the Little Rhein Steak House which was restored and remodeled and graced with river-level patios and plantings; the Venice Italian Restaurant, one of a number of sidewalk cafes, nightclubs, art shops, etc., that fill the Horseshoe Bend, thanks largely to the salesmanship given the Paseo del Rio development concept by city officials, the Chamber of Commerce and the San Antonio Chapter AIA. Casa Rio is the original sidewalk cafe along the river front to offer Mexican food. Now it serves banquets on river barges, with changes in courses made as the barges pass the restaurant on their trips up and down the river.

water plant. It is actually a central heating and cooling plant operated by the City Water Board.

The distribution system consists of a chilled water supply line, a chilled water return line, a steam line and a condensate return line. The system has 22,000 feet of pipe serving HemisFair. After the fair, it will have some 5,000 tons of plant capacity available, and it is planned that temperature control service will be sold to buildings in the downtown area.

The Theater seats 2,800, the Arena 10,000, and the Exhibit Hall provides, besides the exhibit and office space, a banquet hall seating 3,500 and another 24 meeting rooms accommodating from 20 to 500 persons each. The convention facilities are complete and modern. Noonan & Krocher are the architects.

**High in the Heart of Texas:** Beyond the Arena is the Tower of the Americas, soaring 622 feet above the site and forming the uncontested focal point of the exposition. Its restaurant and observation decks are reached through a slender, ribbed stem.

The tower is supported by 55 drilled piers extending to a depth of 63 feet. The pier cap, 92 feet in diameter, required 1,785 cubic yards of concrete and 212 tons of steel.

The first 22 feet of the tower includes 12 buttresses; the next 526 feet, slipformed, was constructed on the basis of eight hours per day allowed for steel and 16 hours for concrete work. Stationary forming resumed near the top. The tophouse is supported by 12 cantilevered trusses.

Three glass-fronted elevators each with a capacity of 27 persons travel from the ground to the top floor in 43 seconds. Interior stairs also provide access to the tophouse, and serve as an emergency exit in case of elevator failure.

The tower, the work of O'Neil Ford & Associates, was originally to be built by private enterprise, but when the tight money market crimped the venture, the people of San Antonio stepped in and saved it by approving obligation bonds.

Elevated walks radiating from the tower lead fairgoers to other main segments of the exhibition—they also shade concessions and rest areas.

The walk to the southwest leads to the United States Pavilion by Roberts, Allen, Helmke and Ayres & Ayres. Federal participation in HemisFair is composed of the Confluence Theater and a structure for



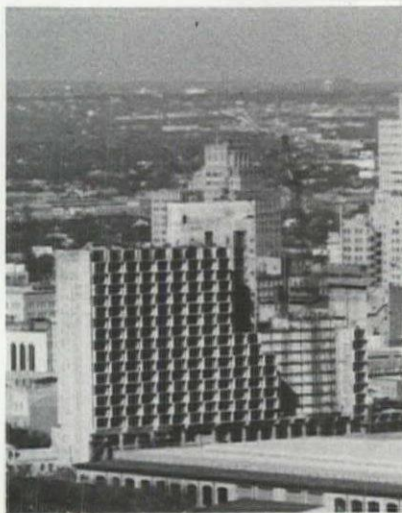
a three-dimensional exhibit. The theater will remain after the exposition as a contribution to San Antonio's cultural and educational facilities. The exhibit structure will be dismantled after the fair.

**US Pavilion Explained:** "The American cultural confluence concept is reaffirmed as the theme element of the United States Pavilion. An imaginative film presents the legacy, harvest, and promise of American culture in a unique theater that evolves and expands in space as the theme unfolds," says Edward Mok, AIA, of Marmon & Mok, theater architects.

Movement of visitors through the pavilion is in this sequence: enter pavilion grounds; admission to exhibit structure; view three-dimensional exhibits; pass through Court of Confluence; proceed to holding area until ready for entrance to theater; film presentation; exit at the screen end of theater upon conclusion of film; depart pavilion grounds.

Educational displays, photomurals, paintings and other works of art are presented to pavilion visitors as a prelude to entering the Confluence Theater.

"The theater requires that a dramatic mood be physically created for the audience, to heighten its rapport with the film," Mok explains. "The audience is grouped in three holding areas. Upon entering the hall, each group is seated in separate intimate volumes. As the film is shown, divisions between the groups of audience disappear, permitting each viewer to experience the expanding physical volume of his surroundings as the theme of the film is gradually



**The Palacio del Rio Hotel goes up unconventionally with crane lifting concrete boxes which are steered into place with the aid of a helicopter rotor. Building had broken-beehive look during placement operation. Below, fair's principal areas and mix of old, new, tranquil and lively elements.**

evolved into the concept of the great confluence of our American culture."

Three projection techniques and as many "stages" are employed during the film. Rectilinear screens disappear in the floor at the conclusion of the second stage and a curvilinear screen, extending to the limit of the viewers' perception, takes over.

While the rectilinear screens are being lowered, the visual barriers separating the groups of audience rise and disappear. Curtains forming the ceilings of the three smaller volumes also rise to permit full view of the curvilinear screen.

"Analytical studies of Confluence Theater functions resulted in the selection of a compact, circular form. The curvature of the building approximates the curvature of the panoramic screen," Mok explains.

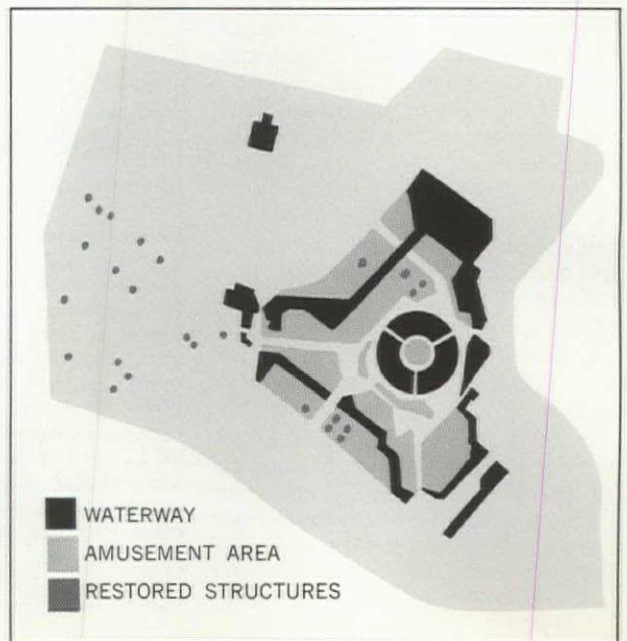
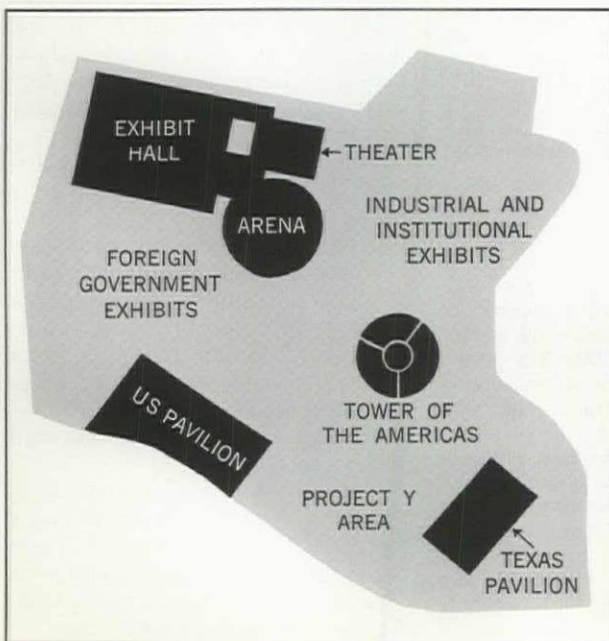
**The Cultures of Texas:** In the southeastern quadrant of the HemisFair site is the Institute of Texas Cultures, primarily a place where visitors may see, hear, and discover the origins in the ethnic history of Texas culture.

The permanent structure is to make specific presentations on the cultures of Texas without duplicating the offerings of the state's existing museums.

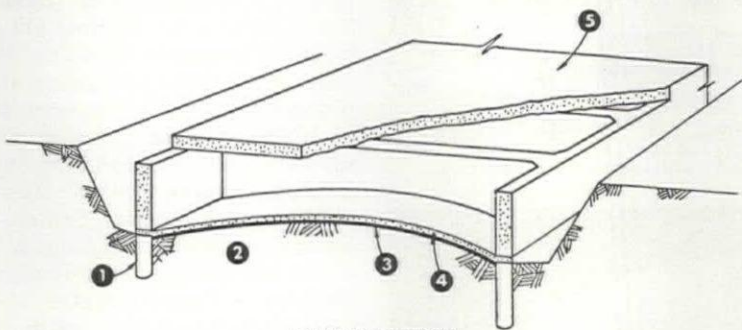
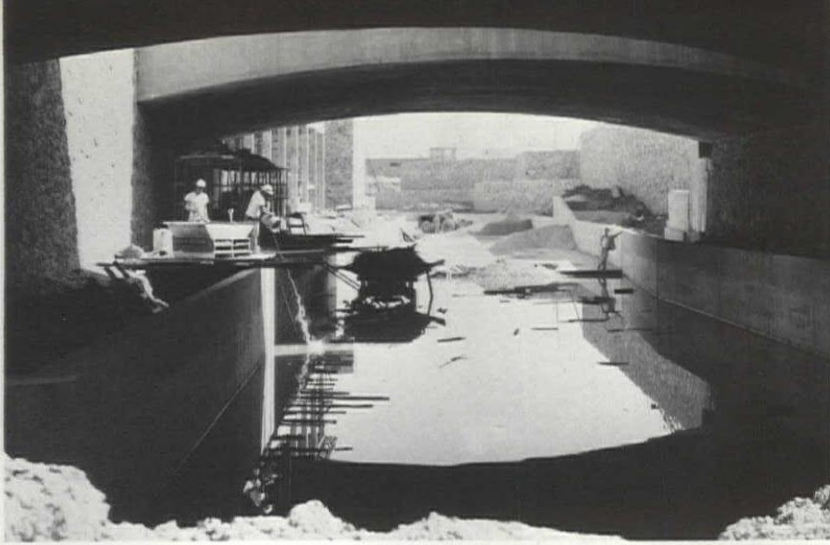
The institute was conceived by Governor John B. Connally as a center of information from the earliest Indians to the present Texas society. It will be of lasting value to Texans and to others beyond the state's borders.

The building is 64 feet high, measures 368 feet by 242 feet, and has a site of some 13 acres.

The main or middle level of the

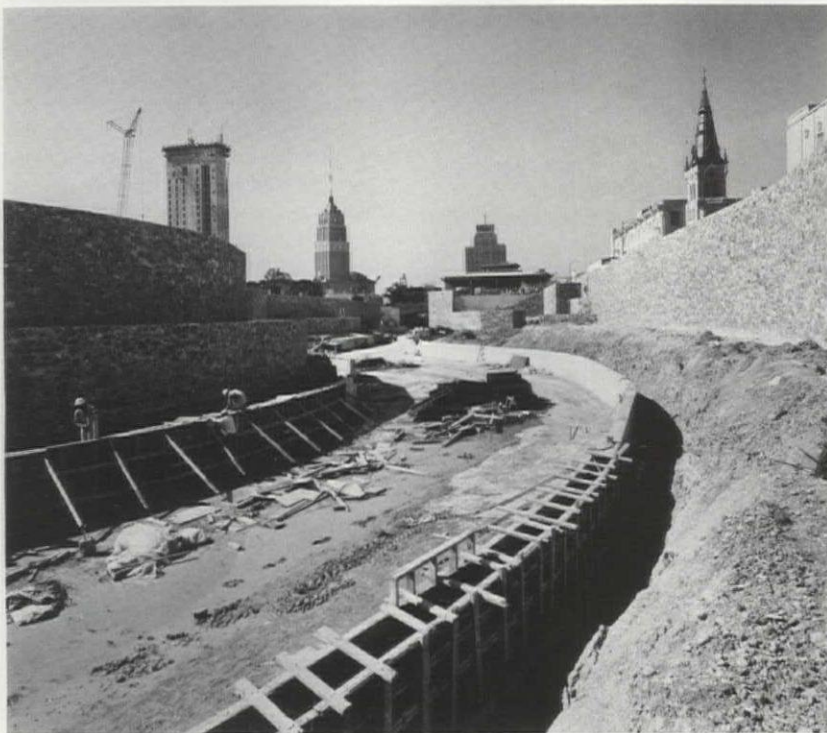






**BRIDGE SECTION**

- |                                                                                                                                                                                                                                                 |                                                                                                                                                                                                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ol style="list-style-type: none"> <li>1. Bridge piers drilled.</li> <li>2. Existing soil shaped to conform to arch of bridge.</li> <li>3. Concrete working slab poured on shaped soil.</li> <li>4. Bottom 5 inch bridge slab poured</li> </ol> | <ol style="list-style-type: none"> <li>5. Bridge deck poured monolithically with beams and abutments, then soil and working slab under bridge are removed, leaving finished bridge.</li> </ol> |
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Gentle arches formed with earth—not, as the author points out, a technique new to San Antonio. One of the most beautiful aspects of the Paseo del Rio is its stonework. In the extension of the river and walkway system to the grounds of HemisFair, retention walls were constructed in the same tradition. It is a mellow, monolithic masonry holding dear, all the same, to its mosaic nature.

building, an area of 40,000 square feet of exhibit space, has over its central portion an 80x100-foot vaulted ceiling dome equipped with rear projection viewing screens.

This is where the Texas story is told by means of modern sound and graphics media, such as films, magnetic tapes, photomurals and slides. Representative artifacts and archives, on loan from other institutions, are exhibited as supplementary material.

At the lower level, additional exhibit space is provided along with space for an auditorium, dining and lounge areas.

The upper level houses the projection areas, with provision for administrative offices, mechanical rooms and post-HemisFair research and audio/visual facilities.

Landscaping of the berm surrounding the building presents a view of grassy slopes and Texas wildflowers which can be enjoyed from terraces on all sides of the structure. Approaches to the building are grassy and tree-filled.

Much of the material produced for viewing and hearing will be available to broadcast media, museums and other outlets, for maximum exposure of Texas history and authentic Texas folkways.

R. Henderson Shuffler, on leave from the management of the Texana collection of the University of Texas, organized the subject matter of the exhibits, assisted by Sue Flanagan, an Austin writer.

Caudill Rowlett Scott of Houston is associated in the project with Callins & Wagner of San Antonio.

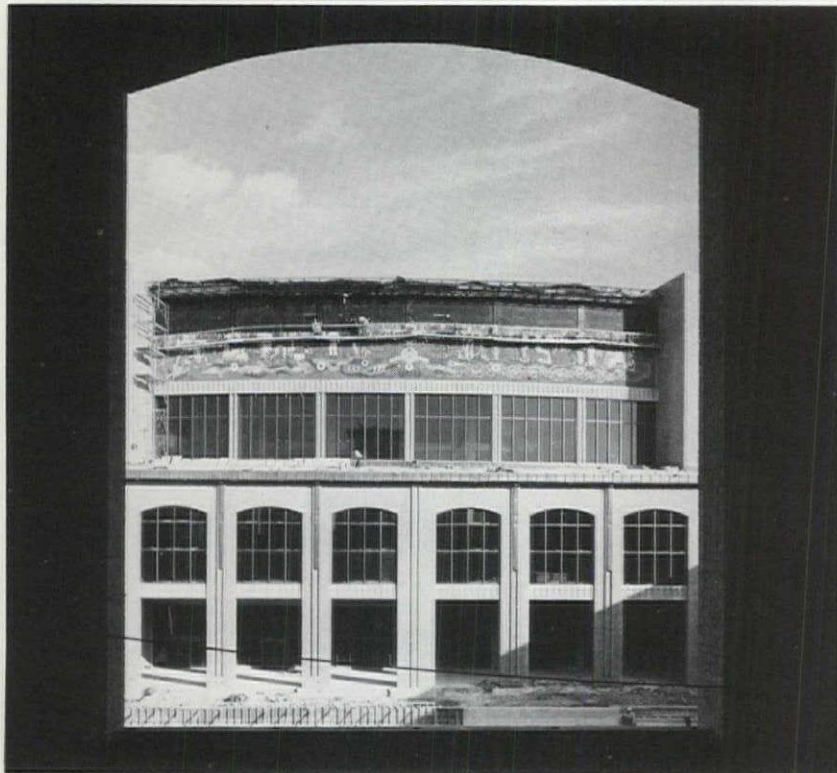
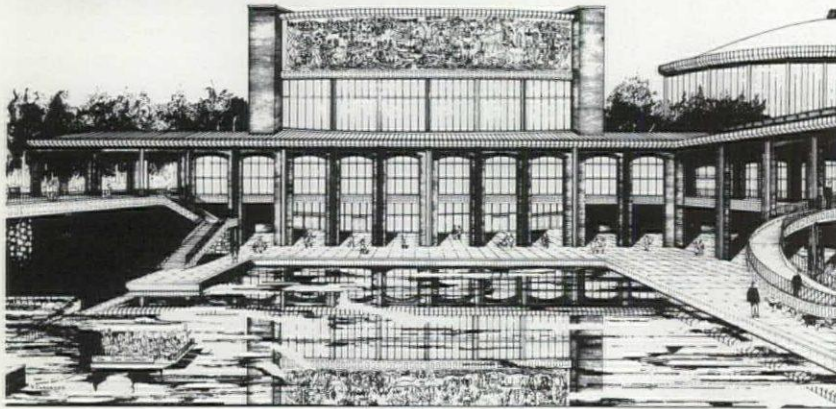
**Keeping Old Houses:** The urban renewal plot on which HemisFair is built is very close to La Villita, the site of the original settlement and for 175 years a fashionable residential neighborhood. The San Antonio Conservation Society selected 25 buildings on or near the site for their historical and/or architectural interest and demanded that they be saved. The O'Henry house, where the author penned many of his stories, was moved and restored on the grounds of the Lone Star Brewery.

The Navarro, Ruiz and Twohig houses were moved and restored at the Witte Museum.

Some 30 historic structures evoking the nostalgic charm of early San Antonio are retained on the exposition grounds, not only as mementos of the past but as charming, functioning additions to the present—and to the fair.

San Antonio's architectural heritage is rich and varied. A book on





The Convention Center includes an Exhibit Hall, foreground, a domed Arena and a Theater. It is the Theater which carries the mural by Juan O'Gorman, a work of brilliant color and intricate form which the lagoon at Convention Center repeats. It is to this lagoon that the San Antonio River extension runs. San Antonians watched the O'Gorman mural inch toward completion while construction workers at the Exhibit Hall across the way were privileged to framed views of the unfolding drama. In the lobby of the Exhibit Hall is the mural by Carlos Merida, left. Both artworks suggest the coming together of various peoples and cultures.

the subject prepared a few years ago by the San Antonio Chapter AIA traces the Spanish, indigenous, French, German, classical and Victorian influences. "It is possible," says the book's introduction, "that some of the style designations may not be esthetically correct; but how do you classify an edifice with 3-foot-thick adobe walls, a colonnaded facade and a rathskeller?"

The first school building of San Antonio is used as headquarters for HemisFair. The old McAllister home has become the HemisFair headquarters for the Bell Telephone Company. The Schultze Store houses the Humble Oil and Refining Company Exhibit.

A few of these houses are of the pioneer type, but most were built by Irish and German immigrants in the early and middle 1800s. In the International Sector is Acequia Madre which Richard Santos, the Bexar County archivist, says is "the oldest original, visible, remaining structure in Bexar County."

It appears in a map of the San Antonio area as early as 1730, when the Marquis de Casafeurte recommended the east bank of the river be settled by Canary Islanders, and was probably built around 1724.

Some of the old buildings on the fairgrounds are serving intriguing functions. A house constructed by an Irishman in the 1860s encloses a French restaurant.

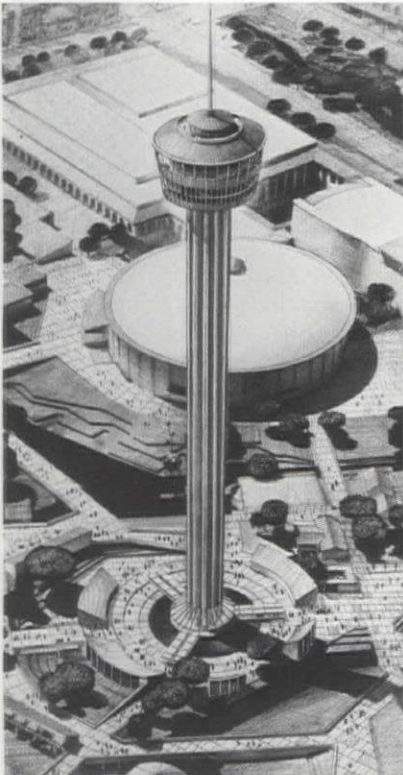
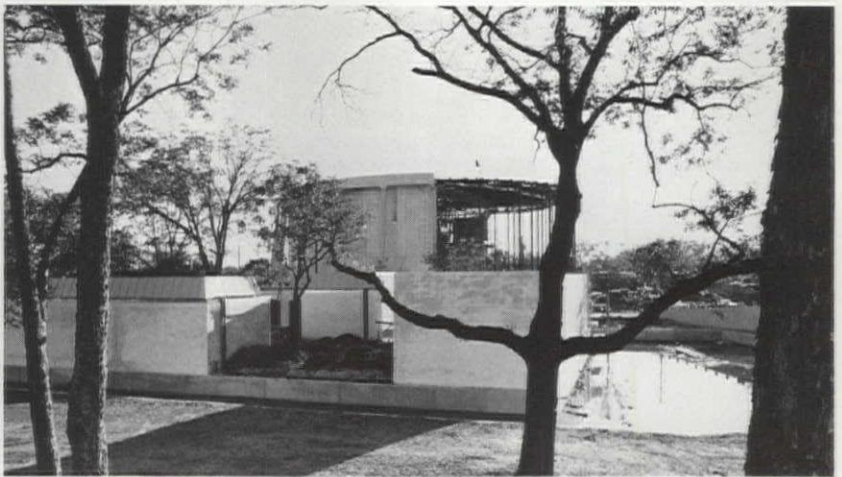
The Acosta house, its brooding Moorish arches formed in the 1870s, features a Philippine cuisine.

A house erected by the Spanish presumably in the 18th century—it has served progressively as an Indian trading post, uniform factory during the Civil War and as San Antonio's first Polish Catholic Church—contains within its 18-inch-thick walls a Gay Nineties restaurant. And so it goes.

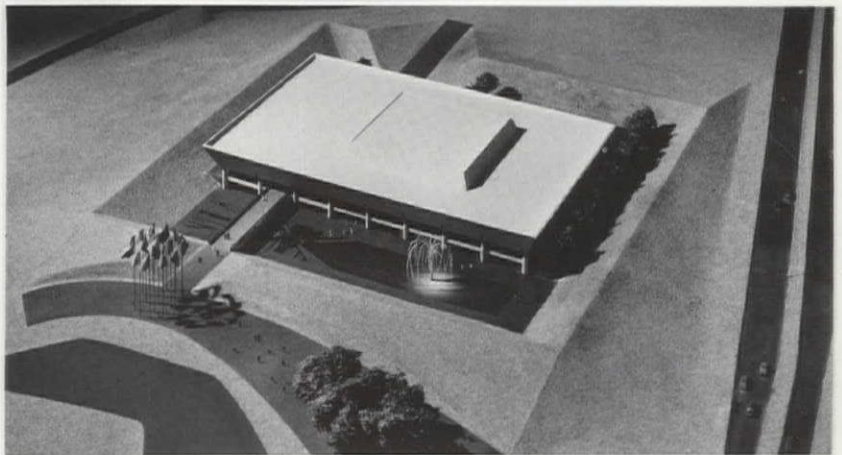
**Where Theme Permeates:** While the Confluence of Civilizations theme dominates in the government exhibits, in many commercial exhibits, in the foods offered for sale and in HemisFair's entertainment, its ultimate expression is reached in Project Y, through which youths of the world are invited to assemble and to react spontaneously to one another and to their conception of the world around them. Project Y is an experiment in the confluence of cultures.

The restlessness of youth, the skepticism of youth, the creativeness of youth; the challenge youth presents to the world and the challenge the world presents to youth—





The United States presentation consists of two structures, the Exhibit Pavilion and, above, the Confluence Theater. Below are a model of the Institute of Texas Cultures and one of the modular, sloped-roof structures in the international area. Note intricately carved doors on this particular unit.



When the concrete Tower of the Americas was completed (most of its length was slipformed), a 650-ton steel tophouse was sleeved up to its cantilevered nesting place. The 622-foot tower dominates the HemisFair scene and from its revolving restaurant and observation levels, 1,750 visitors an hour can view the nation's 14th largest city and its environs.







From top, the Tynan House, built by an Irish immigrant in the 1860s; in a more advanced stage of restoration, the Joske House; the Schultze Store, an expression of the late 19th century; and the Carriage House, another HemisFair restoration artifact. Below, the Acequia Madre, water supply system thought to have been built around 1724. It runs through the fair site.



these all have channels and opportunities for free, spontaneous and unfettered expression.

The youngsters have the chance to project themselves in two directions—vertically, to find the creative energies and unique points of view within themselves, the strength and meaning of their closest associations, traditions and everyday acts; and horizontally, to understand the foreign about them and how it touches them.

For purposes of physical organization of space and materials, five categories of activities are recognized: Creative Participation (many different media), Theater and Cinema, Music and Variety, Public Form, Sports and Games.

It is recognized, however, that spontaneous activities do not lend themselves to categories. The production of a motion picture might involve the written word, music, dance, acting, directing, making of scenery and costumes, photography, etc. Creativity knows no boundaries.

Persons skilled in various creative activities are on hand to help the youngsters express themselves in whatever medium they choose.

The activities of the HemisFair provides a tremendous pool of talent of all kinds for the development and entertainment of youth.

**Accommodating Fairgoers:** The experimentation and spontaneous expression envisaged by Project Y may offer suggestions for the better channeling of the excess energy found from the ghetto to the college campus.

The municipal government of San Antonio, the Chamber of Commerce and the officials of HemisFair are conscious of the fact that unscrupulous persons are attracted to a city engaged in a world's fair and that the exploitative instincts of some natives may be whetted by the presence of 7 million—or more—visitors.

To protect visitors, HemisFair has instituted rules for concessionaires as to services rendered and prices charged.

Visitor Services, Inc., a nonprofit organization, in cooperation with hostelry groups and city fire and health agencies, has standardized lodging facilities. All recognized facilities have received an emblem and are subject to inspection. The members have published their prices for the duration which range from \$6 to \$24 per person for a twin-bedded room, with most rooms going for \$10-12.

Restaurants must pass inspection

and must agree to place priced menus on outside display.

The city and HemisFair have provided a parking lot for 4,500 cars adjacent to the fairgrounds, and the city-owned bus system has acquired 50 new buses, many of which are routed directly to the exposition grounds.

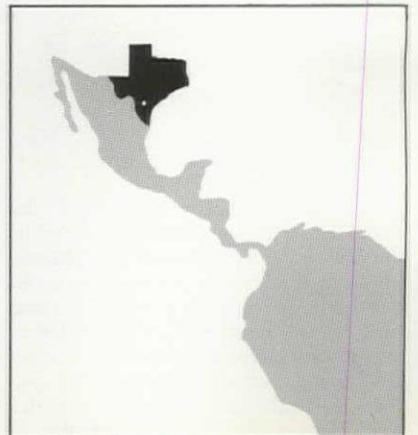
Strolling musicians, players and dancers and marching bands entertain in various parts of the grounds. The open-air theater near the lagoon, the theater in the foreign government section, the state and federal buildings and the commercial exhibits provide free programs in great variety. The objective is to keep the fair-goer entertained and comfortable, and to meet the latter goal rest areas and drinking fountains have been installed throughout the fairgrounds.

Besides the "food clusters" dotting the exposition grounds, more sumptuous dining places, crowned by the revolving restaurant in the tower's tophouse, are also available. And for architects, the San Antonio Chapter AIA maintains a special niche in the Exhibit Hall.

Chapter President Arthur Mathis proudly notes that local and regional architects have designed almost all of the major fair exhibits.

He is also proud that his organization played such a prominent part in converting the San Antonio River into a nationally known tourist attraction. He points out that the AIA recognized this civic contribution by awarding San Antonians a national Citation for Excellence in Community Architecture.

The AIA members of San Antonio, who both individually and collectively contribute generously to the civic life of their community, maintain a display in their Exhibit Hall section portraying the San Antonio environment. Mathis invites visiting architects to make this their headquarters while in San Antonio. □





# Investing in a Growth Profession

BY GEORGE E. KASSABAUM, FAIA

**The president-elect of The American Institute of Architects, in a six-year report to the stockholders, reviews programs and looks at needs ahead.**

At the three Grassroots meetings last January, we compared AIA members to stockholders in a growth corporation. Each member, as one of the Institute's stockholders, has every right to have his questions answered about the way his investment is being used. This is especially true since management is asking you to authorize a \$25 increase in individual corporate dues. In so doing, you should realize that this is the first requested increase since 1950.

Our dynamic and ambitious members are already thinking in terms beyond our present programs. They see that society has great expectations for its urban environment. It sees the medical profession creating life in a test tube and transplanting hearts. It sees science performing miracles and reaching for the moon. Society expects equivalent achievement in the process that creates its physical environment. It cannot be expected to entrust this responsibility to our profession if we prefer to remain in a comfortable role that leaves responsibility and leadership to others.

I want to present facts and figures on what the AIA has done for you, how your dues have been invested, and new programs which your officers and board feel are vitally necessary for the profession as it faces the challenges of an increasingly complex responsibility.

We have analyzed the performance expenditures and budgets for six years, 1963-1968, and this analysis is summarized with this article. I am confident that you will agree, as your chapter officers did, that it represents an impressive return in tangible values for every architect, even for those who, as employees, might feel that they benefit only secondarily.

The outline catalogs our activities under three major thrusts: 1) the development of architects, aimed at a better service and product; 2) the development of public services required to increase the demand for our product; 3) the development of the AIA. The overriding objective is professional development.

In the following text I will touch upon the highlights of each area of our work. I will single out for special comment, along with projections of cost, those sectors where the board has been

urged to expand the AIA's activities to meet today's challenges.

## **Development of Architects: Design**

Of all professionals, we are the only ones who are fundamentally concerned with esthetics. This primary force is fostered by our Committee on Esthetics. Supplemental dues were used to pioneer design seminars, the committee is currently exploring design criticism and collaboration in the arts. We are doing as much as our current funds will allow to supplement and foster creative design by individual architects.

Urban design was recognized in the early '60s for its rapidly growing importance in the fabric of our national life. In 1962 the AIA allocated some of the then-new supplemental dues income to begin the project which produced the widely used book *Urban Design—the Architecture of Towns and Cities*. In 1965 the successful urban design experiments became activities supported by regular dues.

Creation of a federal Department of Housing and Urban Development with all of its ambitious programs has underscored dramatically the need to expand our own urban design effectiveness.

The crisis in our cities must be recognized as being an architect's problem. The environmental problems of the cities will be solved. The only question for us is how much architects will be a part of meeting the greatest challenge our profession has ever faced. Each of us, regardless of the size of our operation, must expand our capabilities in urban design. The Institute can help by producing the new tools the practitioner needs.

I suggest that \$70,000 in new income should be allocated annually to increase committee and staff work, to produce new publications and greatly increase the work of urban design assistance teams that help local communities and local AIA chapters.

Housing is not only the base of the building economy but a key ingredient in the urban crisis. Unfortunately, the profession has let others become the decision makers in housing. The turn-key housing concept is a forecast of more pressure by HUD to solve the problems of low-income housing. It is not too late for us to show leadership, but it soon may be.

I propose \$25,000 in new funds so that we can supplement our staff and permit more committee activity and thereby become more active in developing adequate national housing programs.

Through its Committee on Historic Buildings,



the AIA has long been active in the preservation and restoration of significant American architecture. Through liaison with federal agencies, the AIA has been instrumental in preventing the destruction of many significant historic buildings.

Chapter "preservation officers" supplement national committee work at the community level. The committee is developing a filmstrip on historic buildings, guidelines on the technology of preservation; the Restoration Manual was written by a past chairman.

### Development of Architects: Practice

Practice is one area of professional development which has understandably received a major share of attention and dues investment by the Institute.

We have concerned ourselves continually with supporting the practitioner—studying and revising AIA's documents to keep up with practice.

We have provided a series of aids to good business management; carried on liaison with other organizations representing parts of the building community; and have undertaken research such as the recently published *Cost of Architectural Services* study and *Emerging Techniques of Architectural Practice*.

No one could seriously deny that our past programs have been of real help to today's practitioners. But even this year's tools are not enough to make us more influential in tomorrow's world. In an age that worships research, we must stim-

ulate architectural and environmental research. In an age that worships technique, we must stimulate the exploration and development of new techniques. We can take pride in what the AIA has done, but we must do more so that our members can be better prepared to do more.

### Development of Architects: the Future

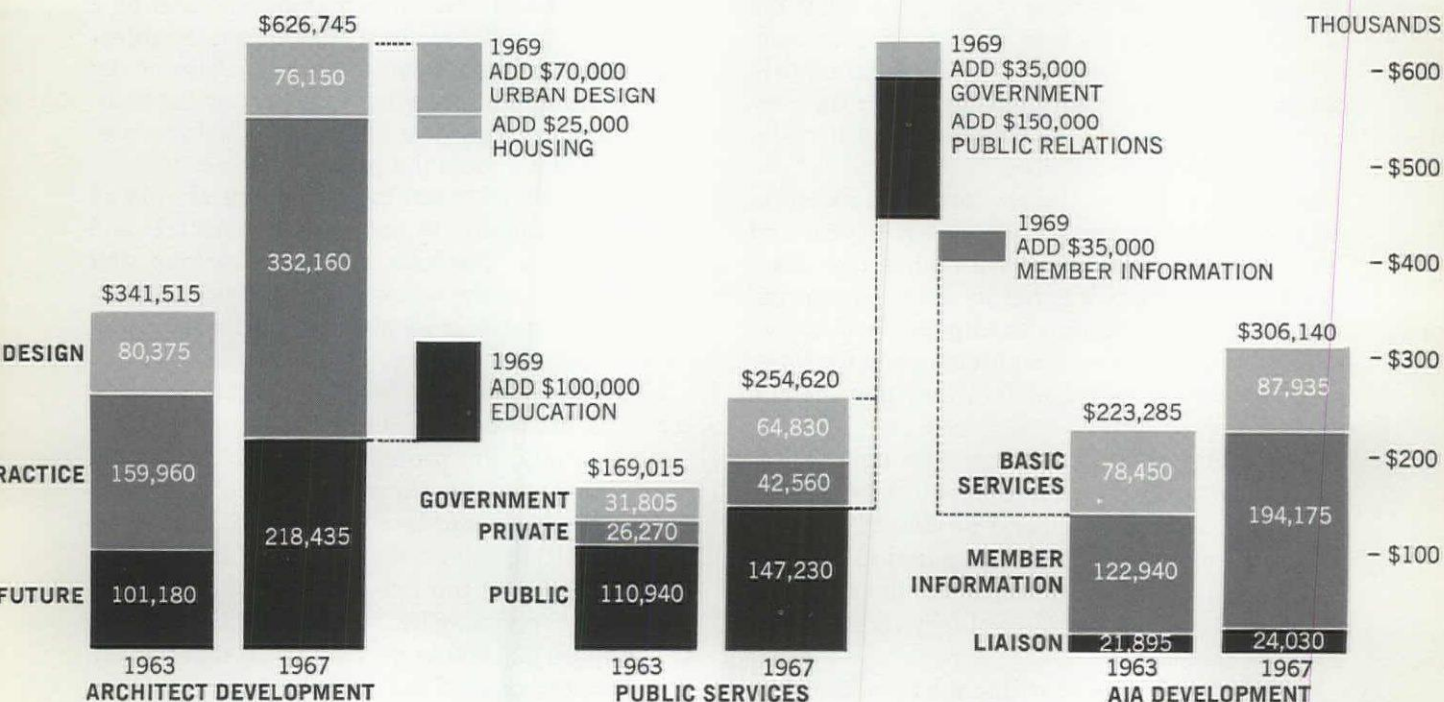
One of the responsibilities is to look to the future and evaluate the effects that are being brought about by the massive changes in society, in the economy and in technology.

The design professionals who will shape the future environment must be educated along entirely new lines. The AIA's Princeton Project describes an education which could produce a new kind of architect.

Like any group with a master plan, we have our short- and long-range goals. For the long-range, we must commit the necessary energy and resources to transforming the project recommendations into reality; into assisting schools of architecture with curriculum development, staffing and all that will be needed to implement sweeping changes in architectural education.

But their results are a long way off, and it is today's architects who must create the environment that will permit more people to live closer together and still get more pleasure from life. So continuing education programs for practitioners must be developed. We are behind the other professions in this respect.

## GROWTH 1963-67



The charts show expenditures for continuing programs and projects (including the convention and the JOURNAL): 1967 total \$1,187,505; 1963 total \$733,815. Increase of \$453,690 was derived from growth over the period of approximately \$113,000 annually. Strong emphasis is shown upon architect development except for design. The future

sector benefited by special project funds for educational research. Development of public services has lagged. The added increments for 1969 indicate allocations from the proposed corporate dues increase to strengthen continuing programs in urban design, housing, education, government and public relations and member information services.



We recognize the importance of the next generation of architects, and our excellent Student Forum and student convention activities are augmented this year with a new, experimental magazine for students, supported from the supplemental dues program.

We must continue to think of the near and distant future, and I propose that we spend approximately \$100,000 to prepare for both.

### Development of Services to the Public

No modern business (or profession) will have great success unless it meets the needs and demands of the public. A growth corporation, no matter how good its products, will put an important share of its resources into marketing its products. Perhaps these words seem a little undignified for a profession. So we call it "services to the public."

We have clearly defined three major "targets"—three sectors of the "public"—to reach, each requiring somewhat different techniques: 1) the government sector; 2) the business sector (private enterprise); 3) the public, press and schools.

### The Government Sector

Our government affairs staff carries on a continuing program of congressional liaison—work which involves analyzing legislation and presenting AIA positions.

The other major aspect of government relations work recognizes the government as a building

owner and client for architectural services. Negotiations are underway to promote use of uniform A-E contract forms for all federal projects; the Institute is working on acceptable alternatives to the 6-percent fee limitation; and an architect's primer on government contracting is being prepared.

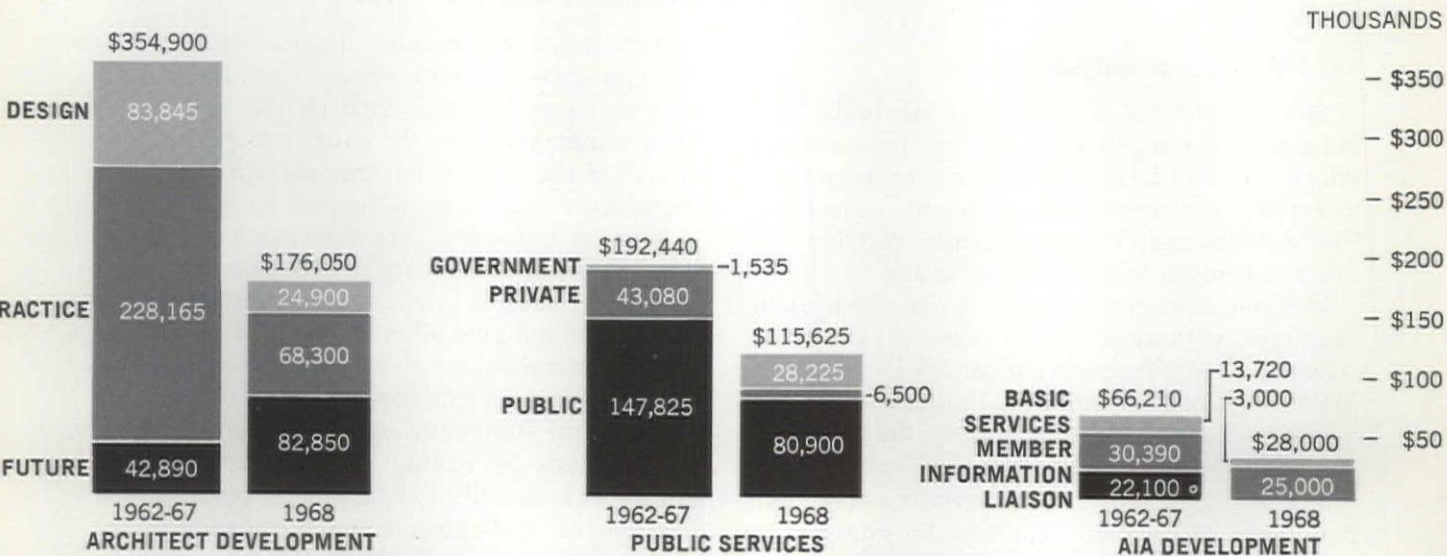
No crystal ball is needed to foresee the increasing importance of government to the building community. Already the largest single consumer of architecture, the federal government, is constantly increasing its sphere of influence—as a client, as a financier or overseer, and many more. Adverse actions of the federal government which affect architects will very soon find their way into the rules of every state and local government.

Architects have an obligation as professionals and as taxpayers to insure that all values are considered in the design of our public buildings. This requires a still stronger government liaison program for the Institute so that we can be well prepared to take a positive role in the creation of legislation.

We need better means of informing our membership about legislative developments; we need the machinery for working with government at grassroots level and marshalling the full power of the profession upon important legislation.

Beginning this year, our government relations capability is being enlarged by the addition of a staff assistant for legislative affairs, production of a bulletin to give more thorough coverage of leg-

## SUPPLEMENTAL DUES RECORD



Average annual expenditure '62-67 = \$102,500. In 1967 the 1% FICA tax produced approximately \$140,000; projects totalled \$155,500. The increased supplemental dues will produce approximately \$280,000 for projects annually.

A total of \$613,550 has been spent in six years of supplemental dues projects 1962-67. Architect development received 58 percent of the total, with the greatest share to projects related to architectural practice. Development of public services received 32 percent, with public relations (press, public schools) receiving sums second only to practice. Expenditures for development of AIA were primarily to conduct surveys or to start activities (e.g., annual committee chairmen's meeting, international liaison) which were

later absorbed into the regular budget to release supplemental dues for projects elsewhere. The 1968 columns show the budgeting of projects for this year based upon greater income resulting from the dues increase. The 1968 total is \$319,675, of which \$233,475 is 1968 income and \$86,200 was a balance carried forward from 1967, as is done annually so that all of this fund is put to work. The 1968 projects lay more emphasis upon public relations, education and technical aspects of practice than in the past.



islation and a "Minuteman" program to strengthen AIA's grassroots contacts with Congress. These immediate steps are possible under the augmented supplemental dues program.

But since supplemental dues cannot be used for continuing programs, we must turn to regular dues income to carry on these programs as continuing activities, and this will cost an additional \$35,000 per year.

### **The Business Sector (Private Enterprise)**

Our communications with the community of private-enterprise clients are chiefly through our "building type" committees. They maintain active, ongoing liaison programs with organizations representing the people who build schools, hospitals, industrial and commercial buildings. They sponsor workshops, architectural exhibits and other programs to increase design awareness.

The expenditure charts clearly show that our investment in the area is minor and should be strengthened, for the study of costs and architectural services show that the most profitable projects are in the private sector. This is an area where package dealers are competing with all sizes of architectural firms. The Committee on the Future of the Profession asked the advice of the decision makers in private enterprise (see "Where Is Architecture Going?" AIAJ, March '68) to open its exploration of future trends for the profession.

The people we are trying to reach spend millions telling the public about the value of their own efforts. We must develop and sustain a more effective program of marketing what architects can do.

### **The Public, Press and Schools**

The education of the general public (public relations) is a big job for a professional society which does not have the resources to permit the sweeping approach used by consumer industries. The methods used must be sharply effective and must be kept professional in character.

We have concentrated most of our efforts upon the press, with national and regional seminars, news releases, clipsheets and guides for chapters. With the War on Community Ugliness, we began a public-oriented campaign using the film "No Time for Ugliness," slide shows, filmstrips, exhibits and paper shows. Very recently a task force has begun to develop experimental material to make elementary school children, the next generation of clients, more sensitive to their environment.

We have moved positively to strengthen this work by reorganizing the Public Relations Committee and giving it an overview position to extract maximum public relations benefit from

every AIA program. The staff has been strengthened; \$80,000 in 1968 supplemental dues funds has been allocated for projects including a new film for chapter use.

We have a clear directive from the membership to develop the best public relations programs possible within our resources. I propose to allocate \$150,000 in new dues income for programs to reach the public, press, schools and business sector, thereby increasing the annual budget to \$250,000. We will continue to allocate substantial sums from the augmented supplemental dues income for special public relations projects and experiments each year.

### **Development of the AIA**

A business or an industry must invest some of its resources in maintaining its internal strength and growth. For the profession of architecture, the only cohesive large-scale operation for collective strength and growth is the AIA. Its own strength derives from active chapters and state organizations, and most of all from a well-informed membership. We divide this major area of activity into Basic Services, Member Information Services and Liaison.

#### **Basic Services of the AIA**

As the outline shows, these are the services which are fundamental to a professional society: the administration of its ethics, honors, bylaws and rules; its component structure and teamwork and its membership promotion. These activities must continue with modest financial support.

#### **Member Information Services**

Ours is a democratic organization whose strength derives from a strong, united and well-informed membership. Each chapter's least informed member hurts the entire profession. Our efforts in the area of member information have increased significantly in the past six years.

A major innovation are the Grassroots meetings which for three years have developed a most productive face-to-face exchange between component and national officers. The staff executives of state organizations also meet annually.

This year, as a supplemental dues project, we are initiating another information service to reach all members, by adding a special architectural journalist who will produce regular in-depth discussions of vital subjects which can only be superficially covered in the Memo. To continue this, we must turn to regular dues, and I propose to provide \$35,000 to cover all costs and to make it a continuing service beyond 1968.

The Grassroots meetings have disclosed several important "clearinghouse" functions for the national AIA. In such areas as state legislation,



## DIVIDENDS AND SERVICES FOR YOUR INVESTMENT IN AIA

Condensed into this one outline is a list of the continuing services performed by the AIA and many of the significant projects since supplemental dues programs began in 1962. Our members' investment of dues in the AIA is modest even for those proprietors who "buy extra shares" with their supplemental dues. The return in tangible values is high for architects who make use of the services and products of the AIA.

### DEVELOPMENT OF ARCHITECTS

#### DESIGN

**Esthetics—Continuing services:** awards; principles of criticism; collaborating arts; critic's medal.

**PROJECTS:** regional design seminars '64-66.

**Urban Design—Continuing:** urban policies; legislation; published articles; conferences.

**PROJECTS:** Book "Urban Design, Architecture of Towns and Cities" '65; Chapter Action Guide '67; local assistance teams '67, '68; new towns studies '68. Book "Potomac" for US Department of Interior.

**Housing—Continuing:** collaboration housing industry and federal agencies; housing policy (e.g., turnkey, housing for aging).

**PROJECTS:** PHA contracts '63; housing legislation '68.

**Historic Architecture — Continuing:** chapter preservation officers; preservation policies and legislation.

**PROJECTS:** filmstrip; preservation technology '68; Restoration Manual '66.

#### PRACTICE

**Administration and Business—Continuing:** Handbook of Professional Practice; AIA Standard Documents; regional, chapter practice seminars

(56 in '66, '67); insurance programs for architects; architects' attorneys conferences; state statutes of limitations (22 to date); unionization of architects' employees; liaison with design professions; convention service centers.

**PROJECTS:** Publications—Comprehensive Architectural Services '64, '65; Legal Citations File '65, '66; and judicial cases (both continuing); national study Cost of Architectural Services '66, '67; Planning for Profit '68; Office Forms Checklist '67; Chapter Fee Summary Chart '67; Employee Salary Survey '67; Service of the Architect '68; Office Procedures Checklist '68; construction industry arbitration rules; studies of fee compensation.

**Production and Technology—Continuing:** Uniform Index System; filing system revision; Specification Worksheets; building product literature; building codes and regulations; building materials standards; building industry coordination.

**PROJECTS:** Book "Emerging Techniques in Practice" '65, '67-68—design programming, computer use and development; technical information pilot study; study of com-

ponents and systems; building code institute; Manual on Roofing Design; Architectural Graphic standards.

#### FUTURE OF ARCHITECTS

**Education and Research—Continuing:** advancement of education with ACSA, NAAB; licensing with NCARB; AIA scholarships; advisory service to new schools, annual teachers' seminar; internship and continuing education; researchers conferences and research surveys; collaboration with industry, government; chapter and school scholarship survey.

**PROJECTS:** Technicians training '66, '67, '68; Princeton educational research project '66, '67, '68 follow-up; course evaluation guide-book; educational development criteria; curricula for technologists; study of future of the profession.

**Architectural Students — Continuing:** Annual Student Forum; assistance to 81 student chapters AIA; annual student convention; career guidance; selective and civil service collaboration.

**PROJECTS:** National Student Registry '67; student opinion survey '67; AIA scholar program (continuing); student magazine '67, '68.

### DEVELOPMENT OF PUBLIC SERVICES

#### GOVERNMENT SECTOR

**Federal Construction Agencies—Continuing:** Communications relative to architects' fees, contracts, policies.

**PROJECTS:** PHA regional seminars '64; Bureau of Indian Affairs policies '66; tri-military services relations (continuing) '67-68; General Accounting Office fee limitations; adoption of AIA document principles by agencies; uniform negotiations procedures for A-E contracts; primer for architects on contracting with federal agencies.

**Legislation—Continuing:** analysis of legislation; preparation of positions testimony before Congressional committees; communications with Congress; state legislative reporting service; influence upon planning and design of the Capital City.

**PROJECTS:** AIA-CEC legislative conference '68; legislative minute-man program and new bulletin '68.

#### PRIVATE BUSINESS SECTOR

**Continuing:** Committee collaboration with national organizations and federal agencies concerned with

schools, colleges, churches, health facilities, theaters, commercial and industrial architecture, libraries.

**PROJECTS:** Industrial architecture promotion '63-66; UIA industrial conference '67-68; school plant reprints; school and college seminar '64; teaching tools for elementary schools '65-68; exceptional children seminar '65; educational specifications '67-68; workshops "Community Mental Health Centers" '67-68, AIA-AMA; Joint Committee on Environmental Health '65 to date; architectural barriers for the handicapped '67-68; interfaith research seminar '64; international religious architecture conference '67; guide to planning religious architecture; theater architecture exhibits '64-66; brochure on architecture for US Chamber of Commerce '67; brochure "Your Building and Your Architect" '67; investors conference '68; library awards exhibits '64, '68.

#### PUBLIC, PRESS AND SCHOOLS

**Continuing:** News releases; magazine articles; citations; exhibits; films and filmstrips; aids to chap-

ters and architects and other public relations services.

**PROJECTS (PUBLIC):** War on Community Ugliness; movie "No Time for Ugliness" '66; paper shows on houses and cities '65, '66; slide show on houses; citations to cities; checklist of architectural films '67; new films—suburbia, highways, urban graphics '68; urban renewal film, Rockville, Md.; chapter PR first aid kit '68; regional PR workshops (continuing); chapter slide show competition '68; study of advertising '68; opinion surveys clients, students, professions '67, '68.

**PROJECTS (PRESS):** Columbia press seminar '63 followed by regional press seminars '63-65; Columbia mass media seminar '65; meetings for AIA component editors (continuing).

**PROJECTS (SCHOOLS):** Three filmstrips on architecture for schools '63-65 (still widely used); bibliography for teaching media '67, '68; elementary and secondary education task force '66-68 produce experimental teaching media.

### DEVELOPMENT OF AIA

#### BASIC SERVICES

**Continuing:** Fellowships and honors; ethics and judiciary system; competitions; nominations; bylaws and rules; membership procedures; state and chapter affairs—services to components; women's auxiliaries.

**PROJECTS:** Surveys and statistics on profession, membership, chapter activities, etc.

#### MEMBERSHIP INFORMATION

**Continuing:** Grassroots meetings since '66, committee chairmen's

meeting; Board Report, Structure and Services, Memo, bulletins; meeting state staff executives; services of AIA Library; AIA officers'-committeemen's participation in component conventions, workshops.

**PROJECTS:** Regional convention seminars '63-65; special architectural journalist and new news service on current issues vital to the profession '68; supplemental dues projects were used in '63, '64 to initiate committee chairmen's meet-

ing, Structure and Services, international programs, all of which were absorbed into regular activities; the AIA JOURNAL and national convention contribute significantly to every area of AIA activities.

#### LIAISON

**Continuing:** Liaison with international architectural organizations, US professional, technical and industrial organizations.

**PROJECT:** Conference of design professions '67.



licensing laws, public relations and successful chapter programs and projects, we see the need to collect the experience and information from each chapter and make it available to every chapter.

To do this and otherwise improve our mail services, we must acquire up-to-date automated equipment. This will represent a sizable one-time capital investment from new income that will greatly improve our services to individual members as well as to our components.

### Headquarters Operations

My experience in AIA has given me firsthand knowledge of the scope and complexity of our total operation. In 10 years, the membership has increased by 66 percent to more than 20,000. The growth of the profession, as well as the growing complexity of practice, keeps setting up new demands that must be put together into a meaningful plan of action.

The primary responsibility of leadership is to plan, and your board and officers have outlined an overall plan of objectives and functions. An increase in our resources makes it even more imperative to implement this plan efficiently for maximum use of every dollar.

We must look ahead at least three years, assess the resources available for this period and develop a well-balanced master program. Each of us advises our clients not to proceed without a master plan. This is equally good advice for the AIA, and I would invest \$10,000 annually in studies and committee meetings that would permit such future planning.

Finally, I see the need to keep improving the already excellent staff that the executive director has organized. *The AIA is being run by its members*, through the officers and the board. Much of the work is programmed and performed by dedicated commissioners and committeemen. However, these busy architects look more and more to expert staff support which calls for the strongest staff possible which, as we all know, means salaries competitive in the Washington area.

### Value to Smaller Offices

Smallness is not necessarily a function of size. Smallness can be a way of thinking, an insistence on trying to apply yesterday's concepts and techniques to today's problems, and refusing to think about tomorrow's.

There is no "conflict" between small and large offices. There are offices of all sizes which are practicing architecture as if they were corner grocers. It is not reasonable to expect a dynamic society to bestow leadership on those who think small. What we are all concerned with is thinking big—not necessarily becoming big.

The small offices face the same challenges to professionalism as the largest firm. It will feel the profit squeeze first and most keenly, and is, therefore, most in need of the benefits of creative research into more profitable architectural practice.

For example, the very fact that every office is not geared to computer-aided information retrieval and processing is the very best rationale for AIA research into these techniques. It is not at all hard to visualize a time-sharing program which would enable the individual practitioner, alone in his office, to avail himself in a matter of seconds of product data or research results stored in a computer a thousand miles away.

Similar information systems are already at the disposal of doctors, to help them diagnose their patients' ailments; it doesn't take much imagination to foresee the day when the same techniques will be applied to creative building.

The numerically small firm is, similarly, the firm most vulnerable to the package builder's invasion of the construction market. Therefore, it is the beginner and the small office, providing they have something to offer, which stand to benefit most dramatically from Institute programs.

Such large-scale, expensive programs can be undertaken best at the national level, to insure a coordinated and effective campaign. But it is the individual practitioner, whether his office employs five men or fifty, who will reap the benefits.

### Chapters' Increased Needs

As a former chapter president, I know how much all of us depend upon the herculean accomplishments of chapter committees, working on meager budgets, in areas of concern vital to us all.

With a tightly knit organization of colleagues, aware of local issues, and perhaps on first-name terms with those in positions of local influence, the chapter organization is our most effective tool.

However, there are times when the task at hand requires resources not within the chapter's reach; when issues affect professional practice everywhere; when the solution to the problem requires continuing contact with federal agencies or other national professional organizations.

It should not be necessary to belabor the need for a strong national organization, working in concert with strong local components, to accomplish the profession's objectives at all levels.

Many chapter and state organizations have found it necessary to increase their dues. These increases represent in all cases a recognition of the need for stronger performance at local and regional levels.

*The national AIA has operated for 18 years without increasing corporate dues. Through prudence and good management it has managed to*

*Continued on page 91*



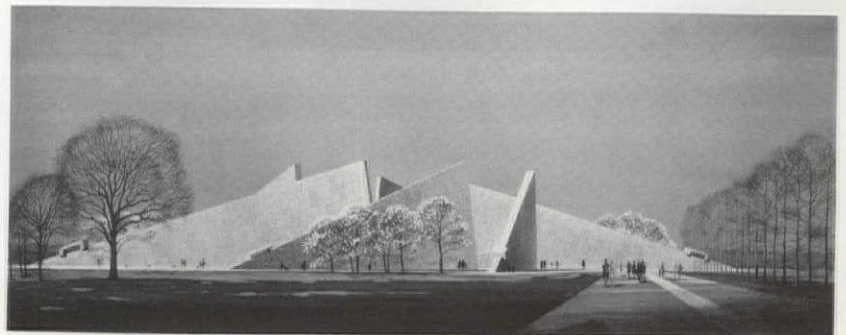
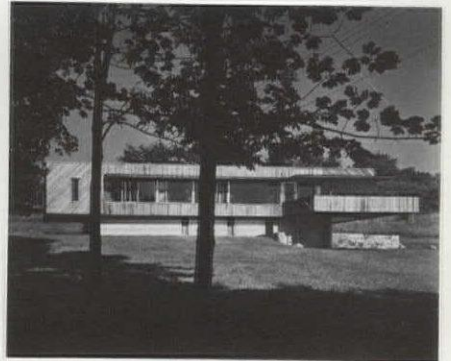
**To Hungarian-born, 66-year-old Marcel Breuer, FAIA, goes the 1968 AIA Gold Medal as "architect, designer, teacher, planner," to quote from the citation. He has, "through his pursuit of excellence in a broad spectrum of activities, done more than almost anyone in our time to unite within his person all the many disciplines that go into the formation of our environment."**

Breuer's career, after he attained the rank of Master at the Weimar Bauhaus, began at the Bauhaus in Dessau where he taught, practiced architecture and invented



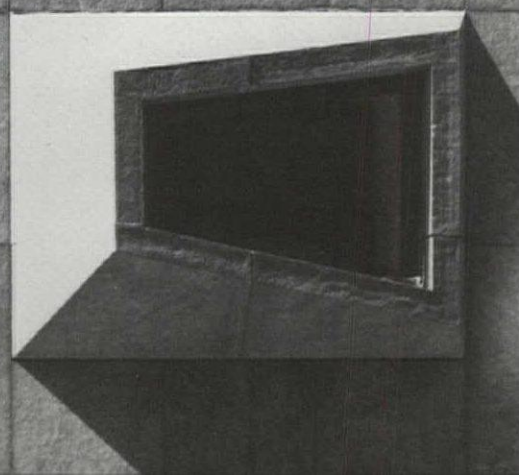
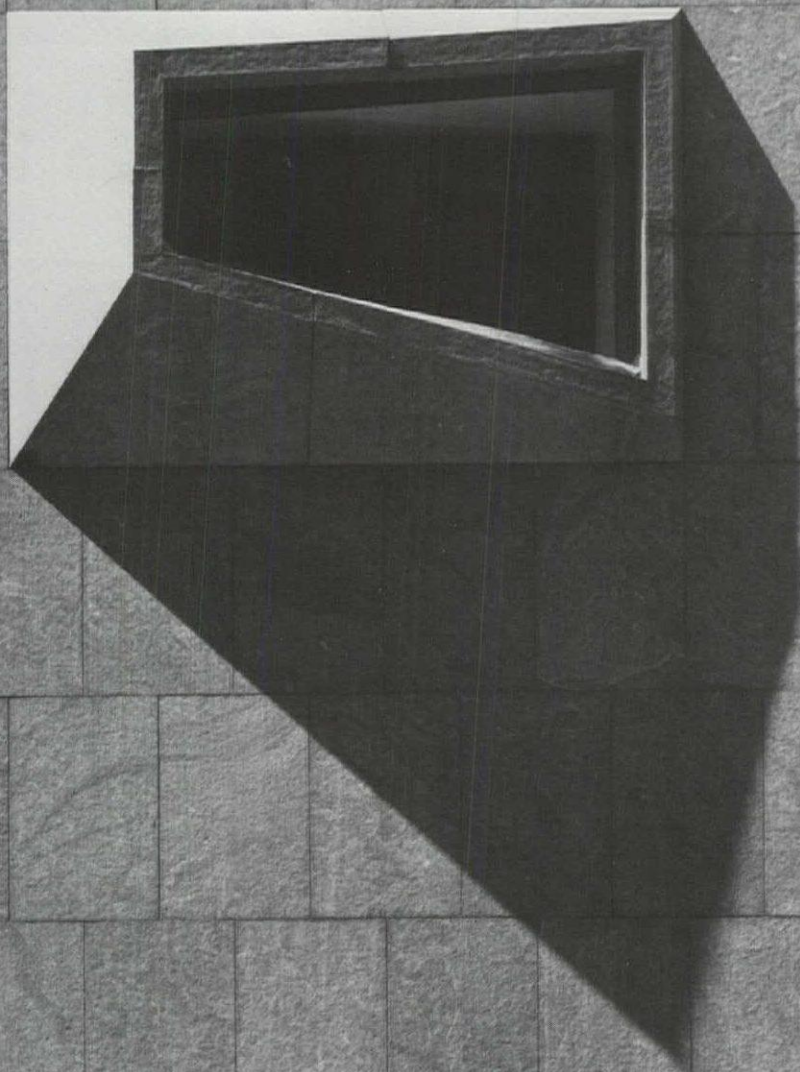
## Sun and Shadow: A Design Philosophy

the first bent continuous tubular steel furniture in 1925. Following practice in Berlin and London, he came to the United States in 1937 at the invitation of his Bauhaus director, Walter Gropius, FAIA, to join the faculty of Harvard University's School of Design and to open an office in Cambridge. He moved to New York, designing his own residence in New Canaan, Connecticut, in 1947 and his first principal work two years later: the Exhibition House in the garden of the Museum of Modern Art. Residential work, in fact, has played a significant part in his practice, currently a partnership (with Herbert Beckhard, Robert F. Gatje, Hamilton P. Smith, all AIA) on Madison Avenue with a staff of about 60 and a branch office in Paris with about 10—and all, nearly without exception, architects. His established reputation was further acknowledged when he was asked in 1966 to develop a new concept for the Franklin Delano Roosevelt Memorial after the original competition failed to materialize. Accepted unanimously by the FDR Memorial Commission and the Roosevelt family but rejected by Washington's Fine Arts Commission, the design by Breuer and Beckhard is still facing an uncertain future.





“There is the main concept and there is the concept of details. Between those two the design of a building just grows: common sense, experience, taste and work carry it to completion.”





## Breuer's approach to the design of the Whitney Museum

In the designing of the project and after establishing its workings and its program, we have faced the first and most important problem: What should a museum look like, a museum in Manhattan? Surely it should work, it should fulfill its requirements. But what is its relationship to the New York landscape? What does it express? What is its architectural message?

It is easier to say first what it should not look like. It should not look like a business or office building nor should it look like a place of light entertainment. Its form and its material should have identity and weight in the neighborhood of 50-story skyscrapers and mile-long bridges, in the midst of the dynamic jungle of our colorful city. It should be an independent and self-relying unit, exposed to history, and at the same time it should have visual connection to the street. It should transform the vitality of the street into the sincerity and profundity of art.

The concept features a sunken sculpture court between the sidewalk and the building, spanned by the entrance bridge; it has the glass front of the lobby facing Madison Avenue and the sculpture gallery which provides contact with the street and the passers-by. While the inverted pyramid of the building mass calls attention to the museum and to its special dedication, the mass is surfaced with a most durable, retiring and serene material: a warm grey granite which is rather dark and has a mild play of reflection of the surroundings. The building, reaching out high over the sculpture yard, does not stop the daylight or the western sun; it receives the visitor before he actually enters the interior of the building. One sees the sunken yard and its sculptures from the sidewalk and the entrance bridge. Also, there is a view of the lobby and the sculpture gallery through the glass walls.

To emphasize the completeness of the architectural form, the granite facades on both streets are separated from the neighboring fronts as an attempt to solve the inherent



problem of a corner building, which otherwise could easily look like a quarter section of something. The project transforms the building into a unit, an element, a nucleus, and lends it a direction toward Madison Avenue. The overall granite facing, homogeneous, extending out and over toward Madison Avenue, reaching down into the sunken garden with openings which grow out of the surface, with the modulation of the avenue gap between it and the neighboring buildings, with the granite parapet along the sidewalk and with the structural concrete form of the bridge—all this is an attempt to form the building itself as a sculpture. However, it is a sculpture with rather serious functional requirements.

Our purpose was to achieve a simplicity of interior design that would focus visitors' attention on the exhibits. Also sought was flexibility of spaces. Solutions for these demands are offered by large rectangular and uncluttered gallery spaces, uninterrupted by columns or beams and partitioned by means of easily interchangeable floor-to-ceiling panels. A ceiling grid permits and promotes this interchangeability, including flexible use of the lighting. All walls are white, the concrete ceiling a light grey and the split slate floors a related darker grey.

The floor area needed is about six to seven times greater than the site. This makes toplighted gallery spaces impossible, aside from the fact that daylight would be reflected and tinted by the red- or yellow-brick color of the tall apartment buildings opposite. Windows or exterior glass areas would be disturbing and would reduce gallery hanging space. Consequently,

our building does not have any use for windows. It has controlled mechanical ventilation, heated or cooled, and controlled, adjustable lighting.

We recognize that lighting is probably the most important single component of a museum's complexity, and the solution here represents rather serious research into the problem. It was tested and verified in a full sized mockup before final installation.

As windows have lost their justification of existence in this building, only a few remain to establish a contact with the outside. These few openings, free from the strict requirements of ventilation and lighting, can now be formed and located in a less inhibited fashion, as a purely sculptural contrast to the strength of the main building contours.

It seems to me that large open gallery spaces with interchangeable partitions need a special understanding and care, otherwise the general impression will be too synthetic. To establish our direct sympathy for these spaces, we suggested for the galleries rather unsophisticated close-to-earth materials: roughly textured concrete ceilings, split slate floors, walls covered with flat painted canvas. Furthermore, the design includes a number of smaller, noninterchangeable rooms of definite decoration and furnishings. Painting and sculpture can be shown here in surroundings similar to a home or office.

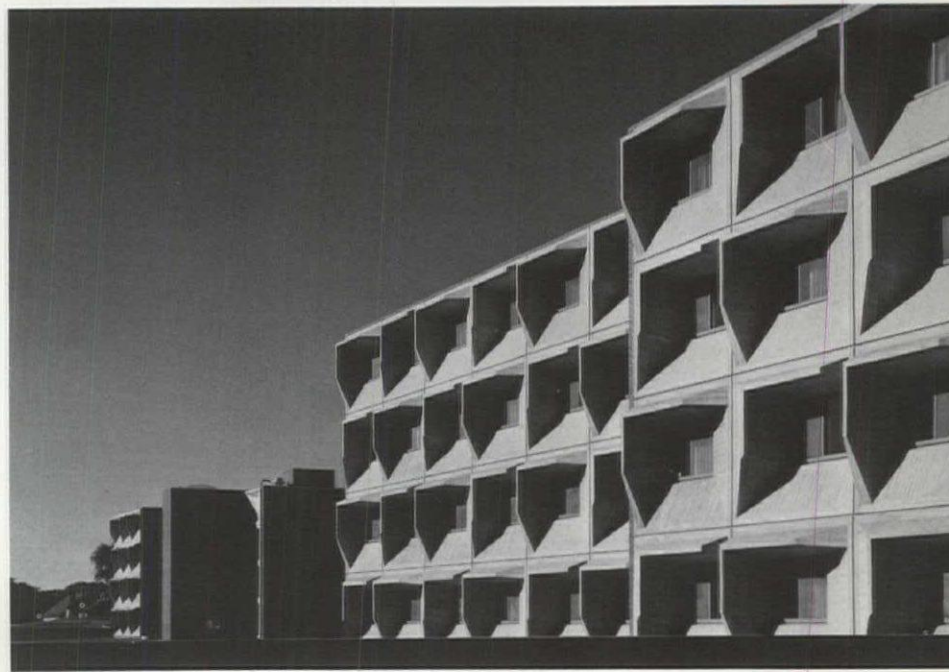
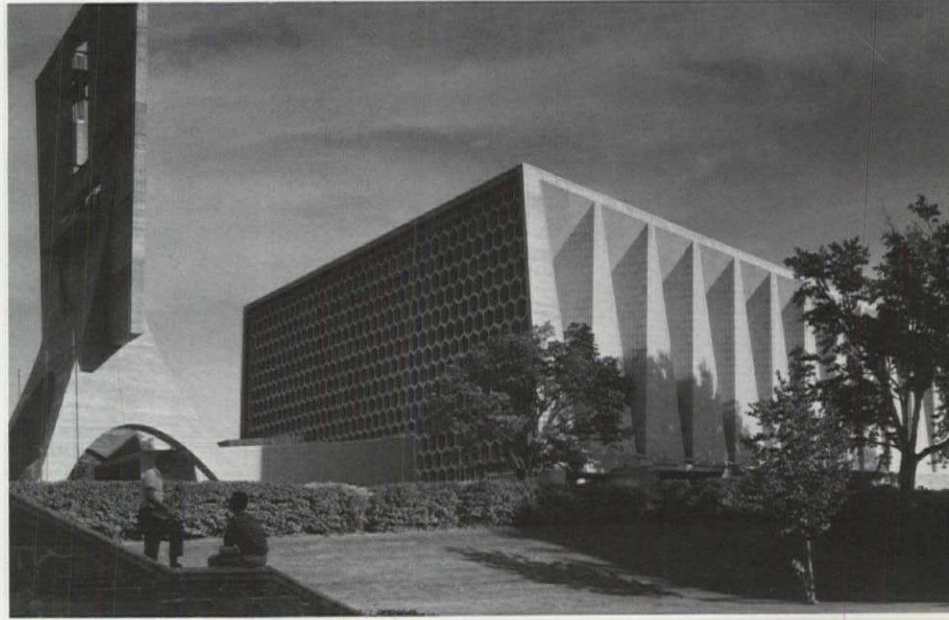
While the average gallery height is 12 feet 9 inches clear, the top gallery height is 17 feet 6 inches, a consideration of the increasing size of contemporary painting. The sculpture gallery is two stories high, according to the wishes of a number of artists with whom I discussed this matter.

A maximum number of offices and the conference room have natural light. They are visually connected to roof terraces by means of glass walls. High parapet walls lend these terrace areas complete privacy: an atmosphere of concentration, indoors and outdoors.

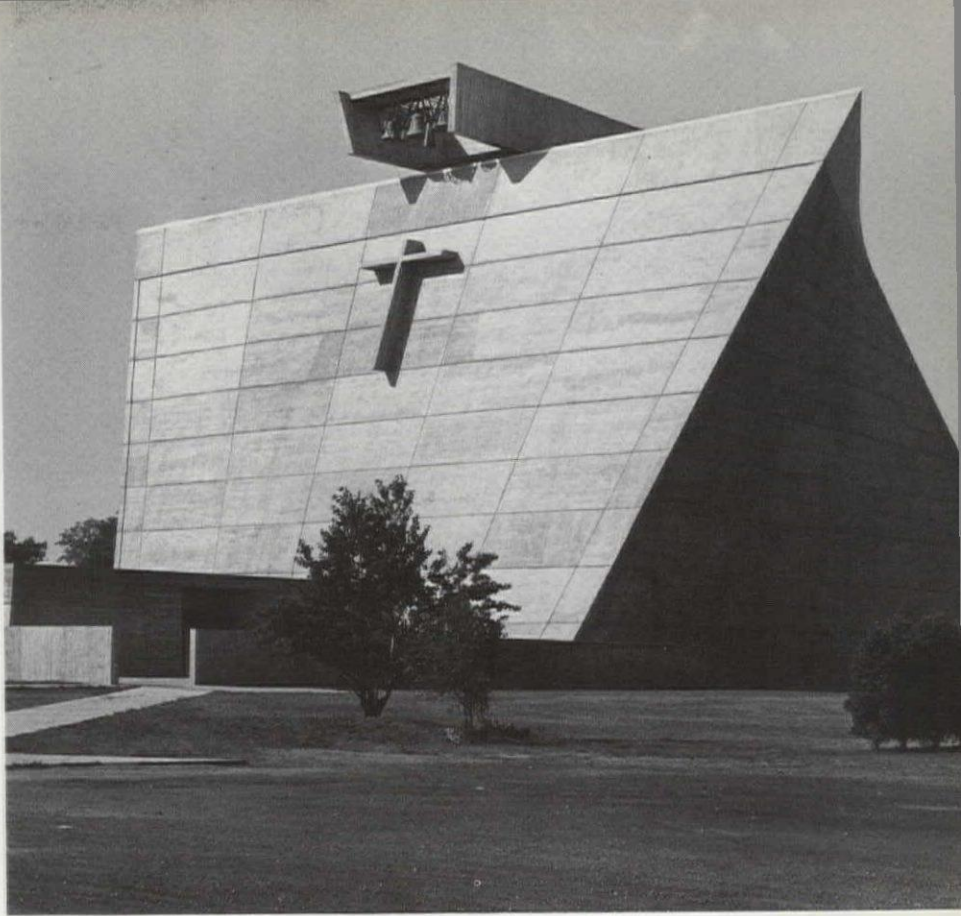


"Sculpture and architecture should not mean a three-dimensional decoration of a building but the three-dimensional nature of the whole and of its organic details—the sun and shadow of its modulation, the contours of its structure, the surface and texture of its material."

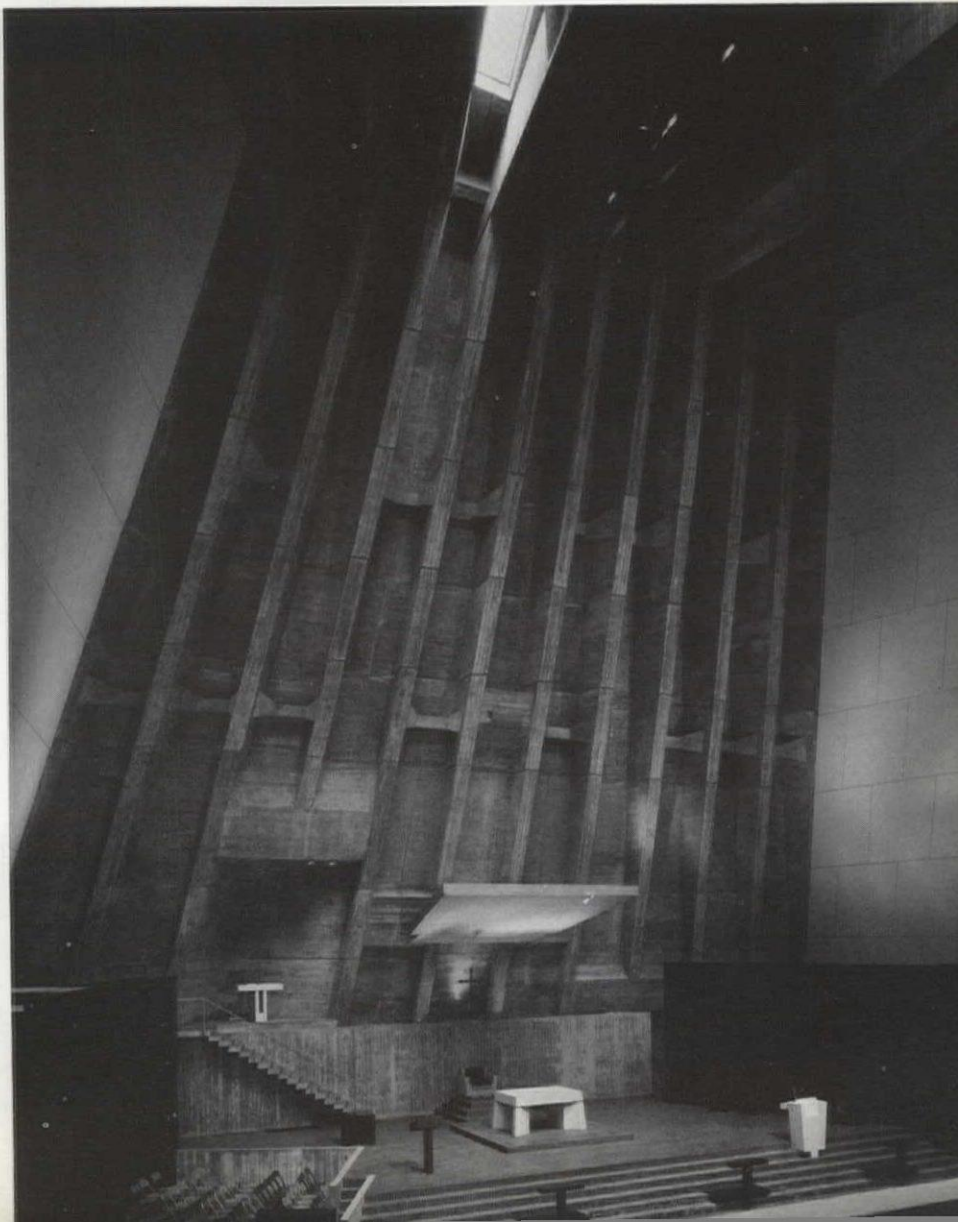
Among Breuer's principal projects, which can be found on three continents, is the UNESCO World Headquarters (Conference Building left, Secretariat right) in Paris, with Pier Luigi Nervi and Bernard Zehrfuss as members of the design trio. Possibly his chief work in North America is St. John's Abbey and University in Collegeville, Minnesota. He and Smith planned a complex to replace 22 structures on campus, the latest of which are the second group of Student Residence Halls (shown here), the Library and the Science Building completed last year. Breuer and Beckhard have designed for Torrington Manufacturing Company its Administration Building in Torrington, Connecticut, plus a factory there and in four other locations: California, Canada, England and Belgium.







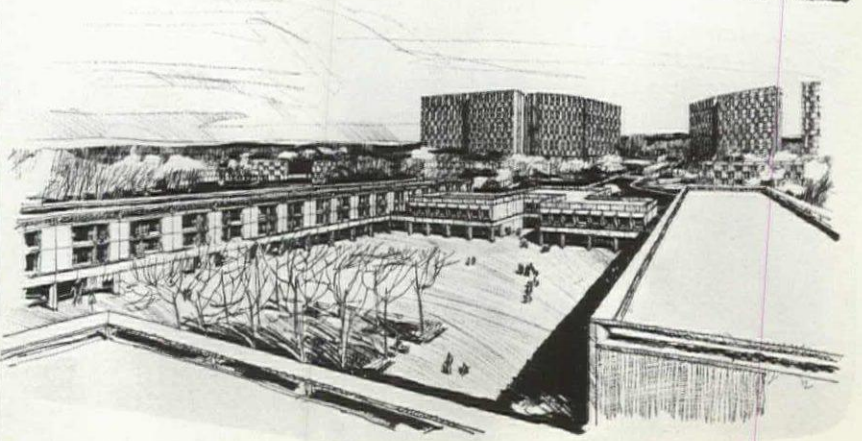
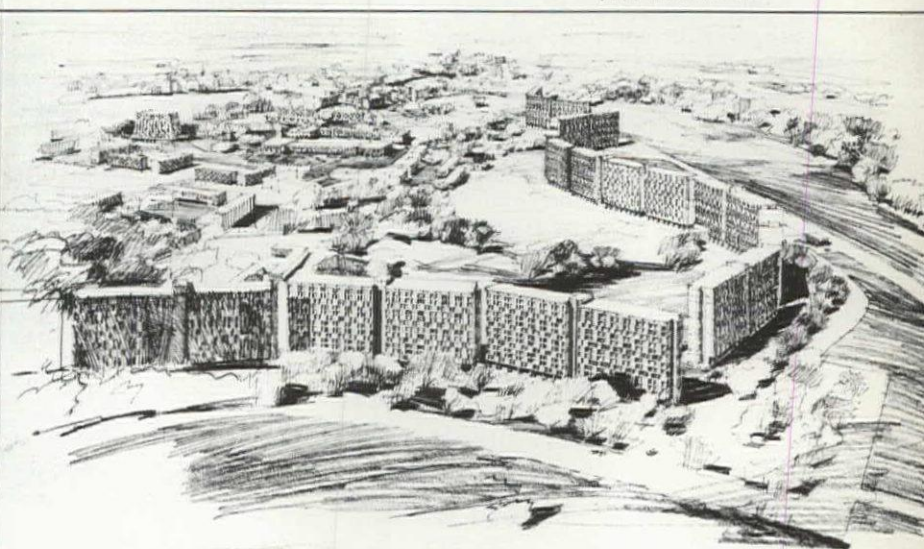
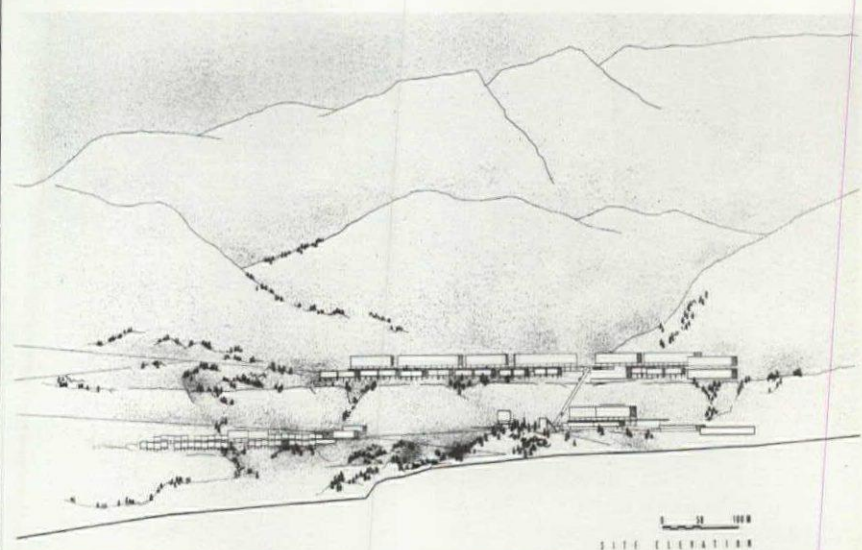
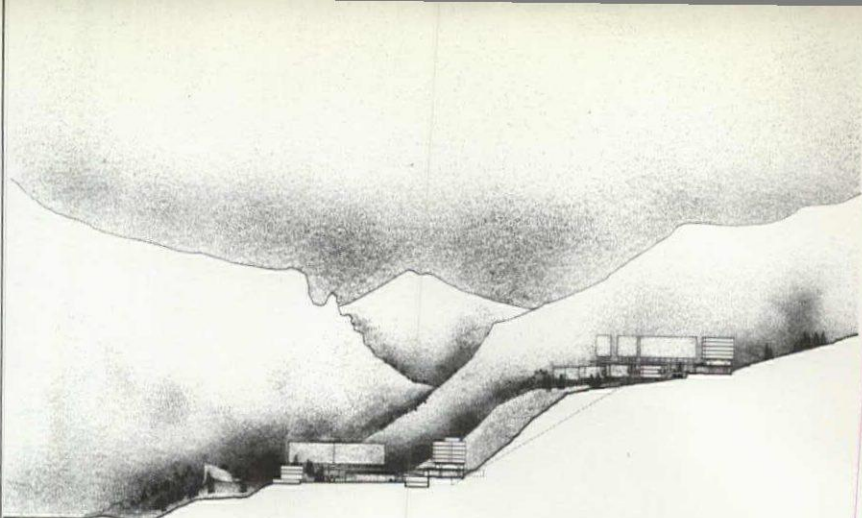
Breuer's most recent work, in collaboration with Beckhard, is St. Francis de Sales Church in Muskegon, Michigan, dedicated last fall. Says the Gold Medalist in describing the design approach: "Although the church may be a new sensation to the eye, its architectural concept does resemble in some ways those of religious buildings in the Middle Ages and the classic period. Whether stone lintels on stone columns are employed, or Roman or Gothic arches, whether dome barrel vaults or folded plates of concrete, church architecture, at its best, is always identical with the structural logic of the enclosure. This identity is basic, dominating, and it is visually so obvious that it almost appears simple, though including infinite subtleties. The rhythm of space is that of its structure, despite important differences of technology and form: in the old days, stone on stone, held in place by the weight of the parts; now, one flowing line of concrete held in place by the continuity of integral steel bars."





"It seems that architecture should have a universal foundation. Man comes and goes; the building, the street, the town remain. To build, in final appraisal, is not to play a role, not to take a vote, not to give an opinion; it is a passion, basic . . . the bread we eat."

Breuer's biggest assignment to date, with Gatje as associate architect, is a master plan for a new mountain town in the French Alps that will eventually be occupied by 7,000 to 8,000 people. The project, in addition to detached houses, will include apartments, hotels, chalets, shops and chapels. Another work underway, again with Gatje as a collaborator, is the "Z.U.P." Project in Bayonne, France, a self-contained residential quarter for about 15,000 inhabitants in 4- and 14-story apartment buildings around an administrative and shopping center with a hotel, a theater, municipal facilities, schools and parking facilities. Also under construction: Department of Housing and Urban Development Office Building, Washington, D.C., in association with Nolen & Swinburne, architects, and Beckhard, associate; and the University of Massachusetts Campus Center, Amherst, in conjunction with Beckhard.









# An Open Letter to Secretary Weaver

The Honorable Robert C. Weaver  
Secretary, US Department of  
Housing and Urban Development  
Washington, D.C. 20410

Dear Mr. Secretary:

I have been asked to report on my impressions of the Model Cities program gained on the tour which started with your address, December 3 in Washington, D. C., and ended on December 9 in Richmond, California. I was appointed by The American Institute of Architects to represent them on the tour; however, the views expressed herein are my own personal impressions.

The most important question one might ask a representative of a sponsoring organization is, "Will the program achieve its objective of improving the quality of American life in our cities?" The ingredients of the answer are many and varied and can be summed up as in most human endeavor by the answer, "Yes, if . . ."

Yes, if highly capable and devoted men, such as HUD Undersecretary Robert Wood and Assistant Secretary Ralph Taylor, continue to express so clearly the ideals and goals of the program and the objectives for carrying it out.

Yes, if the caliber of people involved includes such men as Donald Bourgeois, director of St. Louis Model Cities Agency, and Roy W. Dugger, director of the James Connally Technical Institute in Waco, Texas, to name only two of the many effective and talented people encountered on the tour.

Yes, if we recognize that what we are seeing now are just the beginnings of a program.

Yes, if those who are devoted to the program and to its goals can accomplish such impressive ground



The Model Cities tour in St. Louis. Above, the Jeff-Van der Loo rehabilitation demonstration project. Bottom left, one of many discussions at Pruitt Igoe housing project with tour organizer Wayne Phillips of HUD (striped tie). Right, HUD Assistant Secretary Ralph Taylor talks with newsmen at LaClede Town, an integrated private development.

work with the limited resources now available and with the participation of private enterprise to make the program become, in future years, a national goal with funds more commensurate to the needs and the scale of the problem.

What else will be required before Model Cities can accomplish its objective?

It will require localities and cities to recognize what they can do and make their demonstration as Denver has done with its neighborhood health program; as St. Louis is doing with its West End urban renewal; as Texas is doing with the James Connally Technical Institute; as Rochester is doing with its enriched educational experiments<sup>1</sup> and job placement programs.<sup>2</sup> Other encouraging signs include the many manpower training centers and vital neighborhood organizations such as Richmond's, to mention just a few.

It will require the people of the United States to recognize the vitality and promise in the concept of a return, as it were, to the federal system so clearly expressed by Ralph Taylor, i.e., local initiative to solve local problems with state and federal assistance.

It will require the people of the United States to recognize that the problems of the cities will become the problems of the suburbs; and that sooner or later, the comprehensive solution to urban problems requires crossing city and county lines with commuter freedom.



<sup>1</sup> "Project Unique," City School District, Rochester, being conducted under a grant from the Department of Health, Education and Welfare.

<sup>2</sup> "Rochester Jobs Inc.," a private nonprofit corporation run by business leaders to find jobs for the underprivileged and minority groups.



It will require separate agencies to cooperate at federal, state and local levels to fit the pieces together in a comprehensive way so that varied programs with varied purposes can be directed toward improving life in America.

It will require a re-evaluation of ideals and goals and the creative invention of local programs to provide opportunities, options and alternatives—long-held objectives of the American experiment.

From the architect's point of view, it would appear that the Model Cities program can continue to make most of the mistakes in the physical planning area that are being made by American cities in general. Of the cities visited, Waco and Denver seemed to be most conscious of their comprehensive, physical planning program and where it was leading them. Gainesville, Georgia, in this regard, is interesting since it is within a 14-county planning advisory agency established under legislation of the State of Georgia. This legislation provides that a central planning agency staffed with competent planners can do the technical work for cities and counties within its area with a degree of expertise that small communities are generally not capable of achieving.

My views of how architects can participate in the Model Cities program follow.

Architects will recognize that the rehabilitation of existing old neighborhoods, often neighborhoods of great beauty, such as some of those in St. Louis or Rochester, is a painstaking task and sometimes trying under existing statutory limitations; but it is often preferable to full-scale land clearance.

Architects will realize that their influence can help bring about inventive new types of community development to supersede the public housing image.



Above, the tour arrives in Rochester. At top is the Manpower Development Center, and below it, a meeting with leaders of the FIGHT group there. At bottom left, citizens and tour members study a slum area in rural Gainesville, Georgia, while at right, they walk through an urban residential neighborhood in Oakland, California, during the tour's final phase.

Architects should participate in community organizations to assist neighborhood groups in understanding the alternatives and opportunities available to them.

Architects should be encouraged to serve as professional advisers and advocates for neighborhood organizations because in so doing they can help to crystallize vague feelings and help forge proposals for real programs; thus people can learn to participate in the planning process.

Architects can help to educate people that beauty and livability are an essential part of the urban fabric rather than a cosmetic or window trimming, and, therefore, result from the essential decisions—those decisions that are made so frequently by formula instead of feeling.

Architects can assist decision makers, both public and private, in achieving the intrinsic beauty of sound decisions through the urban design process.<sup>3</sup>

In my view, the Model Cities program puts the emphasis where it belongs: on equal opportunity, on jobs and on decent housing. If our citizens will become more involved, concerned and successful in achieving these goals, then it will certainly result in a better and richer American architecture.

Sincerely,  
JOHN FISHER-SMITH  
Chairman

AIA Committee on Urban Design

<sup>3</sup> "Urban design is the form given to the solution of the city's problems. The answers take physical shape: the shape of the city itself. The best solutions are creative, combining delight and use, evolving beauty from function. Urban design is neither esoteric nor purely esthetic." *New York Times*, Feb. 13, 1967.

ED. NOTE: Replying on behalf of the Secretary, Mr. Taylor wrote in part: "We are grateful that you concur in our feeling that the Model Cities program has a great potential for success, and we share your concern over the impediments that could prevent achievement of local goals."



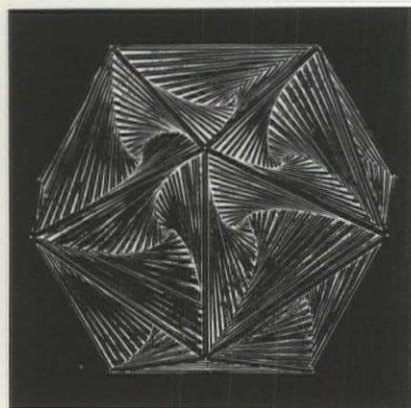


# Return to a Rome Prize Winner

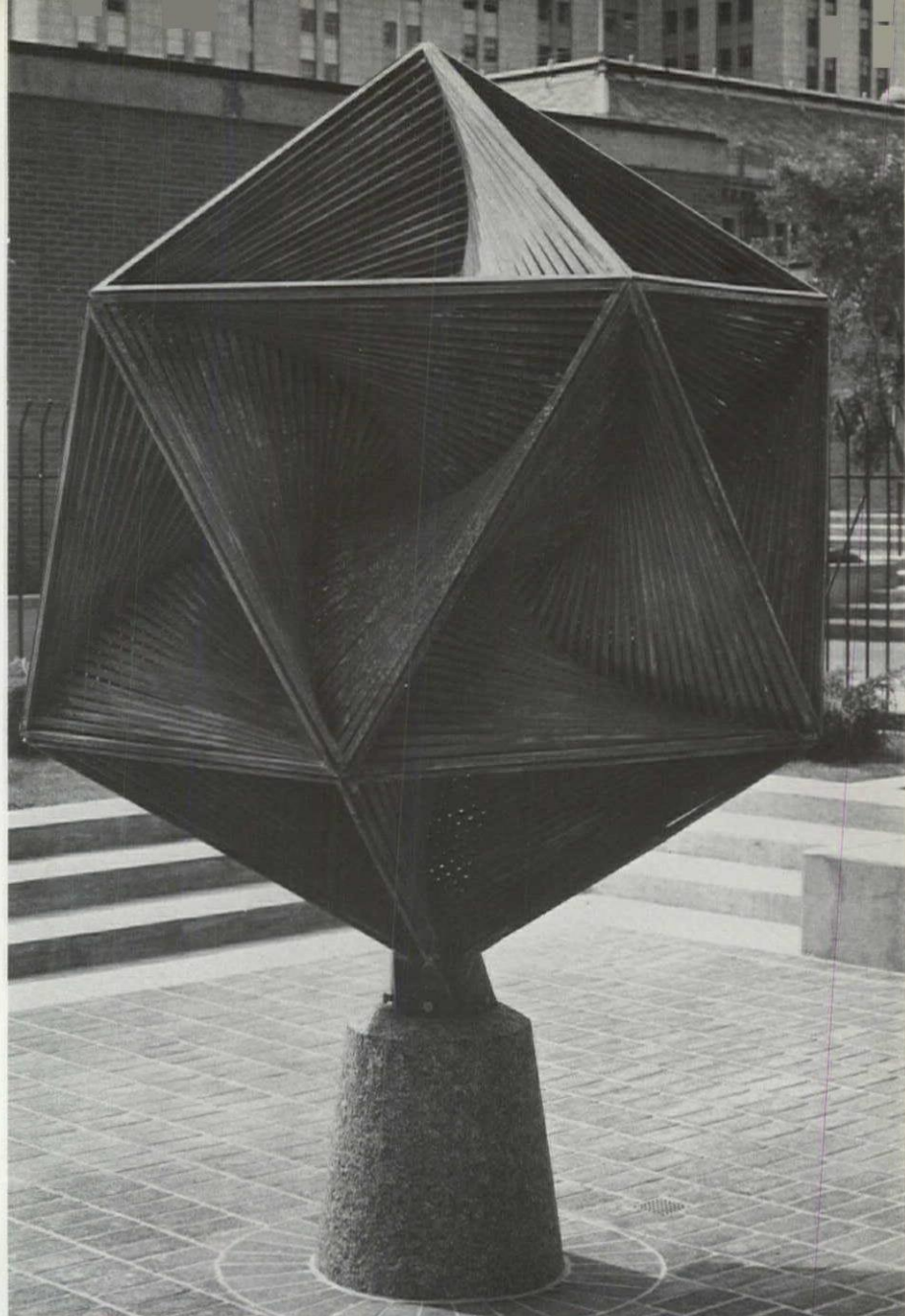
Three years ago, Charles O. Perry, as a 1964 Rome Prize winner, had just set off for the Italian capital, beset with invention. In its usual tradition, the AIA JOURNAL of January 1965 featured the work of the award winners, turning its cover over to Perry's sketch for a bronze sculpture, designed for the Alcoa Building Plaza in San Francisco's Golden Gateway Center.

Today not only has the sculpture "Icosaspirale" come to life on the Alcoa Plaza but the 38-year-old Perry is still in Rome, industriously at work as a "researching architect" who exploits through sculpture the theory of design.

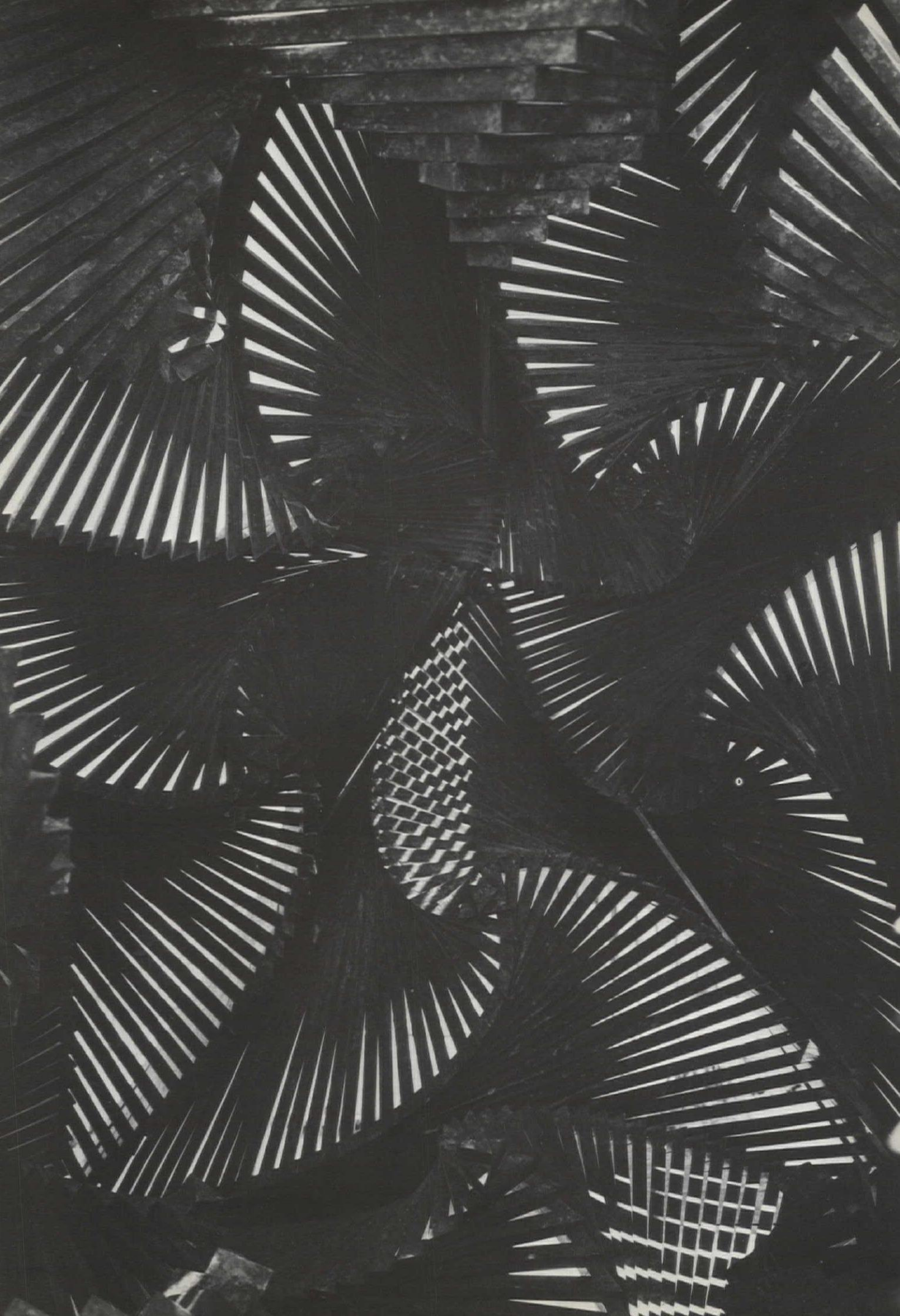
Perry's works are termed architectural sculpture because they are inventions in form (or, in Perry's



words, "discoveries in three dimensions") and are developed with both mathematical precision and a consciousness of environment. This latter point is notable in regard to the Alcoa piece since the form of the sculpture, Perry explains, "was chosen because its triangular 'orders' were consistent with the diagonal bracing of the building. The open window on the front of the piece creates a compelling attraction which draws the viewer nearer so as to look inside







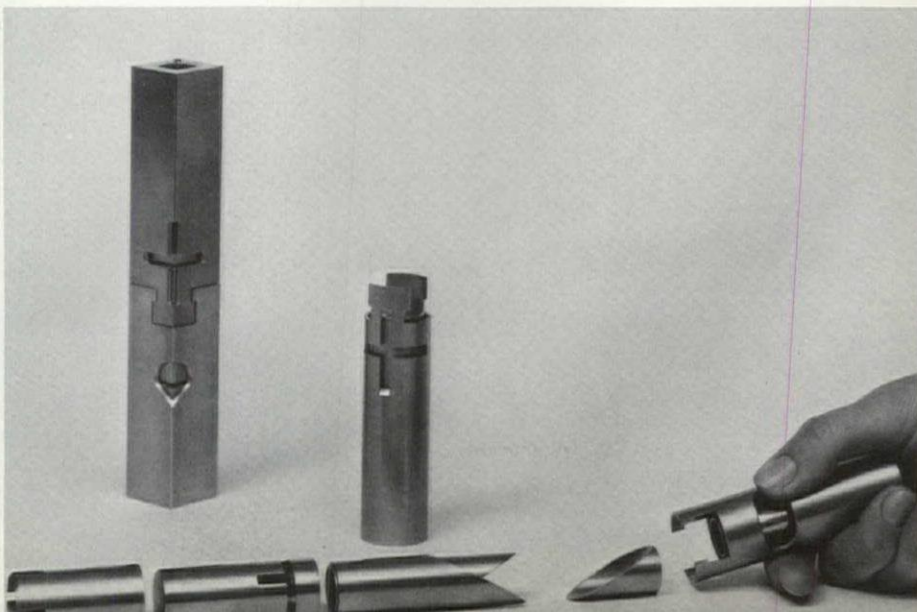
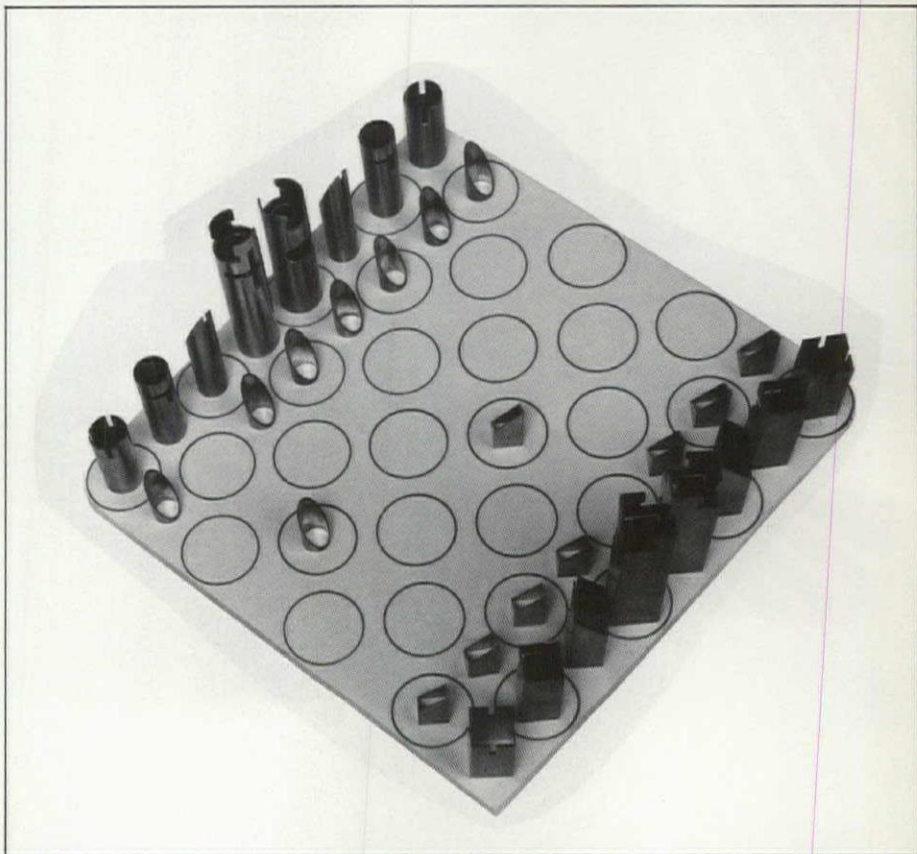
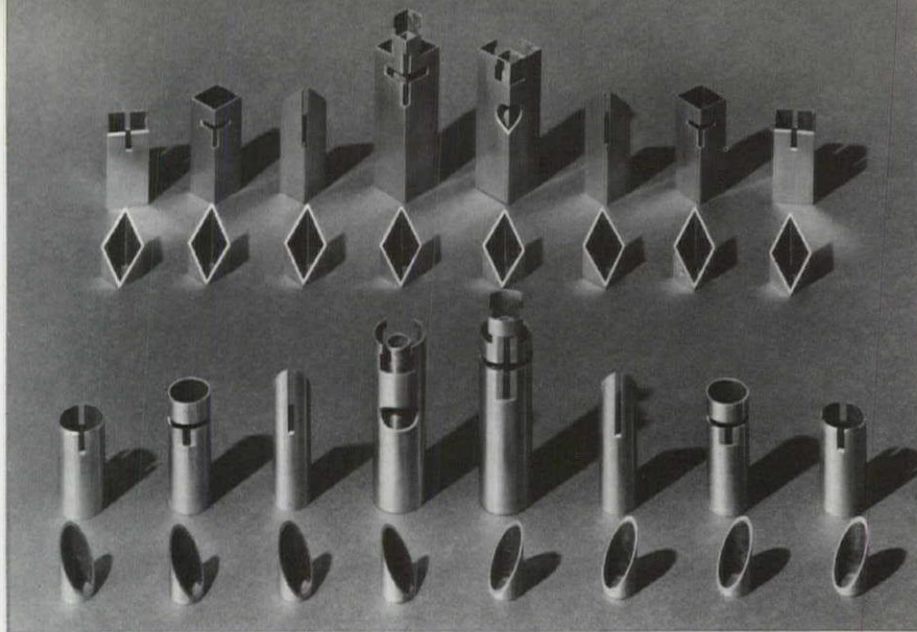


and find the major strength of the piece, where the bright sun laces it with ever-changing patterns of light."

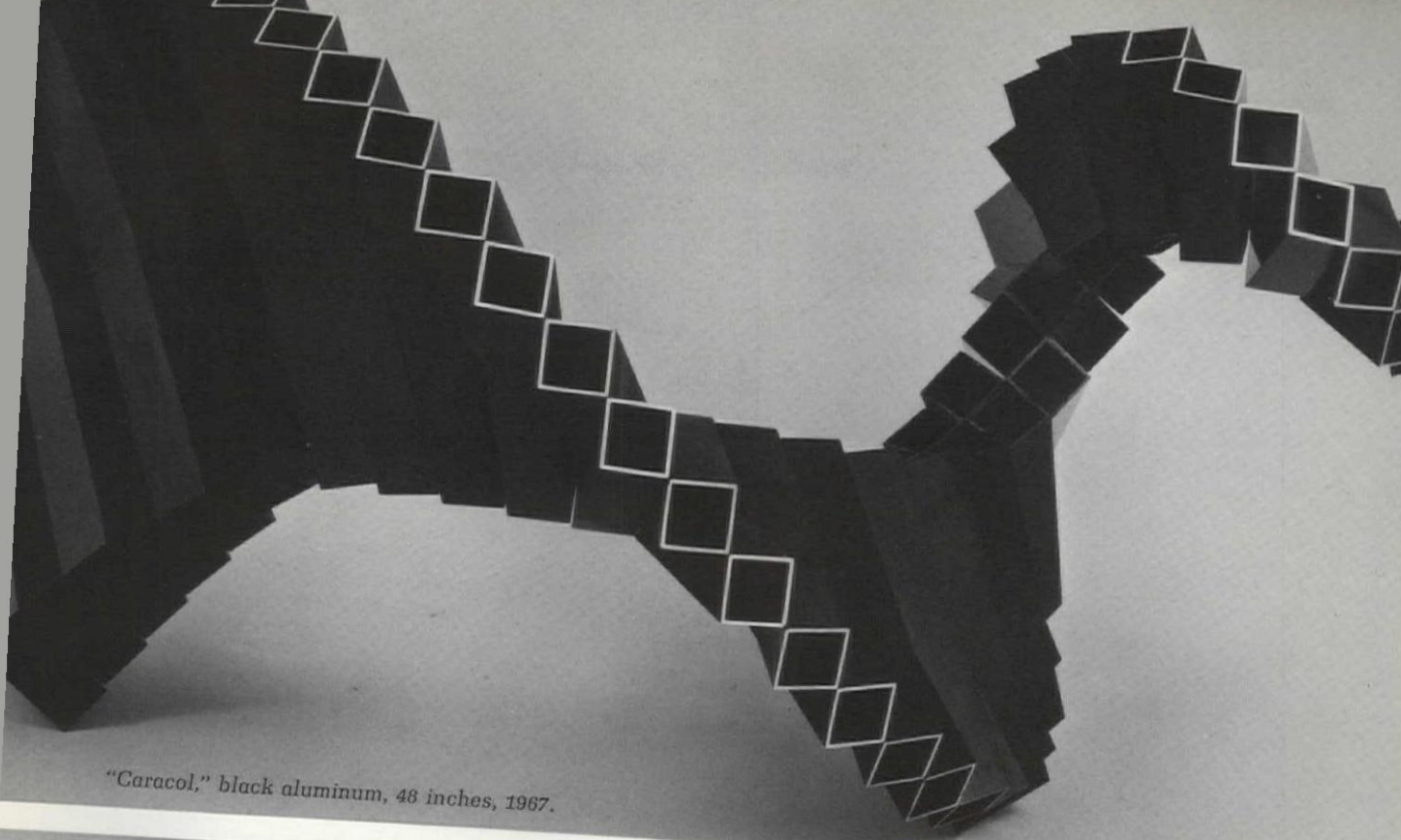
The chess set was conceived for a different purpose—the result of a "mental exercise of architectural design." Explains Perry: "I say 'architectural design' because it has a function to perform and a program, or set use, for each piece. To achieve the symbol, the exercise involved was the use of the tube material and the normal cutting methods. It was first conceived that these would fit one inside the other as they do, and then came the somewhat natural idea to have the crowns interlock and make a complete package." Perry also decided to distinguish the opposing forces by making one side round and the other square instead of employing the usual black/white dichotomy.

The Montana-born sculptor, who received a degree in architecture from Yale University in 1958, feels that his work is a search for the generative orders within mathematics and the apparent orders of nature. Says Perry: "Although there is often a mathematical formula which can describe the shape of my work, none of this work actually starts from a formula. First the form is created through visualization seen in my mind almost as threads of light in a great network. Then it might be transcribed into mathematical notation."

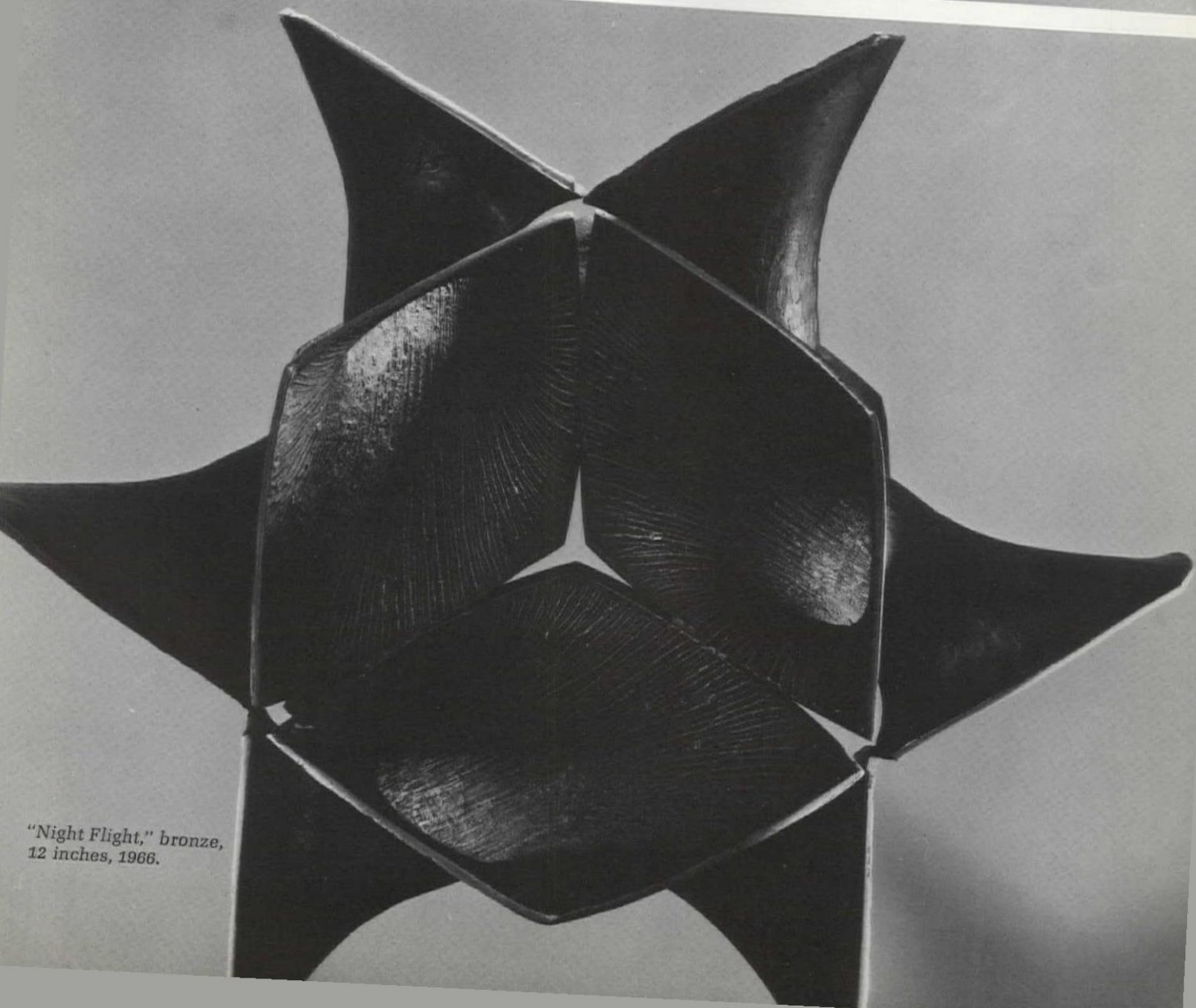
For a sculptor with such a short career, Perry has gained surprising renown both here and abroad.





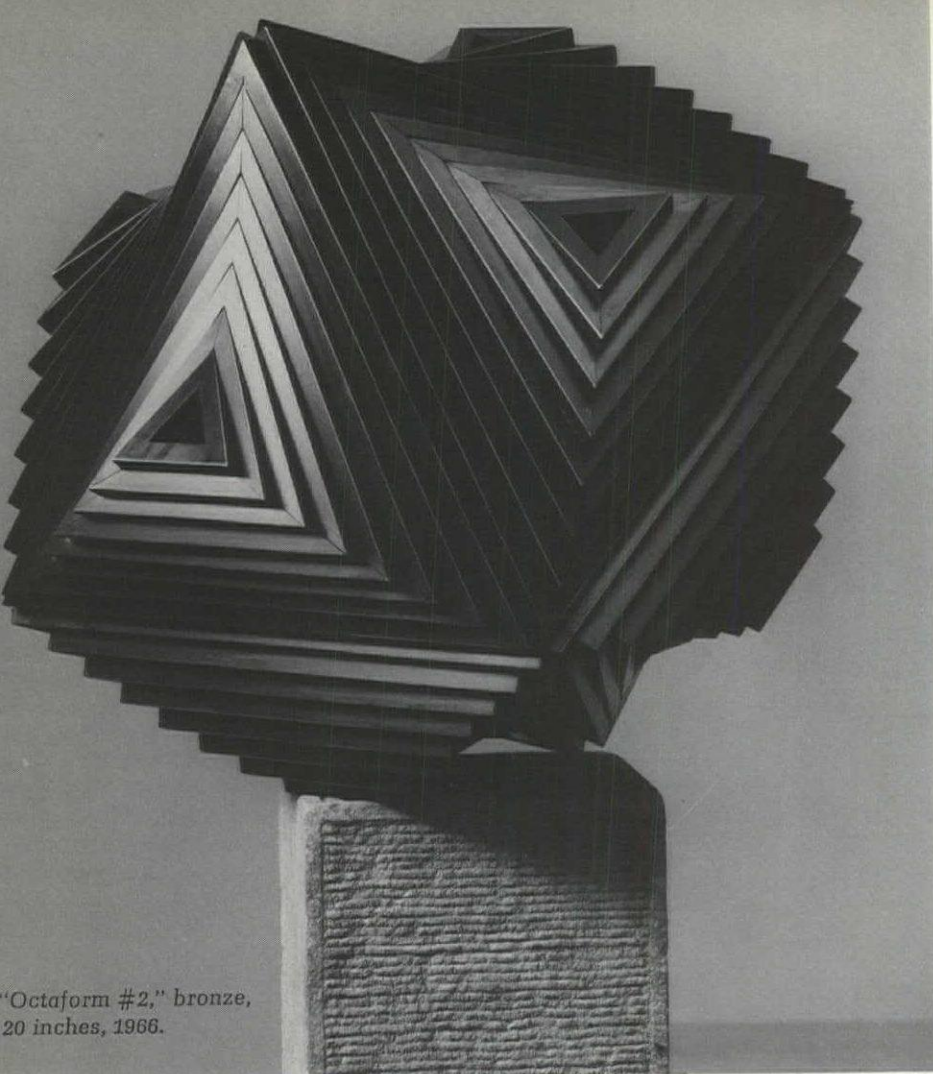


*"Caracol," black aluminum, 48 inches, 1967.*



*"Night Flight," bronze, 12 inches, 1966.*





"Octaform #2," bronze,  
20 inches, 1966.



"Cassini," marble,  
15 inches, 1965.

Besides the Alcoa Plaza piece, his commissions have included fountains (one for the late Stephen Currier) and a sculptural piece for the Fresno Mall in California. He has exhibited in several group shows (including the Whitney Museum Sculpture and Print Biennial, 1964 and '66) and has had one-man shows at the Hansen Gallery in San Francisco, the Axiom Gallery in London and currently the Waddell Gallery in New York City. Collectors of his work include Marcel Breuer, FAIA, New York; I. M. Pei, FAIA, New York; Nathaniel Owings, FAIA, San Francisco; the Art Institute of Chicago; and the Society of Contemporary Art in London.

Swiss art and architectural historian Sigfried Giedion describes the sculptor in the following way:

"Charles O. Perry develops in a new way the spacial methods of the constructivists. Gabo and Pevsner outhollowed space-embracing forms, capturing inner and outer space simultaneously. These have become systematized by Perry. He places in a limited space, a geometrical form: octagon, ellipsoid, cube, dodecahedron; but they are no longer static as in the Renaissance. They develop simultaneously their interior and exterior transparent geometrical form. In the plaza of the Alcoa Building in San Francisco stands such a transparent icosahedron, revealing the new approach of a younger generation toward monumentality."

Since he came to Rome as a prize winner, Perry believes his most important work stems from the use of sculpture in his studies of design theory, emphasizing the freedom which the medium affords him. "Because my work is without restrictions of program, compromise, measured scale or specific material, I have been able to direct my studies toward the distilled problems of the generative orders of form." He adds: "I have learned more about architecture in the three years I have been a sculptor than in my six years as a practicing architect." LEAH B. JACKSON



The American Institute of Architects affirms that housing for all classes of people is one of its central concerns.

# THE ARCHITECT AND HOUSING

*In its most inclusive statement to date, the AIA spells out the profession's role and responsibilities.*

We are at a time in history, after 200 years of homebuilding in America, when all involved now concur that procedures and programs—federal/local, public/private—have not begun to achieve the national housing goal of providing a decent home and suitable living environment for every family.

The notion of housing as a building type is a modern one whose importance to society is clearly manifested by widespread audible concern about it, including major governmental programs. The great ages of architecture as our historians have recorded them showed little evidence of the architect's preoccupation with dwelling places for any but the affluent.

Today, the architect must recognize that he has an accelerated role to play in the housing industry: the custom-designed field where he has traditionally been involved, the homebuilding market where he must enlarge his areas of contribution, and government and privately assisted low-income housing—the exploding sector most in need of his attention.

In the year ahead, the AIA, working with our allied professionals, the building industry and government, will critically review existing and proposed housing programs and also will develop new and expanded ones with the aim of achieving our national housing goal. The following areas indicate issues on which the architectural profession will address itself in the immediate future.

## Government's Participation

It is a well-established historical fact that the housing segment of the construction industry as a major source of employment is closely related to the economic health of the community. It bears the major responsibility for rebuilding and stabilizing the central city. It has for more than two decades heavily relied upon federal programs to underwrite or fund the construction of low- and moderate-income housing. Such programs require months of staffing, preparation and scheduling in order to respond to the availability of new funds.

Therefore, the AIA urges that federal programs be administered in a manner consistent with the maintenance of a sound and healthy housing industry, which should not unduly bear the responsibility for absorbing major adjustments in the nation's economic climate. The withholding of funds without regard for need in order to control inflationary trends is just as ill-advised as to overfinance more housing starts than the proven demand dictates. During the crisis in our cities, there must be a full utilization of the major tool available for renewal of neighborhoods, i.e., construction and rehabilitation.

The AIA recognizes that one function of government on the federal, state, metropolitan and municipal levels is to encourage adequate housing for all strata of the popula-

tion. The Institute also recognizes the need for government at all levels to participate in the development of programs for low-income families.

*Low-Income Housing*—The AIA believes that the public housing concept developed during the '30s for the displaced and the poverty stricken has proven unsuited to today's city problems.

A completely new solution must be found. The best long-term answer is to reduce the number of unemployable by improved education and by overcoming discrimination. However, as an interim solution, the AIA believes that there is currently no substitute to government assistance for the poorest, whose needs are for broad forms of social services which cannot be met through the private sector or other forms of subsidy. Furthermore, community balance requires public programs, preferably under local governmental responsibility with assistance from state and federal levels.

Major reform is imperative in government procedures for housing relocation and related compensation as imposed by large-scale public works. Present inequitable procedures are a primary cause of today's bitterness and unrest.

What has been built to date has shown that the disadvantaged poor should not be isolated in housing institutions. We find many of the present concepts of tenancy to be self-defeating. We look to a definition of low-income housing that



will encompass the needs of a family through good and bad fortune; that will not punish the ambitious by eviction; that will allow certain forms of cooperative management for those tenants who choose to stay and invest their funds and efforts in their home.

We see as an essential ingredient of successful government programs, a mandate for the creation of a "good" or qualitative housing environment rather than that which is described as being merely "safe" or "sanitary" or "not of elaborate or extravagant design or materials."

**Homeownership** — For families of limited income whose physical circumstances and location are favorable, homeownership can be an extremely desirable social goal. But this alone cannot do the hoped-for job without other improvements and reforms including: 1) an increase in the supply of houses for sale in the lower-cost brackets; 2) the upgrading and maintenance of municipal fire, police and sanitary services, schools and community facilities in the urban areas; 3) improved availability of fire, liability and property insurance; 4) a broadly applied fair housing law that will maximize the alternatives by creating a free and fluid market.

**Rent Supplements**—We see rent supplements as a legitimate assist to private industry and the housing business in certain market areas. Such programs can make feasible the private development of good housing that otherwise would be economically out of reach of low-income families without requiring the government to invest in additional public housing. Therefore, the AIA recommends an immediate and significant expansion in the philosophy and funding of rent supplement programs.

**Rehabilitation**—The AIA recognizes that residential rehabilitation provides a multifaceted tool. It enlarges the inventory of good housing by putting back neglected and abandoned units on the market. It helps to preserve both the character of existing neighborhoods and the architecture of earlier periods. To be effective, we feel the upper limits on these programs should be raised to meet the demands of the market. For a more widely effective effort in our cities, we see the need for rehabilitation programs outside of limited "target areas."

**State, Metropolitan and Municipal Government**—The AIA notes

that some of the foregoing programs can also become the function of local governments. However, there are certain goals which are specifically nonfederal in nature. They include reform of taxation and land use policies so as to provide incentives that 1) encourage rehabilitation and maintenance of housing and neighborhoods, and 2) would create balanced communities which integrate housing with commercial, educational and recreational facilities in viable urban locations.

### Research and Technology

The AIA recognizes that one way to provide more and better housing is to produce it for less money. American industry has demonstrated its capacity to respond quickly in other research areas, and if given the necessary impetus through private/public coordination and funding, can also respond to advancing housing technology—and in a very short period of time.

Housing technology refers to a broad definition of research including demonstrations and experiments in new approaches to the living environment. This should encompass experiments in new towns, new towns-in-town and advanced planning techniques for existing cities involving all of its components: the central city, its suburbia and its rural surrounds. New approaches and systems must be developed concurrently with government-owned and -operated housing.

The needs of human beings must be better understood. Research with the collaboration of the social scientists should be instituted to provide a better understanding of the anonymous dwellers' needs. Existing and subsequent housing must be visited and re-evaluated so that their occupants' experience will guide future planning.

Efforts must be made in conjunction with the labor force and the building trades in advancing research and technology, and ways must be developed to allow existing codes to recognize experimentation in building design and construction in order to be able to evaluate new ideas effectively.

Housing construction technology must be advanced through research for new ideas, the further development of existing technology and transfer of the experience of other industries such as electronics, aero-

space, automotive, shipbuilding, etc.; and through acceleration of industrialized housing exemplified by the prefabrication and mobile home industries.

### Assistance Programs

Professional design services must be made available to all in our society. The AIA supports community assistance programs which utilize the capabilities that our profession can offer.

We recognize our moral responsibility to develop and sponsor programs that would provide professional assistance in producing new and rehabilitated housing and neighborhoods where otherwise such help would not be available. However, the AIA seeks creation and implementation of programs and legislation that would provide financial assistance to housing development organizations and sponsors, enabling accomplishment of the initial planning of needed housing by non-profit groups which are not financially equipped to pay for the necessary professional services prior to final commitment. To further heighten the new sense of "social obligation" of the private sector, a fair profit must be incorporated in any program, new or old. Our economy is based on the profit motive, and any sense of altruism will be enhanced if a reasonable reward is available.

### Design for Human Needs

Architects, in earning a leadership role in translating the needs of people for shelter into physical forms, must become involved in the governmental functions of programming and policy making which result in the physical housing product. Today's decision makers often are unaware of the consequences of their actions, and without meaningful participation by architects, sufficient emphasis is not placed on the important relationship of physical environment to human well-being.

Architects have a contribution to make and must accept both a professional and a public responsibility in the review of housing proposals and programs. Arbitrary codes and restrictive requirements must be replaced by professionals making evaluations on the basis of human needs.



**“Well-designed municipal structures such as hospitals, libraries and even schools are often available to the underprivileged, but when they go home they best look at their television sets in the dark.”**

—JACK C. COHEN, AIA

I sense that housing has been somewhat of a stepchild to the profession, but hopefully we architects are beginning to recognize our responsibilities toward assuming our proper role.

Housing is the most tangible physical aspect in the lives of those individuals caught in the urban crisis. Well-designed municipal structures such as hospitals, libraries and even schools are often available to the underprivileged, but when they go home they best look at their television sets in the dark.

We of the architectural profession have all too frequently made ourselves think and act as technicians, with too much regard for building codes, governmental regulations, zoning policies and, yes, fees, and have not concerned ourselves with the conceptual and philosophical design objectives.

We are fortunate that both our professional leadership and a great number of individual AIA members have become aware of the architects' isolation from housing matters and are attempting to do something about it. More and more practitioners are participating in community action groups. And so we are presented with a direct opportunity to establish dialogue with the poorly housed, in new and dynamic ways. There are attempts in some parts of the nation to promote an exchange between the building industry and the profession.

The AIA in the past has approached the subject without a comprehensive view of the social impacts involved in the process of providing housing for all.

Now, in this year of cataclysmic change and crisis, it is imperative that architects fulfill their role as the shapers of an excellent environment for all citizens.

Our contribution to the urban dilemma must be felt now—next year will be too late.

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John Sparkman  
US Senator from Alabama  
Chairman, Committee  
on Banking and Currency

Robert L. Durham, FAIA  
President  
American Institute of Architects

**“A whole new breed of architects could develop if low-cost housing becomes, as it must, a large-scale enterprise.”**

—JEROME P. CAVANAGH

There are never enough good houses to go around. That is one of our nation's recurring domestic dilemmas.

In these days of mounting prosperity, the housing situation has become almost intolerable. And we seem to be running out of answers.

Government really did not become involved extensively in housing until the late 1930s. Its goals may have seemed impressive, but results have been rather limited.

The fact is that we have been underbuilding for years. For example, in eight years the metropolitan Detroit area gained nearly 700,000 people but less than 160,000 additional housing units.

These figures do not reflect the number of units that have become old, substandard and uninhabitable. The reality of the statistics hits hardest among the lower-income groups whose earnings only

recently have been sensed and surveyed.

These are the people who get the old housing as it is “filtered down” (abandoned, discarded, land contracted, leased, subleased and sold) to them from those whose economic conditions improve. Yet even this filtered-down housing is becoming difficult to obtain in many urban area markets.

The problem of obtaining housing, whether old or new, is getting worse. As new construction lags, the availability of older housing lessens even more. The effect on the already ill-housed urban poor is staggering.

Low-rent or public housing has, only in a limited way, come to grips with this aspect of the problem. In 30 years, fewer than 640,000 units of public housing have been built nationally. Current estimates show that the low-income population easily outnumbers this supply category by more than 50 to 1.

Except for wartime demands in the 1940s, the housing supply did not appear too uncertain in Detroit until just a few years ago.

There are three major factors involved in the recent tightening of the city's housing supply which seem to have relevance nationally as well. They are:

1. A steady decline in new housing from 43,000 in 1954 to less than 16,000 in 1961, followed by only a slight surge back to 29,000 during 1967.
2. Necessary clearance for freeway construction and, to a lesser extent, slum clearance through urban renewal.
3. The inevitable aging and deterioration of older housing, making many more units less habitable every year.

The task of bringing housing supply in line with demand and need is going to be a most formidable urban challenge for some time. It can be a futile one if present trends in the housing construction industry prevail.

One way to increase the housing supply is by developing and implementing cost-cutting, time- and labor-saving methods of construction on a large scale. This, to most people in the business, means cheap housing. But it need not be.

Lately, many of our local officials have even concluded that there is no such thing as low-cost housing. But if the need is to be met there must be more low-cost housing constructed, and not just at the cur-



rent experimental and piecemeal rate. Hundreds of thousands of units must be built and made available now or in the next few years.

This will require a reordering of national priorities on the part of government, combined with a more complete and actual commitment from business, particularly the real estate investment and building firms.

In all of these matters, the architect has an essential role. Esthetically and professionally, there is much to be achieved. It takes much more than award-winning designs to make low-cost housing desirable and livable.

Prefabricated housing and packaged unit construction are popular methods now used on a limited scale in many cities.

Locally, our Metropolitan Detroit Citizens Development Authority (MDCDA) is sponsoring a demonstration project in which one- to four-bedroom housing units will be constructed at a cost of \$10 a square foot. This is nearly three times less expensive than several low-rent apartment buildings for the elderly, now delayed because of high bids.

These MDCDA-sponsored homes will be built in groupings of eight units or less. Each will include a living room, dining room and furnished kitchen. The rent, without any federal supplementation, will range from \$90 to \$115 a month.

It has been a long, long time since any housing units have been built at \$10 a square foot in Detroit. Not even the high-rise efficiency apartments, still being planned and constructed here, can come near this low-cost figure.

This newest attempt at low-cost construction in Detroit will be watched with great interest and at-



attention. If it succeeds, the MDCDA will go ahead with similar projects on urban renewal land, particularly in the city's model neighborhood area where a variety of rehabilitation and rebuilding programs are being planned by the residents.

As projects such as this become more commonplace, demand for innovative architectural assistance will increase.

A whole new breed of architects could develop if low-cost housing becomes, as it must, a large-scale enterprise. These architects will have to be dedicated professionals who can imagine, compute, design, prod and persuade in helping to produce decent, livable housing for every family.

The role of the architect is clear. To give him less than full attention and support would detract from the urgency of the task. There simply must be more good housing to go around.

### **"Most architects today shy away from the increasingly complex problems of providing better housing and a better living environment for everyone."**

—JAMES SAN JULE

The position of the architect related to housing has always been a curious and disturbing one in the United States: At no time in our history has he had more than a peripheral influence for the better on the design or quality of the housing and the communities in which most Americans have lived.

Despite the showcase homes, apartment structures and new community plans which appear in architectural publications, this condition is almost as true today as it was 100 years ago. Of the nearly 34 million housing units built in hundreds of communities since the end of World War II, only a relatively few have been designed or influenced by architects.

Across the nation, architects talk freely, and sometimes bitterly, about the reasons for their lack of involvement with the design of housing: "There's not enough money in it." "It takes too much time." "Frankly, we don't know how to work with the builders."

Except for philosophical discussions over cocktails or at professional gatherings, and the occasional design of a luxury house or a multifamily structure, most architects today shy away from the increasingly complex problems of providing better housing and a bet-

ter living environment for everyone. And it has always been so.

This is a sad and wasteful situation, and one for which builders of housing, financing institutions, government at all levels and schools, as well as architects, must share the blame.

It is sad because of an ever-increasing frustration and cynicism on the part of architects who believe there is little or nothing they can do about the condition of housing. It is wasteful because, with only a few minor exceptions, the skills, knowledge, professionalism and intellectuality of architects are today so little reflected in the quality of housing design and in the creation of communities.

The tremendous new need for housing in the years ahead, and its influence on our living environment, demands a historic change in the relationship of the architect to this building type. All who are now involved with housing, and all who are concerned about housing, must share in bringing about that change.

One practical starting point should certainly be the creation of a better understanding and a closer working relationship between architects and builders, not only in the design and production of the housing and the communities which are possible today but also in the development of new forms and in the broader social, economic and political considerations which are already urgent.

Much of today's narrow thinking on the part of both architects and builders must be put aside if this is to be accomplished. Both have much to gain economically and psychologically by bridging the gulf which now separates most of them.

Important business needs in the housing industry today can provide some of the structural materials for that bridge. To cite four:

- Most builders know they need a better product to sell in an increasingly sophisticated and demanding market. Builder-architect teams can create that better market.
- Most builders know they need new technology to drive down construction costs and to help solve the growing shortage of construction manpower. Builder-architect cooperation can help create that new technology.
- Most builders are aware of the need for housing for low- and middle-income families and of its



business potential. Builders and architects, working together, can help develop methods to meet this need.

• Most builders know the need to modernize antiquated building codes and zoning and land use policies. Cooperation between builders and architects on various government levels would help make more rational a situation which now hinders progress in housing and environmental design and in building technology.

More and better housing will be produced, and architects and builders alike will profit from such cooperative efforts to face these business needs. And architects for the first time will enter the mainstream of our nation's housing.

Overriding all is the unique contribution that architects can make to the American people in their present and urgent search for a better living environment and for a higher quality of life. This search takes many forms, but certainly a most important one is a deep-felt urge to satisfy emotional and psychological needs in housing. The architect by his training, and by his intellectual decision to be such a professional, has the most crucial part of all to play in making certain that this part of the search is successful.

## **"There is no single housing design formula which will meet all social needs."**

—RALPH WARBURTON, AIA

The national housing design objective—the provision of an adequate number of appropriate dwellings in good community environments—has not been met.

Though current efforts comprise in dollar volume over 30 percent of all physical development activity, they do not yet include realistic participation by architects, sociologists, industrialists and others whose skills must increasingly be brought to bear on housing goals. Design services are vitally needed if the national level of the environment for man is to be elevated.

We are developing annually over 400 square miles of land with about 1 1/3 million housing units. While adding to our existing stock of about 65 million units, this degree of production barely provides for our expanding population and

largely ignores replacement needs. Forty percent of the nation's families are frequently forced into dilapidated dwellings because little is offered at a price they can afford.

At the same time in other countries, recent estimates show that housing is being built for as little as one-third of our costs, though foreign space standards are often much lower than ours, to be sure.

In some areas, foreign productivity is as high as costs are low. The Soviet Union, for example, is currently building housing for all aspects of its population at the rate of 3 million units per year—over twice the rate of our production—and the construction quality of this housing is rising rapidly.

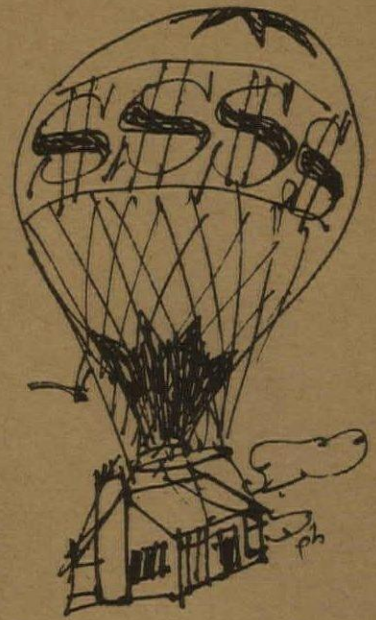
Review and improvement of our national housing effort is overdue. Those observers concerned with qualitative matters insist upon the need for more research feedback leading to a significant refinement of family and societal benefits. Exponents of quantitative indices would like to see more housing scheduled to meet defined needs, costs refined systematically and the delivery time shortened. Both design concerns are important.

There is no single housing design formula which will meet all social needs. Low family incomes may lead to the likelihood of overcrowding: Social contact can become too facile, and strong architectural means to develop a measure of individual privacy are required.

Also, while the small percentage of upper-income families can achieve the freedoms of choice and individuality in many ways, the large group of lower-income households finds that these vital expressions are more directly linked to their dwellings. Thus they see the design of their homes as very important.

New forms of flexible administration arrangements are emerging which may involve many types of tenure including public housing, leasing, cooperatives, condominiums and conventional ownership. Innovative construction methods can also play a role when sweat equity by future residents is involved. These directions are opening up new areas for imaginative planning, design and construction.

One significant way of upgrading quality aspects, saving construction time and reducing costs can involve industrial production techniques. On the design agenda for over 30 years, the development of



mass-produced and mass-erected modules (multiroom units), components (baths, kitchens) and elements (posts, beams, panels)—and combinations of these—is beginning to accelerate.

Over 40 percent of all multi-family housing in Great Britain, France and Russia is built using industrialized systems techniques. Under HUD sponsorship, several refined alternatives are being explored through construction, some in connection with the Federal Lands for Critical Urban Needs effort.

In addition to developing new materials and methods, the action of design professionals in identifying and resisting artificial constraints to the use of new technology can complement several federal activities. Success in this area will contribute to enlarging design capacity and reducing costs so that the needs of millions for well-designed standard housing can be fulfilled.

A strong urban design plan for the entire neighborhood can wisely embrace many public and private construction activities. One of these in an existing community sparked by the Model Cities program will increasingly be rehabilitation. There are over 25 million housing units over 35 years old, and many now are capable of significant refurbishment.

Efforts to meet broad housing development goals are being undertaken more and more through the cooperative sponsorship efforts of government and private enterprise. When optimally structured, a client team can overcome many obstacles



to progress and unleash new opportunities for the design team to explore. Coordinated commitment to design and build better and faster is vital.

This commitment can help achieve the goals of providing a decent home and suitable living environment for every American family. To meet this goal, President Johnson has proposed building 300,000 new housing units next year for low- and middle-income families—three times more than last year. This campaign would intensify until it produced 6 million low- and middle-income units over a 10-year period—11 times our performance in the previous decade.

Architects are critical to the success of this effort. To the degree that professionals engage in it aggressively, bring with them all the necessary related skills, and actively cooperate with public and private groups will the quality of the environment be raised. This is our responsibility, and we must perform.

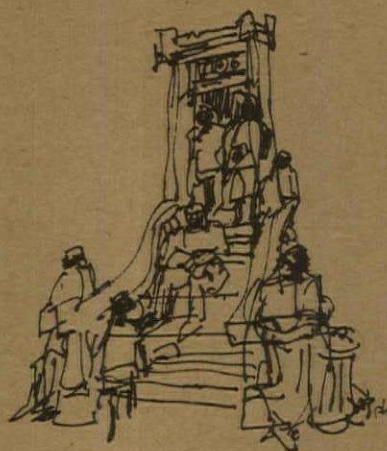
**“The architect must act with a new boldness and a depth of creativity not evident in the recent past.”** —WILLIAM L. RAFSKY

The housing and community development programs of the United States have evolved into a comprehensive effort aimed at reacting to the total cycle of urban change—growth, maturity, decline, decay.

The focus of activity has shifted from the individual housing site in the 1930s to the urban renewal project area in the 1950s to the total community in the 1960s and likely to the metropolitan area and the region by the 1970s.

Nor can the national effort to rebuild urban areas be measured solely in physical terms. We are increasingly concerned about building the kind of urban structure that will recognize the social needs of every facet of our population and extend opportunities for everyone to participate in the fullness of American life. The emergence of the low-income and minority family as a full partner in the American society requires a special sensitivity to his needs and aspirations.

The scope and complexity of rebuilding urban America presents special challenges to the architect. He occupies a responsible, if not



the pivotal, role in determining whether as a nation and as a society we will measure up to producing quality and relevance in the rebuilding of our urban areas.

If he is to fill this role, the architect must act with a new boldness and a depth of creativity not evident in the recent past. He must get to the heart of understanding the best of our urban society and then translate it into a viable environment—not an easy task.

Architects, like all of us who are involved in today's urban world, are searching for relevance—both as individuals and as professionals. But it is particularly important for the architect who, in his best tradition, is not just a draftsman who executes plans but an interpreter of his times who works with ideas and creates new forms.

This struggle to understand and to be relevant is beginning now, I understand, in the schools of architecture where students are no longer satisfied with the prospect of building architectural monuments. I am told that today's student has an acute social conscience related to the problems of urban life and that he is often active in political affairs.

This is certainly a healthy sign since it reflects the student's interest in understanding the important issues of society in which he must live and work. Yet his involvement only starts here. His true role is to infuse his knowledge and concern about urban issues into the substantive work of his profession.

The substance of architecture in today's urban world is related to the entire fabric of the city and to the total living environment. The architect must be concerned with air and water pollution and the abrasiveness of noise. He must un-

derstand the desires of urban man to retain individual identity and privacy in an encroaching world and to live with some sense of the changing seasons. The techniques and materials available to assist him in this attempt to relate his art to the contemporary world are fortunately expanding.

Yet, in adjusting his sights to the needs of the times, the architect possibly has no better resource than that of the tradition which has produced great architecture in the past; it is characterized by three basic elements: boldness, relevance and creativity. The times call for greatness—and great architects.

**“Here is another opportunity for architects to join with others in designing standards that are politically feasible and for which subsidies are practicable.”**

—JOHN SPARKMAN

To the outside world, the United States is an affluent society with all the material possessions one would ever want or hope to have. Unfortunately, this rosy view is only partially true.

It is not true for the millions of poor families living in city or rural slums. Nor is it true for a large number of middle-class families who may have safe and sanitary shelter but who live in an environment seriously deficient in the amenities that are necessary to help them enjoy a full and fruitful life.

The national housing policy refers not only to a goal of decent housing but to a “suitable living environment” for every American family. The architect often carries the responsibility for giving meaning to these words.

As time goes on, the words will probably remain unchanged but their interpretation will change as our society progresses and as we learn how to build an environment more suitable to man's aspirations for a satisfactory life. The nation's architects and urban planners should be in the forefront in the development of the latest designs to carry out the national housing goal concept.

We have been providing financial assistance for over 30 years to local communities to help get rid



of slums and to provide decent shelter for its poor. In the process, we have learned a great deal. The government's first effort through public housing was strictly a brick and mortar job undertaken with the notion that all the poor needed was a roof over their heads.

The public housing effort was replaced by slum clearance and urban redevelopment effort authorized by the Housing Act of 1949. This was broadened in 1954 to the urban renewal concept which visualized a total assault on all housing deficiencies through slum clearance, rehabilitation or conservation. Great strides were made to clear out and rebuild some of the poorest areas of the cities, but the program ran into serious difficulty because of its concentration on real estate objectives and not on dislocated residents.

The next major shift in the US city rebuilding job was the introduction of the Model Cities concept whereby federal funds would help rebuild entire areas of the cities in a comprehensive manner including the upgrading of its residents and its social institutions.

The program is basically sound and a natural and necessary answer to the varied and interlocking problems present in certain areas of the nation's cities. Of course, until we have demonstrated success in this effort, we will have to proceed on faith that it will work and that the whole job can be done if the proper effort is made at local and national levels.

The one big missing link to make Model Cities successful is effective



rehabilitation. A reasonably good financial assistance program has been developed to help the residents meet the monthly charges in this connection, but very little progress has been made in developing a satisfactory and effective technique for the physical work involved in carrying out rehabilitation on a large scale.

Until a method for rehabilitation, involving mass acquisition and volume production can be developed, I believe that the Model Cities program will fall far short

of its objectives. This should not be allowed to happen, and I am confident that once private industry, including architects, recognizes the importance of this problem, it will meet the challenge and join government in resolving it.

Parallel to the program to clear up slums and rebuild cities, the federal government has been actively engaged in helping American families get decent housing by helping them finance homes and apartments. The first and by far the most productive has been the Federal Home Loan Bank System involving principally the savings and loan associations. At the present time, such associations have \$122 billion of outstanding mortgage loans, or about 44 percent of total residential debt.

If the system can be kept confined primarily to mortgage lending, it has the potential for financing well over 50 percent of all new housing built. Unfortunately, in recent years the associations have been serving primarily upper middle-income groups, with little effort being made to direct their lending activities to the area of greatest need: the low- and moderate-income groups in the cities.

Recently, the industry has indicated a willingness to involve itself in inner-city housing problems. The details have not yet been worked out, but I look forward to a significant breakthrough once the giant lending industry becomes effective in this area of greatest need.

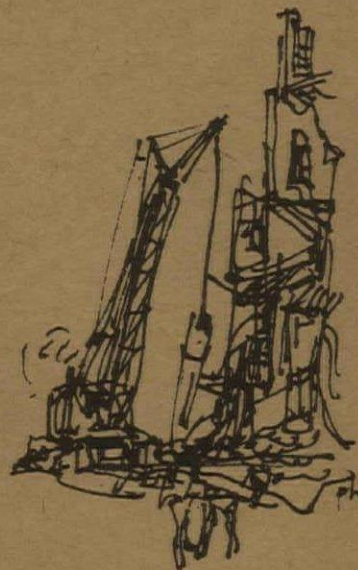
The Federal Housing Administration, the Veterans Administration and the Farmers Home Administration, through their mortgage insurance programs, in combination with the Federal National Mortgage Association, have provided the greatest assistance to enable families of moderate income obtain decent housing.

In recent years, however, these programs have been unresponsive to the housing needs of the low- and moderate-income families. Various financial aids have been developed starting in 1961 to provide a subsidy to bring down the cost to the level these families can afford. The 221(d)(3) below-market program and the rent supplement program were designed for this purpose and are currently being used for rental housing.

Last year a new interest-subsidy program for the purchase of housing was devised by the Senate Housing and Urban Affairs Sub-

committee which would give the benefit of a 3-percent loan to certain lower-income families seeking homeownership. The proposal is a part of S.2700, now pending before the US Senate.

These programs have a great potential but, unfortunately, much of their benefit may be lost because housing costs have risen so sharp-



ly in recent years. In the pending homeownership plan, a mortgage ceiling of \$15,000 (or \$17,500 in high-cost areas) would be established under the program.

Already we have been told that homebuilders cannot build under these ceilings. We have probably not heard the last of this, but our committee takes the attitude that, for government subsidy programs, these are reasonable ceilings and, instead of raising them, insists that industry produce the housing to fit. Here is another opportunity for architects to join with others in designing standards that are politically feasible and for which subsidies are practicable.

Congress has developed a wide range of tools whereby federal assistance can be obtained for the clearance of slums, the rebuilding of cities and the financing of new and existing houses.

It is now up to private industry, the architects, the urban planners, and the homebuilders to give these programs life and to provide the expertise to devise new community plans, new housing design and new construction techniques which, in combination with government financial aid, can produce housing in the kind of environment that our great masses of American people can enjoy and afford.



**“We have a public responsibility to see that potential clients who cannot afford large budgets, or who do not wish to use full architectural services, have the benefit of consultation.”**

—ROBERT L. DURHAM, FAIA

Our nation must not continue its current direction in housing. While the factors causing the summer riots are elusive, poor housing is high on the list.

The housing industry is restive and has been especially plagued by fluctuating economic factors. Both federal and local governments are exploring new approaches to public housing. Policies being discussed by members of Congress re-



main unclear. In this situation of unrest and confusion, the architectural profession has both opportunity and responsibility.

The suburban evolution which has left us with urban revolution indicates that we do not have solutions for the problems that beset our citizens, within or without our cities.

That portion of our population which has violently demonstrated

contempt for its surroundings has been given no choice. Suburbanites who thought they had a choice are exhibiting dissatisfaction with the dullness of their environment.

At no time in the history of public housing has its results been subject to such questioning. Private housing, supported by government programs designed to provide maximum standards and maximum quality, has produced unsatisfactory quality at maximum price.

We have the responsibility of fitting ourselves to the twofold housing task: making our professional services more widely available to the American public and promoting our skills and knowledge as an accepted standard in housing of every type and quality.

To this end, the AIA is making a basic reappraisal of its policies. We are preparing to offer political leadership on every subject in this field—a new role because for too long we architects have been content to react to the proposals of others.

We must offer more than our carefully conceived and positive advice to legislators and all others concerned with housing problems; we must also initiate legislation.

It seems obvious that we must also provide technical leadership. Architects must exert more influence in the writing of better and more standardized building codes.

We must involve ourselves with technical manufacturing processes so that design concepts become a part of industrialization processes. In order to establish policies that will make US industrial know-how available in housing, we must sit down with labor as well.

We must become the advocates of future home dwellers in pro-

viding every device and policy that might produce better housing at reasonable cost. This includes multidisciplinary community design (economic planning, transportation, etc.) and systems approaches.

Suburbia was built in a fashion that often prevented the orderly growth of cities, resulting in



wasted and despoiled landscapes and lack of sense of community. We and our professional colleagues, along with a growing segment of the American public, have learned much from the experience of the past two decades.

Serving notice that the profession is vitally interested in housing requires leadership from individual architects, from AIA chapters and from the Institute nationally. We must assure the public that we are ready to become involved; and lest we think we have demonstrated this involvement, try making a few calls among the architects listed in the Yellow Pages under the pretense of seeking assistance on the design of a small house.

It is high time that individuals can more readily obtain architectural consulting services on housing matters. We have a public responsibility to see that potential clients who cannot afford large budgets, or who do not wish to use full architectural services, have the benefit of consultation. However, we still maintain it is preferable that the architect coordinates the complete design process.

Even the casual student of past civilizations has noted that one of the first signs of decay was the desire not to get involved. We stand aghast at reports that witnesses turn their backs on attack and robbery. Is the housing crisis any less an example of noncommitment? Our creative talents and our professional responsibilities demand that we face involvement with housing people, rich and poor.

Only by assuming active leadership politically, technically and professionally can we offer more than lip service in building a better environment. We have the capabilities; do we now have the will? □





# The Inside Story of Glasweld.

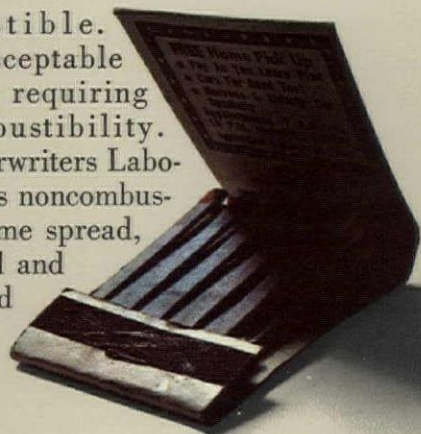
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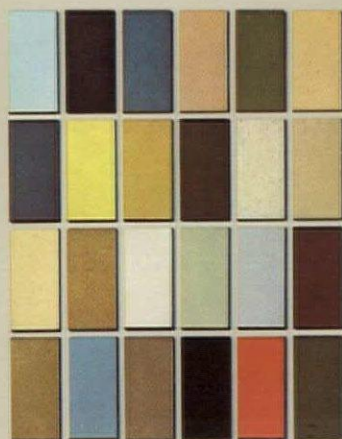
**Incombustible.** Glasweld is acceptable in those areas requiring 100% incombustibility. Listed by Underwriters Laboratories, Inc., as noncombustible with a flame spread, fuel contributed and smoke developed rating of 0-0-0.



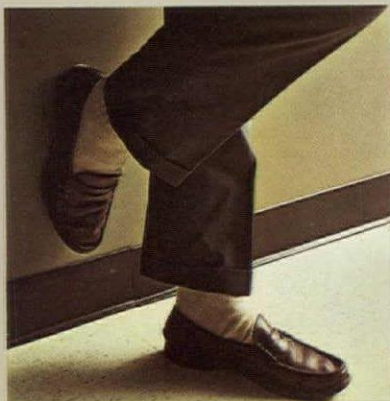
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Glasweld can be backed with gypsum board where fire regulations require. (Depending on the construction of the wall, an hourly rating can be secured.) Apply chestnut-size gobs of mastic to the substrate. Trowel, press and seat for adhesion. The "R" series molding shown creates a panelized treatment.

For greater articulation use the "K" series molding. It will create a distinctive scale without increasing overall wall thickness.

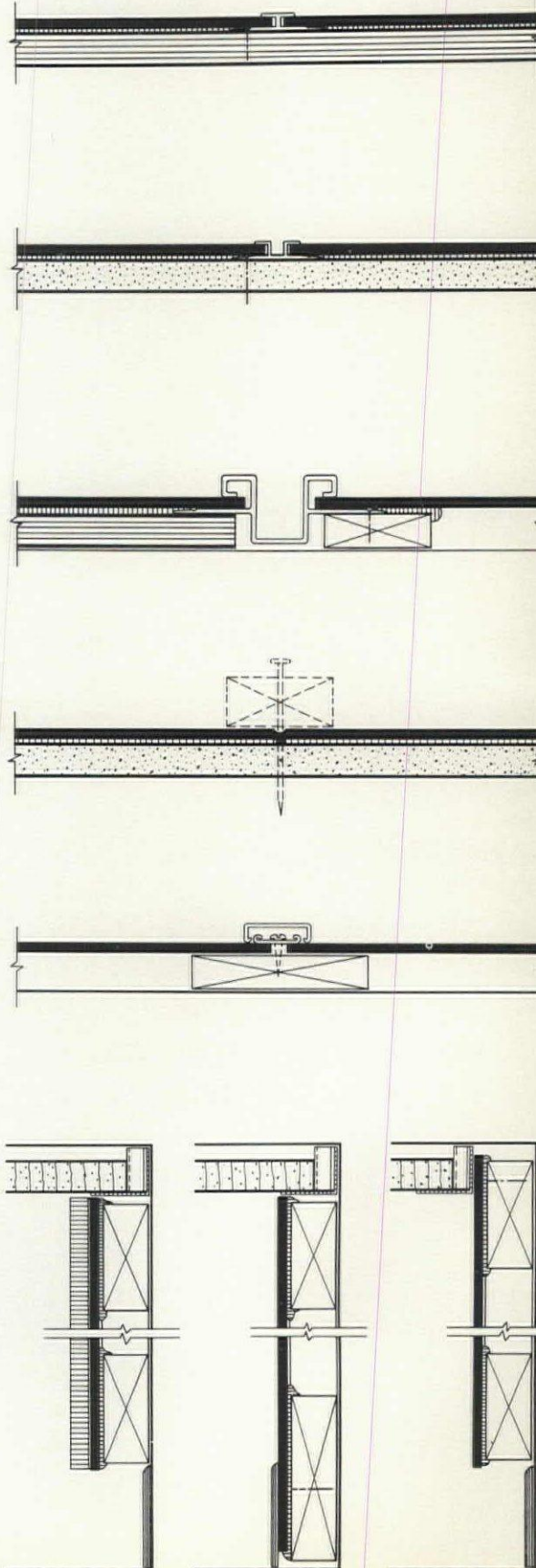
Vertical joints without moldings can be secured by chamfering Glasweld edges with a carborundum flocked steel file. Apply exterior grade mastic to the entire substrate, seat and temporarily block at joint. Fasten top or bottom. Use a grout or sealant at joint.

Where impact is a minimal problem, Glasweld can be mounted on furring strips. Spacing for  $\frac{1}{8}$ " thickness, 12" x 120". Shown here is a snap-on molding which can be used in a matching or contrasting color.

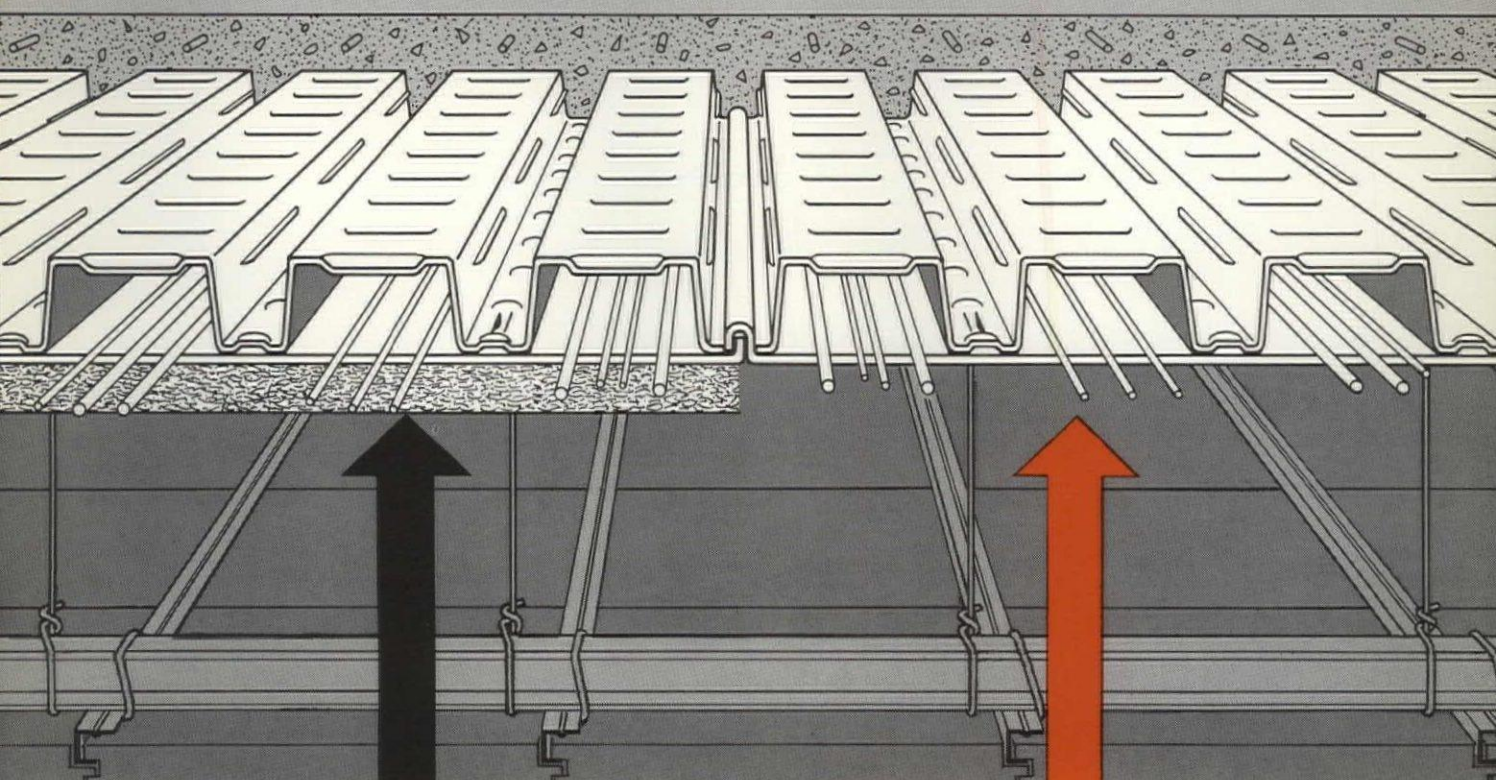
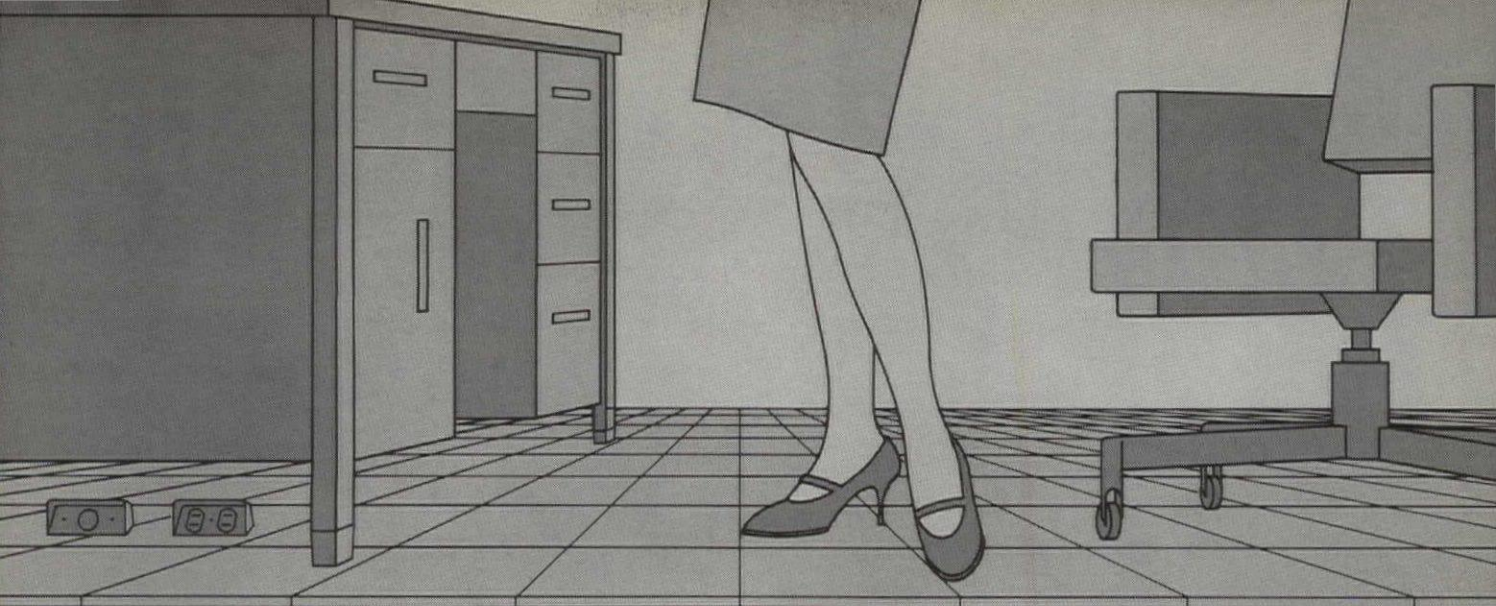
**Head and Base Treatments.** Where the vertical edges of Glasweld are retained by moldings, panels do not have to be secured top and bottom. Panels mounted without vertical moldings must be mechanically supported top or bottom to prevent slippage due to possible mastic release.

(Scale  $\frac{3}{8}$ " = 1")

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use the increased income of normal membership growth to meet new demands. Just as many chapters have felt it necessary to suggest raising fees to cover the increased costs of doing the job right, we have come to a point where this ordinary acceleration is too slow and so we propose a dues increase equal to about one cent an hour for your work-year—one cent an hour increase in 18 years.

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### Supplemental Dues

The large number of members who pay supplemental dues may ask why the 1968 increase in those dues, from 1 to 2 percent of the FICA tax, is not sufficient to carry out these endeavors.

When supplemental dues were first approved at the Philadelphia convention in 1961, it was promised that such dues would only be used to initiate and perform new short-term projects for specific results. We have used these funds to produce useful tools, to explore, experiment and pave the way for new permanent programs.

When the Council of Commissioners met in November 1967, it found the demands for excellent projects to be far in excess of the income produced by supplemental dues which approximated \$140,000 annually. The decision was made then, and sustained by your representatives on the board, that the demands on the profession were so great that the income had to be increased. Society's demand for improvements in practice, technology, education and public relations will increase rather than diminish. We are obligated to stick with the policy that supplemental dues will not be drained away from special use to augment the continuing programs or add new permanent staff positions. Our only hope for effective new continuing programs is your approval of a dues increase to fund them.

The continuing activities have been described as the broad programs that build the backbone of professional development. The demand for stronger, broader programs has also become urgent, as I hope I have made clear. The answer, then, is to provide growth for the entire integrated program at one time with the increase in corporate dues.

The board has accepted the responsibility of leadership to recognize the changes affecting architects, determine what needs to be done, how to do it, what it will cost and what benefits are to be achieved.

We think the challenges and opportunities are unmistakable and that it is time to move into the big leagues.

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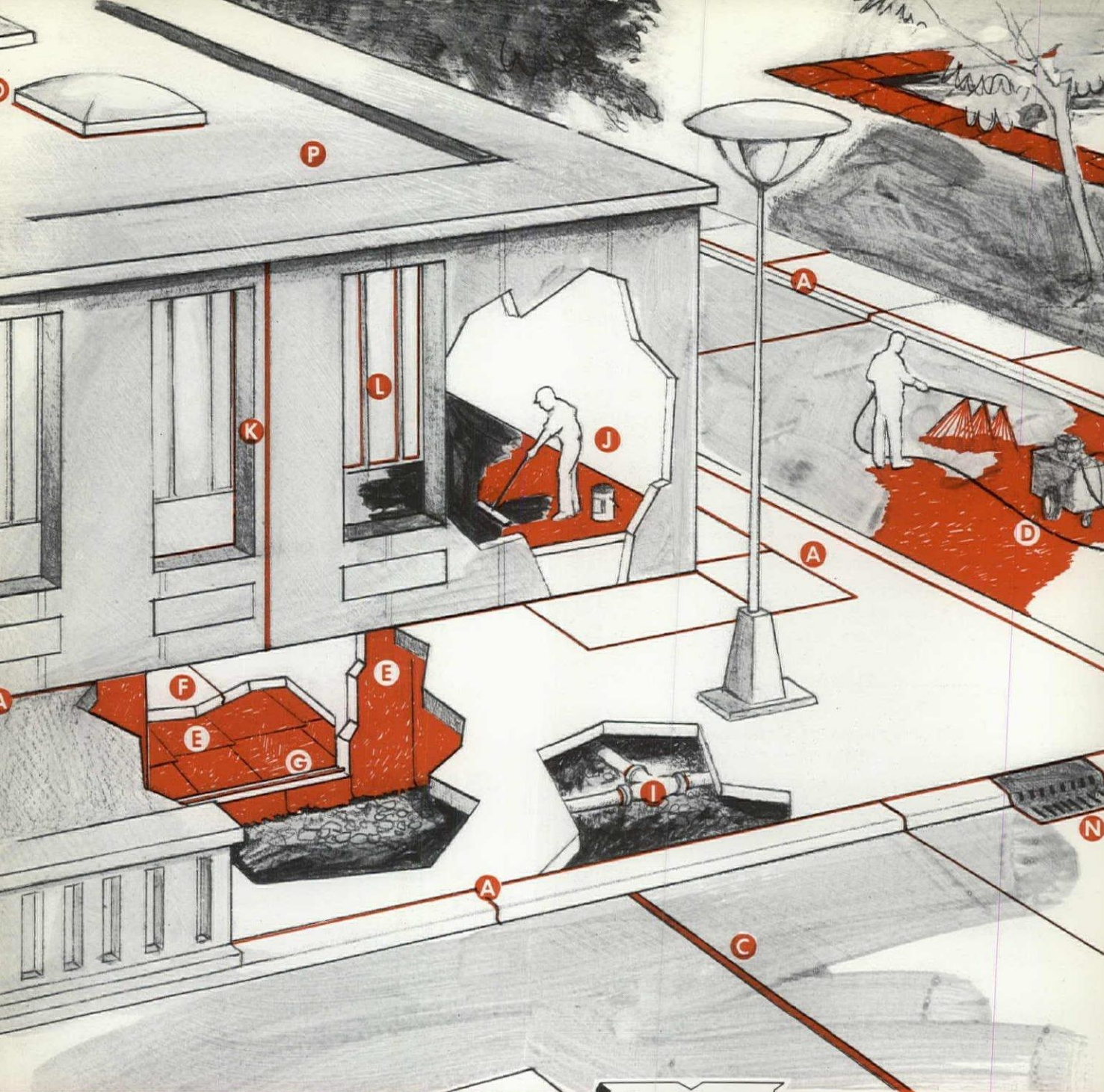
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# Computer Programs to Share

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An AIA-sponsored survey has turned up 14 professional practice subject areas suitable for computer use by architectural offices of all sizes.

This is reported by the North Carolina Research Group which, under contract with the Institute, conducted the survey.

Aim of the survey was to determine how the computer is being used in today's practice—and whether computer programs now in use by some firms could be made available to all offices.

North Carolina Research discovered through the canvass 176 computer programs. But the researchers said this number could easily have been doubled through "further solicitation."

Fourteen of the programs could, the survey staff said, "be of great utility if made available to the small and medium-sized firms as well as the larger organizations" and if "taken together and organized as an integrated package."

Ben H. Evans, AIA, the Institute's director of Education and Research, said the North Carolina Research Group will be engaged to develop a series of workbooks on available programs of professional usefulness. Some of the programs will be amalgamations, he explained. For example, the cost accounting workbook might be based on the cost accounting programs of several firms.

The workbooks will explain to architects the kinds of information, equipment and answers-to-be-expected involved in the computer programs.

The issuance of the workbooks will be followed by a series of seminars at universities around the nation which will be held to bring together architects and computer service bureau personnel.

"It is generally felt that the programmers found in typical service bureaus do not have the insight into architectural problems required to write satisfactory programs for

these applications," North Carolina Research says in its report.

"The small firm finds itself limited in obtaining satisfactory programs. Only a handful of small software houses specializing in architectural applications were found by the survey. This points very strongly to a need by the small and medium-sized firms for program distribution."

The survey, as expected, found that most of the expertise in the use of sophisticated techniques lies with the larger architectural firms.

Also found—and again not surprisingly to the researchers—was a heavy concentration of computer usage in the corridors between Boston and Washington and Philadelphia and Chicago.

Only the larger firms, as a generality, were found to be writing their computer programs in-house. "The smaller firms, when programs are required, particularly arrange to have them written by others," says the survey report. "This may be one of the primary reasons, aside from economics, why small and medium-sized firms tend less to use computers."

The 14 professional practice subjects suitable for computer application which the survey delineated:

**1. Accounting**—One program found by the survey involved the standard AIA accounting system for architects, suitable for small and medium-sized firms. Most firms, especially the larger ones, use a more elaborate system.

**2. Project scheduling and manpower control**—This area was represented by a number of programs and seems to be an item of particular interest, says the report. Efforts here are aimed at optimizing the utilization of office resources in producing required work.

**3. Cost estimating**—Several programs were found for estimating both during and following the design stage.

**4. Specifications**—There appear to be at least two specification-writ-

ing programs considered by their developers as satisfactory for most projects.

**5. Engineering**—Found was a wide variety of programs serving the range of engineering problems.

**6. Heat gain calculations**—A number of programs is available for the calculation of heat gain and loss, probable operating cost and equipment selection.

**7. In-house information retrieval**—Several programs were identified involving retrieval from correspondence, job files, drawing storage and technical data resources.

**8. Cut-and-fill calculations**—Found was a program useful in making preliminary decisions regarding site treatment and building design.

**9. Lighting design**—A program assisting in lighting layouts and luminaire selection was turned up.

**10. Area and volume allocation**—Programs found on this topic assist in schematic design and produce a display of optimum spatial allocation based on the design program.

**11. Perspective drawing**—This program provides accurate perspective layouts as a foundation for final rendered drawings.

**12. Elevator design**—A program relating elevator design to program requirements was found.

**13. CPM**—Discovered was a program that helps in the economical development of network schedules and their use in refining design for speed of construction.

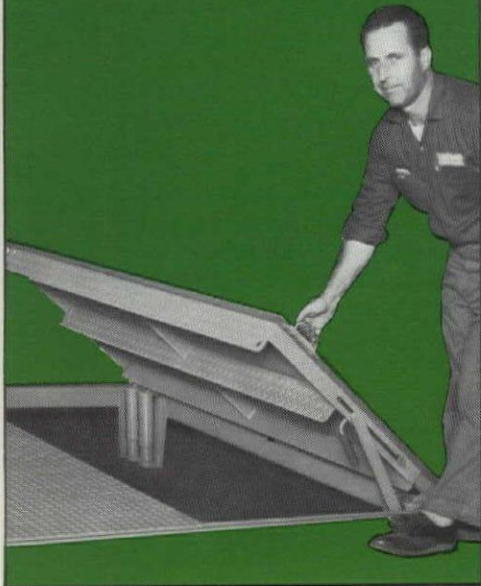
**14. Project design**—Several programs were located in this area, all of them aiding designers in the development of design through reference to critical parameters: cost, size, zoning envelope, elevator capacity, space required, etc.

Researchers also found programs in prototype use. At least one firm was discovered working toward the machine-generation of architectural drawings following the completion of design.

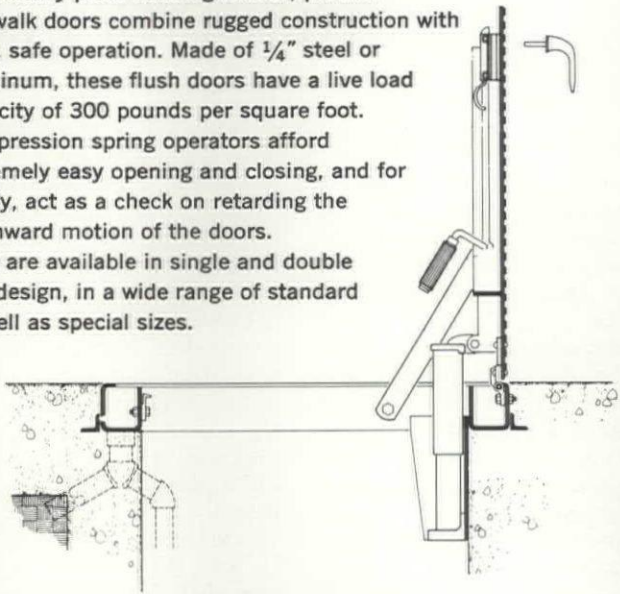
"These programs have significant implications for future practice," the survey group stated. □



# Bilco exterior doors

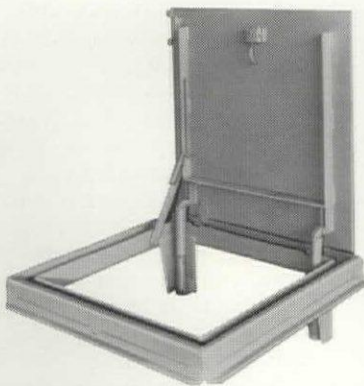


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# Checklist for Cities

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A peaceful, racially integrated neighborhood of 90,000 residents on the South Shore of Chicago found itself threatened by relocation due largely to real estate economics.

A group of volunteer residents called the Architectural and Redevelopment Committee of the South Shore Commission, headed by a young architect named Saul Klibanow, accepted the challenge. For two years they worked in South Shore to assess the housing, shopping, transportation, law enforcement, human resources, traffic, recreation and schools as well as many other social and physical elements. In short, the group developed a plan for the creation of a total dynamic environment.

In Washington, D. C., last year a group of 18 citizens instituted a defense for their community from the threat of major construction proposals that would destroy the 19th century setting of the nation's capital. The Joint Committee of Members from the Capitol Hill Community, which was headed by a lawyer and included two architects, challenged public policy by developing a physical and social analysis of the area and submitting it to citizens and the local government.

These examples indicate the action which has already been taken in certain urban areas in order to appraise cities and achieve environmental reforms. Moreover, they point to the need for an appraisal that is comprehensive if it is to solve urban problems in communities all over America. In answer to the need, the AIA Committee on Urban Design has created the Checklist for Cities.

The Checklist provides for the first time an entirely unique working guide with which citizens can plunge in and analyze the assets and liabilities of their communities and delineate a basis of action for reform.

Using the Checklist as a tool, any group of architects can act through their local chapter to get environmental reforms underway. In addition, local support must be

generated. Even with this, however, outside help may be needed, resulting ultimately in a full-scale commissioning of urban design services.

Publication of the Checklist was undertaken with the primary consideration that *design must be related to decision making*. Under the assumption that each community is uniquely afflicted with varying problems, the Checklist is necessarily a flexible tool, a multifaceted inventory. As explained in its text, the guide is "designed as a checklist of significant factors common to most cities in this country. These factors are grouped under the major headings of the physical and social facets of the city and of the forces shaping them.

"Taken together, the checklist of factors articulates the evolving form of the city—a form which constitutes the design as an end product." It goes on to say that "Comprehensiveness is more important than exhaustive research into each heading."

The implications of such a flexible tool readily apply to community and citywide appraisals, Model Cities projects, downtown renewal and urban highway planning.

Who can use the Checklist? The document itself is designed as an aid for the practitioner who works at larger than single building scale. It is particularly suited, however, to citizens, concerned about the plight of their communities, who are willing to act. These people might be organized within civic and neighborhood action groups. They could be local chapters of the environmental design professions or professional design consultants. Whatever group it is that initiates an appraisal process for their city must "organize itself for the long pull to achieve its recommendations," proposes the Checklist. The organizational follow-up should give expression to certain functions which include:

- distribution of the document
- stimulation of public support by means of communications media and within the citizenry and its leadership

- ongoing professional counsel of the public and private groups implementing the recommendations.

Also important is the group's preparation to "make its voice heard in public hearings where legislation is being considered, or administrative decisions made, that will affect its recommendations."

To help AIA chapters begin the appraisal of urban America, the national Committee on Urban Design has embarked upon a highly successful assistance team service. Briefly, this brings several expert design professionals to the scene of the problem where in several days' time the issues are authoritatively and firmly enjoined. This service has already met with enormous success in pilot studies conducted for such communities as Rapid City, S. D., Frankfort, Ky., and Denver.

If the objective of urban design is "to produce physical forms and systems that are rational, coherent and responsive to the life styles and aspirations of those who use them," then the Checklist for Cities helps to meet that goal. Concerned people are becoming aware of this. Lady Bird Johnson has written: "What a pleasant surprise it is to see the Checklist for Cities that The American Institute of Architects has published.

"Urban officials and concerned citizens can greatly benefit from this professional summary of environmental facilities, each and all of which add up to make the image of a city as a whole."

Bulk orders during the document's first month of publication reflect the widespread concern. Some examples: the Detroit Model Cities program, University of Illinois' department of architecture, the Philadelphia Chapter AIA's new Community Design Workshop for helping low-income neighborhoods, the National Paint Up-Fix Up Campaign and the National Association of Housing and Redevelopment Officials.

The 31-page Checklist is available from Documents Division at AIA Headquarters. Single copies free; \$50 per hundred. □



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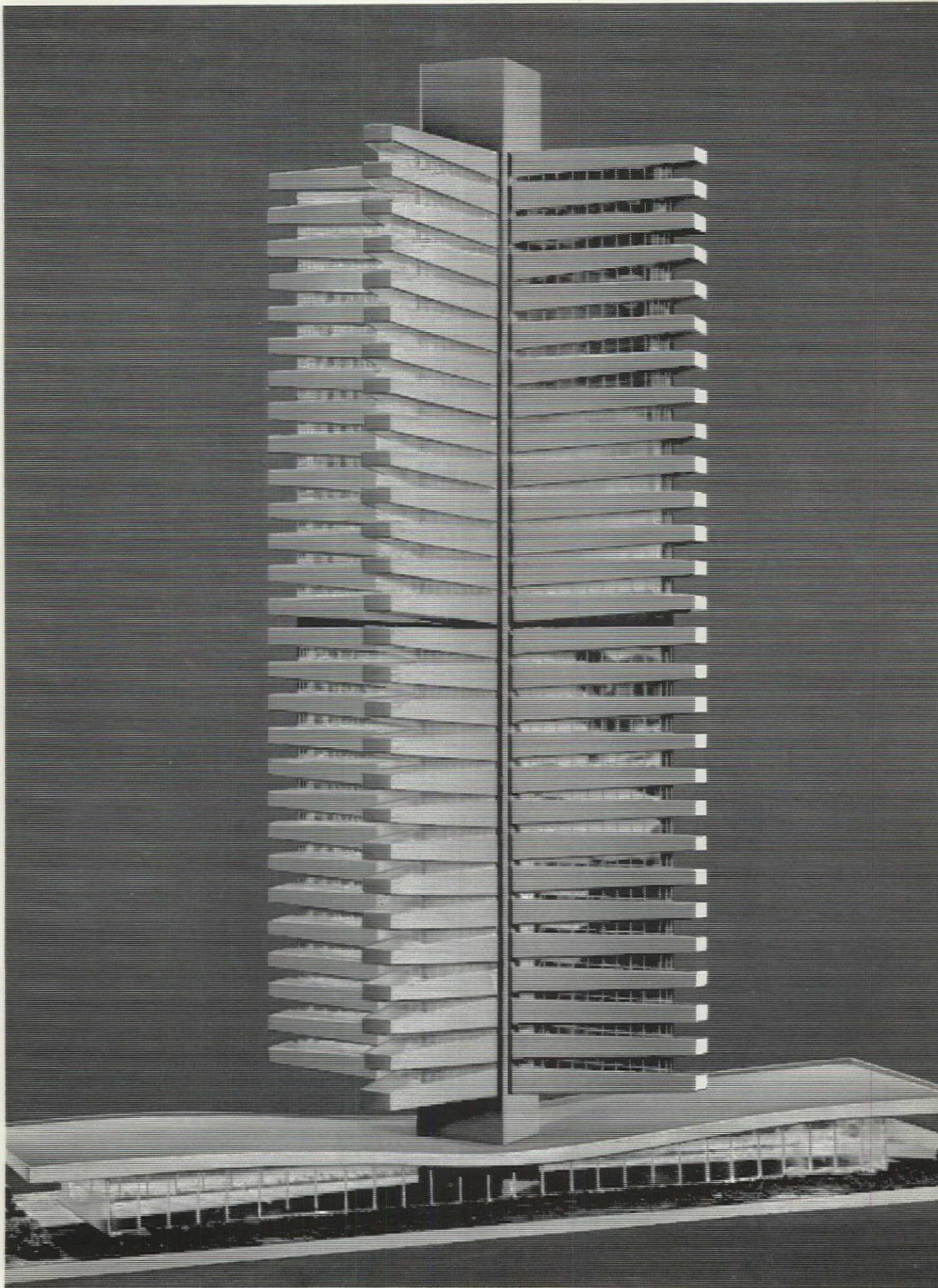
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# The Hill Eyes 'Systems'

If more and more architects are trying to understand the systems approach, so are more and more politicians.

This is reported by Rep. F. Bradford Morse (R-Mass.), who for some time has believed that "ours has been a haphazard, piecemeal approach that depends far too much on good luck."

Such an approach will no longer suffice, Morse said. "We are on the threshold of an entirely new approach to the solution of these public problems. Long-standing relationships between government and business will, of necessity, have to be altered. Our best creative effort will have to be exerted through the evolution, testing and full utilization of more forceful, imaginative techniques and devices."

Among members and committees of Congress, Morse related in a speech before the joint Legislative Conference of The American Institute of Architects and the Consulting Engineers Council, there is a feeling that understanding the systems approach takes special education and orientation.

**Those Esoteric Phrases:** "The terminology itself often seems unclear. What is meant by operations analysis and research, simulation and modeling, or systems management and planning? Esoteric phrases such as 'symbolic logic' or 'queueing theory' pose even greater mental impediments. The world of automatic data processing—the subject of countless articles in the popular press and professional journals—is not always easy to comprehend."

But politicians and their staffs, in gradually increasing numbers, are "striving to understand the new jargon, to understand the systems approach," Morse tells us.

The mounting interest is doubtless due to the dramatic shortcomings of the fragmented approach and the sensational success of the systems approach—at least in "hard" applications.

"Management science has been much talked about during the last two decades, and the aerospace industry has utilized it to the fullest," the Congressman says. "Unfortunately, few groups responsible for dealing with the 'soft' problems of society have pro-

gressed toward the better utilization of management tools and techniques."

**Commission Is Proposed:** Morse—as the "criticality of our situation became more and more glaring"—introduced legislation (HR-20) providing for the establishment of a National Commission on Public Management.

The charter of the working commission would feature two major objectives: 1) to collect and analyze information about the application of systems techniques to non-defense, non-space public problems, and 2) to develop programs which would use these techniques to solve specific problems.

In addition, the commission would have the authority to tap into private management skills and experience.

Support for the concept has come from many quarters, according to Morse who quotes Dr. Simon Ramo, scientist and industrialist, as saying that "one of our biggest challenges today is not so much the development of a new technology but rather the utilization of what we have for the betterment of mankind. For the past few years, we have been watching our cities decay, our transportation systems choke with too-heavy traffic, our school and hospital facilities grow less and less adequate, and our water and air become more and more polluted."

**Systems Allocations:** Sen. Gaylord Nelson (D-Wis.) in a bill he has introduced has concentrated on the need to employ systems analysis and systems engineering in collaboration with plans to selectively allocate the nation's scientific and engineering manpower to the national problems. Grants-in-aid to states or contracts with university groups are provided for in his bill.

Morse told of attending an informal seminar at the Brookings Institution along with 19 other members of the House who "discussed candidly their need for better information, and how systems techniques and automatic data processing might help them in their day-to-day office functioning and in their role as national legislators."

Moreover, "as federal legislators

face the plethora of activities being undertaken at the federal, regional, state and local levels, it quickly becomes apparent," Morse adds, "that assessment criteria and procedures are an absolute 'must' if order is to emerge out of relative chaos. One step to bring this about has been the introduction of a bill by Rep. Charles E. Goodell (R-N.J.) calling for the establishment of an Office of Program Analysis and Evaluation and a Joint Committee of Congress on Program Analysis and Evaluation. In urging that 'objective, scientific, and empirical analysis' be used in assessing all federal programs, the sponsors are pointing up the requirement for strong controls in order to optimize the results to be derived from those programs which have been chosen for funding."

**The PPBS Technique:** Within the federal establishment, meanwhile, PPBS—the Planning, Programming, Budgeting System—grows in its adoption and impact.

PPBS has four central features: 1) focus is placed on the basic objectives of the federal government and in establishing a relationship between these objectives and all program activities; 2) the impact of program development and funding for several years into the future is identified; 3) all costs germane to the given program are noted; 4) alternative courses of action are delineated and analyzed.

Members of Congress have great interest in PPBS, Morse says. They are, he adds, beginning to realize that "a cleverly derived mixture of technological and political solutions is going to be needed to overcome the problems of our age and the means by which government strives to overcome them."

Morse said he shares the sentiment in a statement by Prof. Harold P. Green of the George Washington University, who said:

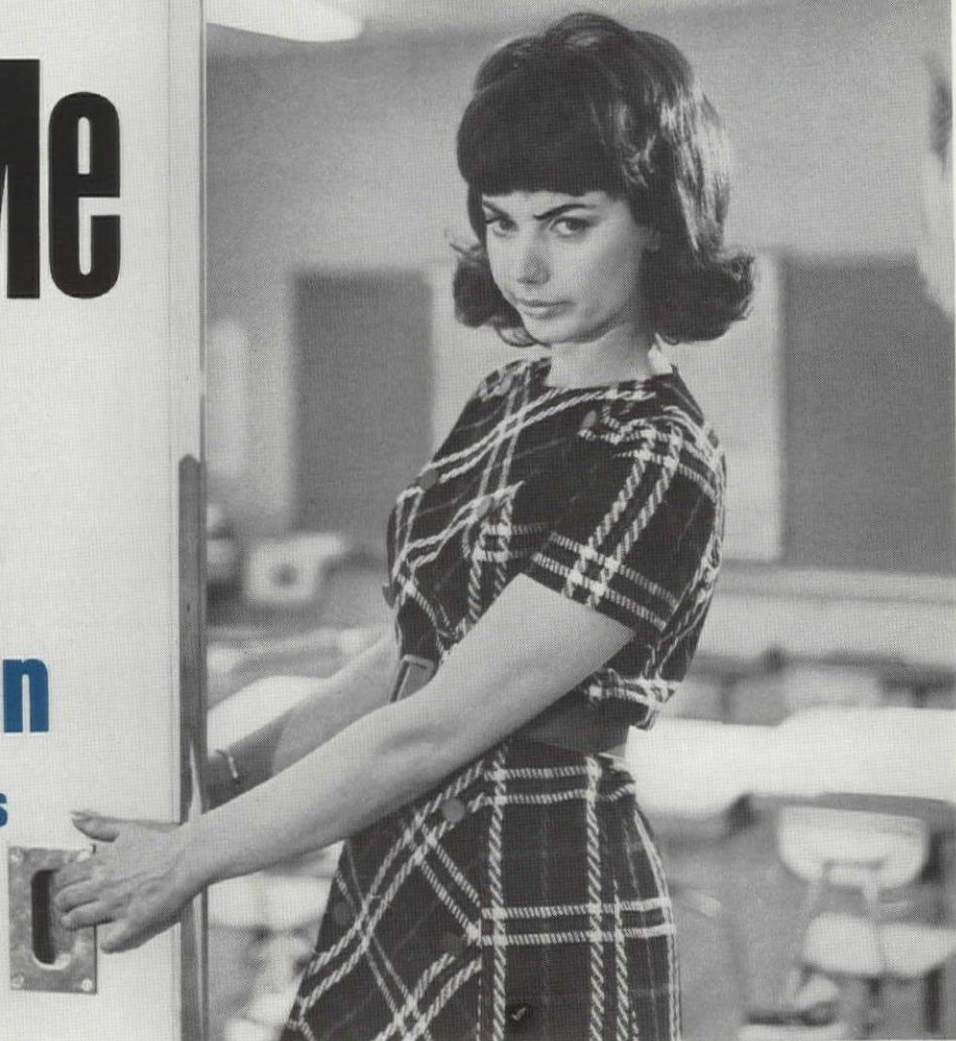
"At the present time, national policy decisions with respect to 'go' or 'no-go' on technological programs are made on the basis of judgments only as to feasibility, cost, priorities and budgetary considerations. What is required in my view is that judgments on legal, economic and social aspects be integrated into the decision-making process." □



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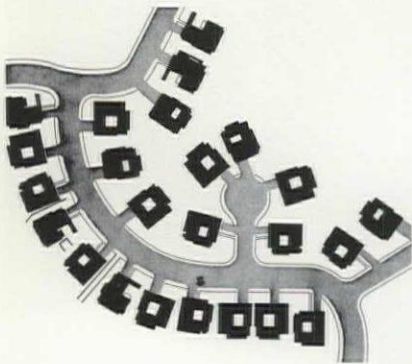


# Books

**Design of the Housing Site—A Critique of American Practice.** Robert D. Katz. Washington, D.C.: Department of Housing and Urban Development, 1966. 223 pp. No price given.

Katz has undertaken with vigor and critical analysis this study to identify technical and procedure factors essential to the high quality development of multifamily housing in the United States. Visiting 700 separate sites in 30 urban areas, his investigation endeavored to determine ways of increasing intensity without sacrificing livability.

In evaluating both publicly assisted and privately financed housing, his objective included qualities in older housing, the influence of zoning practices, new design tech-



niques, and ways to improve both the practice and process of site planning in the US.

The result is a study well documented with descriptions, photographs and site plans. The reader will not find pat formulas for successful solutions but rather a wealth of evidence to support the need for more careful concern at the design stage. Since each community and each site has a peculiar personality, quality can be achieved only by the sound and imaginative application of old design principles correlated with the nature and attitude of the anticipated occupants. Katz' emphasis upon environmental values of exterior spaces suggests the importance of cooperation with landscape architects.

He faces directly the question of the importance of regulations and controls and believes that they do not insure good design and, in fact, may discourage it. He does, however, conclude that the professional review process is good and should be encouraged at all levels of government. Constructive design criti-

cism is one of the surest means of achieving improvement.

The photographs, largely by the author, illustrate well the points he documents. The examples of good design usually indicate a quality which has resulted from careful concern for details, many of which appear to be more expensive in first cost or maintenance than their unsightly counterparts.

Since cost control is a great limitation to freedom in design, it is regrettable that some relationship between the two could not have been suggested in this valuable reference work. If such a supplementary study were undertaken, some correlation between quality of environment and degree of public acceptance would be most valuable.

Mobile home parks as a site design problem are also included in this study, and ample evidence is presented to confirm the need for the serious concern of the profession. The growing industrialization of housing components is well demonstrated by the mobile home, and the architect should not consider this innovation outside of his area of concern in the urban scene.

Katz' study is a valuable contribution to the much neglected field of housing and should be considered required reading for every interested design professional.

DONALD L. HARDISON, FAIA

**Highrise Building and Urban Design.** Hans Arreger and Otto Glaus. New York: Praeger, 1967, 224 pp. \$20.

In the United States we have become so accustomed to high-rise buildings that we take them for granted, rarely asking questions about their advantages and disadvantages.

This book is by two Swiss authorities: Aregger is director of the regional planning office of the Canton of Zurich, and Glaus is an experienced architect with many buildings to his credit.

The first section of the book, composed by Aregger, raises many penetrating questions about the high-rise structure, analyzing its purpose and function, its siting and its effect on country, town and city.

"The question," Aregger writes, "is whether we mean to endure them or control them."

It is somewhat difficult to relate the supplementary illustrative material, prepared by Glaus, to the theoretical text. To this reader, at least, it somehow seems a thoughtful presentation but not specifical-

ly a documentation of Aregger's text.

There are 29 examples of high-rise buildings given, stretching from Wright's Price Tower in Bartlesville, Oklahoma, to a high-rise block in Tapiola, Finland, designed by Aarne Ervi. This so-called "documentation" is followed by a detailed analysis of 22 other structures.

Glaus also wrote the concluding essay called "Thoughts on Future Development." He calls for high-rise buildings to be "put to use as a normal, highly valuable, integrated element in urban building."

The book includes 51 photographs, 200 plans and 85 most intriguing sketches.

**Private Houses: An International Survey.** Werner Weidert. New York: Praeger, 1967. 165 pp. \$16.

This book, with text in English and German, presents 33 houses located in various parts of the world from Helsinki to Santa Barbara. The aim has been "to present typical examples which illustrate the current trends and potentialities in house design."

There are plans and photographs of each house; and specific features and problems, particularly of siting, are pointed out in individual descriptions of the houses. The arrangement of the book is according to shape and size of plan, starting with the comparatively small house and going on to larger ones with more intricate plans.

The book begins with architect Halldor Gunnl6sson's own home near Rungsted, Denmark, and concludes with the Taylor house at Westport, Connecticut, designed by John M. Johansen. Roughly a third of the houses shown are by American architects.

It has been quite a while since there has been a really topflight book on domestic architecture. This one is still not the answer, but in many ways it is an admirable contribution.

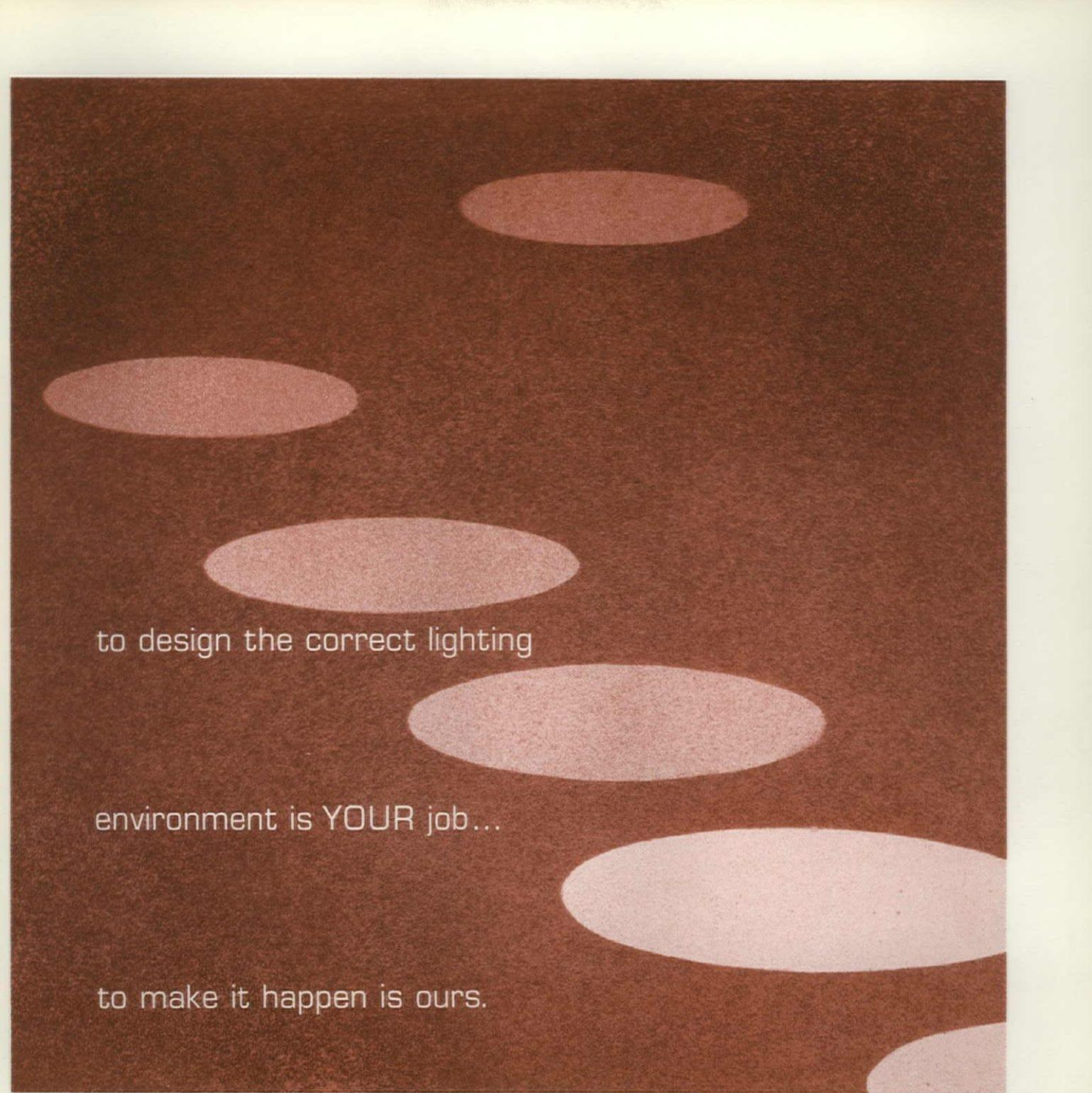
**The Modern Room.** Edited by Giulio Peluzzi. New York: Universe Books, 1967. 210 pp. \$15.

*The Modern Room* will make a homemaker drool. It makes some obvious statements such as, "Curtains and draperies add considerably to the atmosphere of a room." But the really stunning color photographs speak louder than the text.

The book is crammed with visual suggestions to help anyone,

*Continued on page 105*





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amateur or pro, solve an interior decorating problem, provided the décor is contemporary. If French provincial is your taste, this book is not your cup of tea.

Foyer, living room, kitchen, bath, nursery, terrace and garden—all areas of a home are considered. There is also a section on "decorative elements," and included here are treatments of curtains and draperies, carpets and rugs, floors and walls, doors and screens and lamps.

The book was published originally in Italy under the title *Forma e Colore nell'Arredamento Moderno*.

**Desert Architecture.** Ralph E. Parachek. Phoenix: Parr of Arizona, 1967. 93 pp. \$6.95.

As a practicing architect in Phoenix for the past 10 years, the author has studied the varied and beautiful architecture of the Sonora Desert in Arizona and New Mexico. This short book, interspersed with many illustrations, can be only an appetizer. It is successful in that one wants to go immediately and investigate the desert himself.

Parachek contends that the region is unique. In the rest of the United States, old cultures have been obliterated as new ones gained strength, but in the desert even today the Hopi villagers, Spanish-Americans and Anglo-Americans co-exist. One sees daily evidence of their respective ancestors. There



is an overlapping and intermingling, too, and this is revealed clearly in the architecture of the region.

Parachek writes of the arts and architecture of the Indians; of the Spanish padres and their followers; and of those irreverent gringos who poured in from the eastern and southern parts of the United States after the Civil War. Each adapted to the demands of the desert environment; each left contributions.

Environmental factors, such as the warm and dry climate, remain

constant. In a chapter on "Contemporaries," Parachek discusses the materials and techniques the modern architect uses as he confronts those constants.

Many contemporary architects have brought a new excitement to the desert, aided and abetted by the bright and brilliant sun, the strong colors and deep shadows and its fierce but compelling beauty. "As in the past," writes Parachek, "the new is added to and blended with that which has been before."

**I. Planning, Programming and Design for the Community Mental Health Center** (1966, \$8); **II. Architecture for the Community Mental Health Center** (1967, \$12); **III. Architectural Aspects for the Community Mental Health Center** (to be published, \$6). New York: Mental Health Materials Center, Inc. \$20.80 per set.

This three-volume Community Mental Health Center series presented by the National Institute of Mental Health, the School of Architecture of Rice University and the Maurice Falk Medical Fund, aims at bringing about a closer collaboration between the mental health therapist and the architect. It also seeks to achieve a new set of design principles for a "new kind of structure for a new kind of service program."

The first two of the three volumes are now available, and they are useful tools. The first volume considers the theories and concepts involved in the design of a community mental health center for a San Francisco community. Other neighborhoods will not have the same needs precisely, but there are underlying, constant principles.

The study was conducted by the Western Institute for Research in Mental Health, San Francisco. Project directors were Dr. J. J. Downing; Dr. R. A. Kimmich; Ellis Kaplan, AIA; and Herbert McLaughlin, AIA.

The second volume came out of the Rice University Design Fete held in 1965. Six teams of specialists met on the Rice campus to consider the problems involved in designing six representative mental health centers. On each of the teams there were a psychiatrist, a community psychiatrist trainee, an architect and five architectural students. Within a two-week period each team worked to develop a psychiatric program and an architectural design for a community mental health center.

This volume reports the conclusions reached by the six teams, and it should provoke thought regarding both community mental health programs and their architectural settings. Among the architects who participated in the program were Kaplan, David A. McKinley Jr., K. Izumi, Wilmont Vickrey, Jean-Paul Carlhian and W. W. Caudill. Bill N. Lacy was director of the project.

The third volume in the series will be titled *Architectural Aspects for the Community Mental Health Center*. It will endeavor to interpret new concepts of design and will represent "a composite of architectural consultation information from the National Institute of Health."

Any architect charged with the responsibility of designing a mental health center will welcome these books which bring to him considerable information from both the mental health and the architectural specialist.

**Literature Relating to Planning, Design and Construction of Science Facilities.** National Science Foundation. Washington, 1967. 29 pp. 20¢. For sale by the Superintendent of Documents, US Government Printing Office, Washington, D. C. 20402.

A list of articles and papers pertaining to the planning of science facilities that can be consulted in the reference library of the National Science Foundation's Architectural Services Staff is given in this pamphlet. Established in 1963, it aims to provide "professional support in the areas of architectural design, engineering and construction," and its reference library has been considered as an essential element in giving help to those who ask the foundation for assistance.

This publication aims to inform persons searching for materials on the design of science facilities about the data available for consultation in the offices of the National Science Foundation in Washington. It provides considerable help for other libraries and architectural offices as well.

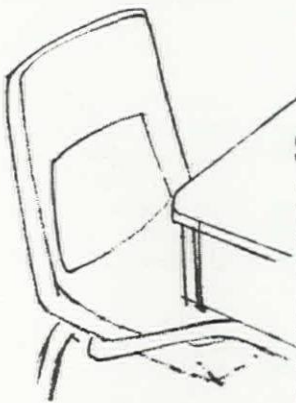
Many government publications, books, periodicals, transactions of congresses, papers and similar sources are cited. There are a number of references to articles which have appeared in the AIA JOURNAL. The subject divisions are logical and helpfully detailed, making the bibliography easy to use.

This is certainly a wise investment of 20 cents if you are interested in science buildings.

*Continued on page 110*



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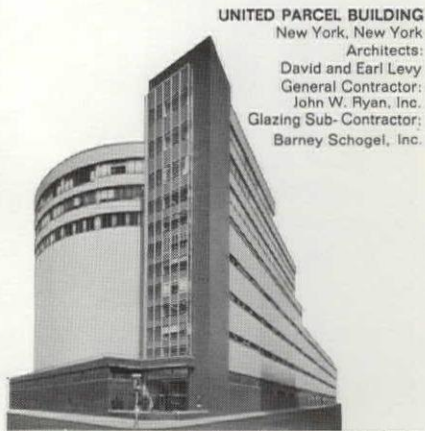
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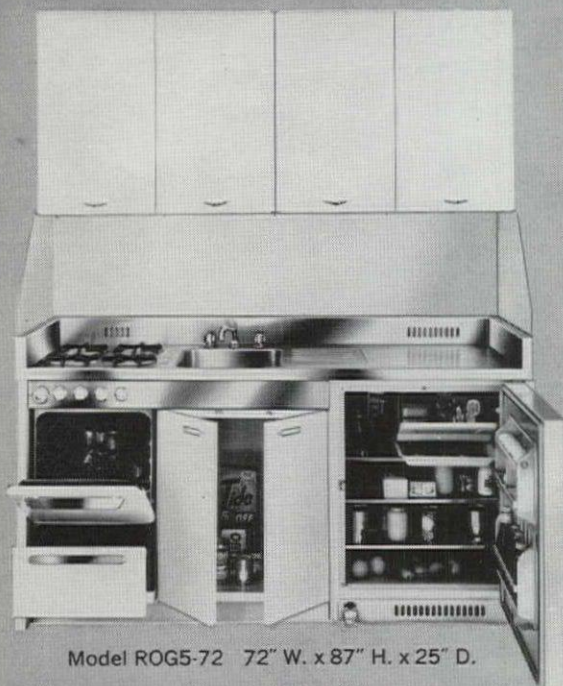
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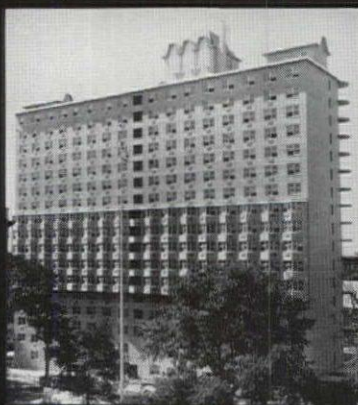


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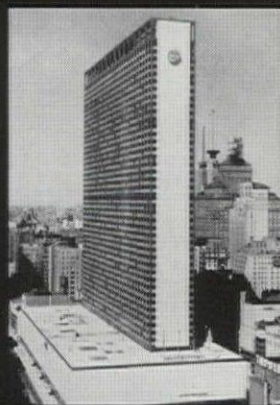
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**Sun Protection: An International Architectural Survey.** Ernst Danz. New York: Praeger, 1967. 149 pp. \$13.50.

Modern buildings with large expanses of glass require some means of sun protection regardless of whether they are sited in northern latitudes or in warmer regions. Due to factors beyond his control the architect often cannot face the building in such a manner as to influence favorably the intake of light and heat. In such cases he is doubly pressed to provide means of protecting the building from excessive sun and glare.

In this book Danz suggests a wide variety of methods to afford sun protection, both fixed and movable devices and combinations of the two. There are chapters on such means of control as shade from trees, cantilevered roofs, projecting floor slabs, structural framing, balconies and loggias, shade louvers and blinds, shutters and jalousies, shaded glass, awnings and roller blinds, and screens.

Danz, a graduate engineer from the Stuttgart School of Technology and with experience in a number of

architectural firms, makes practical suggestions about comparative costs, problems of maintenance, the efficacy of various materials, and esthetic and design considerations. The illustrative examples are well selected and provide the architect with a wealth of suggestions. The text is in English, German and Spanish.

**A System for Dynamic Simulation Using Computer Graphics.** Philip A. Hendren. Stillwater, Okla.: Oklahoma State University, 1967. 40 pp. No price given.

The need for developing simulation techniques in architectural design has indeed been recognized (see ACSA section, AIAJ, Dec. '67). Such techniques are generally valuable in discerning human response to various environmental stimuli, and particularly useful to architects and planners in testing responses to a proposed physical environment.

This Oklahoma State University study uses as its basis computer graphics and motion picture photography. Its objective is "to devise a simple technique for studying movement through space." Perspective drawings are used to

study spatial experience with consideration to the important variables of light and movement.

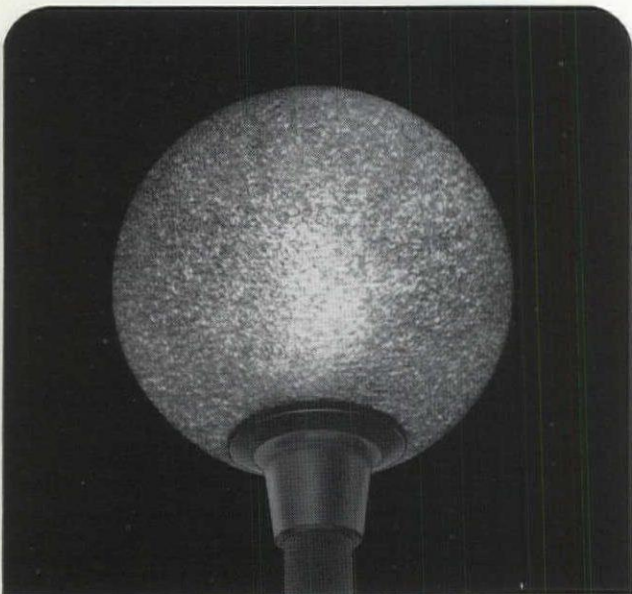
Says the author: "The system realizes movement by changing relative positions between space-confining elements and a viewpoint; and light by describing the elements in proper illumination with the use of shading and shadows. It is considered that the essence of space can be depicted effectively in this way as long as the interactions of the elements that confine space are clear in the presentation."

As the study shows, "the system is still largely experimental and its limitations are not well defined, but initial investigations indicate a broad range of applications."

**The Architecture of Wisconsin.** Richard W. E. Perrin. Madison: State Historical Society of Wisconsin, 1967. 175 pp. \$7.50.

Perrin probably knows Wisconsin architecture the way that few people do. He has studied it, observed it, admired it and written about it. The essays collected here first appeared in the *Wisconsin Magazine of History*, and this book

*Continued on page 114*



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| 1925 | Isabella McCosh Infirmary<br><i>Architects: Day &amp; Klauder</i>                     | 1963 | John C. Green Hall (re-designed)<br><i>Architects: Francis Roudebush</i>                     |
| 1929 | Henry C. Frick Laboratory<br><i>Architects: Charles Z. Klauder</i>                    | 1963 | Henry C. Frick Laboratory Addition<br><i>Architects: O'Connor &amp; Kilham</i>               |
| 1930 | Dickinson Hall<br><i>Architects: Charles Z. Klauder</i>                               | 1964 | Undergraduate Dormitories<br><i>Architects: Hugh Stubbins &amp; Associates</i>               |
| 1947 | Herbert Lowell Dillon Gymnasium<br><i>Architects: Aymar Embury</i>                    | 1964 | Guyot Hall — Geology Addition<br><i>Architects: O'Connor &amp; Kilham</i>                    |
| 1952 | Edward S. Corwin Hall<br><i>Architects: Voorhees, Walker, Foley &amp; Smith</i>       | 1965 | Magie Apartments<br><i>Architects: Ballard Todd Associates</i>                               |
| 1960 | Dormitories and Social Hall Complex<br><i>Architects: Sherwood, Mills &amp; Smith</i> | 1965 | McCormick Hall — Art Museum<br><i>Architects: Steinmann &amp; Cain</i>                       |
|      |                                                                                       | 1968 | L. Stockwell Jadwin Gymnasium<br><i>Architects: Walker O. Cain &amp; Associates</i>          |
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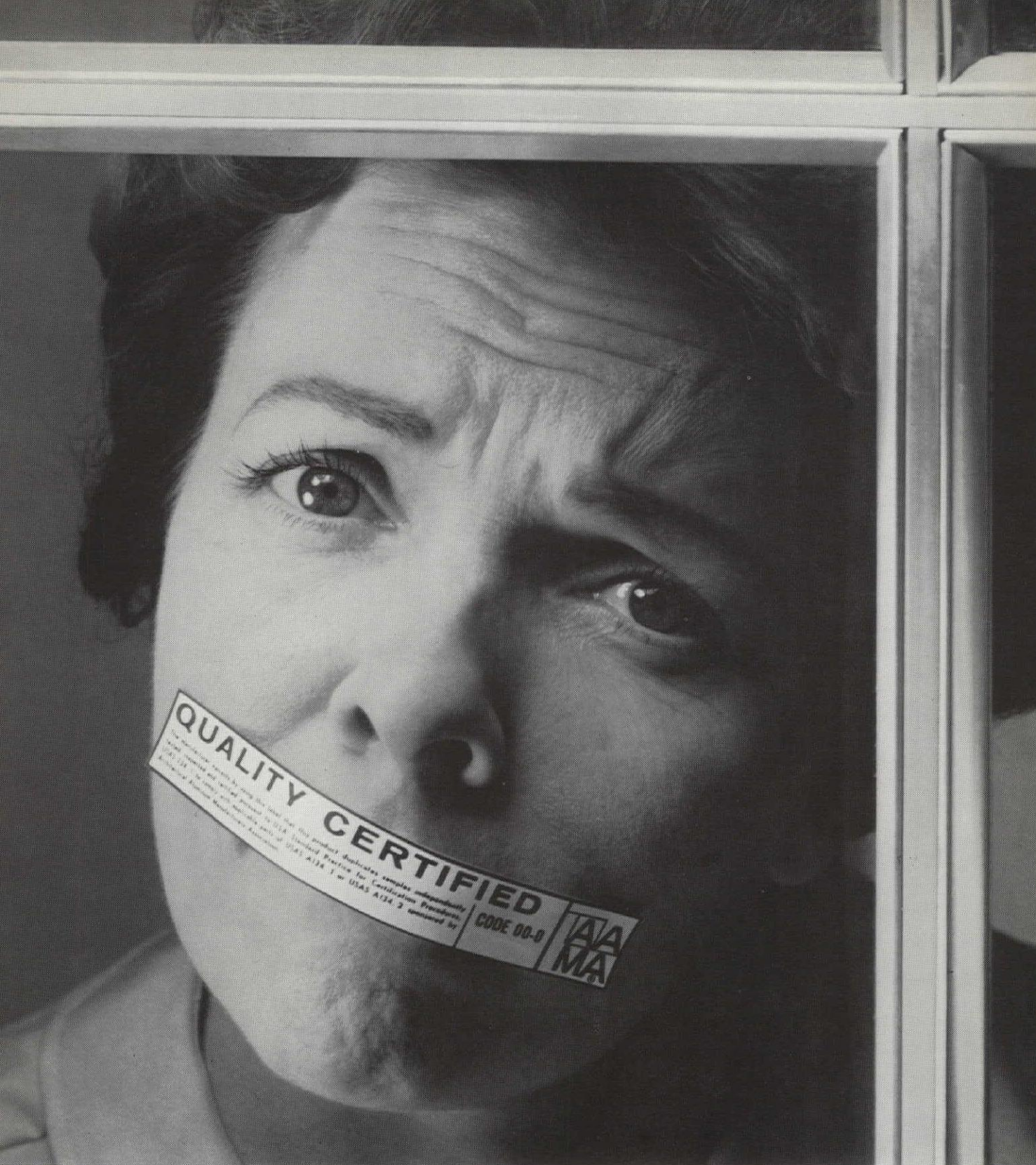
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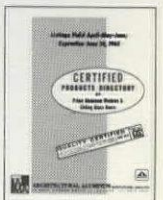
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- April 30-May 1:** Building Research Advisory Board Year Round/All-Weather Construction Conference, Mayflower Hotel, Washington, D. C.
- April 29-May 3:** Conference on Religious Architecture, Statler Hilton Plaza, Miami Beach, with a post-convention seminar, May 3-6, San Jeronimo Hotel, Puerto Rico
- May 4-9:** American Society of Planning Officials Conference, Fairmont Hotel, San Francisco
- May 7-9:** Consulting Engineers Council Annual Meeting, Statler Hilton Hotel, New York City
- June 23-26:** American Society of Landscape Architects Annual Meeting, Sheraton-Brock Hotel, Niagara Falls, Canada
- June 23-29:** AIA Annual Convention, Portland Memorial Coliseum, Portland, Ore., and Ilikai Hotel, Honolulu (June 28-29)
- July 3-6:** National Society of Professional Engineers Annual Meeting, Schroeder Hotel, Milwaukee, Wis.

*AIA Regional and State Conventions*

- May 2-4:** Gulf States Region, Holiday Inn, Rivermont, Memphis, Tenn.

*International*

- June 2-4:** International Design Methods Group First Annual Conference, Massachusetts Institute of Technology, Cambridge
- June 15-20:** International Federation of Landscape Architects Congress, Montreal
- June 16-22:** International Design Conference, Aspen
- Aug. 26-30:** International Health Conference, Copenhagen

*Continuing Education*

- June 17-28:** "Computer Graphics for Designers" course. Contact: Bertram Herzog, Associate Professor, Department of Industrial Engineering, University of Michigan, Ann Arbor 48104

*Awards Programs*

- The Liturgical Conference (preliminary plans and completed churches). Contact: Architectural Competition, 2900 Newton St. N.E., Washington, D. C. 20018. Submissions due May 1.
- Prestressed Concrete Institute. Contact: PCI, 205 West Wacker Drive, Chicago 60606. Submissions due May 13.

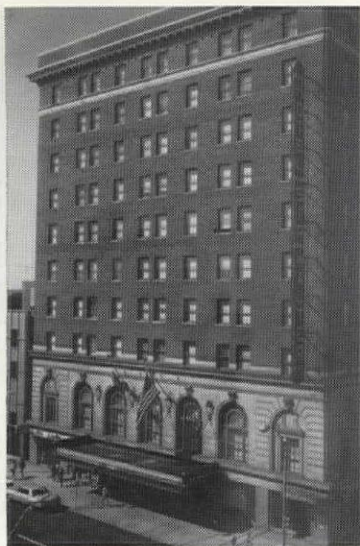
*Tours*

- Greek Settlements Through the Ages, July 6-13. Organized by the Athens Center of Ekistics. Applications must be sent to the ALFA Tourist and Travel Agency, 35 Voulis St., Athens 118, by May 6, with a deposit of \$52.50 (first-class hotel) or \$42.50 (third-class hotel).
- Architectural Tour of Scandinavia, Aug. 8-Sept. 6. Contact: Dr. Harold Fredsell, Director of Church Development and Architecture, United Presbyterian Church, USA, 475 Riverside Drive, Room 1511, New York, N. Y. 10027. □





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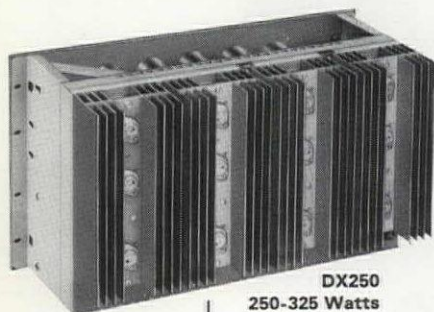


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## Credit Where Credit's Due

EDITOR:

Thank you for Louis Sullivan's bank in Grinnell and William Steele's Woodbury County Court House in Sioux City, included in the "Iowa Landmarks" portfolio in February.

I was delighted to be informed that William Purcell was to get partial recognition with George Elmslie (in association with Steele) for such a wonderful and daring structure. While I knew Purcell personally, I never heard him take any credit for his contribution to that essay in architecture.

ERNEST O. BROSTROM, AIA  
Bridgeville, Pa.

ED. NOTE: The work of Mr. Purcell—"a lively link in the modern movement"—was analyzed in AIA JOURNAL, December 1966.

## AIA and the Law

EDITOR:

Many decisions in lawsuits directed against architects are based on a conception of them as "master builders." This conception doesn't square with reality and may ruin the profession.

Law isn't settled by judges alone; it is developed also by lawyers who win cases. The AIA should employ or assist in the employment of legal talent to fight crucial lawsuits.

For protection, architects have resorted to insurance, indemnification provisions in contract documents, etc. These expedients treat symptoms only. It would be better to cure a sick law that puts too heavy a burden of responsibility on the architect.

ALAN MATHER  
Specification Writer  
Detroit, Mich.

ED. NOTE: The Institute has launched a task force study of changing construction industry legal relationships. As President Robert L. Durham, FAIA, has noted, the study may "tell us whether an effort to revise construction law is feasible and how we might go about accomplishing it."

## Getting to Know You

EDITOR:

Having read with considerable interest the article on the UIA appearing in January, I firmly agree with the observations made by Joseph Watterson about those who voiced opinions of the Ninth Congress.

I have seen it happen at many meetings; those who participate with a desire to make constructive

contributions are usually those who leave with positive reactions, either about the effort expended or about the results shown—and sometimes both. Then there are those who are present for a variety of reasons, none of which is too closely connected with making an effort toward a successful program.

If only more of our citizens knew the value and satisfaction from getting to know people from other countries. In my job, I get to meet hundreds from other nations, and sometimes on their home ground.

ROGER C. MELLEME, AIA  
Director, Division of Design  
and Construction  
American Hospital Association  
Chicago, Ill.

## For 'Freehand Freedom'

EDITOR:

"Freehand Freedom for Better Detailing—and Better, Faster, Cheaper Drawings" in January was one of the most helpful articles an architect could read in any professional magazine lately.

If the purpose of architecture is "to think out our problems and find better solutions"—defined so well in nine words—then the importance of having more time to do it by more freedom from the mechanical processes of drafting is comparable only to that of the computers.

Associated with a larger firm, author Chester E. Roemer did not emphasize—maybe did not realize—the obvious advantages of more "freehand freedom" in small offices. The proposed method will probably have only favorable consequences in all offices, in schools and on construction sites.

EUGENE PADANYI-GULYAS  
Billings, Mont.

## Back to Beauty

EDITOR:

I was glad to know that my former fellow board member, Ken Black, had the temerity to express his concern about "beauty" in architecture in his letter in February. Verily, beauty does seem to have become a naughty word.

I become discouraged about the future of architectural design when I look through the professional magazines and view some of the present-day buildings—especially the brutal concrete structures with no pretensions to any refinement and which in a few years become cracked, dirty, stained and spalled.

After a practice of over 40 years, I realize that I could be considered

reactionary and old hat, but I have a nostalgia for better design and more beauty in architecture. It seems to me that a great many of our current designers are more concerned with "being different" and producing "stunt" architecture.

Bob Hastings gave an excellent but disturbing talk before a group of Pittsburgh architects not too long ago. His chief concern seemed to be with "change" and "systems," which he expects to be influential on the near future of architectural practice. I fear he is right. The dependence on manufacturing systems is creating a nationwide monotony in architecture.

I like the JOURNAL, but would like to see more of the lighter type of articles and some humorous ones like Bob Schmertz's illustrated poem, also in February.

ALLAN H. NEAL, FAIA  
Pittsburgh, Pa.

## Concerning the Chicago School

EDITOR:

The Chicago School of Architecture Foundation appreciated the article in the February issue, and we look forward to 1969 when we will welcome those attending the AIA convention to activities in Richardson's Glessner House.

The successful purchase of the house was organized by Harry Weese, FAIA, and his brother Ben Weese, AIA, who garnered substantial contributions from C. F. Murphy Associates, the Perkins & Will Partnership, Philip Johnson, Phyllis Lambert, Skidmore, Owings & Merrill, Alfred Shaw & Associates, Loeb Schlossman Bennett & Dart and, of course, from Harry Weese Associates.

Many other contributions have been received from architects and the public, and more are sought. The generous assistance of the entire national architectural community is needed to support the foundation's work.

The house is owned, free and clear, by the foundation, but restoration will continue over many years. A new heating plant has been installed with provisions for future air conditioning, and plumbing has been provided.

Regular membership is available at \$15 a year, while students may join at \$5. Several other categories are included in the membership structure.

L. MORGAN YOST, FAIA  
Executive Director  
Chicago School of Architecture  
Foundation  
Chicago, Ill.





# Welcome to the city of angels.

Bitter? Cynical? Sí. This is your introduction as you enter from East Los Angeles. Just 12 miles from Beverly Hills, where the beautiful people live, it's called Boyle Heights. Here, some 87,000 exist in the twilight zone of sub-employment. Substandard living conditions. Inadequate schools. Opportunity non-existent. The population is predominantly Mexican-American, with a generous helping of Negroes, Orientals of all extractions, and whites. What would you do to pull this area, rich in the beauties of nature, out of the

sub-culture classification? Could the very fact of its polyglot population suggest a creative solution? Why does the planning not extend to include the outskirts of the city of Our Lady the Queen of Angels? What could be done to correct this oversight?

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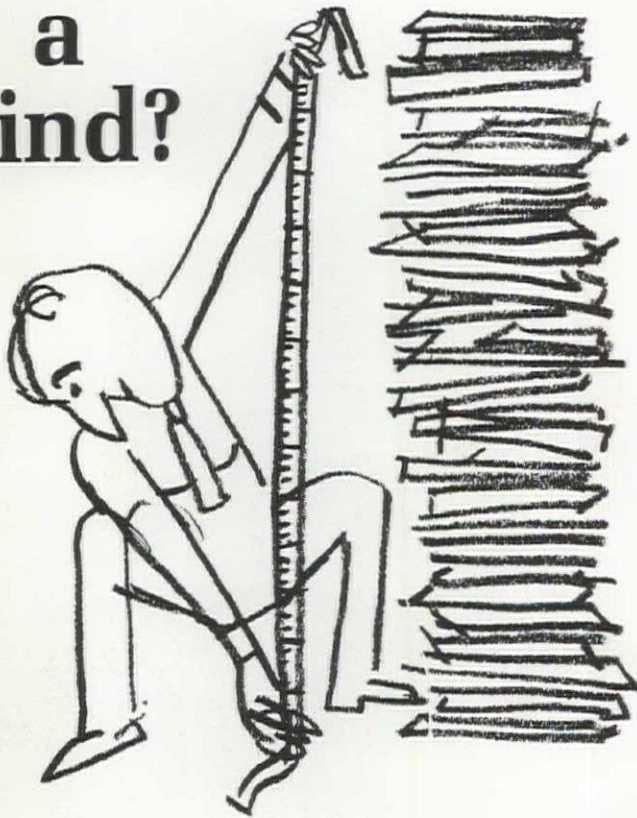
study in urban design at an American university and a follow-up tour of urban developments abroad.

This doesn't solve the whole problem. But it's something to think on. And it could start some action. At least, we hope so. For 100 years, we've never stood for ugliness in anything we've made. Now, we can't stand for it in anything.

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## Asides

**Next Month:** In referring to the art/architecture relationship in Comment & Opinion in January, we pointed out that it is "a presupposition to which we tend to give lip service and not much else. There are signs, however, that progress is being made." And evidence of that progress has been found by a Detroit architect—an artist in his own right—in a variety of building types across the land and in foreign countries too. His "Art in Architecture" presentation is based on McGraw-Hill's forthcoming book of the same name.

Also in May: an architect-lawyer views Institute Document A201, General Conditions of the Contract, in the larger light of basic legal relationships of the parties themselves; a British editor examines the role of the professional magazine in architectural criticism; and a two-time participant in the Delos Symposium conducted by Doxiadis analyzes the spreading influence of the Greek architect-planner-teacher.

**Vamonos a la Fiesta:** Readers who are planning to take in HemisFair, subject of our cover article this



**HEMISFAIR '68**

month, can obtain further information and make reservations by writing Visitor Services, Inc., 406 W. Market St., San Antonio, Tex. 78205. Officials expect as many as 7 million fair-goers

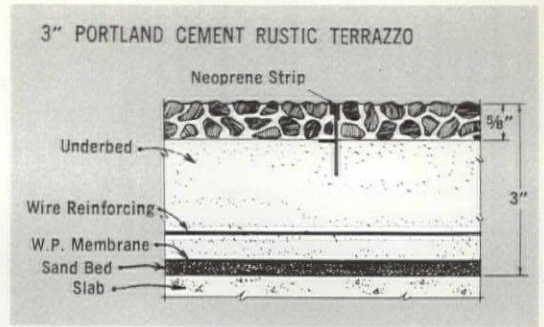
at the downtown site but secretly hope for more.

Meanwhile, a 6-cent commemorative stamp has been issued, which symbolizes the theme "The Confluence of Civilizations in the Americas." The design by Louis Macouillard of San Francisco is in pink, blue and white. R. E. K.

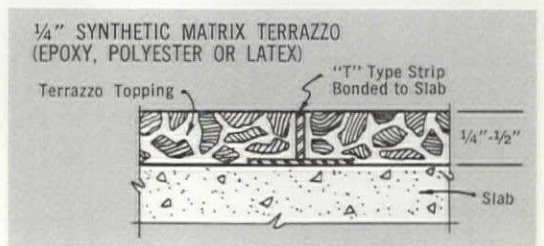
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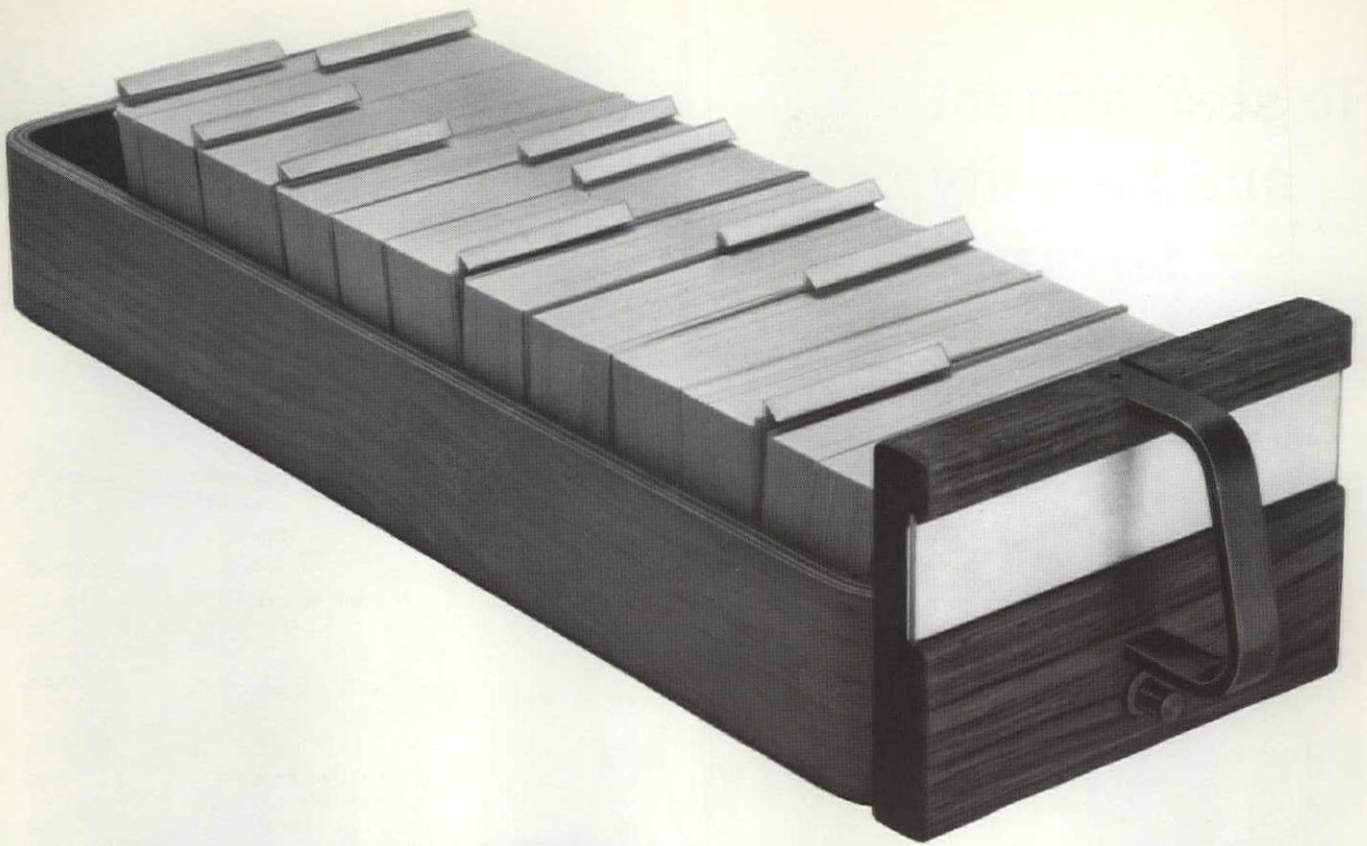
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Remember—I repeat—remember, Central City can be cool when the sun sets. Bring a warm jacket or sweater and remember also that liquor can "get to you" at high altitudes, so be sure to try that "next to the last drink" on for size before deciding. We will have a medic or two, some oxygen and a place to lie down if you don't acclimate readily. No worry.

You girls will have the traditional Fashion Show and Luncheon of course, but with a switch. This one will feature "buckskin and beads"—authentic Indian cos-

tumes out of the Denver Museum's priceless collection and not a one for sale! (So the architect in your life can rest easy, except for the sneak punch: Our ladies are also doing a Shopping Guide for you.)



We are assuming that you will come early, or stay late, and combine a few days of touring or vacation and that you will bring the kids. So we've got a teenage swimming party and a teenage pad at the hotel; also, an afternoon at Elitch's (our amusement park, which is modeled after Den-

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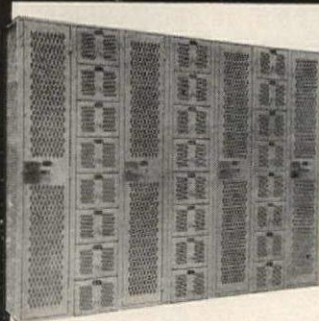
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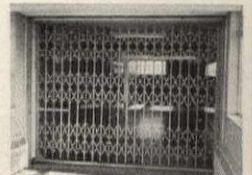
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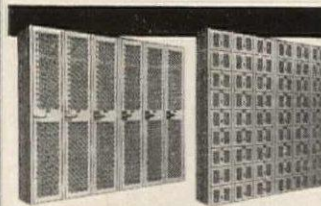
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## U. S. Excess Land Project Pilot for Pilot-Prototype

A pilot project for a pilot project, hopefully to become a prototype for urban renewal across the nation, is in progress at the former site of the National Training School in Washington, D. C.

Project One—to comprise 400 housing units for about 1,800 people—will occupy 20 of the 335 acres of federal land declared surplus and made available for urban renewal. The overall project, called Fort Lincoln, will in time supply housing for 25,000 persons.

Harry Weese, FAIA, Paul Rudolph, FAIA, and Moshe Safdie have been selected to meet the challenge of Project One: to streamline construction techniques without sacrificing quality or good design.

The costs of their projects are not expected to be low. What is expected is that from this empirical experimentation cost- and time-factors of larger-scale construction can be calculated.

The National Capital Planning Commission and Washington's Redevelopment Land Agency, sponsors of the projects, stress that they do not want cheap construction but do want good quality for low cost, possibly through industrialized construction such as seen for many years in Europe.

Different methods are planned by the three architects, but the emphasis of all is very much on teamwork. Weese, in cooperation with the Washington architectural firm Brown, Wright & Mano, will use factory-made building components; Rudolph, with the 19-plant Magnolia Homes firm, will utilize completely prefabricated units approaching plug-in status; and Safdie, with engineer Edward K. Rice of California, will create a less costly Habitat of lightweight concrete boxes — with 2-inch thin walls.

Advantages offered by the mini-projects will be spread across Fort Lincoln and incorporated in other excess land projects, it was said. A number of other land holdings is expected to be tagged surplus.

Architects for Fort Lincoln are Keyes, Lethbridge & Condon, working in cooperation with city planner David Crane. Only firms—25 in all—with membership in the AIA or the American Institute of

Planners were invited to bid on the project.

"We kept our standards so high that we were almost crucified," comments Charles H. Conrad, executive director, National Capital Planning Commission. "But there was no question in our minds. The planners of the well-balanced community we wanted stood out right away."

Teamwork, complete with a sociologist in the picture, was again key to the architect's concept. The plans were judged by the Department of Housing and Urban Development, the National Capital Planning Commission, the Redevelopment Land Agency, the District of Columbia—and the public.

Fort Lincoln will have a blend of low-, medium- and high-rent units (1,500; 2,200 and 800, respectively). A town-in-town, it will have schools and stores, possibly a private or public office complex and a new public college. It will provide several thousand job opportunities when completed.

## Death of Earl Reed Loss To Preservation Movement

The late Earl H. Reed, FAIA, was to many "Mr. Preservation." As a memorial, the Chicago School of Architecture Foundation, of which Mr. Reed was a trustee, will name its library for him.

Until his death on Jan. 28, Mr. Reed served as a supervisory architect for the Historic American Buildings Survey of the National Park Service. The Chicago architect's distinguished work in historic preservation was recognized by the Institute when in 1961 he was granted the Edward C. Kemper award.

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