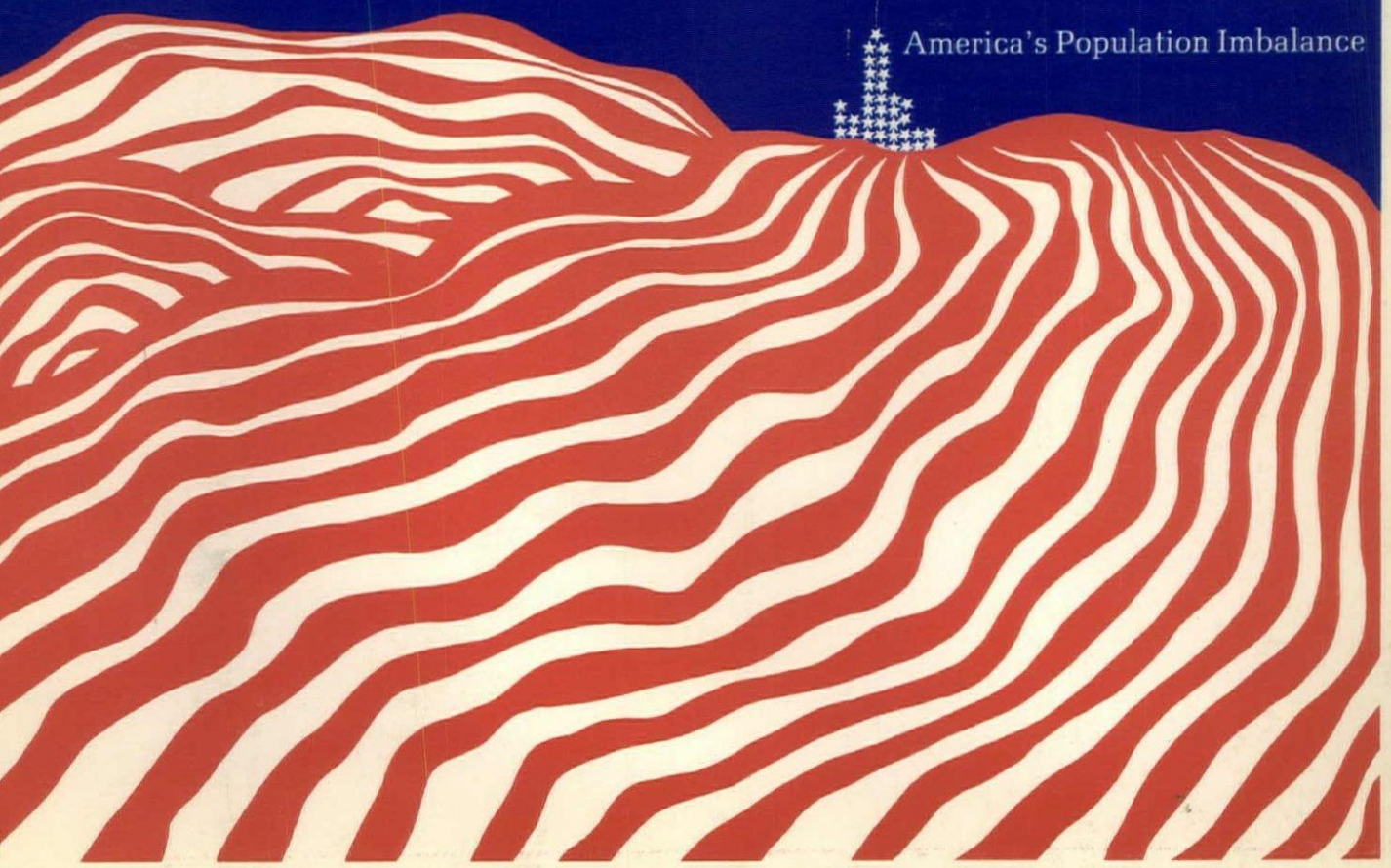


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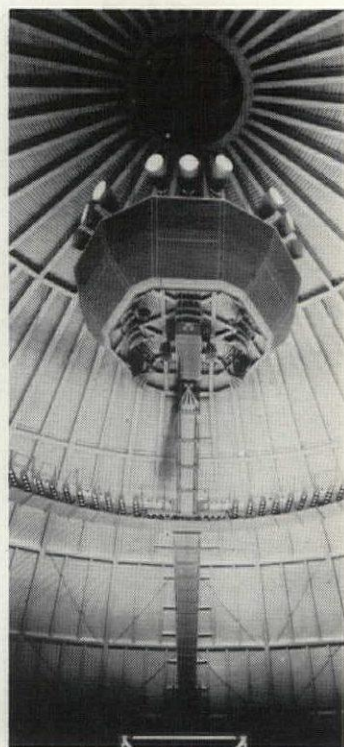
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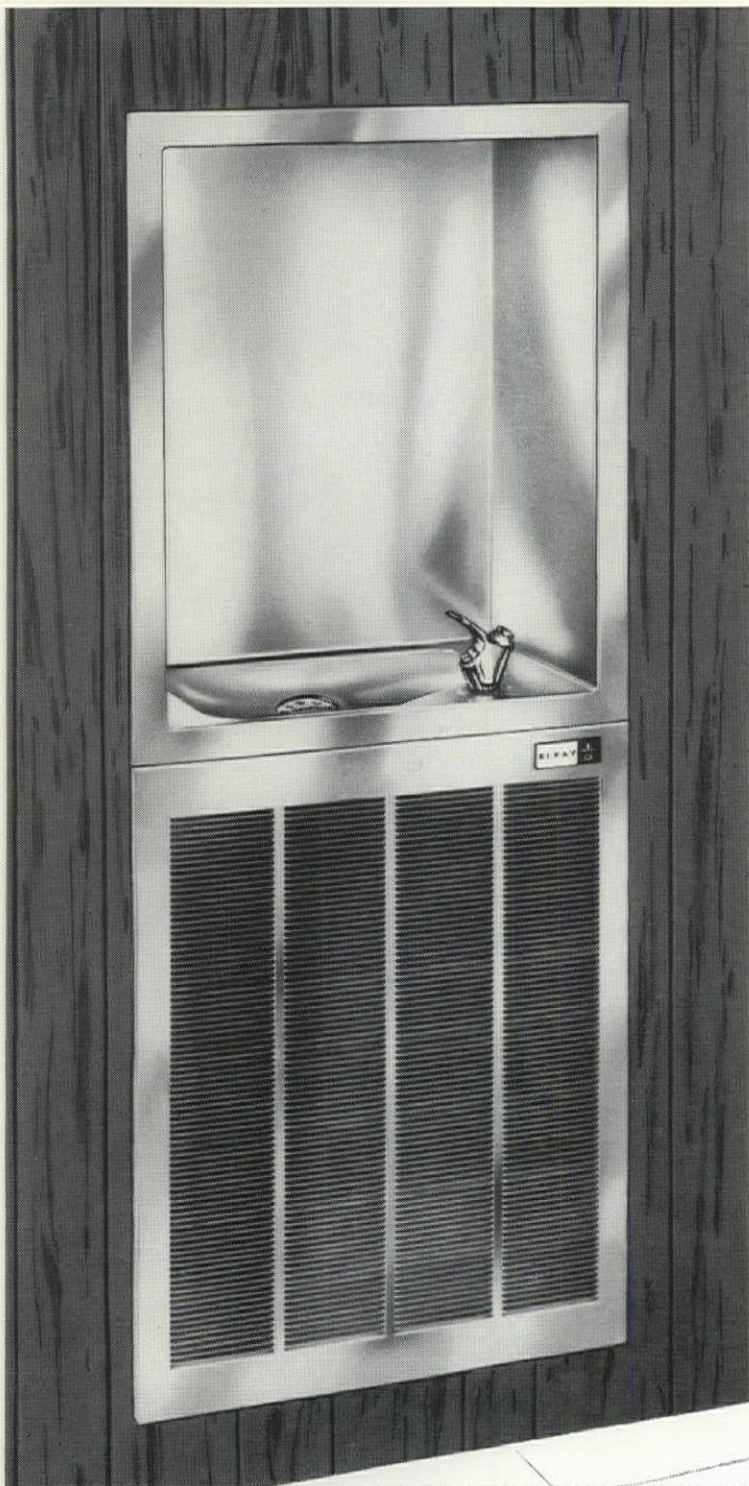
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Cover: America, land of population imbalance

Next Month: February represents what we feel is a good example of the kind of editorial balance architects tell us they want: a range of articles to equal the range of their professional interests. Leading off is a definitive study of the pedestrian mall that spells out what it is and what it isn't. The concept has caught the public's imagination but, as the author points out in this well-illustrated piece, it offers no miracle drug for our urban ills; instead, it must be considered in terms of the more basic revitalization process of the central core.

In Baltimore, a model for designing urban highways in the rest of the nation may well have been established. There, architects and other professionals have formed an urban design concept team to get the interstate highway program through with the least possible disruption of the environment, both peoplewise and housewise. Logical though such a method seems, the team had a rough time getting established, as an in-depth review of its development points out.

Small architects can do big work. At least that's the case in Spokane, Washington, where a principal says, "The more complex projects somehow seem to come to our nine-man office." The reason for this is explained in a Practice Profile.

Also in February: an architect describes how topflight design is derived from the use of a pioneering use of a post-stressed concrete structural system in Florida and the contributing editor of *Harper's Magazine* tells how the profession looks to him.

About Mr. Belaunde: The reference to Fernando Belaunde Terry in the report of the Panamerican Congress in this issue reminds us that he is now a visiting professor of city and regional planning in the Graduate School of Design at Harvard University. The architect-planner, who until last fall was president of Peru, is leading an interdisciplinary case study of regional development in Latin America. R.E.K.

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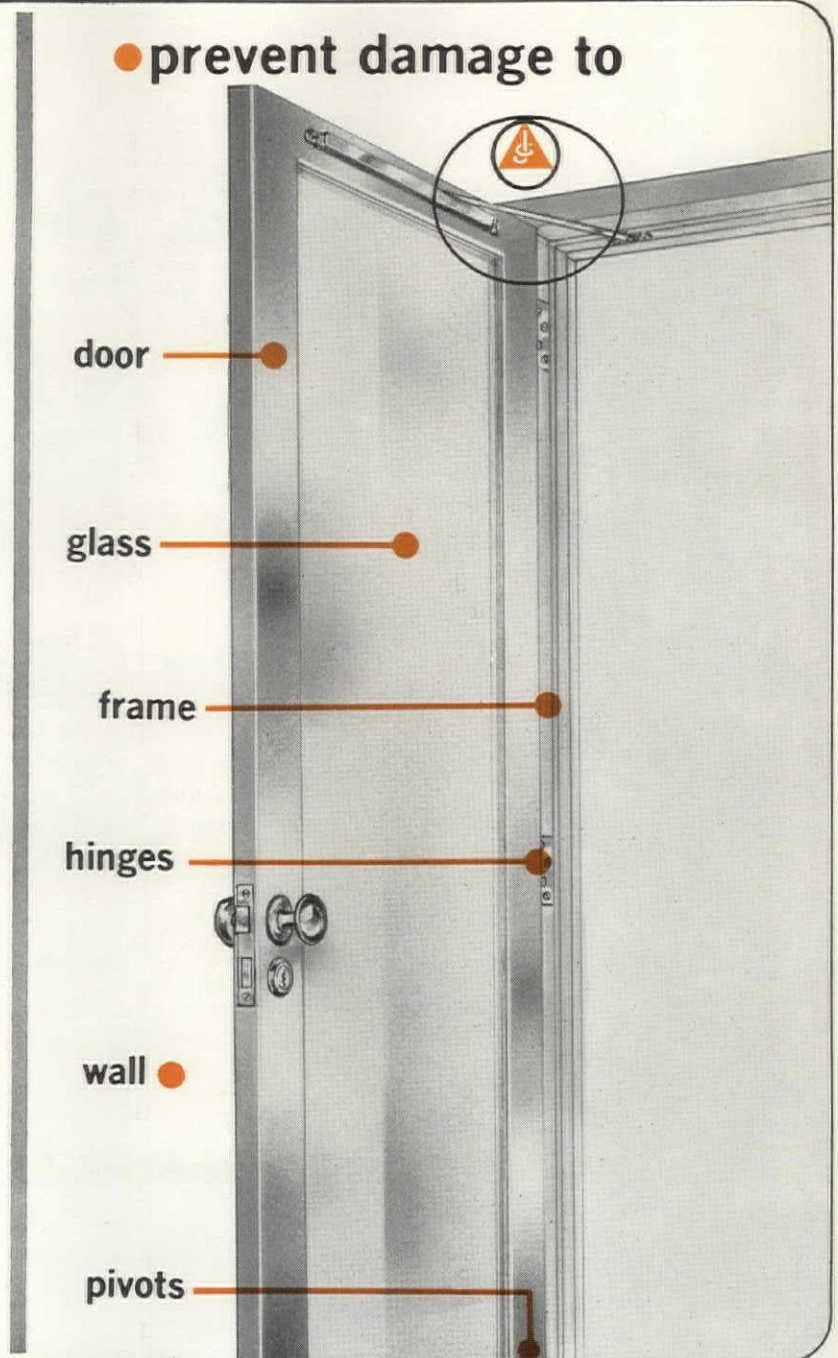
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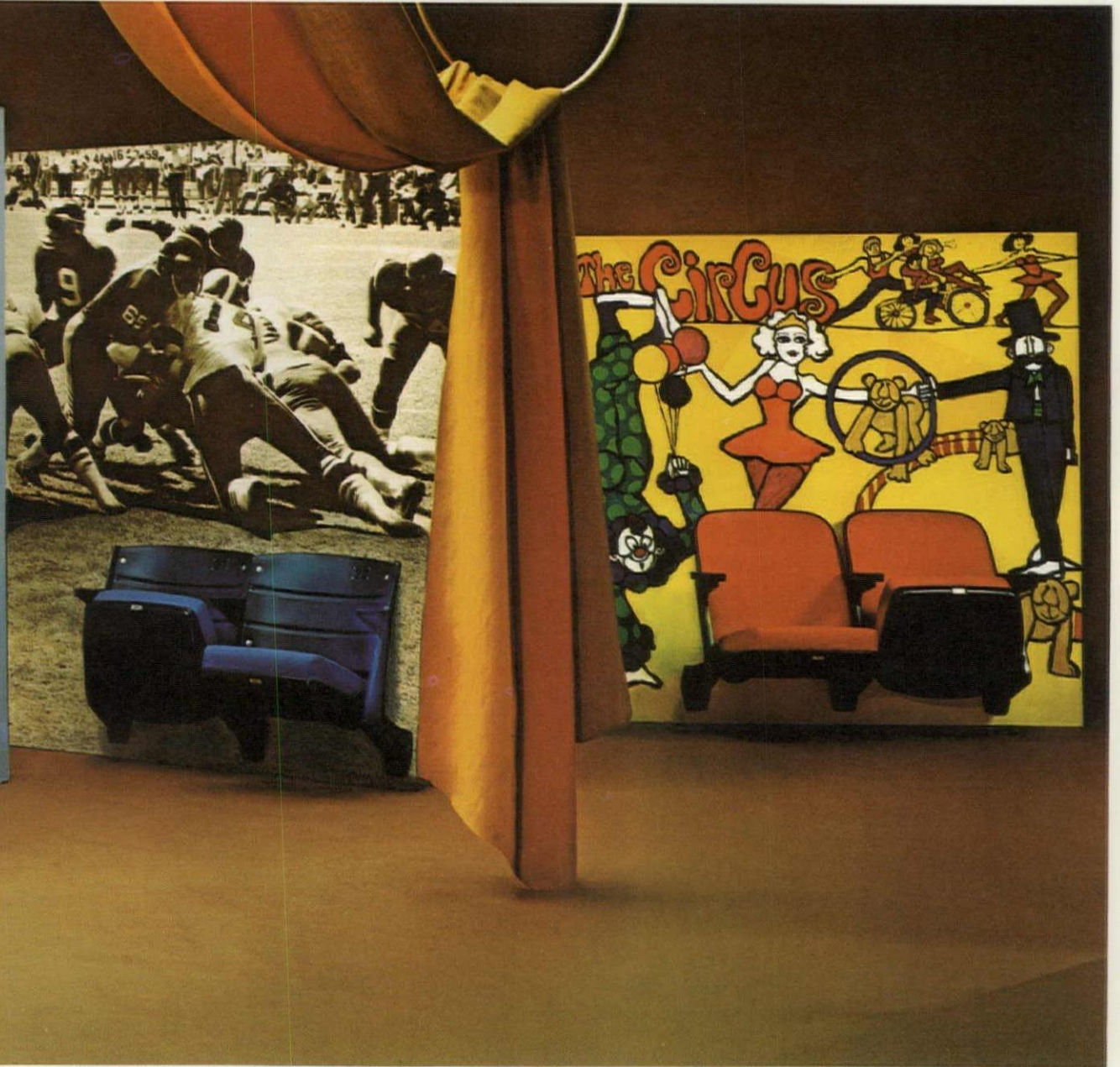
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Newslines

Nine to Select Architect For AIA Headquarters

A committee of AIA members is in the process of selecting a new architect for the Institute's headquarters building program.

Among those serving on the committee of nine is Romaldo Giurgola, principal of Mitchell/Giurgola Associates, the firm that won the architectural competition for the building's design. Washington's Fine Arts Commission in 1967 and again last year rejected designs of the firm which later resigned.

Max O. Urbahn, FAIA, a member of the Board of Directors, was then asked to recommend a course of action. His suggestion that a committee be named to select a new architect was approved by the board.

Neither the present headquarters nor the AIA-owned Lemon Building next door offers the Institute adequate space, it was pointed out. Institute President George E. Kassabaum, FAIA, said it was not financially feasible to remodel the Lemon Building for long-term use.

Serving on the selection committee along with Urbahn, its chairman, and Giurgola, are:

Rex W. Allen, FAIA, first vice president of the Institute; Edward Charles Bassett; G. Harold W. Haag, FAIA; Morris Ketchum Jr., FAIA; Willis N. Mills, FAIA; I. M. Pei, FAIA; and Philip Will Jr., FAIA.

Meanwhile, restoration of the Octagon House, part of the building program, was slated to begin by the start of 1969. Completion is expected by the year's end, Kassabaum said in a progress report on the structure built in 1798-99.

Cleveland Opens Airport Transit; Mayor Looks To Inner City Renewal

Cleveland has become the first US city to provide rapid transit between its downtown business center and its principal airport, a 12-mile distance that takes 20 minutes via rail.

In addition to serving the air traveler, the newly opened four-mile extension to the Cleveland Hopkins International Airport is designed to serve suburban commuters. Each of the two new stations—Puritas and Brookpark—

have parking lots that will accommodate 1,250 cars, bringing the total number of parking spaces along the transit line to 7,500.

The stations also provide extensive "kiss-n-ride" and "bus-n-ride" facilities, all part of the Cleveland Transit System's attempt to offer balanced transportation.

Twenty cars built for this new service incorporate such features as special luggage racks, wider seats, tinted windows and a heating/cooling system through window sill vents.

The airport extension was jointly financed by federal funds made available by the Mass Transportation Act of 1964 and local bond issues.

The Cleveland project touched off comments in other cities. The *Washington Post*, for example, in an editorial made a case for a rapid transit link between the nation's capital and Dulles International Airport.

Meanwhile, back in Cleveland, Mayor Carl B. Stokes seemed to be mindful of a campaign promise. He had spoken before the Cleveland Chapter AIA on a platform encouraging a forward step in architectural design and city planning.

To help in the task of city rebuilding thus far, the mayor has sought the advice of Boston planner Edward Logue and obtained his right-hand man, Richard R. Green, as director of community development.

In addition, Stokes recently unveiled the model of the Public Utilities Building, which will be the first major city government

structure to be built in Cleveland in half a century. Architect for the five-story, \$5 million project is Thomas Tse-Kwai Zung, described by the mayor's office as a "former protege of Edmund Durell Stone." Madison, Madison & Madison are consulting architects-engineers.

The building will include a mall area, a continuation of I. M. Pei's Erievue Master Plan, featuring a sunken plaza with fountains, plantings, kiosks and a display of flags.

Building Industry Group Sets Landmark Meeting

Members of the Construction Industry Foundation will assemble again in Washington, D.C., next month, following up on a two-day organizational session held last month at AIA headquarters.

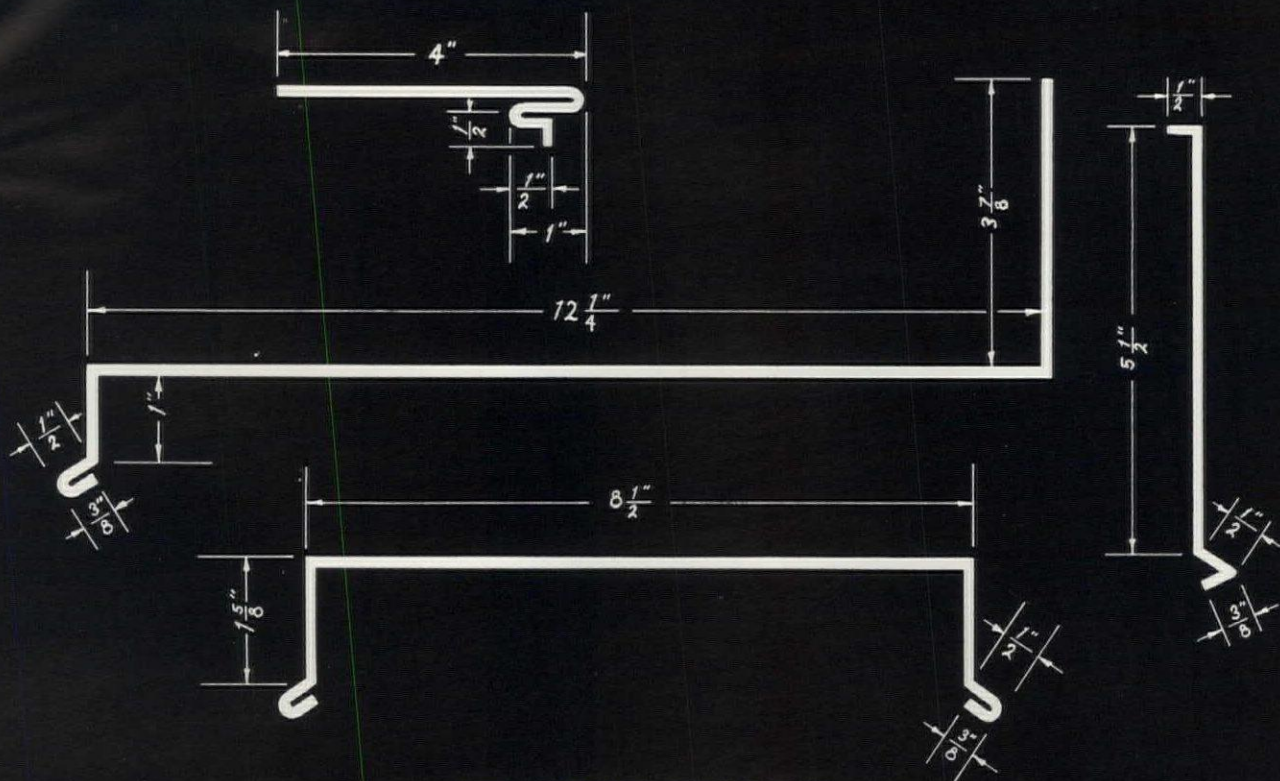
CIF is conceived as a research and program organization aimed at helping overcome the legal and financial problems that beset the building industry.

For the most part, enthusiastic attitudes were reportedly expressed toward this concept in last month's session, attended by representatives of the credit and banking and product manufacturing industries as well as those from construction. Some reservations were said to have been registered over financial and organizational details, however.

Meetings of the group's finance and organization committees were set for early this month and it was expected that many of the unresolved questions would be settled then. *Continued on page 14*

Cleveland Transit System's extension terminates at station below airport.





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WHITE CEMENT

Among major decisions made at the organizational meeting was a general agreement that the CIF budget would run around a half-million dollars yearly.

Robert G. Cerny, FAIA, the developer of the concept and spearheader of efforts to get the foundation established, is serving as temporary chairman.

Next month's meeting in Washington will be held on the 27th and 28th, the place to be named later.

GSA Adds a Discipline To National Design Panel; Enlarges Regional Panels

A landscape architect has been added to the 14-member Public Advisory Panel on Architectural Services of the General Services Administration.

Additionally, GSA expanded each of its 10 regional panels from three to four members and established a two-year staggered term arrangement for both national and regional panels to gain greater continuity.

The national panel was established in 1965 by GSA Administrator Lawson B. Knott Jr. "to assure achievement of the highest standards of architectural excellence in the design and decoration of public buildings by GSA."

Architects filled out the panel at first, then a structural engineer, a mechanical engineer and a historical preservationist were added. Now they are joined by Ian McHarg, Philadelphia landscape architect, in a further extension of participating disciplines.

The principal function of the national panel is to advise and make recommendations as to criteria for contractual relationships with architects; review designs and design standards, guides and procedures; and advise the administrator in selection of architects for nationally significant projects.

The national panel meets in Washington, D.C., once a year and then functions through three-to-four-man subcommittees to study various questions relating to design and construction methods.

Design reviews, principally of buildings in the Washington metropolitan area, are conducted by subcommittees of the national panel. Both national and regional reviews are undertaken during the design concept stage of a project when GSA believes the panels can

be most effective in advising commissioned architects.

National Panel: (Extended appointments to end Dec. '69) William Caudill, FAIA, Houston; Vernon DeMars, FAIA, Berkeley; Carl Feiss, FAIA, Washington, D.C.; Michael Pope, mechanical engineer, New York; Harry Weese, FAIA, Chicago; Dr. Lev Zetlin, civil engineer, New York.

(Appointments to end Dec. '70) Ulrich Franzen, New York; S. Kenneth Johnson, FAIA, Los Angeles; Samuel E. Homsey, FAIA, Wilmington, Del.; Ian McHarg, landscape architect, Philadelphia; Gyo Obata, St. Louis; Jack D. Train, FAIA, Chicago; O'Neill Ford, FAIA, San Antonio; William J. Bain, FAIA, Seattle.

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Region 7—Fort Worth: John Desmond, FAIA, Baton Rouge; E. Davis Wilcox, FAIA, Tyler, Tex.; Donald McCormick, FAIA, Tulsa; Harris Kemp, Dallas.

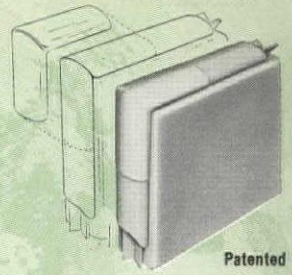
Region 8—Denver: Victor Hornbein, FAIA, Denver; Fred Markham, FAIA, Provo, Utah; F. Lamar Kelsey Jr., FAIA, Colorado Springs; Hugh Rowland, Albuquerque.

Region 9—San Francisco: Wm. Stephen Allen, FAIA, San Francisco; Frank Hope, San Diego; Robert Alexander, FAIA, Los An-

Continued on page 22

A flexible travel program has been developed for members of The American Institute of Architects utilizing the low group fares of Pan Am, TWA, Lufthansa, BOAC and other major airlines. Several groups will leave New York this summer to Europe, the Mediterranean and the Bible Lands. Round trip jet fares start at \$230 (New York/London/New York.) Write for brochure to: Division 'L', Travel Wholesalers International, 1707 L Street, N.W., Washington, D. C. 20036

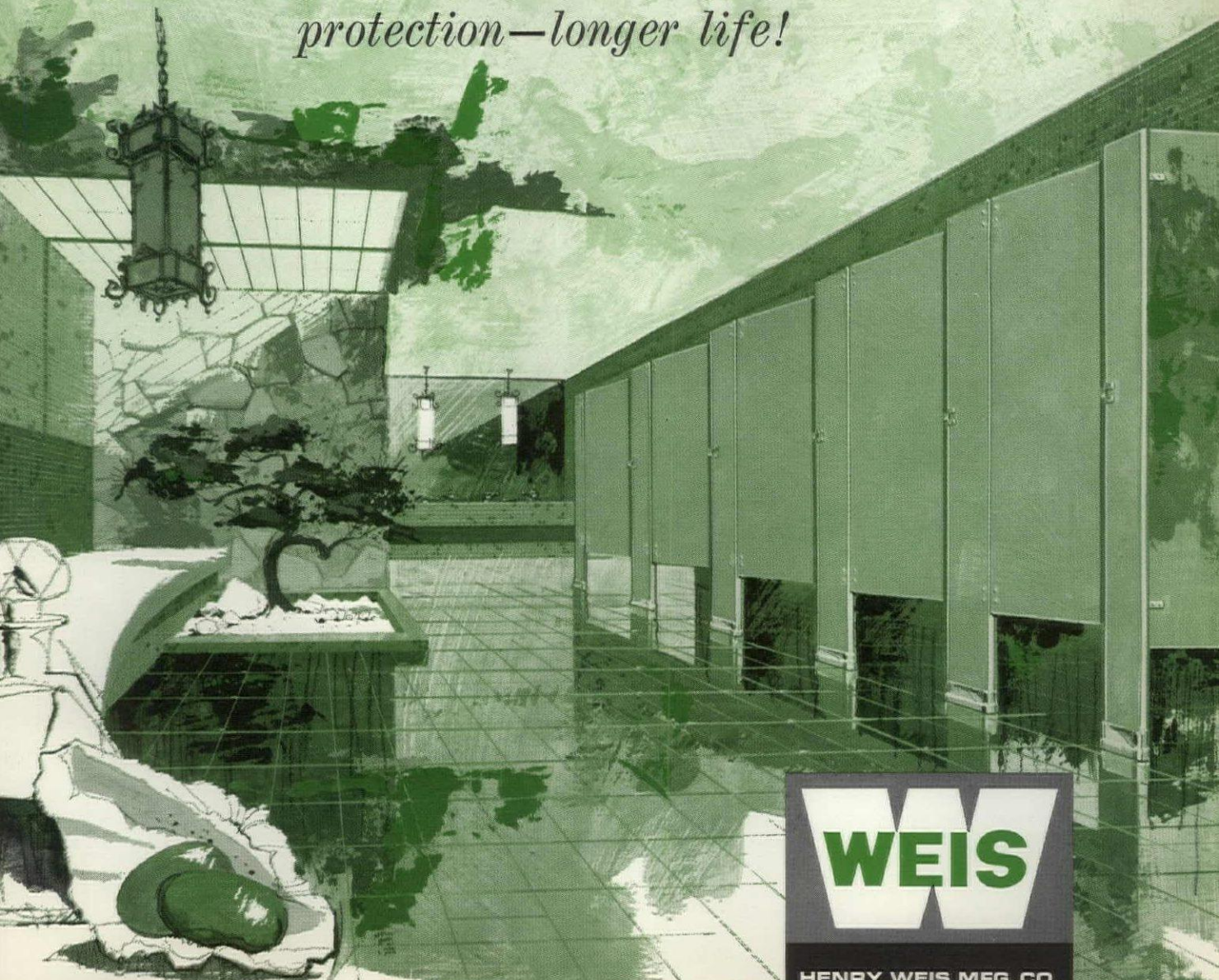
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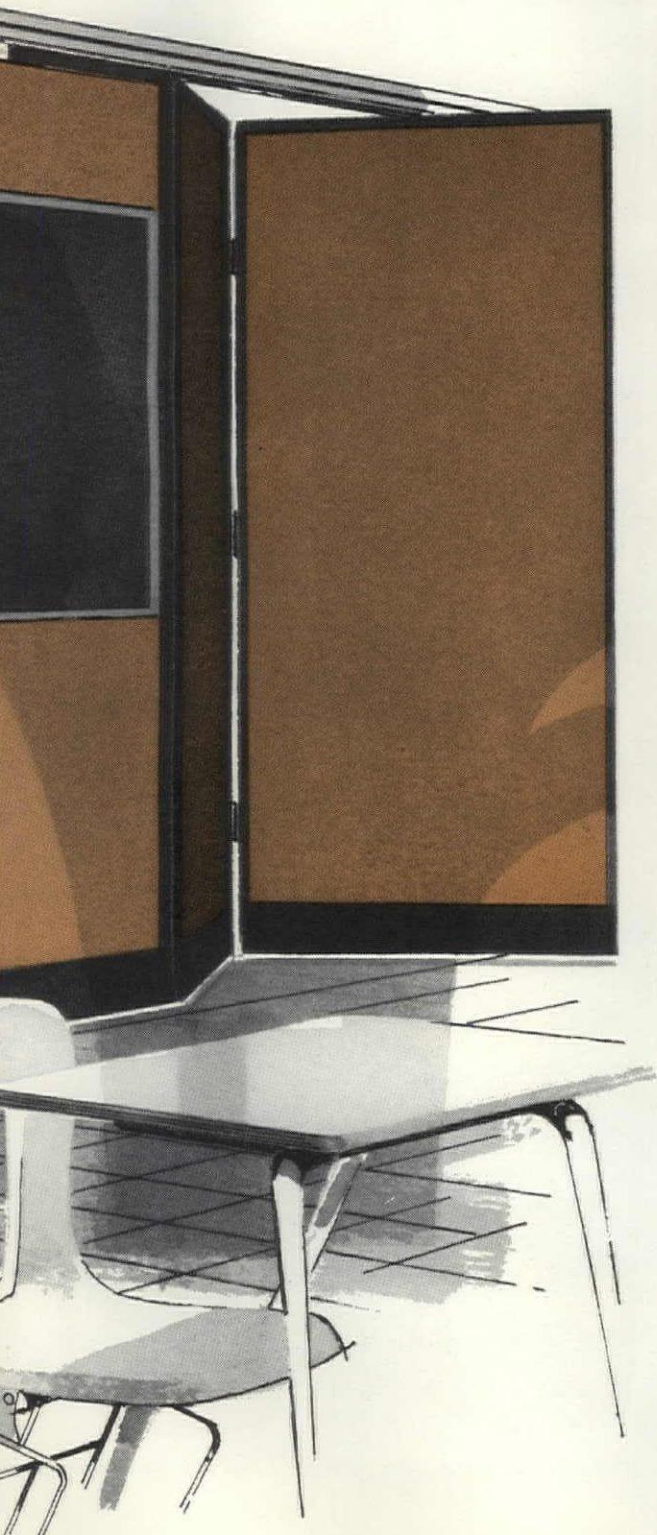
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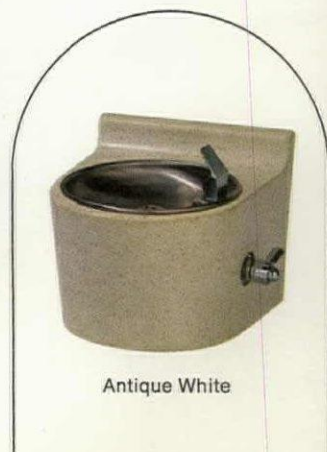
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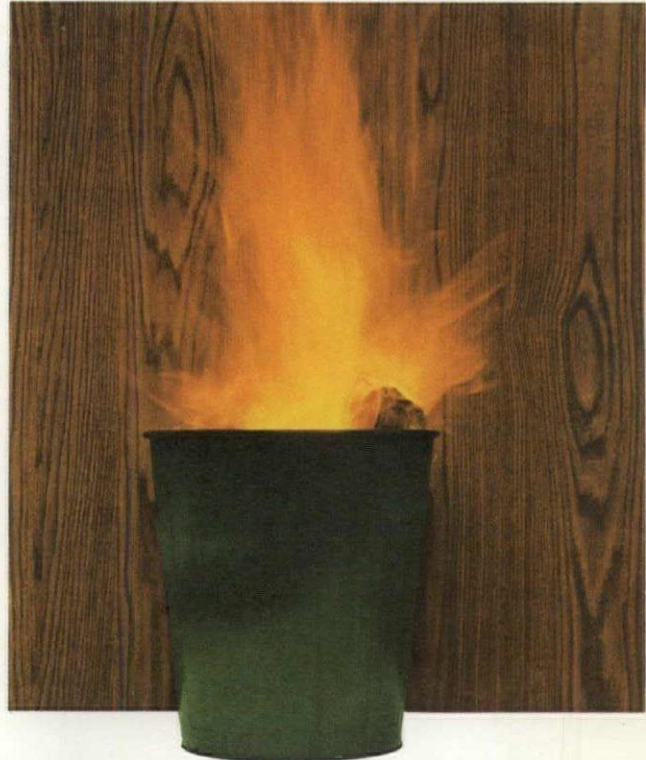
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ICED Seeks to Expand Its Disciplinary Base

Acknowledging that present methods of utilizing the services of social and behavioral scientists are inadequate, the Interprofessional Commission on Environmental Design has formed a committee to study ways of working

with these disciplines as part of its team effort.

A second committee set up by ICED, of which the AIA is one of six member organizations, will investigate methods of:

- sponsoring mutually beneficial research
- developing interprofessional rapport for team action on environmental design problems for the student as well as the teacher
- improving communications between the various disciplines
- providing mix and flexibility in the education experience.

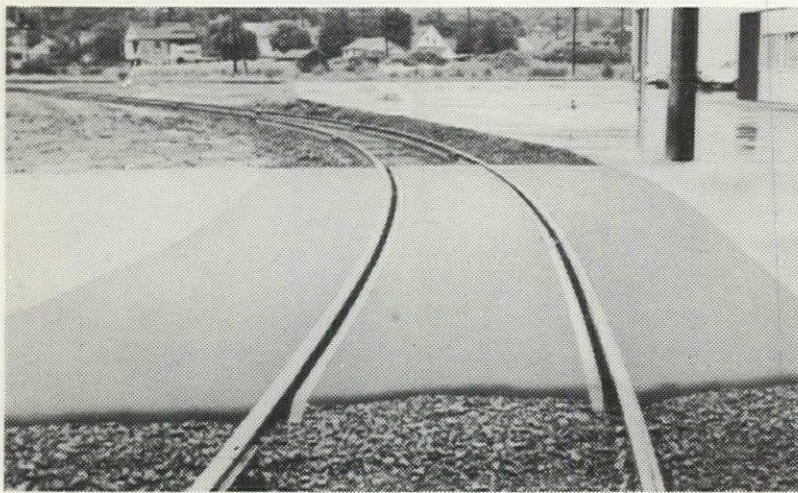
These actions grew out of the recent ICED "Education for Environmental Design" conference at the University of Notre Dame.

Jonathan King, vice president of Educational Facilities Laboratories, told conference participants that they must not isolate design descriptions from human and social implications, that they must find ways to educate administrators needed for teamwork who will be able to take full advantage of the various disciplines involved in designing the environment.

King reminded his audience that another great virtue in developing design administrators might be improvement of clients, particularly the big ones, since the problem of organizing the client is far more serious and important than organizing the technology. He also emphasized the desirability of getting more designers into governmental and other decision-making spheres.

The conference recognized the need for a new educational process with emphasis on systems analysis, based on interdisciplinary research, clinics and joint efforts in graduate work in order to produce professionals capable of planning the complex urban design projects of the future.

It was suggested that a mechanism for carrying forth the ideas of the conference might result in the realization of an educational council for environmental design, a development center where ICED could sponsor the formulation of techniques, media, curricula and teacher training programs.



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Utah Publication Is No. 1 Among AIA Components

Institute component editors, meeting at the Octagon, honored the *Utah Architect* as the best component publication of 1968 and established a liaison group to work with the Institute Public Relations Committee and staff.

Edited by David R. Hayes, AIA, the winning magazine was selected by A. Bailey Ryan, who has assumed the chairmanship of the Public Relations Committee and is director of the East Central States; Donald Canty, editor of *City* magazine; and Paul Grotz, graphic designer and managing editor of *Architectural Forum*.

For the liaison group, the nearly 30 editors of official magazines and newsletters picked John R. Conron, AIA, editor of *New Mexico Architecture*; Ello Brink, editor of *Wisconsin Architect*; and David Dibner, AIA, chairman of the editorial board for *Architecture New Jersey*.

Continued on page 25

At fifty below "x" can't be an unknown

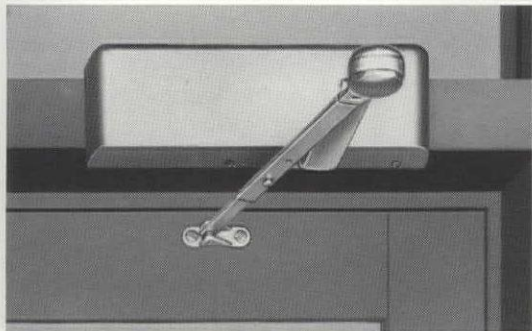
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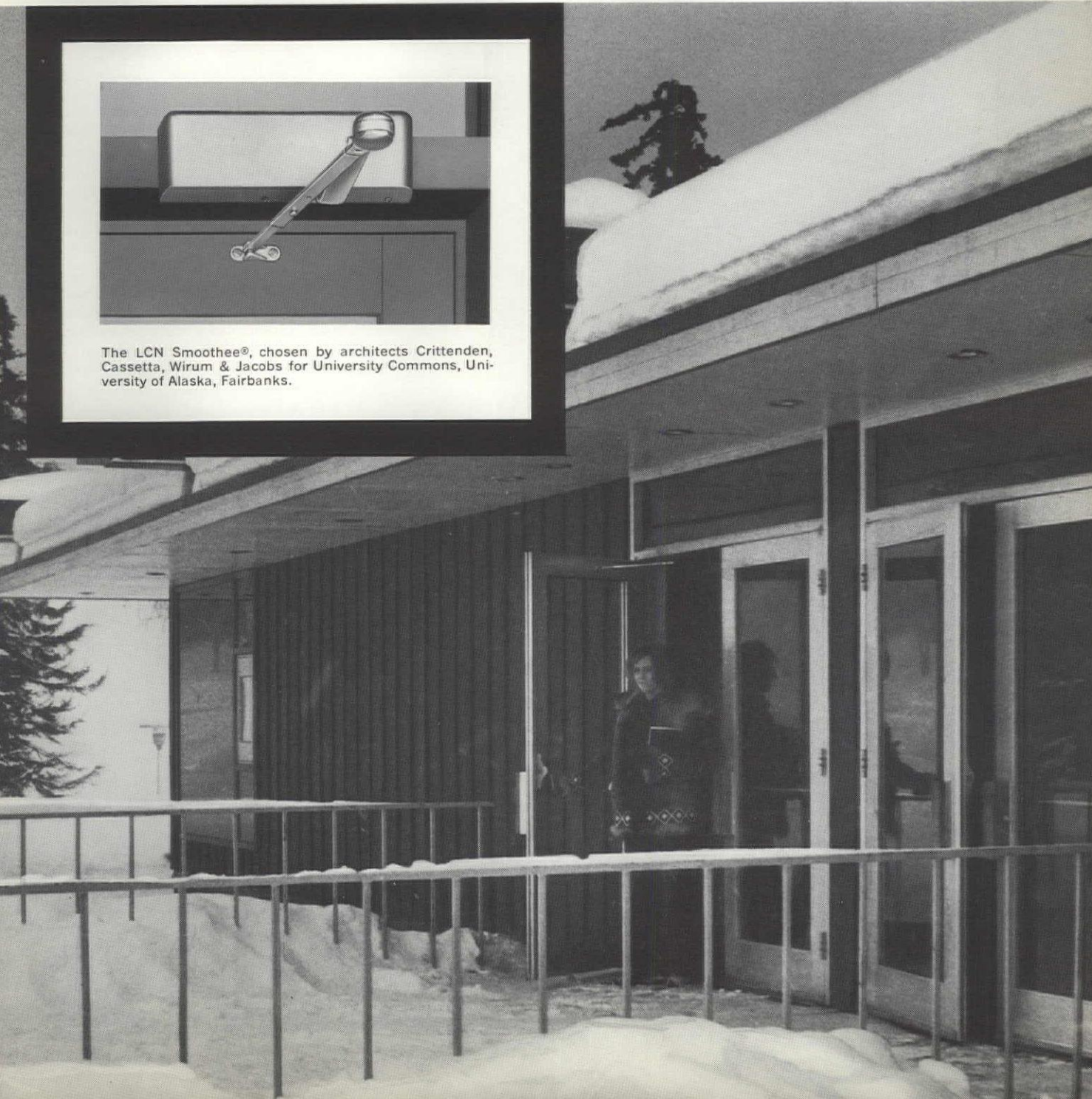


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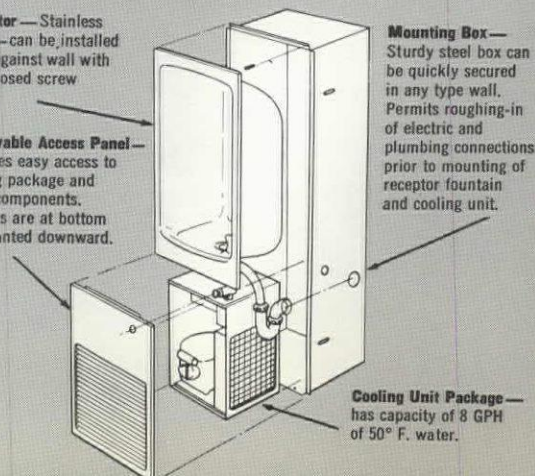
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Industry Ads, Literature Vie in '69 Competition

Entries for the second Construction Industry Advertising and Product Literature Competition are due Jan. 20, and awards will be presented in Chicago on May 7 during a two-day conference devoted to the subject.

Among the sponsors is the AIA. For details, contact the Publications Department, Producers' Council, Inc., 1717 Massachusetts Ave. N.W., Washington, D.C. 20036.

Architects, GE Explore Mass-Produced Housing

An architectural firm and General Electric Co. have teamed up under a Department of Defense contract to provide mass-production housing at California's George Air Force Base.

For a seven-month period, the office of Hugh Gibbs & Donald Gibbs of Long Beach will join forces with GE's Re-Entry Systems Organization of Philadelphia in exploring all aspects of the prototype project, from neighborhood

planning and design through manufacturing.

The contract calls for 200 living units ranging from single-family residents to apartment units to townhouses in two-, three- and four-bedroom sizes. All are to be erected from subassemblies manufactured in a transportable, on-site factory, eventually capable of producing a minimum of 1,000 units a year.

The design goal is twofold: utilization of standard elements which can be assembled in different ways to produce different units and the development of simplified field erection procedures.

The Defense Department has given the team freedom from codes and regulations (except Congressional limitations) imposing only general requirements such as structural soundness, life and fire safety, wide consumer appeal, ease of maintenance and adaptability to all parts of the country.

Commenting on the proposal before the National Security Industrial Association, Defense Secretary Clark M. Clifford said it was hoped to have a "beneficial impact on low income housing," an illustration of how defense efforts can benefit domestic problems.

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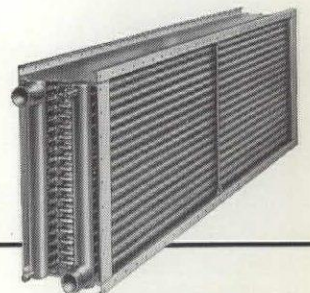


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UNFINISHED BUSINESS

BY DAVID H. CONDON, FAIA
Member, AIA Committee on the National Capital

Proposals for D.C. Planning

The National Capital Planning Commission, Washington, D.C.'s single planning agency, has a dual responsibility: to the city and to the federal government. Its members are appointed by the President and it is not under jurisdiction of the city government, as in most cities.

Under the President's reorganization plan in 1967, the District of Columbia's government was strengthened. A mayor-commissioner, popularly known as the mayor, and a city council are now moving on many of the pressing problems in the central city. The Redevelopment Land Agency and the National Capital Housing Authority, formerly autonomous, are now under the city government.

There is strong feeling among many city officials that the planning commission should also be responsible to the mayor. Many citizens and the business community feel that NCPC has not been responsive enough to the needs of the citizens and that they should have greater participation in planning decisions.

A recent bill (S2976) introduced in the Senate by Senator Joseph D. Tydings (D-Md.) proposes two planning bodies: one responsible to the mayor would initiate and direct all programs undertaken by the D.C. government; the other, responsible to the President, would plan federal building sites and facilities in the metropolitan area. The bill goes further and sets up neighborhood planning councils to insure citizen participation. The city has proposed a plan which would establish a Housing and Community Development Administration under the mayor, absorbing non-federal planning now done by NCPC.

It is generally conceded that planning machinery in the District of Columbia has been unwieldy and indecisive. NCPC is bogged down in the detailed review of a multitude of building projects, it lacks adequate authority and a widely accepted program of planning goals.

The commission is composed of five citizen members, five ex officio members and the two chairmen of the House and Senate District Committees. Four of the ex officio mem-

bers represent various departments of the federal government, the fifth is the D.C. mayor. All are high officials already burdened with full-time administrative jobs and with only a secondary interest in planning, and they may vote as a block on matters where their departments have common objectives not necessarily those of the city. The commission is heavily weighted in favor of the federal government.

Dividing the planning function between the city and federal government, however, can only add to the confusion and widen the gap between their interests. It would be difficult in any case to divide the responsibility logically because, in most instances, federal projects involve planning decisions by the city and vice versa, and many decisions affect the interest of both federal and city governments.

The AIA Committee on the National Capital believe that some changes can be made in the organization of the present planning commission which would give it wider acceptance and increase its effectiveness. The following points have been discussed by the committee:

1. Planning responsibilities cannot be divided between the city and the federal government. NCPC should continue to be the single organization responsible for comprehensive planning for the District of Columbia, for federal planning in the regional area and for coordination of D.C. and federal planning with all other regional planning bodies.

2. NCPC should have members representing the D.C. and federal governments, as well as private citizens. The D.C. and federal governments should be equally represented. A distribution might be:

- Five citizen members appointed by the President, a minimum of three of these should be citizens of the District of Columbia, and one of these three should be designated chairman by the President. The chairman should be a professional architect or planner, spend at least half his time on NCPC work and be commission/staff liaison.

- Three district government members, one a Deputy Mayor for Plan-

ning and two representing major building departments in the city.

- Three federal members representing major building departments of the federal government.

3. The chairman should be paid a fixed salary, other citizen members compensated on a per diem basis.

4. The primary responsibility of NCPC should be to develop and adopt a comprehensive plan based on a broad program of objectives approved by the citizenry. The plan should be periodically reviewed and revised to meet new developments. Individual building projects should be reviewed by the staff for general compliance with the comprehensive plan. It would be the responsibility of the various departments of the D.C. and federal governments to implement the NCPC comprehensive plan. The Fine Arts Commission, a separate body appointed by the President, should see that this implementation within the area of its jurisdiction is of the highest quality.

5. All departments of the D.C. government dealing with the physical development of the city should be under the supervision of a Deputy Mayor for Planning who would coordinate D.C. projects with NCPC.

6. NCPC should work with outside experts in the design and behavioral professions. A planning concept team, professionals working closely with a community team and responsible government agencies, should be employed on many of the complex problems facing the city.

7. An important objective should be the inclusion of Capitol Hill in the area for which the planning commission and the Fine Arts Commission have responsibility. When Capitol Hill matters are considered, a member representing Congress should serve on the commission.

8. NCPC's action on D.C. matters could be vetoed by the mayor; on federal matters by the President.

9. The commission should work closely with other planning groups in the regional area.

The AIA is establishing a joint task force with the American Institute of Planners to study these problems in greater detail. □



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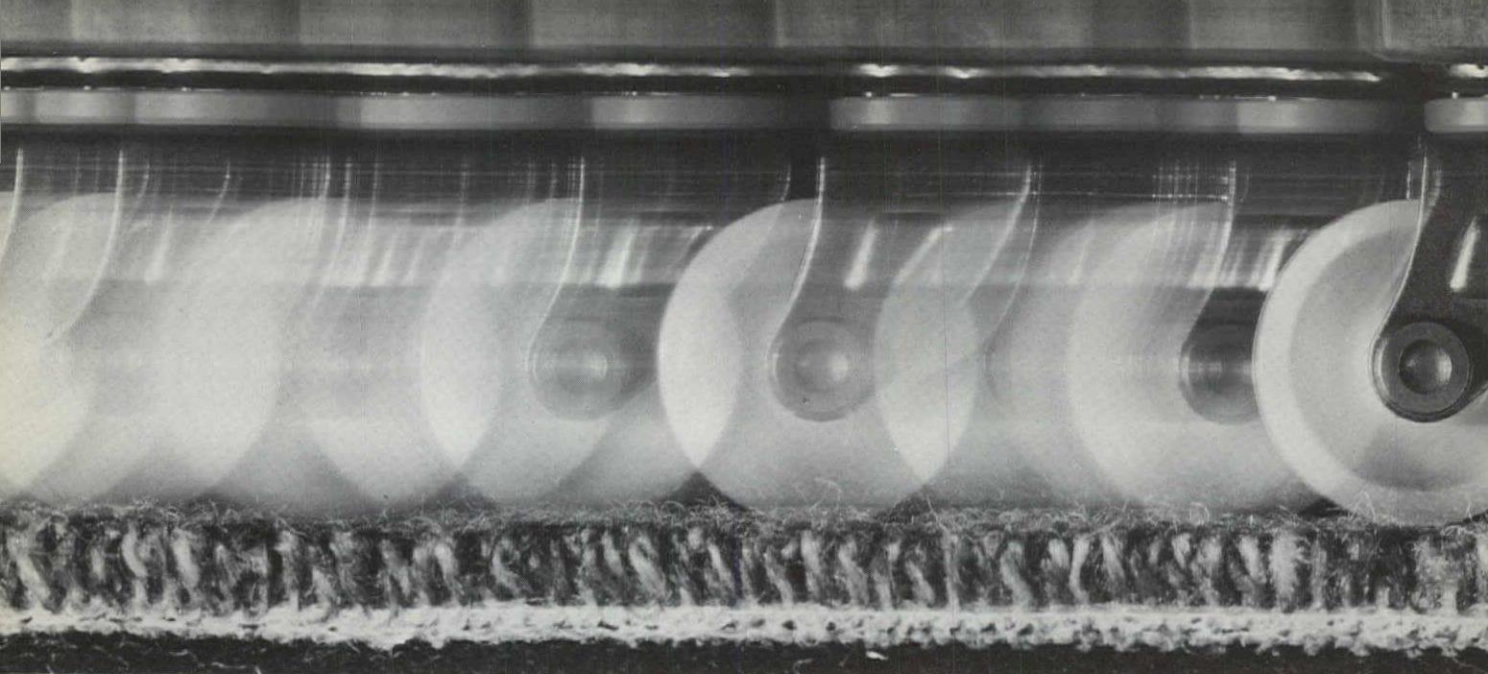


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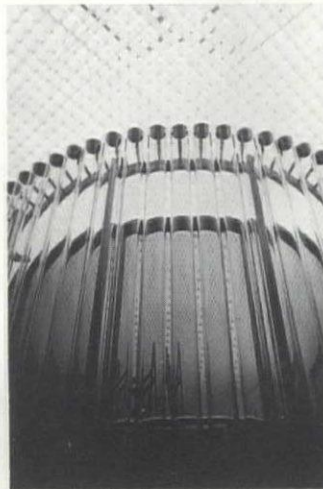
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Comment & Opinion: While undeniably graphic, jewel-in-the-slag-heap lamentations also carry an untoward connotation: that the justification for improving the slag heap is a better setting for the jewel. The jewel, of course, is the well-designed urban or suburban building; the slag heap its typically unfortunate surroundings. Efforts to date to improve the latter—efforts which ostensibly intend people and not jewels as their foremost beneficiaries—have not been singularly successful.

Before investing more public funds in more of the patchwork same, it is perhaps time to regard our “urban problems” in a more comprehensive way, to see not sick cities but a sick system of cities, to address this system and all its parameters in a way that might shake out more effective and viable solutions. Liveable places *must* be found for people, including an additional 100 million people in the United States by the year 2000, according to banded projections. The question is where in the United States. Will the new arrivals have some options or will they be forced to pile up with the rest of us, thus aggravating the impacting of our urban centers? There are, to be sure, both imponderables in population dynamics and demographers who say we might not become 300 million strong after all. The fact is, however, that locational patterns within even our present population clearly inspire some basic questions. At a minimum, we ought to challenge what has been called our “policy of drift.”

The article that follows is intended to raise some questions and to share some proposals. It is hoped it will contribute to the debate that seems certain to envelope a geographically ample nation which merely looks on as more and more of its people crowd into less and less of its land—into areas less and less responsive to efforts to establish the kinds of environments architects want to achieve for the American people. NEIL GALLAGHER

Americans, now some 200 million strong, are projected to become 300 million by the century's end. This and the current pressures on our urban areas are generating experimentation and proposals hinged mainly to the new town concept. Additionally, calls are being heard for some kind of national policy to redirect rural-displaced and forthcoming population from congested metropolitan centers.

The Next

100,

For every American there are 10 acres of America. Should this nation, then, accept prolonged urban compacting as irreversible? Should it seek instead a course of demographic redirection toward new towns and now towns, perhaps even toward no towns?

Seldom posed a few short years ago, such questions today are alive and doing well. They move the champion of the city to fear a new wave of agrarian orientation in America, the spokesman for conventional wisdom to say soberly that "people have to go where the jobs are," and the conveyor of fashion to pass along something about "action" and how Americans, variegated though they may be, always cluster where that is.

That the questions have vitality at least for the moment, however, is suggested by their ignition of proposals, studies and experiments directed toward a more rational distribution of present, and, most importantly, future population.

The labels attached to the concepts and efforts afoot are revealing in themselves. We hear of a national urbanization policy, a national people/space policy, urban/rural balance, experimental cities, a national migration policy, a rural city concept, and in one case, "a bold sweeping, national, truly free-choice-of-residence policy."

Notwithstanding its own culpability for the imbalance, immigration and cleavage characteristics of the nation's population patterns, the federal government at present is lacking for a national settlement strategy. In the meantime, 200 million Americans, 70 percent of whom live on 1.3 percent of the land, are projected to become 300 million by the year 2000. And within our population there is an unrelenting exodus from the countryside to the cities which, were we to



000,000 Where Will They Live?



impart greater social dimension to our maps, might be shown as black-cored circles of white. The encircled black ghetto is a bit more than a fact of life; it is a refutation of our national ideals.

Proposed remedies are surfacing, nevertheless, and it is only fair to say frequently with the help and participation of the federal government. They are converging behind the new town concept. The report of the Advisory Commission on Intergovernmental Relations, "Urban and Rural America: Policies for Future Growth," strongly advocates the creation of new towns as well as the reinvigoration of those existing towns and smaller cities in static or adverse circumstances.

In their paper, "An Urban Strategy," Bernard Weissbourd and Herbert Channick propose a massive new town effort to create a temporary housing surplus and thus eradicate the urban ghetto. President and vice president, respectively, of the real estate development firm of Metropolitan Structures Inc. (Nuns' Island, new town, Montreal; Illinois Central air rights project, Chicago), Weissbourd and Channick present the astonishing prospect of reducing the size of the ghetto "by somewhat more than half" in just five years!

Such proposals are always confronted by the impediment of a national will lagging for reasons regressive or prudent, as you will. While acknowledging this, it is at the same time salient to recognize what may be an offsetting phenomenon, this the ascendancy of the contextual approach to problem solving.

Increasingly, problems are viewed in both their full context and the context of their environments. Concomitantly, the wastefulness if not the

sheer futility of single-problem solutions becomes more and more visible.

The focus shifts from pieces and attributes—from slums and congestion, for example—moving inexorably toward a view of the whole, toward a system of settlement within a national environment.

Cities Bent and Broken

The systems approach-oriented among us are conspicuous witnesses of the whole, at least of the whole as unveiled by their methods. George Parsons, director of urban programs for the TRW Systems Group (he has a master's degree in aerodynamics and jet propulsion), in a recent speech attributed the current urban condition to "the fact that most of our cities are broken, and those that are not broken are bent to the breaking point. As a result, the people, individually and collectively, are in constant conflict with their social and physical environment."

Parsons urged a "rural city" experiment. "High technology industry," he said, "has the experience to bring together multidiscipline teams to address these problems—really the systems approach of which we hear so much—and bridge the gap between the promise of technology and the needs of society. They are thus able to design the social, economic and physical experimentation necessary to determine alternatives and to assist in the formation of future policies."

An Experiment in Minnesota

It would seem the experiment Parsons suggests is already taking place in Minnesota's Experimental City Project, a primary purpose of which is "the closing of the gap between a rapidly developing and expanding technology and the application of that technology to the environmental needs of man." (The project's steering committee includes Bernard Schriever, retired Air Force general and systems approach exponent.)

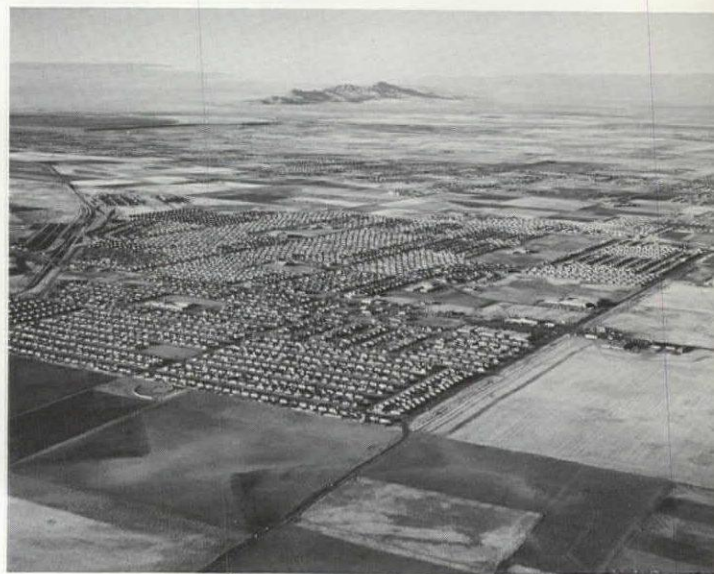
If our cities are not broken, they are, a paper describing the experiment says, without doubt unwieldy. The paper elaborates: "They seldom respond to proposals for major changes, even in their subsystems. Thus, it is unlikely that current programs beamed at existing cities will bring about a full mating of the city and current technologies."

Investigational in its early stages, the Minnesota experiment is to become operational later, having a target date for the start of construction of 1974, with the windup expected by 1984. The hoped-for result: a "technologically advanced, people-oriented" city having a population of about a quarter million and located far enough from existing population centers to ensure against its becoming another bedroom community.

The project is funded by several departments of the federal government, the University of Minnesota and business and industry. Walter K. Vivrett, professor of architecture and planning at the university, is director of this highly multidisciplinary approach that searches for "conceptual as well as physical innovations," again quoting from the description paper, which adds: "It seeks to determine the implications of altering selected fundamental features of society and the environment. It recognizes the certainty of continuing process and change. Unlike other schema, it not only permits deviations but encourages them—freeing man from restrictions instead of curtailing his choices."

Structuring for Change

Such open-endedness wins the approval of those who read ahead in time and perceive a likelihood of revolutionary social and technological change. Additional breakthroughs in but two technologies, communications and transportation, could with their electronic and supersonic



extensions of man suggest the option of returning to a settlement pattern reminiscent of early America. Current levels of sophistication have already made the suggestion, some say; to them the justification for locating in the city has reduced to the presence of utility lines. Even here technology shows promise of pre-empting the necessity of connecting with these endlessly tormented networks.

Technology's meaning to new settlements is more than simply intriguing in its alternately contributive and complicating aspects. Obviously, it is a meaning that seems to plead for resilient, growth-permitting settlement matrices. Conversely, greater rigor and less resilience seems to be demanded by the one constant in the milieu, the basic social and psychological needs of man.

Technology's relevance to a system of settlement is seen in considering developments in aircraft capabilities. By about the middle of the next decade, Federal Aviation Agency officials believe, the dollar volume of air cargo will have surpassed that of passenger traffic.

The monitoring of the air freight trend in all its relevance, including its implication of waterless, inland harbors, might indeed be useful to a settlement system that for centuries has placed its towns by the millstream and its cities by the sea.

The same technology that has been driving people off the land "may, at a subsequent stage of development, bring people back and redistribute population," Dr. Lynton K. Caldwell, professor of government at Indiana University, told a National Forest Products Association seminar called "The Land and the American People." He pointed to the implications of atomic energy and observed that "as new energy forms are developed, it is quite conceivable that we will have the growth of population in places where it does not now exist."

Trends Toward Great Clusters

There are, on the other hand, formidable and enduring forces which sustain and spur the growth of present metropolitan centers. Reminding us that "a national system of cities is also an overlay of nationwide industry locational patterns," Professor Wilbur R. Thompson, director of the Urban-Regional Economic Program at Wayne State University in Detroit, has said:

"Those who would alter the current pattern of urbanization need to know how powerful is the current trend toward great clusters of population."

Efforts to dampen the growth of large urban areas, or to spark the growth of small settlements, Thompson cautioned, "cannot succeed at modest

cost or with light commitment, if indeed they can succeed at all."

It would seem, then, that if we were to monitor any push given industrial relocation by technological development, we would also do well to track the pull toward locational intensification of which Professor Thompson spoke in an admonition that was not, as he said, "at odds with the interest in colonizing coming growth into new towns—if these places are projected at populations of, say, 200,000, and given room to grow."

We should at least understand industrial location trends, if not attempt to predict or manipulate them, in order to make realistic anticipations.

Commission Would Lure Industry

"Urban and Rural America: Policies for Future Growth," the report of the Advisory Commission on Intergovernmental Relations, offers a number of suggestions on how to influence industrial location. It urges tax credits to firms which locate according to an urbanization plan, below-market financing and even direct bonuses. The report points out that government spending can also be deployed to strategic advantage.

Parenthetically, William L. Slayton, executive vice president of Urban America, once observed after citing the "tremendous impact" National Aeronautical and Space Administration facilities have had on Houston:

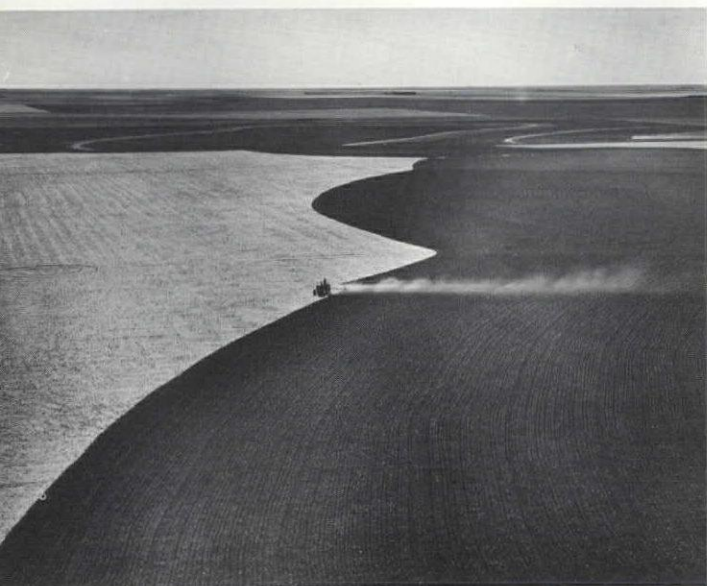
"The NASA installation could have been placed almost any place in the United States. It could have created a new urban community. Federal installations should be used in a positive way to encourage population settlement where it is logical for it to go rather than inundating existing population centers."

The commission report also urges that every effort be made to "capitalize on the potential" of locating such public facilities as universities, military installations and research centers, all of which have their "multiplier effect," in areas where growth can be encouraged.

The commission finds that "the present pattern of planning and land-use and development controls, widely dispersed as they are among numerous jurisdictions and private developers, has been inadequate to cope with pressures placed on land in rapidly urbanizing areas. Moreover, these existing controls basically are designed to deal with problems in already built-up areas or problems created by gradual growth and accretion. They have not produced satisfactory results under recent rapid urbanization."

Land Development Agency Urged

So the commission advocates a "basic instrument for marshaling available public resources from all levels of government and relating them



to one another and to private development efforts. The instrument, a state land development agency, would 1) acquire land by negotiation and through eminent domain, 2) arrange for site development and construct or contract for the construction of utilities, streets and other related improvements, 3) hold land for later use, 4) sell, lease, or otherwise dispose of land or land rights to private developers or public agencies and 5) charter local or regional land development agencies.

An instrument similar to the state land development agency might be established on the federal level, the report suggests. But no matter the government level, new communities—as distinguished from new towns, the latter of which the report sees as having economic self-sufficiency—would rank high among the tasks of development mechanisms.

New communities provide “an unparalleled opportunity to influence the patterns of urban development” and “a striking opportunity to counteract the ill effects of ‘sprawl.’” If these communities are large enough (at least 15,000 to 20,000 people), have a varied ethnic mix and the right kind of employment, social, cultural and recreational features, plus the subsidization which the report says is necessary, we will have settlements that in the commission’s words:

“... afford a chance to break away from conventional developmental thinking and to try new arrangements. They encourage new and greater flexibility in building construction and land-use regulations. They hold promise of a market large enough to permit technological innovations which, in turn, encourages investment by industry. They clearly facilitate the introduction of community-wide education, health, transportation and other public service functions. They permit the development of governmental arrangements that can foster a sound growth pattern—a pattern that relates harmoniously to surrounding developments. They give the chance of providing a wide and balanced range of housing for a diversified population. Finally, they can provide varying employment opportunities in service industries, manufacturing and research and development firms.

“New communities, then, present a dramatic opportunity to demonstrate contrasting kinds of urban environment which can serve as models of what can be done to upgrade the life and living styles of urban residents. In this role, they can be significant, even if they are few in number. Moreover, the enterprise of developing an entire new community focuses public attention in a way that a series of separate and often unrelated development decisions cannot.”

The commission report does not present a national policy on urbanization. It speaks to the



need for such a policy—examining both sides of the argument—and makes recommendations which could become component parts of such a strategy. Given the nature of the intergovernmental commission’s purpose, participation of all levels of government is expectedly enlisted to counter the present “policy of drift.”

We are drifting, the commission says, toward “larger concentrations of population with resultant diseconomies of scale and possible increasingly damaging noneconomic effects on urban residents; the poor nonwhite from the rural and other urban areas are migrating generally to large central cities, adding to the problems of the ghettos; suburban and exurban parts of metropolitan areas are increasingly succumbing to sprawl; the social and political institutions in many impoverished rural areas continue going downhill as the most competent part of their labor force and leadership moves out.”

Refugees from the Countryside

Competent, perhaps, but generally ill-prepared in terms of the skills required for subsistence in today’s urban areas, where the same technology which induces rural displacement dries up turn-the-bolt assembly line jobs. And when jobs are available, they are too often unreachable. The rural displaced become, as an advertisement of the National Rural Electric Cooperative Association portrays them, virtual “refugees.” Victims of “a quiet revolution in agricultural technology rather than of war,” and because they travel “by



ones and twos and threes in cars and buses," and because they "disappear into city warrens and byways rather than refugee camps, they are unseen and unheeded," the advertisement says, "until they pour forth into the streets in violent protest."

To restore "the promise to the land," the association calls for more job opportunities in rural and small-town America along with the development of "the instruments of modern living"—more and better housing, medical facilities, schools, libraries, etc.

Renaissance and People's Choices

Senator Abraham A. Ribicoff (D-Conn.), chairman of the Subcommittee on Executive Reorganization, has stated that Congress will be guilty of "gross misgovernment" if it does not this year write a new farm program with the tandem aims of 1) enabling efficient farmers to make a smooth transition to a free market, and 2) generating a rural economic renaissance that will provide new opportunities and alternatives for both rural and urban citizens.

A Gallup Poll survey last year showed that 56 percent of Americans would prefer to live in rural America. The sampling revealed that only 18 percent preferred city life while 25 percent wanted to live in the suburbs, 29 percent in small towns and 27 percent on farms. One percent had no opinion.

Devotees of the metropolis would presumably argue that the rejection of city life stems from

needless and transient conditions—from social festering, from vapidness (It has been said that whole generations of people in Los Angeles live and die without ever going downtown.), from tax predicaments, etc.—rather than from visions of what our cities could become. This is undoubtedly true.

But more significantly, it is also true that no democratic society should toy with the idea of directing population flows by ukase; that Americans, who appear to divide into four roughly equal parts in their residence preferences, deserve some options; and that America's design disciplines deserve the chance to demonstrate the most exciting alternatives. Robert C. Weaver, Secretary of the Department of Housing and Urban Development, once said in this vein:

"When we talk about population policy, the question is not one of dictating distribution but of enhancing people's freedom to choose. Our policies must rest on a premise of three essential freedoms:

- "The freedom for all to choose their places of residence, with the attendant questions of open occupancy, the adequacy and flexibility of the housing supply, and the ability of people to afford good housing.
- "Second, freedom of opportunity for all to attain adequate education and employment.
- "And third, the freedom for all to enjoy whatever cultural, recreational and other amenities that a community can offer.

"Clearly none of these freedoms today is being fully realized by many persons and in many communities, rural and urban."

Prepared for a United Nations seminar in Moscow last fall, a paper of the UN Centre for Housing, Building and Planning and the UN Economic Commission for Europe termed new towns "undoubtedly the most significant innovation in urban development policy" and noted the view of some experts that "properly conceived, new towns may offer most of the advantages of metropolitan locations without experiencing congestion and other disadvantages of major cities."

Interacting Air Currents

It would appear that however the question of population policy is viewed, it has to be seen in broad and even remotely interacting terms. We know, for example, that the air of the forest is good, that the air of New York City is bad. So polluted is the latter that it has been credited with adding \$150 million annually to the metropolitan area's paint bill, to cite just one count against it.

Yet so valuable is the haze over Manhattan as to cause the New York Times' Ada Louise Huxtable, in her appraisal of the projected air rights

tower above the Grand Central, to refer to it as solid gold. While conceding "striking technical elan" and a measure of suaveness in the design concept, she regarded the tower as "a colossal modern office building surrealistically astride a mansarded French palace," then added significantly: "The result is no less grotesque, however, than those midtown real estate values."

An editorial in the *National Forest Products Review*, reacting to the "Symposium on Communities of Tomorrow" held in Washington over a year ago under the auspices of six members of the President's cabinet, declared: "We would like to point out to anyone in government who will listen that if the (forest) industry could be assured of a continuing resource base of public timber over the years, it would make the necessary long-term investments to create even more jobs and strengthen rural economies. Then people would not have to leave rural areas to seek doubtful urban employment."

The pure air that blesses the forest is, in an economic sense, somewhat uncertain; the impure air that oppresses Manhattan is red hot—but implicit in both pure and impure bodies are the kinds of questions which could well be addressed by national settlement strategists.

Land-Use Study Contemplated

The forest industry may, by the way, undertake a land-use study. Russel H. Ells, chairman of the board of the National Forest Products Association, in an open letter to individuals and groups concerned with a land-use policy, said it "is genuinely concerned with making the decision as to whether to underwrite a national land-use study designed to find answers to the problems which we see in terms of current land-use practices and trends and the lack of cohesive policies related to them."

Generally, the federal government appears to be somewhat below the 1934 plateau reached by the old National Resources Board which that year informed President Roosevelt it was "making plans for planning," an exercise that would be welcomed in many quarters today. Nothing of gripping magnitude has occurred in government since the Communities of Tomorrow Symposium that Secretary of Agriculture Orville L. Freeman opened with an account of how its six Cabinet-member sponsors got the idea for the conference during a luncheon discussion.

"All of us expressed concern at the continuing exodus of people from countryside to big city and the problems that it helped create and that it is helping to perpetuate," Freeman said. "We asked ourselves if it made sense to compress more and more people into less and less space, and, in pondering the answer, we had to agree that the coun-



try had never really addressed itself to the question.

"Except for a few lonely voices, no one had tried to approach the problems of today and the dangers of tomorrow with a space-people equation.

"No one had asked if it is inevitable that in the next 32 years we pile more than 100 million more people into roughly the space which holds 140 million today. No one had ventured that we might spread out a bit and use the space with which we are blessed in this great land."

So the symposium was scheduled and held, in December of 1967, with the hope, Freeman said, that it would "generate a concentration of national concern and interest that can lead us to the development of a firm national policy."

For his own part, Freeman has since done much to try to keep before Americans a long view of their population imbalance. He also made it a policy to locate his department's facilities outside of urban areas when possible. His efforts to aid rural and small-town America have in fact drawn the wrath of one city-oriented publication which called them "a further serious divisive force" in the national community.

Nonetheless, the viewpoint of Freeman and some others—one that seems to regard urban and rural America as parts of a whole—is winsome in its logic.

Meanwhile, unfolding on the conceptual front are infatuating views of future environments ranging from the near-pastoral to megacities of entirely new scale and audaciousness. The promise of alternatives, both social and personal, pervades the nation's irrepressible creativity. For the moment, though, the principal interest appears to surround new towns—"new communities" in

the Housing and Urban Development Act of 1968 which authorizes the Secretary of HUD to guarantee obligations to help finance their land acquisition and development costs. The act requires that new communities contribute to the orderly development of the areas in which they are a part, that they have sound development plans contributing to good living conditions, that they have a proper balance of housing for families of low and moderate income, etc. But new communities are not seen as forceful vehicles for radical new settlement directions and alternatives.

Segregation Destroyers

Not, to be sure, in the way that Weissbourd and Channick would deploy new towns. They go beyond even the elimination of the ghetto in their earlier mentioned proposal, "An Urban Strategy," published in the magazine of the Center for the



Study of Democratic Institutions. They view new towns as avenues to residential desegregation.

It is necessary, they say, to be "hardheaded" about white acceptance of a desegregated situation. They propose, therefore, stabilized racial proportions in new towns and existing neighborhoods.

"Desegregation as we use the term," they say, "does not require that every street or apartment building have Negro residents in precise proportion to the total population. Obviously, economic status, distance from work, arbitrary personal preferences (including those based on race), and many other facts will continue to play their roles in where and how people choose to live. Desegregation does require, however, that Negroes have

the same opportunities as whites to make choices."

The authors, who believe efforts to date have committed an inadequate portion of our national resources to race and urban crises—only then to be used "in a scattered and patchwork fashion rather than as part of an overall strategy"—list these as essential elements in their strategy:

- "A massive 10-year program of development of new towns in outlying areas to accommodate the projected Negro and white population growth.
- "The construction in these new towns of some additional 350,000 subsidized housing units each year for 10 years, which will allow the ultimate replacement of urban substandard housing and create a temporary housing surplus.
- "The withdrawal of public expenditures for housing subsidies, sewer, water, roads and mass transportation from ordinary subdivision development and their rechanneling into new towns, thus virtually eliminating the competition of segregated housing development.

"Accommodating the increased Negro population in outlying areas is required to keep the ghettos from getting larger," Weissbourd and Channick say. "The housing surplus is necessary to 'loosen up' the housing pattern so that normal market forces can begin to work in favor of desegregation. The new town concept lends itself admirably to dealing with the critical problems of our urban areas as well as with the race crisis."

Five Years of Arithmetic

Pursuit of the strategy for five years can reduce the size of the ghetto by "somewhat more than half," say Weissbourd and Channick. Population movements by then, they explain, will possibly lead on to complete elimination of the ghetto and to desegregation with less governmental participation. If not, the program can be carried on for another five years, "until the ghetto as we know it has ceased to exist."

The "arithmetic" of the Weissbourd and Channick proposal works, briefly, like this: Assume a metropolitan area of 1 million population, 750,000 white, 250,000 black. Now build enough surplus housing in outlying areas to accommodate a fourth of the black ghetto population and three times as many whites. Moving in from the ghetto then are 62,500 blacks, and from the metropolitan area, 187,500 whites.

The 187,500 blacks left behind in the ghetto equal the created vacancy factor of 187,500 in the metropolitan area—"strong economic incentive for landlords to encourage Negroes to move into these residential neighborhoods." The projected result: desegregated neighborhoods in the metropolitan area, a desegregated new town in the outlying area.

NEIL GALLAGHER



Designing

A coherent design approach is proposed for a different kind of world, a world placing novel, ever greater demands on the molder of forms.

BY HARRY E. RODMAN, FAIA

There is a growing interest in the kind of design values that can come from knowledge in the behavioral sciences and a better understanding of man's interactions with his physical environment. A design approach encompassing these values has to be altered from past ones.

Habit, history and methods of education have led us to view architecture almost exclusively as an object art—a kind of sculpture—where the value lies in the object forms, is fixed by these forms and is predominately visual. But there is a need today, and it is of special importance in new approaches to wide-ranging modern practice, to recognize that the good or bad qualities of most architecture range over all the senses and run more in the active and continual interchange between the man-made environment and who or what it surrounds.

The object is incidental to the action.

What is a brick? To a salesman it is an object to be sold by the thousand. To a specification writer it is an object made of certain materials. To a draftsman it has certain dimensions which control its physical arrangement, and these object-dimensions have an important relationship to the hand of the mason who stacks the objects one upon another.

Such professional preoccupations with the processes that bring a structure into being tend to obscure the active role of materials in the quality of the total environment. The wall of a gymnasium is a solid surface against which to bounce a basketball, a reflector of noisy cheers, a manipulator of light energy, a rejector of the soil of a sweaty hand, a protector against wind, a container of heat—a brick in the wall is important as a part of the action, not as a static object.

Most of us were taught design as the fashioning of an object, at least in the early stages of schooling where attitudes and habits of thought begin to harden. Design activities were not only totally visual but were primarily involved with miniature, lifeless images seen through the frame of a

for the Whole Man

photograph, or as small sketch representations, or in terms of a distant, godlike view of a model.

There is a serious scale problem in models and sketches. An abstract study of organizational structure can be accomplished from outside the system, but this technocratic aspect has a tenuous relationship with human values. These values lie in the dialogue a man in the street has with his mini-environment, as defined by the limited extensions of his sense perceptions.

The study of history from books helped in the identification of architecture as something observed from a respectful distance in time as well as space. Activity, immediacy of environment, envelopment, luminosity and sound were all absent, and the act of design became fixed conceptually as something which involves a remote and mute object.

The rewards and punishments of architectural critics are applied in visual-photographic terms. Discussions rarely speak of sensations of movement through and between spaces or of the sound and feel of a changing environment.

Because the traditional media of an architect are visual and pictorial, designs tend to evolve on the basis of form quality and convenience of form arrangement, but these form decisions have major consequences for other aspects of the environment.

The gritty problems are crystalline glass areas which cause blinding glare and wild temperature swings, and lighting fixtures which by their

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forms interfere with seeing. The brick wall used improperly in a church would make a shambles of the sounds of a sermon.

What is needed are unity and coherence in the aims and effects of design. A music hall should communicate in a coherent fashion to all the senses. It should look, sound and feel like a place for fine music. This will not happen in a design process in which dominating visual concepts are only grudgingly modified to meet some minimum level of acoustical performance.

What is needed is a design method which joins together all aspects of the sensory environment. It seems possible to think of a palette of these

effects for use by a designer. He might think of a space, not just as big, but as one which should be big and noisy, big and hushed, big and warm, big and invigorating, big and bright, or big and shadowy. As a professional, he should also understand how to make these kinds of spaces.

If the design team process is to be coherent, conflicts among specialists must be prevented from causing mutual frustration and cancellation of efforts. The architect should originate forms from a knowledgeable consideration of all forces bearing on the design. An important task for education is to identify the kinds of knowledge necessary for this to happen.

These are not easy ideas to implement; in some areas information is incomplete and techniques have yet to be developed. Nevertheless, much more knowledge is available than is being effectively used. And our age is unique in having powers of science and technology of multisensory solutions. In the field of the built environment, architects should take the lead in a conscious effort to put them to use.

But this first requires a change in attitude toward the sciences. We will also have to isolate—and leave behind—all remnants of a pattern of thought deriving from the historic position of the architect as an image maker for princes: economic and hereditary.

In the film "The Idea of the City: History Economics, Future," John Kenneth Galbraith observes that "Prior to 1776 they [cities] were invariably a projection of the personality and power of those who governed them—of a ruling prince of dynasty or commercial oligarchy." The force of this structuring idea has disappeared, and the concern of cities is now with the people as a whole—or with the underprivileged instead of the most fortunate.

Yet this concern has not led to new and meaningful design forces. The profession is working well beyond the image needs of princes, but without a full recognition of the differences.

The young black in Harlem couldn't care less about the qualities of brick as a visual object. Nor does the object-design of a building have much to do with his needs. His immediate world is one of sounds and odors, heat and cold, light and darkness. If this is ignored, we miss the whole point of relating him to a beneficial environment. Hopefully, some specific ways of satisfying these needs

will come from such sources as community design centers.

There is a general tendency to fashion built environments that are static and uncommunicative. In the *Journal of Social Issues*, Albert E. Parr, a former director of the American Museum of Natural History, comments, "The unending variety of God's creation in fields and forest, on plains and hills, has been succeeded by a far smaller selection of much more vigorously repetitive forms, which has recently been reduced to even greater uniformity by explicit architectural doctrine."

Dr. Joachim Wohlwill observes in the same magazine that "psychologists have come to recognize what persons in the amusement and recreation industry—to say nothing of observant parents—have known all along: that a large part of everyday activity has as its aim not to reduce unpleasant tensions, but rather to heighten the level of incoming stimulation." A design for bland "comfort conditions" does not recognize this.

In *Man Adapting*, the biologist, Rene Dubos, says, "As the anonymous glass curtain wall buildings took over Park Avenue, people stopped responding to it altogether. It became too monotonous. The danger is that when an environment becomes monotonous and people stop responding to it, they cease to develop . . . the restriction of environmental stimuli which is becoming increasingly a characteristic of our environment proves disastrous to the human being."

Perhaps psychodelia is the exasperated response. The Electric Circus in New York's East Village is not a freak idea which interests only a kooky and alienated few. Amusing, entertaining, harmful, its sounds and light are of this age which is different from past ages.

The prince and his image need to be replaced by a vibrant design which effectively considers man and his total sensory environment. The energies of light, sound pressure, heat, odor and taste crowd the world around us—they are the environment and *they* are real. It is *they* that we must master as elements of design.

This is a new problem and a very difficult one. In the past this kind of complexity was not required of architects, in part because the man-made environment did not force itself so completely on man; and in part because activities were less complex and demanding on the environment. Moreover, technological solutions were not available, and thoughts of solving these kinds of problems did not arise.

But our different world is a world of the laser and of scientific and technological resources, resources inadequately used in environmental design. Enormous efforts have been devoted to the separate design aspects of structure, materials,

subjective form, color, climate control, acoustics and illumination. The capabilities are adequate, but the results fall short.

The problem is in the current committee system—a bedeviling of an initial object-space arrangement by a parade of specialists with conflicting demands, fighting for spaces through which to poke various kinds of spaghetti, and attaching Band-Aid corrections when it is too late for a full solution.

Much more should be done. Design can and should be coherent in the sense that the light of a laser is coherent. Unlike ordinary light vibrations which occur in a disjointed, quarreling and self-defeating relationship, the components of the laser beam are ordered and directed to work without confusion and conflict. In architecture the problem is the professional mastery of the fundamental forces on design and their effective organization toward a coherent result.

It is a problem that implies a need for a much more sophisticated design approach and considerably less isolation from the nature and processes of modern science and technology. There is a need for informed skepticism, too, about the sacredness of numerical engineering criteria, for example. How important is a standard footcandle level? Does the precision with which a temperature recorder follows the temperature measure the satisfaction of the indoor climate?

Standards designate maximum acceptable noise levels, but in investigations of acoustical environments for schools we found open-plan arrangements functioning in what appeared to be a beneficial, relatively noisy background of contagious busyness in the adjacent teaching spaces. In studies of a partially carpeted school, we found that the carpeted section's quiet atmosphere had a marked effect in reducing noisy and boisterous behavior.

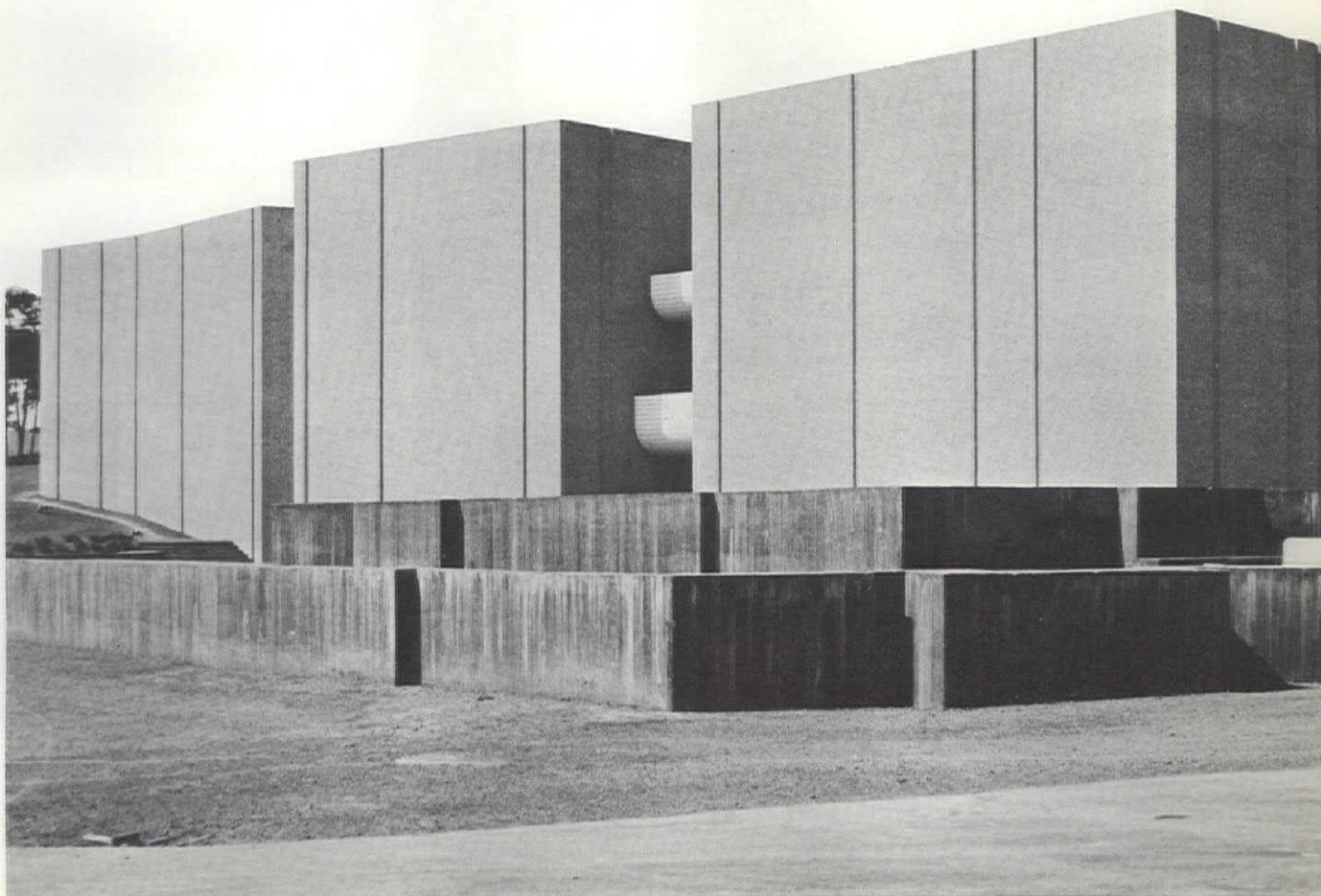
It may be necessary to recognize as the vital force in design some special sensory quality. In a museum the lighting and the forms which mold the light should be designed as a unit. In a real sense an auditorium is an extension of the violin: It participates in molding the sound which reaches the listener.

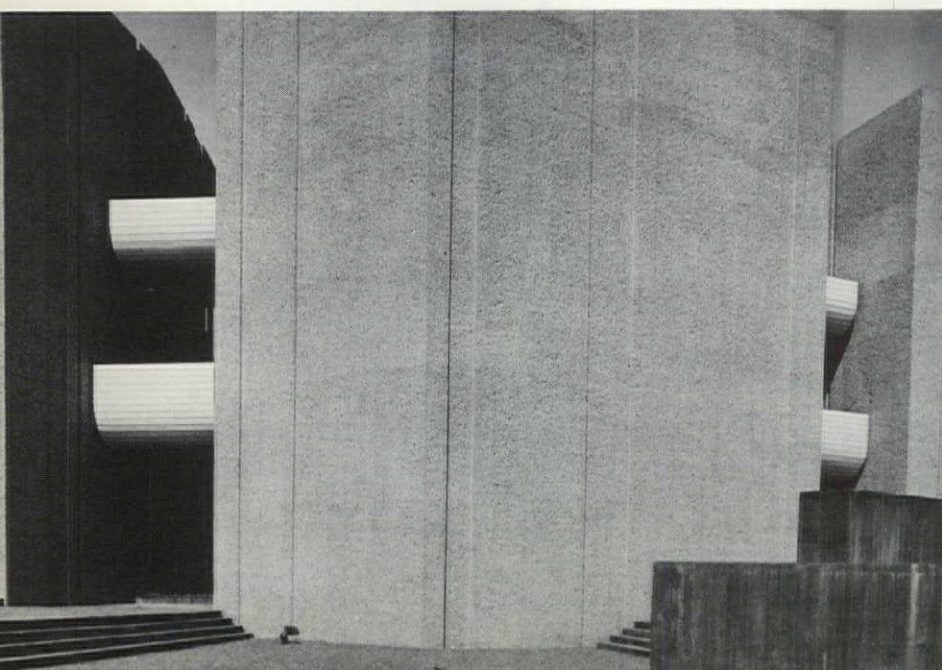
In the final analysis, we come back to architecture as physical form, having, of course, important visual values. But the demands on the molder of these forms have changed.

In specialties we have demonstrated a fantastic technological virtuosity. Structurally, we can build as tall as we want, as broad as we want, and we can fling our constructions off into space to join the original works of creation. But we have not paid enough attention to the architect's role in joining together diverse capabilities to form a coherent total environment at the scale of man. □

From Ice Shows to Art Shows

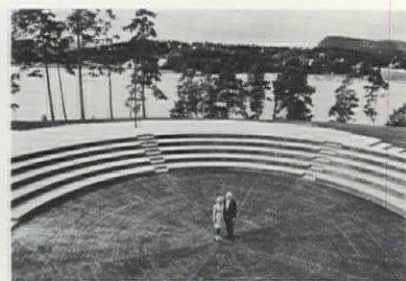
Sonja Henie,
that bundle of energy
from the North Country
who skated
her way to fame and fortune,
is now cutting a figure
in the art world.





Once again, Sonja Henie was the center of attraction in her native Norway. And again, the former prima ballerina of the ice had the public gasping, shaking their heads in disbelief and finally applauding much as they used to when watching her capers on skates in days past, resigned to the fact that what she had done was, miraculously, possible.

This time, however, the show was different. Sonja dazzled her audience not with her leaps and pirouettes but in a new role: a patron of the arts. The girl who had gone to Hollywood in the mid-30s to cash in on her ice-abilities through films and shows had, with her shipping magnate husband Niels Onstad, returned to give her old country a cultural center worth a cool \$4 million. It opened last fall



under pomp and circumstance in the presence of His Majesty King Olav V.

With the gift went the couple's collection of some 100 moderns estimated at \$3 million, including works of Picasso, Miro, Munch, Matisse and Braques. It all added up to the largest private donation Norway had ever received.

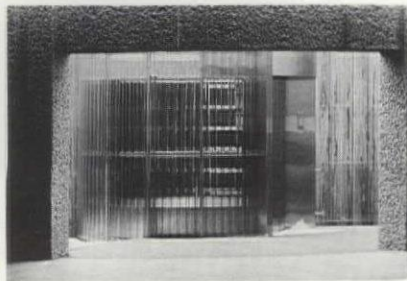
The center, said the management of the Sonja Henie and Niels Onstad Foundations, will concentrate on preserving the future instead of the past by seeking the good in the new, casting aside preconceived ideas and conventions. In short, it will be a research hub for contemporary art.

Planned as a center of action, it will branch out from pictorial art shows to the various art forms: theater, film, literature, arts and crafts, music, dance and architecture. It will, hope donors and management, help make the public more art conscious by attracting regular nonmuseum-goers with bop presentations on par with Bach and with evenings of light, sound and movement plays.

The capsule raised for this burst of activities looks, with its hand-chiseled concrete walls and white-lacquered aluminum cornices, like

a granite-and-ice bastion swept into the hilly terrain by the Oslofjord, just a few miles south of the Norwegian capital. Designed by Norwegian architects Jon Eikvar and Svein-Erik Engebretsen, both 33, it was selected from about 100 entries in a two-stage competition.

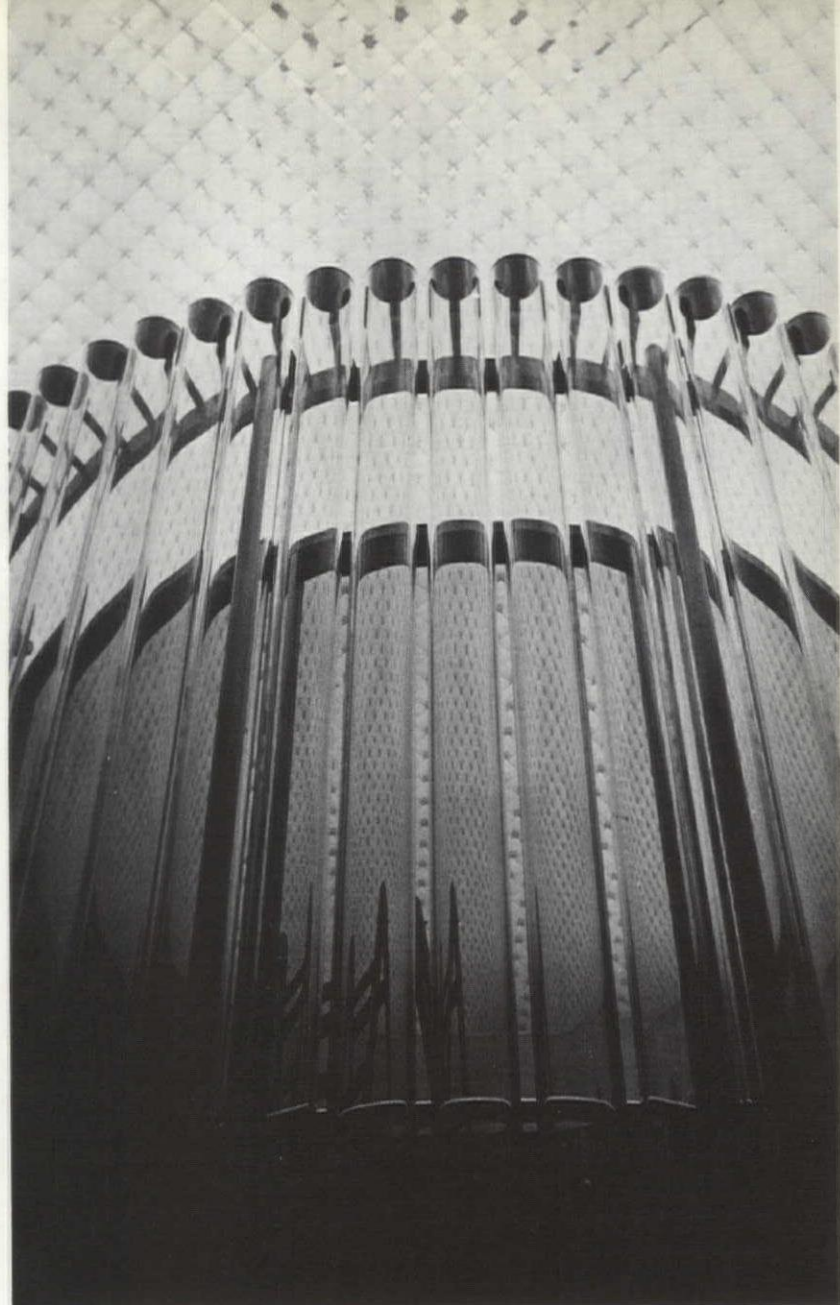
The leaf-shaped plan concentrates public areas in its leaves, with the administrative wing in the stem, separated from heavy traffic. All exhibit halls are closed off from



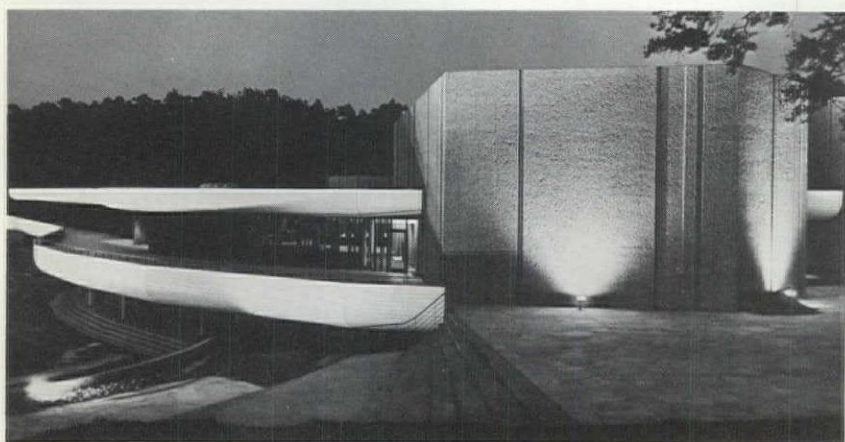
the outside to divorce art from nature and to give paintings an even light. Corridors between the halls open to the fjord and the hills, clad with spruce and white birch. Study rooms for artists and students, library, auditorium and a room to park children are on the lower level.

Core of the structure is the lobby with its spiral staircase. The circular elevator, with a glass rod wall, is set against dark teak and hand-chiseled concrete, a repeat of the exterior. Ceilingless, it is bathed in light from above and, when in motion, is like an organ come to life, playing with endless reflections of color from the bright red carpet.

A restaurant (the Pirouette, of course) faces the fjord, full of skat-



- Main Floor
 1, 2, 3, 4 Exhibit Halls
 5 Cafeteria
 6 Sonja Henie's Trophy Room
 7 Kitchen
 8, 9 Restaurant and Terrace
 10 Amphitheater
 11 Administrative Wing
 12 Entrance Hall with Checkroom,
 Central Stairway and Elevator



ers or skippers according to season. Its dining terrace overlooks an amphitheater for concerts and folk dancing in the blonde summer nights.

One nostalgic touch from the past is left within the future-oriented center: a room displaying Sonja Henie's trophy collection, won with toil and sometimes tears, among them 10 world championship and three Olympic medals. But now, with her twilight years ahead, Sonja has transferred her vitality from the art of skating to other art interests.

BESS BALCHEN

Dialogue and Discovery

BY CHARLES BURCHARD, AIA

"We are disturbed by the growing complexity of problems. Action and determination of direction become more and more difficult. We are in danger of losing the long view, a change rooted in the compartmentalized education of the specialist.

But even behind the most complicated book, the most involved philosophy, there must be a leading thought which can be expressed in simple terms. . . . In our case the question may be what kind of life do we want? . . . From every really creative man whether artist or scholar, we must demand that the pattern of future life is expressed in his smallest utterance." S. GIEDION

What kind of life do we want? Would we understand its pattern if we heard it expressed? We have no answer to either question. We realize only, nearly seven decades into the 20th century, that the environments in which we live are in conflict with the human and biological needs of the human family.

Mankind's model of vast knowledge, divided as it is into clear-cut disciplines which split and then split again, each with discrete methods for discovering and verifying accumulating truth, is proving inadequate to provide a coherent grasp of human experience. It affords no way to interrelate an inner condition of life to a definition of environmental objectives helping us identify, thus find ways to sustain our conditions of need.

The model is too easily lent to describing merely topical contradictions of environment as they are discerned. Data responsive to topical contradictions (but after the fact) are accumulating at an incredible rate within each discipline and accumulating unsystematically. Literally mountains of unrelated psycho-socio-economic information catalog the tidal waves of density, congestion, traffic, foul air, pollution, crime and violence of our environmental chaos. This data describes inadequate living conditions and a waste of human and material resources as our sprawling cities and exploding populations pound us and pound us.

Our topical investigations generate frantic expenditures in topical work to do. We build new towns only to find that the problems of a sprawling suburbia have already magnified beyond the hope that a new town might bring. We reconstruct our city centers and contribute elegant edifices and pleasant terraces as meeting places for people, but with a nagging doubt! A doubt

that we have arrived at an answer to a question that has already changed.

We spend vast sums for new highways and move cars more efficiently, but into and through environments which are further disoriented by this intruder, independently dedicated to mobility.

We are told that this is all so because we have inherited concepts of an order belonging to a slower and a smaller scale of existence; that we cannot cope with the exploding scale of our big, alien and undefined world; that reintegration at the parameters of our knowledge is the contemporary challenge and the contemporary hope. But in more than half a century the sought for integration has not managed to occur.

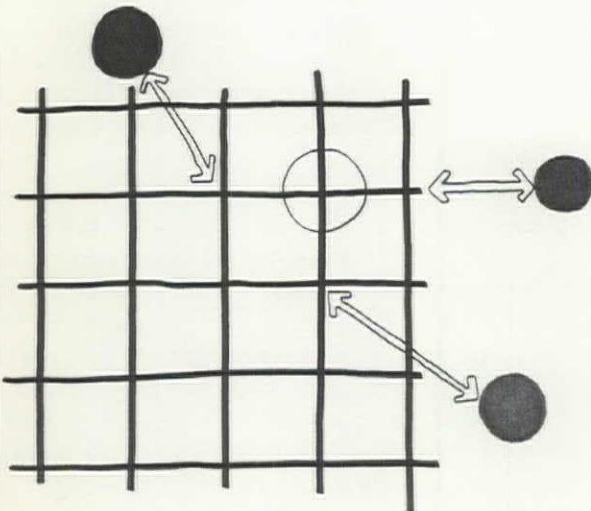
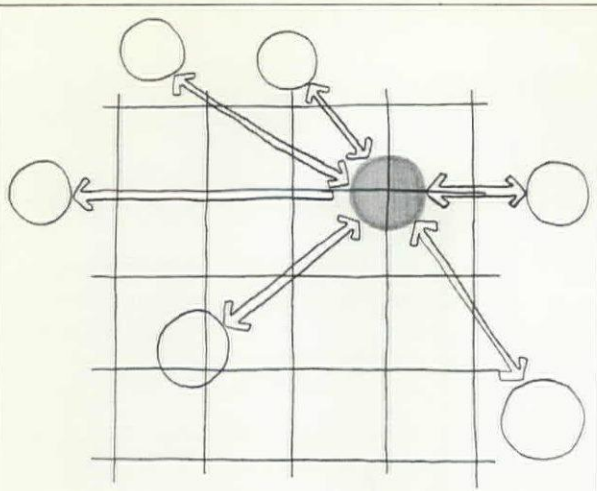
It is so strongly to be suggested that we can map the strange vistas of a strange world, that we can discern the harmonious interconnecting structure appreciable to our sensibilities and that we are going to be able to arrange our lives in consonance with new perspectives. But we must find that link which interconnects—or references our inner and outer worlds to a sustaining definition of environmental objectives—if we are to reach environments worth living in.

The flexibility necessary for organizing knowledge toward such human goals remains, as it has always, with the individual. Each of us is a complex of needs, interests, competencies and adequacies which cut across the lines of our artificial and fragmented knowledge model, and each can use this holistic spectrum of qualities to seek and comprehend the interacting multiplicity of combination which is necessary to the construction of conceptual models fit to a complex world.

But who is to teach this? What sort of educational processes can lead to this kind of thing?

It will require a concept of education which can bring the professor and the student together less routinely and less relentlessly, with greater meaning for both. It suggests that both faculty and student must become learners who can involve themselves in interaction on their several and respective levels of experience as they search for the same thing: the inner attitudes necessary to the discovery of media, means and methods with which the identified problems of environment may be related, through one's whole experience, to a process of translating complex contents into a qualitative reality.

The new condition of knowledge powerfully indicates the urgency of such an approach. In most fields, information and technical procedures



The curriculum of the VPI Inner College for Environmental Design is a flexible network of processes, activities, faculty and students, interacting and adapting to needs as they occur. It is a personal and environmental discovery network or "involvement box" which each student uses to define himself and his own position in the world through the development of personal models and methodologies. Resource faculty from other disciplines, normally outside of real involvement in the environmental design task, can join in the sense of discovery and are encouraged to use the involvement box as a means of defining their position, the position of their discipline, in its contributory relationship to the total task.

become obsolete almost before they can be taught. With "facts" becoming less and less stable, we must free ourselves to get at the roots of the habit of learning itself. No responsible professional or scholar is going to scorn the best available facts, but we need new curricula that

The author: Mr. Burchard, who is dean of the College of Architecture at VPI, was assisted in the writing of this article by Olivio Ferrari, director of the Inner College for Environmental Design. Professor Ferrari also prepared the diagrams.

will eschew "covering the field" in favor of emphasizing the deep conceptual grounds of a discipline.

Dr. Harold Taylor once remarked, "If the teaching program is turned around and considered a learning program by the students with such help as the faculty and other students are able to give, then a new role for the student body is immediately suggested."

A role of this sort could release that interplay between sensory, imaginative awareness and disciplined scientific knowledge. It could link self-direction, self-motivation and independent discovery to a candid thrust toward a sense of participation in the work of the world, with a whole range of opportunities to collect data, check theories against observation and to expand continuously one's own experience. It suggests the way for each student to unify himself: to help each discern the structural principles that interconnect one's image-making faculties to the impact of environment on the one hand and to the processes that refer these sensibilities to the problem itself on the other.

It is this unifying power that can, and possibly only can, overcome the formlessness of our world.

It was with goals of these sorts in mind that the College of Architecture at Virginia Polytechnic Institute introduced a novel curriculum in 1965, reported in the AIA JOURNAL, June 1967 ("A Curriculum Geared to the Times"). Much of the course orientation of the conventional university curriculum was rejected in favor of an academic environment in which each student was afforded access to resources as needs occur.

This curriculum begins strongly as a learning program, transforming to a teaching program only in the latter years as was thought necessary to an increasing emphasis upon the professional content.

The Foundation Studies Division, of two years, is wholly learning oriented. It couples an environmental overview with an opportunity for personal discovery, to let each student find both his inner and outer worlds and to discover the lan-

guage of translation from the identification of environmental need to conceptual form.

Contentual emphasis increases in the two succeeding divisions and with a tendency toward "instruction," although by no means in the sense of more conventional and topical professional curricula. For example, in the Second Studies Division, design laboratory work and the contentual professional subject matters are interrelated—become one interacting process—successfully accomplished through the elimination of separate subject matter courses and the utilization of team teaching techniques by an interdisciplinary faculty.

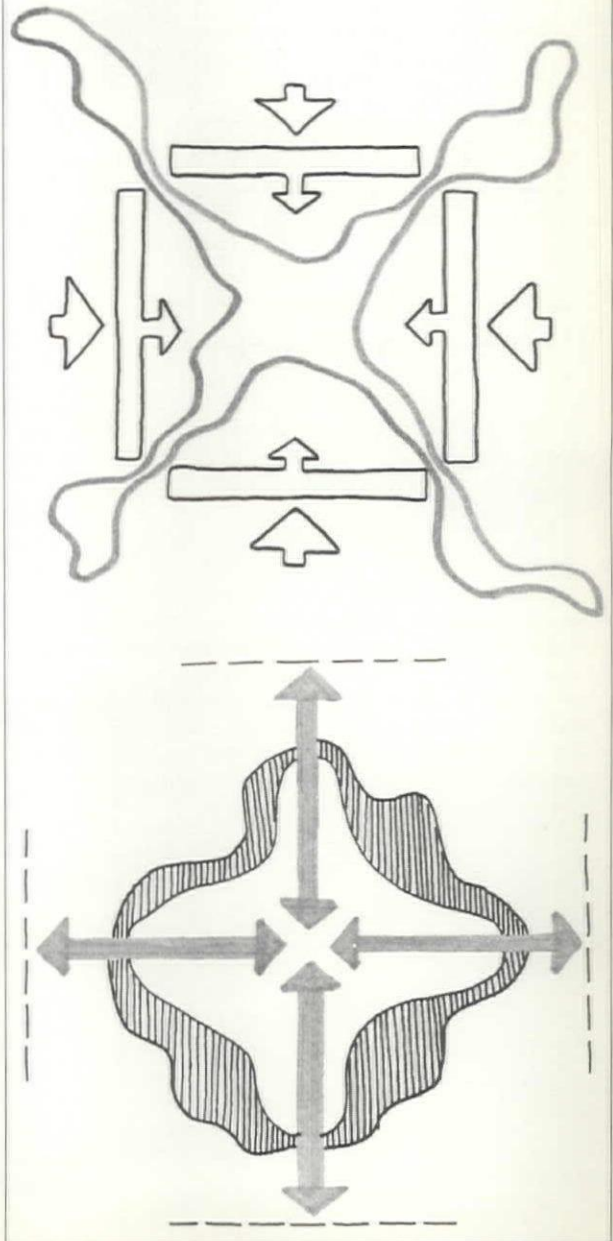
Every indication since 1965 suggests that this educational pattern facilitates the search for relevance and professional meaning which each student must undertake. It suggests something else as well: that an alternative avenue must be explored—an avenue which extrapolates the powerful personal release of the learning model of the Foundation Studies Division into a full professional curriculum. It would appear that such an approach might, at long last, thrust a new generation of environmental designers into a life-long process of involvement and learning, and into the continual personal renewal that is necessary for us to comprehend environment in all of its differing and complex scales of time and sets of conditions.

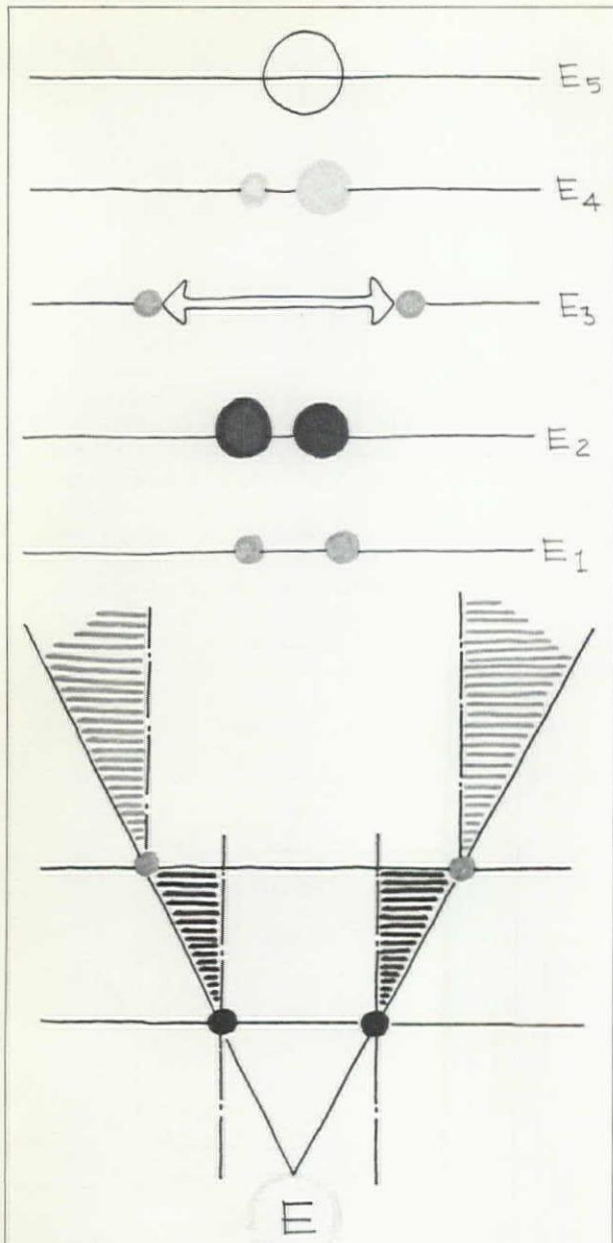
Such an educational avenue has found its initial expression during the 1968-69 academic year at VPI in the concept of an experimental inner college, functioning *within* the main curriculum in architecture. The inner college is conceived to be a flexible network of processes, activities, faculty and students—interacting in a personal and environmental discovery network or professional laboratory which each student uses to define himself and his own position in the world—through the development of personal models and methodologies. Its activities will explore beyond campus boundaries, as they will explore beyond usual curriculum restrictions. Faculty from other campuses, other resources and persons and the use of "beachhead" campuses, linking design laboratories to the community, will be incorporated into the concept.

Faculty from other disciplines, normally outside of real involvement in the environmental design task, will be asked to join in the sense of discovery and be encouraged to use the inner college as their involvement laboratory and as a means of defining their position, the identity of their discipline, in its contributory relationship to the total task.

This is all important because the sought-for construction of communication in a fragmented world must emerge from an awareness of the

The individual and his environment—the inner and outer worlds of each of us—are not accessible to dialogue and to discovery through conventional academic curricula whose fixed course structures attempt to squeeze the individual into a predetermined pattern in terms of a defined task, based in past experience. A truly contemporary curriculum for environmental design must allow each individual to find himself, to shape himself and to unify himself. It is this unifying power which can, and possibly only can, overcome the formlessness of our world of unprecedented events.





There are as many environments as there are pairs of eyes to view them. And the environments of a complex and constantly transforming society differ in scales of time and sets of conditions. The topical investigations which our knowledge model encourages, establishes nodes here and there to introduce a point or measure of control. But undefined areas beyond these nodes grow greater and greater and soon defeat each discrete attempt.

theoretical whole of our potential. Idea-formats derived through a common involvement focus could generate an idea-language—an interconnection through individuals—that could, in turn, form the basis for a profound change in our intellectual conduct.

Learning-environments for such potentially fruitful involvements need a dynamicism that will encourage interplay of human, intellectual and physical resources. In the inner college this dynamicism will derive from a flexible curriculum network of two interacting processes which will in turn support the search for personal models.

The search for models has been identified to be essentially threefold. First, the search for intellectual models, or models of attitudes, which each can equate to an explosively growing range of intellectual tools, themselves in a state of continuous transformation. Second, action models, or processes of involvement by means of which one may discover the methods necessary to manipulate environments of continually changing variables to the service of man. Third, institutional models which let one find one's own sense of place and an awareness of the nature of the contemporary intellectual kaleidoscope from within which concepts must now be sought, while each student simultaneously defines the relationship of his own sets of abilities and sensibilities to this totality.

The two processes of the curriculum network which support these searches are interdependent. One is an educational process. It is a process because the individual and his environment—the inner and outer worlds of each of us—are not accessible to dialogue and to discovery through conventional curricula of fixed structures, which package "education" for the individual too rigidly into predetermined patterns in terms of a defined task, based in past experience. A contemporary curriculum for environmental design must allow each individual to find himself, to shape himself and to unify himself. To be relevant to our lives and to the problems we now face, the inner college's range of resources are therefore to be organized by faculty and students as is necessary to facilitate their searches for information and for the methods with which to deal with an outer world. In this way, as a process, the curriculum can be in continual renewal, self-regulated by the demands for change, for innovation and invention, which feed back from evaluations of prior manipulations.

The other process, a design process, when derived in such a network or curriculum, can then become what it should be: a true problem solving tool which can lead to methodology, optimization and to form. It can become an action model, adap-

tive and responsive to current, and to frequently unprecedented, events. It can be used to reference one's set of abilities to needs as they are found for the optimization of concepts which will sustain such needs.

Through interaction both student and faculty will seek design methodologies to resolve problems and variables, to derive information and determine standards, and to conceptualize form. And achievement will be self-evaluated, linked to the personal structuring of an evaluative and sustaining model.

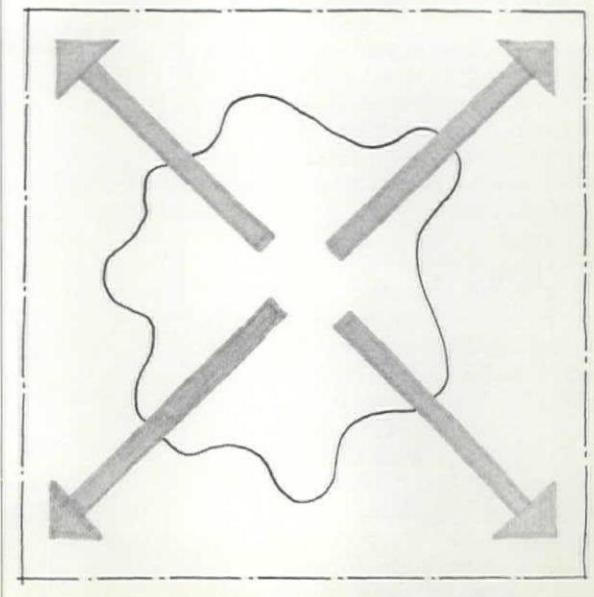
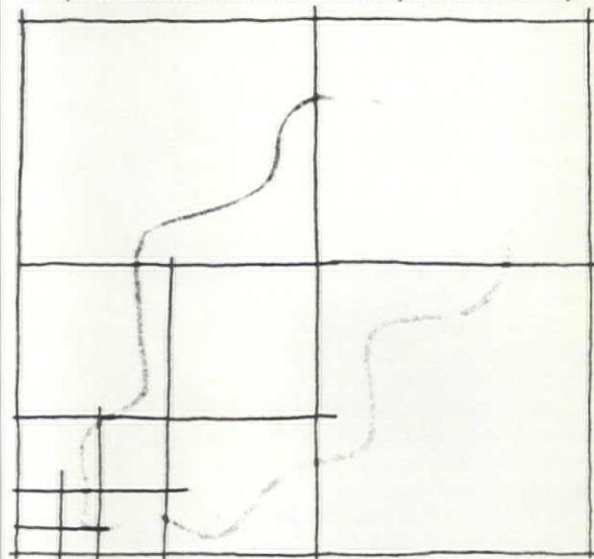
The teacher may function as a resource person, generating a search for conditions and providing support in the identification of problems. But he does not define the environmental task, assign the problem, set the process nor impose values to "judge" results.

The physical housing for such activities needs a new orientation as well. Design laboratories of the inner college must complement curriculum processes with a spatial structuring in which densities and patterns can be varied if these laboratories are to facilitate interactions between groups and individuals and allow for interplay between, and inputs from, disciplines contributory to environmental design. The inner college's design laboratories need a spatial configuration which is manipulatable to the accommodation of a range of activities and functions, as distinct from the usual academic environment of separate, unrelatable spaces for separate, unrelated functions. Such variable density laboratories can in fact be contributory to the learning process through demonstration, making evident the interrelation of need to spatial density and organization and to the structural principles that interconnect the needs of an outer world, through inner sensibilities, to conceptual form.

The program got underway last fall. As inner college methodologies appear which are appropriate to the main curriculum they will be incorporated, and in this way afford an exceptional means for complete renewal through doing, by providing student and faculty with access to environments in which they may interact across the total spectrum of professional involvements; with a new responsibility for self-identification, for resource identification (information systems and interdisciplinary resource persons) and for the discovery of an outer world.

The sense of excitement that accompanies the discovery of our unique worlds projects one powerfully into awareness of the structural principles that interconnect a world outside our bodies, through one's whole experience, to processes and to intellectual and physical tools, which can reference vast resources to a new approach to the living environment. □

A new basis for use of intellectual and physical tools is needed. Our model of knowledge, which splits and then splits again, no longer provides a coherent grasp of human experience and thus no means to comprehend environment. It lends itself to descriptions of an environmental task only in terms of topical contradictions—and after the fact. It provides no true basis for the control of environment. A new dynamic model which interconnects one's inner image-making faculties to the impact of environment could reference these sensibilities to the discovery of strategies, and means for translating complex contents into a controlled qualitative reality.



"Fine," replied President Johnson, who wanted him to head the Urban Housing Committee, "you won't be handicapped by any preconceptions." It was a response to Edgar Kaiser's admission of "a limited knowledge of housing, to say the least."

In truth, however, the chairman of the board of Kaiser Industries did have "one lingering preconception." He was in fact "gripped by the notion that there just had to be a relatively simple and practical solution to the problem of providing decent housing for the millions of families who can't afford it."

He kept thinking back to World War II's shipbuilding efforts, he told a Senior Executives Conference of the National Housing Center Council.

But some basic differences were discerned between shipbuilding and homebuilding, acknowledged Kaiser in the speech from which the accompanying article was adapted. The British and United States governments provided a guaranteed market for the ships which were, in their various classes, all the same and thus accommodating of repetitive operations.

"I also recall our beginnings in homebuilding," Kaiser said. "We thought our experience in shipbuilding could be applied to housing and we built large plants for precutting and, in many instances, for prefabrication.

"We found that our product did not fit the market. A house, unlike an automobile, is a highly personalized commodity . . . and soon we began a large-scale modification center. The system worked, but with only moderate success, and we returned to limiting our activities to land procurement and development, and to working with homebuilders."

Through the years, however, there persisted with the Kaiser people a belief that the solution to any problem could be found with enough hard work. It was with this belief that Kaiser joined his committee colleagues, many of whom came from similar backgrounds and therefore shared the same conviction. "For us, it was frustrating to have to recognize that there are no broad-reaching panaceas. For us, the committee's 16 months of work was an educational process."

Partnerships to

BY EDGAR F. KAISER

The assignment President Johnson gave to the Committee on Urban Housing was to find new incentives and mechanisms for attracting full-scale private participation in the creation of subsidized housing.

With this as our mission, and through our own investigation, we first determined the extent of the housing need. Then we undertook an examination of the programs and practices in subsidized housing and we formed, ultimately, a number of recommendations for both public and private sectors.

In the public area, the committee decided that the quickest solution to filling the need was to review all existing federal housing programs and to suggest changes designed to enlist greater private enterprise participation. This we did, and I believe that our recommendations materially helped in the shaping of the Housing and Urban Development Act of 1968.

In the private area, the committee recommended the formation of the National Housing Partnership as a means of involving a segment of private enterprise that has not addressed itself to the housing problem.

The National Housing Partnership is a limited partnership—a device long employed in real estate—which accumulates its project's book losses, losses that result from the difference between gross income and depreciation and other allowable deductions. Proportionate shares of these book losses pass through to each limited partner. The limited partners, in turn, apply these losses to their taxable income from other business activities.

Any limited partnership needs a general partner who serves as manager, and in this case the general partner is the National Corporation for Housing Partnerships, an entity now undergoing incorporation.

It must be understood that neither the Urban Housing Committee nor the incorporators view the corporation as a broad-spectrum panacea. It is not an immediate solution to the housing problem. It is a response to President Johnson's charge, which I believe to have been a proper one; it is intended as a means of involving the private sector in the housing industry.

Over my recommendations to the contrary, Mr.

Get Big Business into Housing

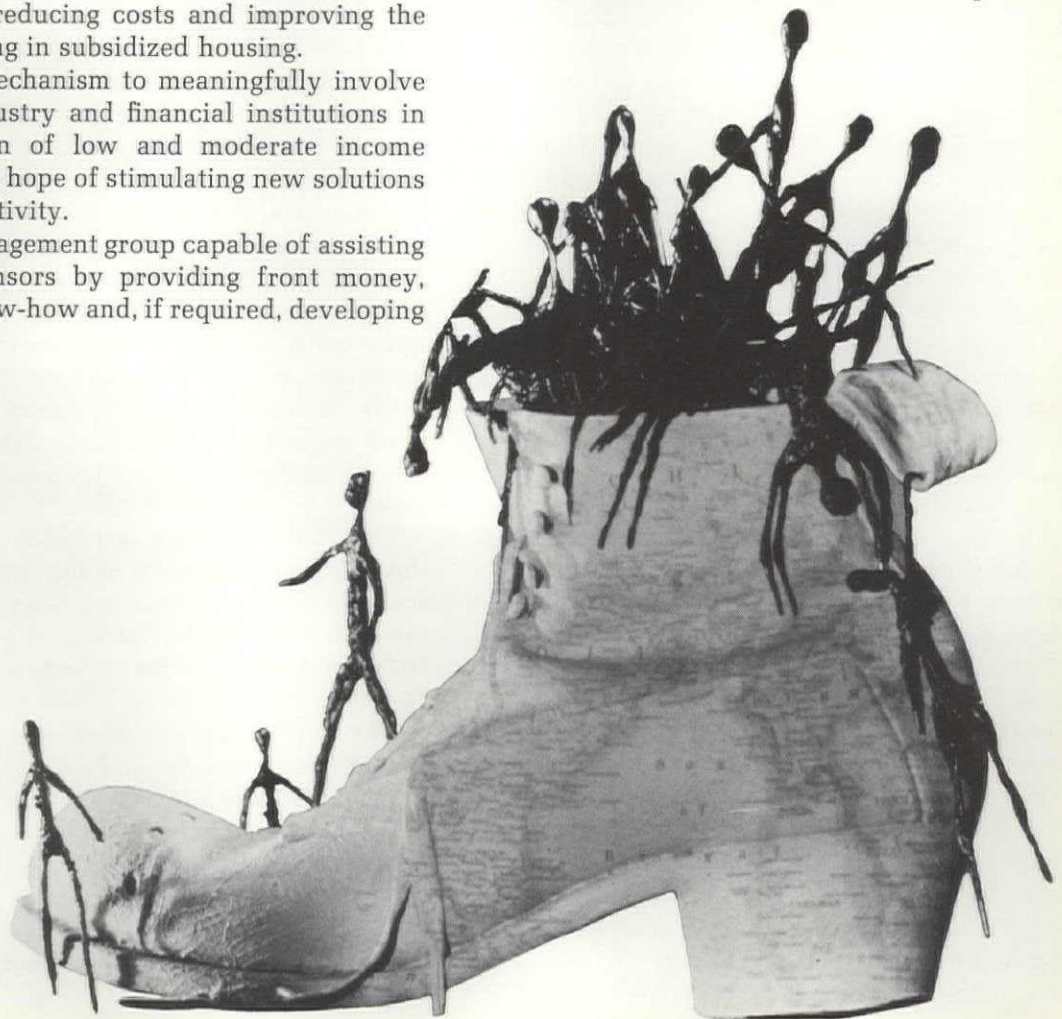
Johnson named me chairman of the incorporators, and we began the fulfillment of a dozen functions, the most important of which is the recruitment of a chief executive and operating officers.

The incorporators defined the purposes and goals of the National Corporation for Housing Partnerships, which are to:

- Create an adequately capitalized, professionally managed corporation to help achieve the national goal of at least 600,000 housing units per year over the next 10 years for families of low and moderate income.
- Stimulate the formation of local profit and non-profit groups in the development of federally assisted housing in their locales, and offer technical and financial assistance when requested.
- Generate construction of such volume as to permit the development of improved design and technologies, reducing costs and improving the quality of living in subsidized housing.
- Provide a mechanism to meaningfully involve American industry and financial institutions in the production of low and moderate income housing, in the hope of stimulating new solutions and greater activity.
- Create a management group capable of assisting nonprofit sponsors by providing front money, packaging know-how and, if required, developing

the project and selling it to a nonprofit sponsor upon completion.

- Develop new and improved methods of managing low and moderate income housing developments, methods that give the occupants greater participation in the management of the property without jeopardizing the owner's investment.
- Train professional management, preferably from the ranks of the housing occupants.
- Develop methods of widening and assuring homeownership opportunities by encouraging the early conveyance of developments to tenant cooperatives or condominiums.
- Develop practical methods of involving neighborhood residents and potential occupants in the planning of projects, to ensure that the housing reflects the occupants' needs and aspirations.
- Assist when called upon in the development of



local labor agreements that ensure the training and employment of neighborhood residents.

• And finally, create an organization with sufficient public and private support to help break bottlenecks at federal, state and local levels.

I have heard some concern expressed by homebuilders that this all adds up to the injection of big business into their business. But the corporation is not intended to be—nor will it be—competitive with anyone in the homebuilding industry. Its purpose is to the contrary.

I think we all agree that there is a critical need for more housing. The current rate of travel is about 1½ million units per year while the need is one of at least 2½ million units. In view of the fact that at one time we did produce at a level of 2 million, why the necessity for this new entity?

The answer is simple and clear. The need for low and moderate income housing is a minimum of 600,000 units a year. The present rate of travel is somewhere around 50,000, indicating that production must be increased by at least 10 times. It is obvious that the building of low and moderate income housing has not been attractive—the job hasn't been done. The prime purpose of the corporation is to address itself to low and moderate income housing, public housing, subsidized housing; to finance, build and manage such housing.

In short, there seems to be plenty of room and opportunity for everyone in the housing field.

Housing is a volatile, highly competitive and relatively efficient industry. Yet it is subject to more vagaries of external constraints and influences, both nationally and locally, than most other industries. These conditions won't be changed overnight. They suggest a need for more private management talent.

There are two things to be said about housing costs: They represent a family's biggest single expenditure and they are relatively high, not because of unreasonable profits but because of a combination of all the development costs. Foreseeable new technologies and cost-saving changes all along the line will not, it appears, eliminate the need for federal housing subsidies.

Occupancy costs could be reduced by as much as 10 or 15 percent in the next few years provided all segments of the building industry and all levels of government work together. This could save the economy several billion dollars a year. But savings even at that rate will not eradicate the need for federal subsidy to some six to eight million families if they are to be provided with decent homes.

The real key to the elimination of subsidies is jobs, and to the extent that we are successful in maintaining a strong economy and providing equal opportunity for a good education will we be successful in reducing the subsidies.

The National Corporation for Housing Partnerships is not going to dramatically change current projections. It is not going to enjoy special privileges or set-asides of federal subsidy funds.

Why then did the committee recommend it? And why did it take an Act of Congress to enable its formation?

With President Johnson's charge of greater private participation in front of us, and with a housing need both immediate and massive, we concentrated first on recommendations aimed at attracting more existing homebuilders and developers to the challenge. We questioned whether it appeared necessary to attract new sources for management talent and equity capital. With the answer affirmative, the next step was to examine how this involvement might be accomplished.

By this time the total housing need—at least 26 million units over the next 10 years, including at least 6 million subsidized dwellings—was clear. It was also clear that to attain the goal in subsidized housing, assuming Congress appropriates the necessary funds, the full participation of everyone would be needed, and this included the major corporations.

To the committee, it appeared that big business, or the *Fortune* 500, would be unlikely to leap into subsidized housing. From the business standpoint there was a natural reluctance.

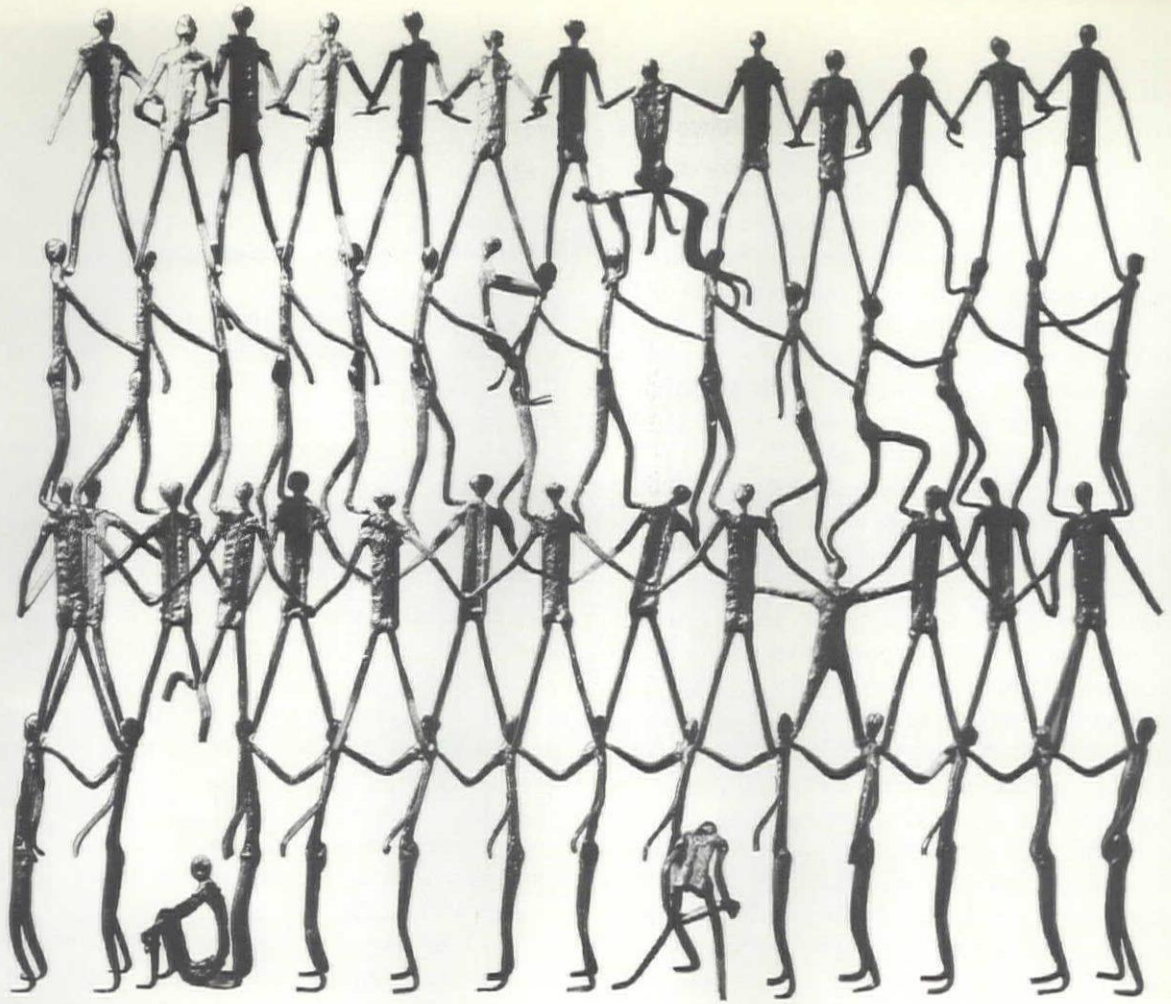
The committee saw the need for more businesses to engage in housing. I think it is quite clear that a byproduct will be one of the most needed resources namely; money. As any business is attracted to this field, a proportion of its available funds will be allocated to housing and this is what is needed. The committee also saw an opportunity for larger businesses to stimulate more research and development effort.

The housing business encounters all sorts of blockages—local ordinances, codes, red tape—and greater participation with larger businesses can only help in the solution of these problems.

The committee envisaged the corporation as the entity that not only would provide the partnership with that critical ingredient, management talent, but would also have an investment in the partnership of the same size as each of the other partners.

The corporation will raise its equity money by subscriptions from broad-based corporate investors who can use a tax savings. Only a small percentage of their investments would go into this corporation's shares of stock—5 percent or less. The largest percentage is contemplated for direct investment in the limited partnership where both the needs and the potential rate of return for the investor are greater.

It was not contemplated to offer investment opportunities to the general public, at least not



until the venture can develop its own track record on financial performance.

We tried out the concept on a selected group of about two dozen of the country's major business leaders. In the judgment of the majority, it was practical, feasible and appealing, both as a business investment and as a new opportunity to help business fulfill its more broadly recognized social responsibilities.

The fully developed proposal was recommended to the President and was included in the Housing Act. Although neither the partnership nor the corporation has any special privileges or powers, we considered their establishment by an Act of Congress to be advisable for three reasons:

1. The legislation serves as a national invitation to industry to join in helping fill the need for subsidized housing.
2. It ensures the application of existing tax laws—with respect to the pass-through of tax savings—to individual partners.
3. Provisions in the act settle any questions of local laws, questions which might otherwise require long and delaying deliberations.

What do we expect from the partnership?

It is anticipated that its main role will be in partnership with local contractors throughout the nation. Its responsibility is to assist the industry in attaining the national goal of 600,000 units a year for low and moderate income families.

The intent is that these projects will be developed, owned, and managed in partnership with local interests. In fact, the legislation specifically limits the partnership's equity in any one project to no more than 25 percent, unless sufficient local equity capital is unavailable. Where and when local capital is unavailable, the partnership can undertake a project on its own.

As a minority investor in local partnerships, it will help generate investment and building opportunities for local organizations. We expect the national organization will have construction capabilities to undertake special projects and to review and estimate proposals. However—and this is important—it is anticipated that most construction will be done by local builders and contractors and that the majority of investments in individual projects will be by local subscription.

For the building suppliers, the National Housing Partnership should be a customer. For the local builder, it will be a local partner able to provide seed money, something I understand is not too easy to come by in this field, and, hopefully, will be able to help overcome local and national problems and impediments. The mortgage bankers and lending institutions should find a ready customer in the new partnership.

In addition to the partnership's direct activities, the corporation itself—the management team—will be in a position to offer technical capabilities

to local profit and nonprofit groups who need knowledgeable help in planning and developing local projects.

This volume of activity offers new opportunities for large-scale research and development activities aimed at new technologies for reducing costs in housing—at every step along the way. Not only will the corporation itself be motivated to seek new and better approaches to problems, but the businesses investing in it will be directly exposed to these problems—and the challenges and opportunities in solving them.

The rate of return on real estate developments drops sharply as the tax savings decline. Somewhere around the 5th to 10th year, generally, it's often good business to sell. Normally you capitalize on the property's appreciated value and sell at a price that will retire your mortgage, pay off your taxes and recover your equity for you.

But then, normally, rentals must go up under the new ownership. Such an end result is contrary to the objectives of subsidized housing programs.

This problem is largely overcome by a provision in the 1968 Housing Act which permits a profit-oriented sponsor of subsidized housing to sell his project to a tenant cooperative or nonprofit group at a price expected to be sufficient to accomplish his business objectives. Such new owners are eligible for 100 percent financing—with re-extension of the mortgage terms—which should prove enough to avoid any marked increases in rentals. If problems *should* develop with this approach, the Urban Housing Committee has offered some recommendations for alternate solutions to enable such sales without rent-boosting.

From a profit standpoint, it becomes simply good business for the partnership to help its tenants help themselves in developing their management and ownership capabilities. In this manner, the partnership will be helping to increase homeownership opportunities among families eligible for housing subsidies.

It is common judgment, I believe, that people who own their own dwellings make for better neighbors. If you have a stake in your housing you have every reason to be a property-protective citizen—with pride in ownership—and pride in the neighborhood surrounding your dwelling.

Although good housing alone will not cure the problems of urban slums, good housing is an essential part of the concentrated efforts required.

To help further in this total effort, the partnership will be working with local management and labor to assure the training and employment of neighborhood residents in the construction of its projects. The main objective will be to develop new opportunities for minority citizens.

The challenges in rebuilding the nation's cities

and assuring the availability of decent housing for every American family summon all of us at every level, both public and private.

The Urban Housing Committee believes that the Housing Act of 1968 established realistic and practical goals. If anything, the goals may be a bit too low.

Housing for the nation's poor requires federal subsidies. Hopefully the Congress will recognize the priority requirement and appropriate adequate funds.

There will be many problems. One of the biggest will be finding the sites—and overcoming the problems of zoning.

There is no question but that reaching the goal will be a strain on our ingenuity, our muscles and our national resources. It will call for decisions and sacrifices which for the moment may be unpopular.

The goal is essential. The costs for failure would be far too great—economically, socially and morally.

If private enterprise and labor fail in accepting our responsibilities, then one alternative is clear: government action grows when private inaction leaves a vacuum.

The federal government could condemn enough land, allocate enough public funds and let enough public contracts to build, own and manage enough housing for the urban poor.


By a narrow definition—of dollars and cents—the immediate opportunities for business could well be broader if the government became the nation's houser of last resort. But I seriously doubt whether any of us would welcome the restrictions and the loss of private initiative, both in our businesses and in our communities, that would result from such government action.

I am convinced that such an alternative never need happen.

All my business life I have had the privilege of close associations with competitors in building materials manufacturing and heavy construction, with organized labor and with the financial community.

For 18 months—during my urban housing assignments—I have had the added privilege of meeting and coming to know and respect many of the nation's leading homebuilders, developers, mortgage bankers and housing officials. I have had opportunities to work constructively on housing issues with some of the nation's responsible minority leaders.

From these experiences, I firmly believe that our system of creative free enterprise is not only the most efficient but the best, and that our private and public sectors will carry their full share of responsibilities. The future of our nation demands nothing less. □



The AIA and the FPAA

A report of the US delegation from Bogota as interpreted by the staff executive for the AIA Committee on International Relations.

BY MAURICE PAYNE, AIA

A US delegate to the 12th Panamerican Congress of Architects said on his return that it was "very difficult to measure on which side of the balance its successes and/or failures outweigh each other.

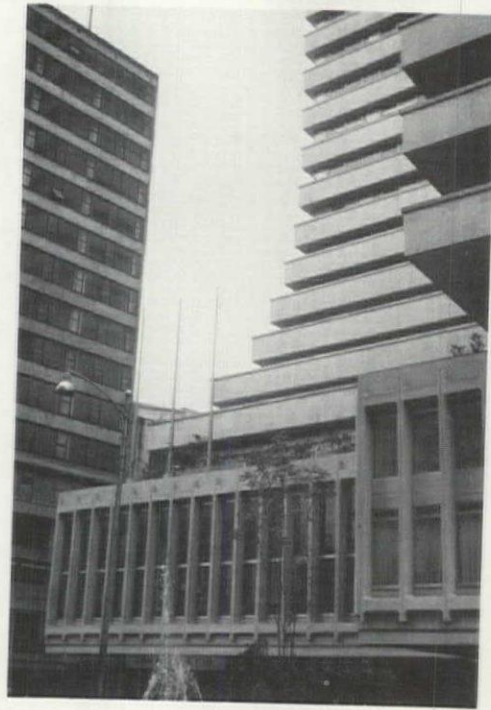
"Fundamental to these congresses, of course," he continued, "is the opportunity for the architects of the Americas to come together to learn more of each other's experiences and problems and, in general, to further understand the tasks that confront the design discipline professions. Regarding content, I am inclined to feel that the scope of the congress was excessive in terms of the period of time and structure allowed to deal with such a gigantic topic."

Last October, 15 members of The American Institute of Architects represented the United States in Bogota at the 12th congress conducted by the Panamerican Federation of Architectural Association (FPAA) and hosted by the Colombian Society of Architects.

The congress, attended by delegations from Western Hemisphere nations, had as its objective the study and interchange of information concerning the urban crisis: the unprecedented growth and rate of change in our cities, the deterioration of the quality of the urban environment, the definition of goals and action to facilitate an orderly and humane development of cities, and the formulation of urban poli-



Bogota, with a population of over 2 million, is located on a 8,600-foot-high plateau in the northern Andes. Even though only 300 miles north of the Equator, the climate is cool and wet the year round, and the delegates put heavy coats and umbrellas to good use most of their stay. On touring the city, one finds many contrasts: contemporary concrete skyscrapers and 18th century villas reminiscent of southern Europe; modern expressways and narrow cobblestone streets; the very rich and the very poor. The week of the congress is interspersed with meetings, social events and guided tours.

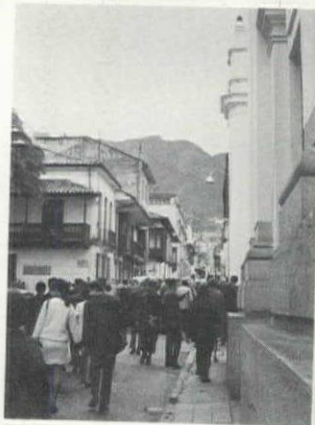


cies aimed at the meshing of financial, legal, administrative and technical means in the solution of environmental problems.

The president of the Republic of Colombia, Dr. Carlos Lleras Restrepo, inaugurated the congress with a welcome unlike the Chamber of Commerce variety to which we are accustomed. An economist and political scientist, President Lleras expounded perceptively on the urban problems of Latin America. There, the countries are experiencing the highest rates of demographic growth in the world, and as the shift in population from rural to urban areas is at high tide, the urban crisis is truly alarming in the major cities.

The Latin American architects doubtless merit the prestige and importance which they are accorded with their respective societies. They tend to be well and broadly educated, widely traveled, concerned with social issues and conversant with the most avant-garde cultural developments. Since most of them are part of firms that build as well as plan and design, they speak about building projects with economic authority and in terms that their clients understand.

It is therefore not surprising that the manager of the Instituto de Credito Territorial, architect Luis Alberto Villegas, whose job is roughly the Colombian equivalent of that of the Secretary of the US Department of Housing and Urban Development, served as secretary of the congress, sitting through all the plenary sessions. Nor is it surprising that a prominent Peruvian architect and former dean of the architectural school of the National University, Fernando Belaúnde Terry, was elected president of Peru and provided intelligent leadership to that country for the past five years. A few days before the



The President of the Republic of Colombia, Dr. Carlos Lleras Restrepo (facing camera at right). AIA members from US include President George E. Kassabaum, FAIA, and wife; FPAA Second Vice President Samuel Inman Cooper, FAIA, and wife; Richard Sharpe, AIA member on the FPAA Executive Committee, and wife; Thomas Broad, FAIA; Mr. and Mrs. Hilario Candela; Leonard Currie; Charles DuBose, FAIA, and wife; Mr. and Mrs. John Heyl; Maurice Payne; Robert Raymond; Camilio Ricon; Mr. and Mrs. Kenneth Schwartz; Nestor Siciliano; Luis Summers; and Herbert Tatum, FAIA.



Congress opened in Bogota, President Belaúnde was ousted by a military junta.

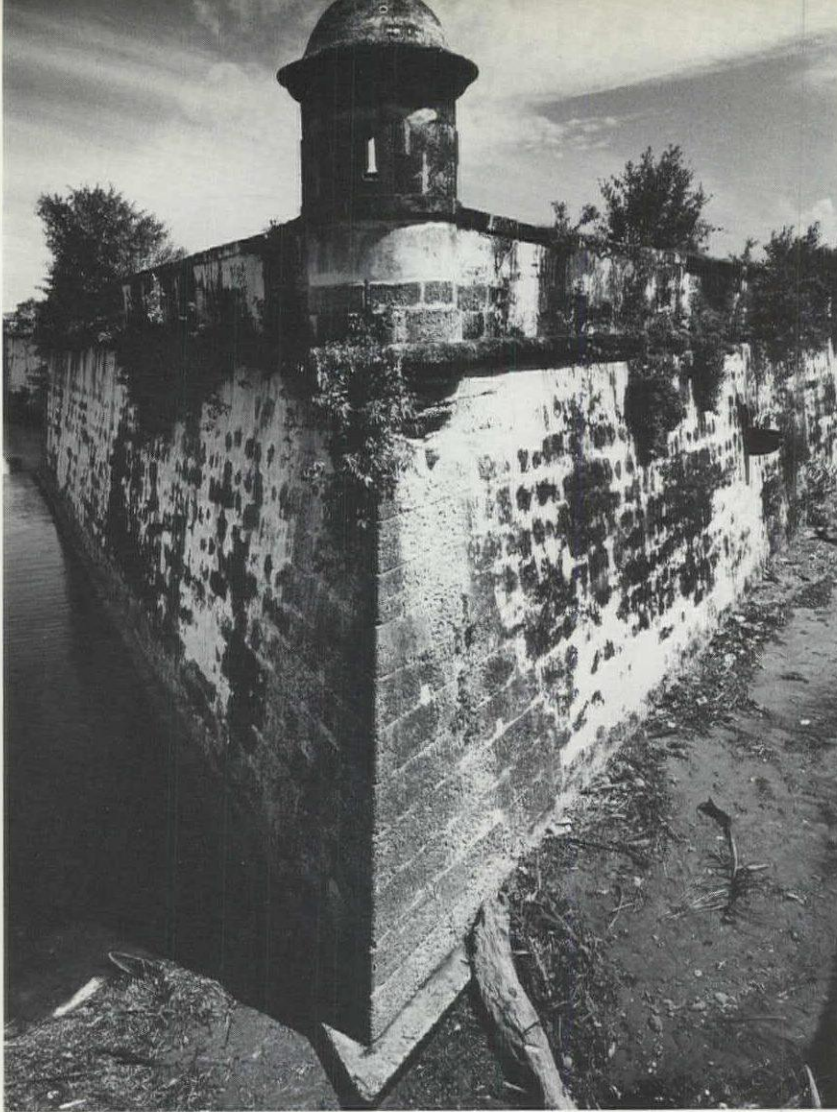
Following a Monday inaugural session, the congress proceeded into five working commissions, or seminars, on problems of 1) Urban Expansion, 2) Conservation of Urban Areas, 3) Rehabilitation of Urban Areas, 4) Redevelopment of Urban Areas and 5) Creation of New Areas. Leonard Currie, AIA, dean of the College of Architecture, University of Illinois at the Chicago Circle, was elected to head the commission devoted to Urban Expansion. The working commission sessions, interspersed with social events and guided tours, continued through Thursday. Another feature of the congress was an exhibition of Colombian architecture, samples of which are shown on the following pages.

On Friday, the five commissions brought back to the plenary sessions the conclusions of their seminars in the form of resolutions to be adopted by the congress. The Latin American architects make use of such resulting resolutions, probably because their voices are heard politically and are taken seriously by their respective governments. The product of convention resolutions was not as highly valued by many of the US delegation, who instead found greater value in the basic idea of exchange of knowledge.

The following comments by two US delegates, in my opinion, summarize the majority's concern with the scope of the congress theme and the attention given it.

Said one: "To competently deal with the causes and consequences of urban degeneration are issues to which scholars and institutions have spent lifetimes addressing themselves. The assumption that some 600 architects could, within



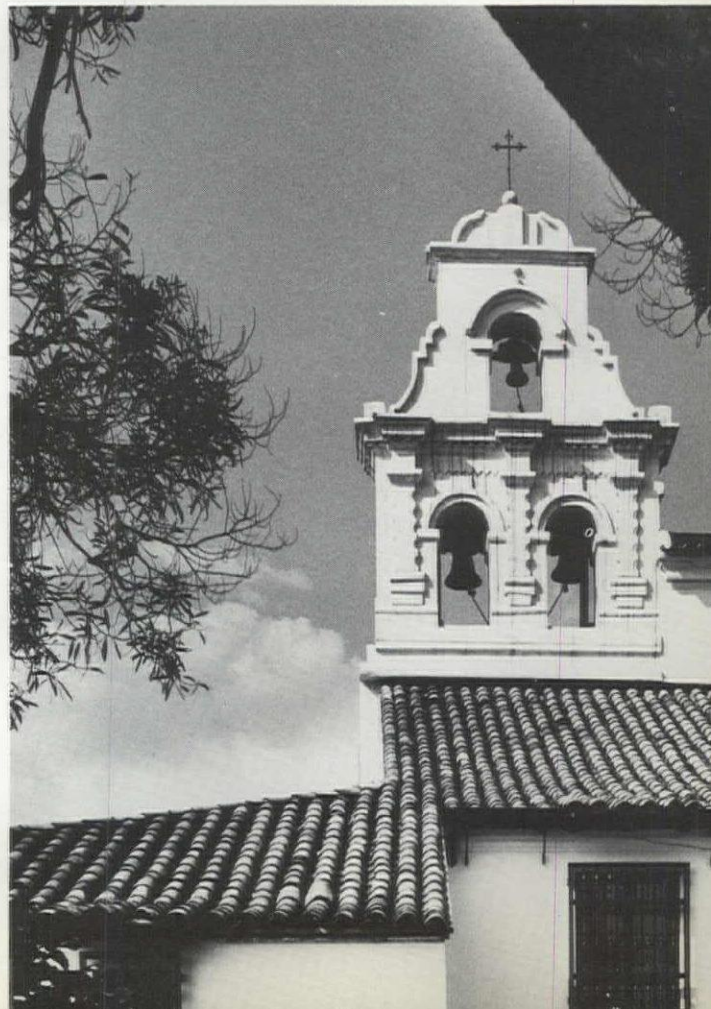


Photographs of Colombian architect German Tellez, professor at the University of the Andes, constitute a major Panamerican Congress exhibit on display at the National Biblioteca in Bogota. In 1549 an area corresponding to what is now Colombia was established as a Spanish colony. Bogota later became the seat of the Viceroyalty of New Granada. In 1810 Bogota arose, banished the Viceroy and declared its independence.

such a short period of time, arrive not so much at conclusions but rather at improved methods and techniques of resolving and implementing solutions to these issues is hard to imagine."

And another: "The five commissions put a great deal of time and effort into the preparation of a long list of statements or resolutions which were then scrutinized at tedious length in the plenary sessions. The end result was a catalog of compromised opinion concerning many important phases of urban design but so inclusive as to focus on very little."

AIA President Kassabaum addressed the congress on the closing day, and his remarks clearly bore



The architecture shown in this exhibit covers that period of Spanish rule and reflects a quiet style of design with little native influence such as is found in the other New World Spanish colonies. Churches dominate the remaining architecture of this period, and their interiors suggest a regal theme of white plaster, crimson and gold leaf. Fortresses are simple and strong, and houses are light and airy with green interior courts.

out the difference in professional emphasis between the Latin American architects and the North Americans. Kassabaum's message on the US architects' concern for "user" involvement in the urban planning process was highly commented on and applauded by the newer generation of Latin American architects, and their political involvement was the envy of many of the US delegation.

During the congress, the FPAA's Executive Committee, or Supreme Council, held a rather important conference in Bogota with official congress observers from the United Nations, the Organization of American States, the World Bank, the International Development Bank,



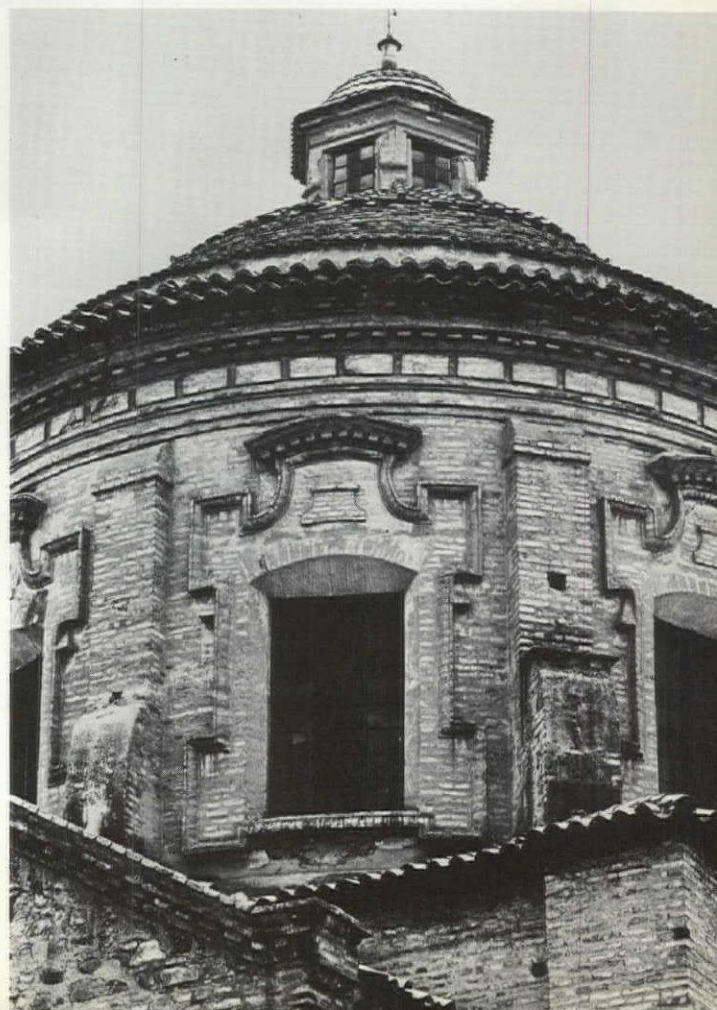
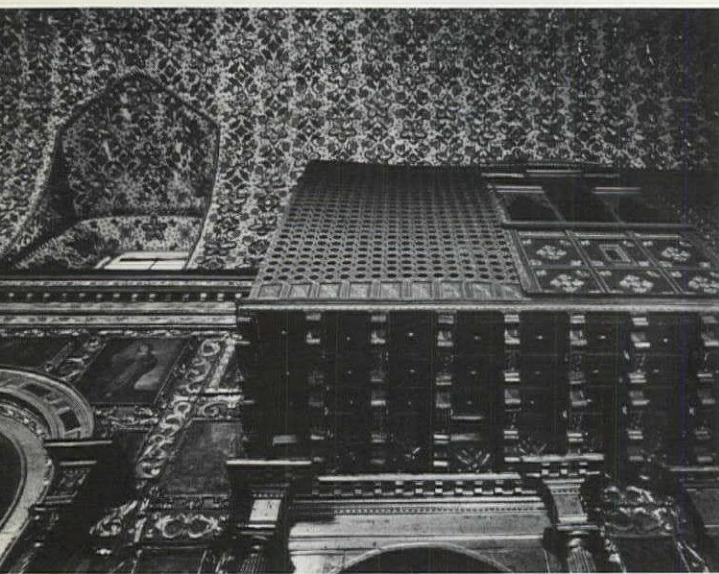


Although wealthy in natural resources, Colombia's Andean crags and dense jungles created an isolation and austerity of its early settlements that were factors in creating some of the best and most original Spanish colonial architecture—simpler and in a sense freer than elsewhere in Latin America. Clay and stone of high quality were readily available; wood was transported.

Agency for International Development and the Alliance for Progress, clearly demonstrating an area of liaison that has been rather ignored.

As a result of the Supreme Council meetings, a special subcommittee has been organized with representatives of the United States, Mexico, Uruguay and Argentina to institute certain reform investigations leading to improved structuring of FPAA and improved constructive activities. The next year of effort by representatives from these countries should begin to produce new areas of activity which will give further reason for greater activity on the part of FPAA and lead to undoubtedly more effective congresses.

The next congress is scheduled for October 1970 and is to take place in Puerto Rico under the leadership of the new FPAA president, Augusto Gautier, AIA. □



Report from a Douglas Commissioner

BY JEH V. JOHNSON, AIA

Definite architectural relevance is ascribed to findings and recommendations of the National Commission on Urban Problems, the so-called Douglas Commission, by one of its members.

Of all the study groups proposed by either the President or the Congress, few have been as important to architects as the National Commission on Urban Problems.

By mandate the commission's emphasis has been on housing. Its findings bear directly on the architect's tools, limitations and role in the design of housing and other accouterments of the urban environment. The commission's specific concern areas have been those of building and housing codes, zoning, taxation and development standards along with the supply and production of low cost housing ("low cost" meaning of low cost to the user). Reform in codes will have a direct bearing on the documents the architect works with, and commission findings and recommendations on zoning policies and standards will further shape the physical end product of his design.

The formation of the commission was announced on January 12, 1967, in a message issued by President Johnson on a "National Commission on Codes, Zoning, Taxation and Development Standards." Mr. Johnson stated the charter of the commission as twofold: "First, to work with the

The author: Mr. Johnson, a partner in the firm of Gindale & Johnson of Poughkeepsie, New York, and New York City, is a member of the AIA National Task Force on Equal Opportunities, the AIA Housing Committee and the Poughkeepsie Planning Board.

Department of Housing and Urban Development and conduct a penetrating review of zoning, housing and building codes, taxation and development standards; second, to recommend the solutions, particularly those ways in which the efforts of the federal government, private industry and local committees can be marshaled to increase the supply of low cost, decent housing."

Mr. Johnson sought out the former Senator from Illinois, Paul H. Douglas, to serve as commission chairman. Senator Douglas brought singular qualifications to the chairmanship since he is not only a great American statesman but a man who has had much experience in the legislating of urban renewal and low and moderate income housing.

Partly because of the broadness of its mandate

and partly because of the rather dry and dull-sounding title suggested by the study requirements of Section 301 of the Housing Act of 1965, which created the commission, the name was changed to the National Commission on Urban Problems.

The 16 commission members comprised a rather broadly representative group of distinguished practitioners in various fields of public and private work. There were elected officials from every level of government, federal, state, county and city; representatives of the building industry and labor; attorneys, educators and real estate experts; and four architects.

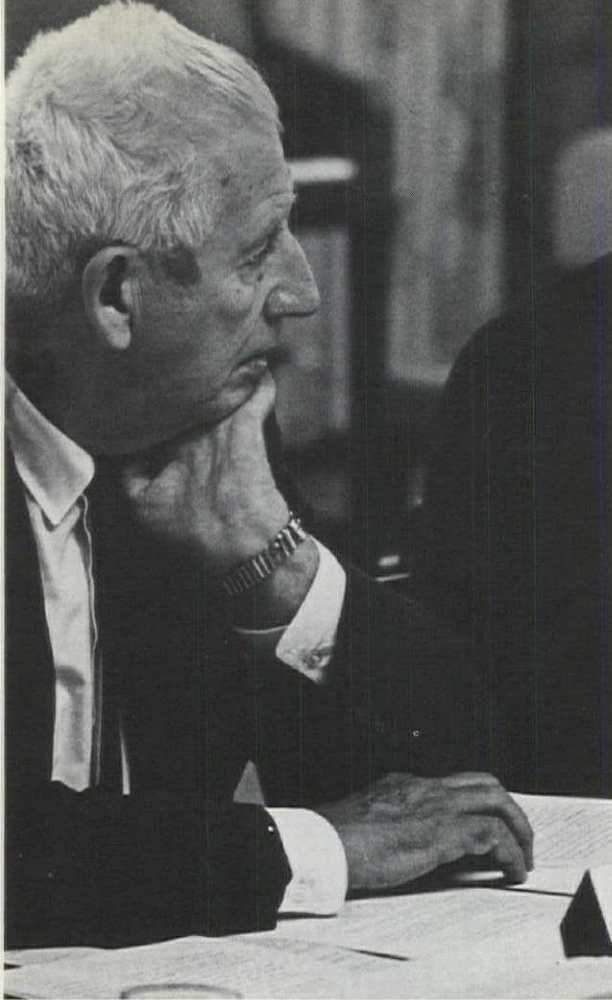
The fact that four of 16 commissioners were architects is indicative, I think, of the new way officialdom and the people are looking to the profession for workable ideas and new concepts of city life. The architects: Mrs. Chloethiel Woodard Smith, FAIA, of Washington; Lewis Davis of Davis, Brody & Associates, of New York; Ezra Ehrenkrantz, president of Building Systems Development, Inc., of San Francisco; and this writer.

The task confronting the commission in February, 1967, seemed staggering. It became clear in the earliest sessions, nevertheless, that the commissioners were going to be an active working group participating to the fullest extent, that they would not be content to merely sign their names to a document prepared by a staff of experts some 18 months hence.

Four separate techniques were devised for gathering information. The first was through a series of position papers on major subjects of the commission's charge. The second was through a staff hired by the commission from the private sector and governmental agencies. The third was to be through a series of public hearings held in key cities of the nation, and the fourth through contract studies by experts in fields selected by the commission and its staff.

The public hearings constituted what was, perhaps, the most dramatic and exciting aspect of the information gathering. Sixteen cities were chosen for the hearings and in each there was a specific emphasis relating in most cases to some problem or achievement somewhat peculiar to the selected city. It was felt that the hearings could serve a treble role of gathering information; educating the commissioners on the current status of urban renewal and housing throughout the country; and finally, performing a kind of ongoing public relations service that would bring to the public's attention the problems of the study.

The schedule was devised in an effort to give



Senator Douglas in thought during commission session.

the commissioners a chance to get to each of the meetings and have some time in between; thus the 16 hearings were spread out between May 12 and October 28. The commission went to New Haven to look at urban renewal; to Boston to talk about the production of housing for low income families. In Pittsburgh we discussed and took testimony on land taxation; in Los Angeles we talked about building codes and housing codes; in San Francisco we discussed land use and inter-governmental relations; and in Atlanta we spent considerable time talking about low cost housing. So it went, on through Houston, Fort Worth, Dallas, Miami, New York, Philadelphia, Detroit, St. Louis, East St. Louis, ending finally in Washington.

Then there came the enormous task of designing research study schemes for each of the subjects to be covered. The commission broke down into panels to organize the necessary studies and to help select the authors of the reports. There was the problem of devising the contracts, budgeting the studies and conferring with the authors to assure that the product would be as desired by the commission.

What did the commission unearth in all of this effort? The report of the commission itself may not be out until after this article has gone to press, but without scooping the report, I can appropri-

ately make a number of generalizations on those matters that have the most direct bearing on what architects are doing.

Codes: More Uneven Than Disparate

There are probably fewer codes around the country than one would think. The major cities do, in fact, have codes that are quite singular, reflecting specific local building problems or local building histories. But, generally, most local codes conform in one degree or another to one of the four model codes or are derived from them.

The problem from the viewpoint of the builder or architect is that the codes are unevenly administered, unevenly updated, modified from the original model in part, and quite often left in the bare form in which they were adopted, perhaps 10, 15 or 25 years ago.

The administration of similar codes varies enormously from one place to another, so much so that even with a similar document, building costs for the same single dwelling unit vary across adjacent jurisdictional lines by as much as \$500 or \$600. Most of the wide variations in building costs arising from alike but differently administered codes in adjacent communities are in the mechanical trades, especially plumbing.

Architects are familiar with the varying and capricious requirements evolving from plumbing jurisdictions in various communities, and the commission was told that no amount of uniformity in code writing alone would completely eradicate the often unjust and expensive way the requirements are interpreted or treated by the local inspector. Many builders and developers were somewhat hesitant to muddy the waters in their local communities by giving pointed testimony, and it was difficult to put a price tag on some of the unrealistic changes from one community to another.

Members of the Institute's Committee on Building Codes met with us on the West Coast and stated very convincingly the case for nationally respected standards that could be used for the introduction of new materials and for a more even administration of codes.

It was found, generally, that the most serious problem with building codes as they are now administered around the country is the fact that there is little leeway for technological innovation, for the introduction of new products and the application of existing codes to new building types and shapes. The commission's recommendations with regard to codes parallel, generally, the consensus of the professionals we talked to around the country.

While it is both impractical and infeasible to attempt to produce a national building code in this country, applicable to all communities and

all states, it is possible to develop nationally respected criteria for the development and updating of existing codes, for experimentation with new materials and for new building types and shapes, to establish training centers for code officials, perhaps jointly funded by federal and state governments; and to establish appeal mechanisms applicable to most communities.

Zoning: One of Many Ways

In zoning and land use, the commission noted the kind of problems that are evident all around the country; mainly, the tendency toward fiscal or uneven zoning in suburban communities and a tendency for outlying communities to exclude, by one means or another, the less tax-productive uses, especially housing for families of low or moderate income.

The commission, noting that zoning is only one of many ways of controlling land use, described and identified a number of other techniques that may be more effective in the long run. The most significant of the latter, certainly, is the device of selective public improvements as a means of establishing land use.

The commission examined the kinds of regulations referred to collectively as development standards (subdivision regulations, etc.); and in an attempt to relate all of the controls and standards that apply to buildings, it evolved a model indicating the different approaches used in each of the major instruments for regulating the safe design, bulk, size, maintenance, density and use of the building.

Its proposals are geared to evolving better integrated systems for regulating building development through building codes, housing codes, subdivision standards, other forms of development standards, zoning requirements and deed restrictions. When taken as a whole, these independently conceived documents can be made a much more rational and less contradictory kind of package.

Urban Problems: Getting Worse

The commission's view of current urban problems as a matter of necessity took a very strong social turn. The upheavals in the cities during the hot summer of 1967 made it impossible for us to regard our mission in terms of only the strictly technical aspects of our mandate; we were smack in the middle of things, quite literally.

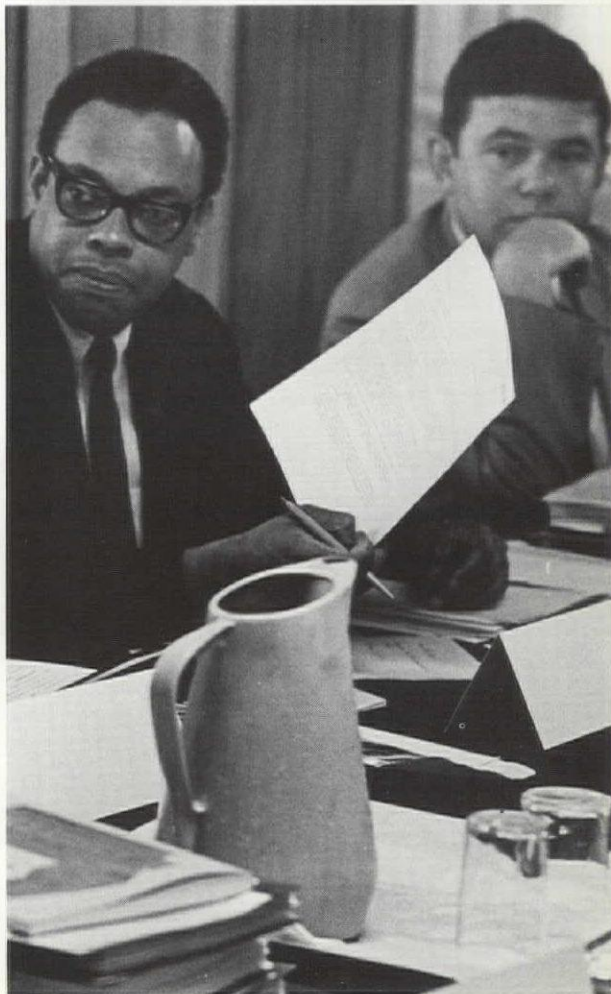
It was clear that the slums of the cities, large and small, were getting worse and were growing larger year by year. The face of housing around the country in 1967 was indeed a rather sorry one—and I think we architects are especially sensitive to both the visual and underlying social decline of so many neighborhoods.

There is very, very little housing being built or rehabilitated for families in the lowest income brackets. In the large cities, it is extremely difficult for a family toward the lower end of the middle income spectrum to obtain good housing, even when by most standards their income seems sufficiently high. There are simply too few offerings in this part of the market.

When this condition is complicated further by race, the picture becomes even more discouraging. Most of the evidence suggests that the cities in the north are constantly growing more segregated. The occasional black family that desegregates a suburb is a mere drop in the bucket compared to the numbers in the growing population of the central cities, families with only two choices—substandard housing or public housing.

Despite all of the cry about bad public housing around the country, the commission did see a number of attractive, well-designed projects. Behind each project was not only a devoted and talented architect, but a rather unique story that began at the planning stages with a mandate from the local housing authority or the federal government to create good design. It is safe to say that there is considerably more public conscience

Jeh Johnson, flanked by Ezra Ehrenkrantz, makes point.



about the design of public housing than existed six or eight years ago.

While Turnkey was a rather new device at the time we began our travels, there was evidence that its use does not necessarily increase the standards of design for publicly subsidized housing. But this need not be the case.

It is true that the architects across the nation who have been involved in group housing have numbered few in relation to the size of the problem and the number of units now being built. The architects on the commission felt it necessary to issue a short statement on the question of design because of widely held misconceptions about design which we encountered among the citizenry and among our fellow commissioners. There is the notion that a good building will simply jump off the drawing board if the architect sits there and is pure and honest.

Design: A Simple Statement

Our statement on design is very simple and basic in its recommendations. We felt it important to infuse every section on every subject with considerations of good design and how regulatory, legislative and fiscal policies have a telling effect on the final product—the building. We tried to avoid the usual fuzzy kind of isolated addendum on how, in some marvelous way, everything should look and feel good in the end.

We concentrated instead on two points: The need for involvement of the designers at the earliest stages in project decision making and the need for time and available funds when the project is being designed in its earliest stages, long before mortgage funds are called.

On the matter of construction costs we encountered a widely held notion that there is some magic number no dwelling unit should ever exceed. Certainly, there must be limits on the money spent for any given unit; otherwise we simply won't be able to produce the quantity necessary. But at the same time, one wonders what standards are used for developing these magic numbers, and we think that every architect involved in housing knows how the arithmetic tends to have an unfortunate way of cranking out the building, in spite of his efforts as its designer.

As for technological innovation in the production of housing, the commission found little that was encouraging for the immediate future, like next year. There are the beginnings of many rather significant trends, but the technological revolution many have been expecting for so long to produce, magically, hundreds of thousands of housing units at a lower cost in less time, really isn't just around the corner. It will evolve as most things do in a large, very slow and sluggish industry—very slowly.

When new techniques do evolve, their use is hampered by insufficient volume, and in many cases they have been prohibited by building code requirements. In other instances, there have been hints of problems with the trade unions and with work rules. In still others, the complexity of transportation and the laws that pertain to houses as units of real estate tied to the land have further complicated the picture far beyond the kind of simple solution the public seems to expect.

Carl Koch, FAIA, who did one of the very distinguished papers prepared by architects (and there were several others), pointed out the kinds of problems that have hamstrung the evolution of technological breakthroughs. He concluded his paper by suggesting that this country simply hasn't found the breakthroughs that it wants in housing because it doesn't feel that it has the magnitude of deficiency to justify the tooling up or the massive restructuring of a large industry. The majority of people in this country seem to consider themselves satisfactorily housed.

Public policy today, though, *has* to be in the direction of providing a large supply of better housing for the ill-housed who have proportionately less political muscle, less voice and a lot less money to spend. Even the most isolated conservative would reckon this to be true if he could see it like it is in most of the worn-out hearts of our cities. Conditions there are truly bad—and chances are that examples matching the worst are not far from where many architects are doing business at this moment.

Architects, nationally, have often been charged with not knowing or caring enough about what's going on around them in their communities; not knowing enough of the political intricacies, or of the desires and hopes of the people in the communities in which they do their work; not knowing enough about the users of housing, schools and public buildings.

The charge has been leveled that their hazy and superficial sociology often gets built into buildings and that their lack of concern is generally pervasively obvious when it comes to small amenities. The architects on the commission believe that very few of these allegations are true and that the profession has more to correct in its image than in its performance.

But we would recommend to concerned architects the reading of the commission's final report and all of the pertinent special studies that were published and released as a basic review of the current problems in the cities. (A listing accompanies.) The transcripts of the hearings from the summer of 1967 are especially interesting and enlightening reading.

After seeing the really dramatic contrasts between the bright, well-conceived new commercial

and public buildings and the grim fabric of the rest of our inner cities, we are convinced that there is an enormous job for architects as catalysts in the process of upgrading this neglected remainder.

It was encouraging to see architects leading the way in many places, not just as parochial technicians but as interested, effective citizens revealing the routes toward a positive change for the better. They came to our hearings to listen, to learn and to share experiences.

In almost every case, they were among the most respected and most articulate of the local professionals we encountered. But they were, sadly, few in number, leaving one to feel that the architect's larger role as a mover and shaker in his own community is just beginning to take hold.

Whether the issue is code revision, zoning reform, community master plans, low cost housing, community self-determination, integration, new

kinds of taxes, beautification, model cities or design review, the architect should be there and make his presence felt because he—more than anyone—should know the physical consequences of these and similar public policies. And there should be several architects to argue and present advantages and alternatives.

This, it seems to me, is where the action is today. An architect on a local planning board can have a much more pervasive and telling influence on his immediate physical surroundings than normally possible through his practice. This is not just a theory; this is one of those things we have seen and touched.

When we architects are made to sit and wait for the job to walk in, site chosen, policies set, program fixed, priorities and budget established, and we are told, in effect, to "make it all come out good," our work will certainly reflect the trivial nature of our involvement. □

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No.:	Titles, Authors, Number of Pages:	Order From, Order No.:	Price:
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A New Approach to Code Problems

BY DAVID M. PELLISH, AIA

A proposal for a more comprehensive approach to not only the problem of building codes but to all inhibitions on design and innovation.

The building code problem can be solved, but only by going to the root of the matter where all code standards affecting physical development are promulgated, adopted, amended and enforced.

A solution directed toward the entire system—and one will be offered here—can also suggest answers to the problems encountered with zoning ordinances, housing codes, subdivision regulations, health and fire codes and mobile home ordinances.

The search for rationalism in building codes must be more wide-ranging than the futile efforts made during the 50 years since Commerce Secretary Herbert Hoover told the Congress: "Systematic measures of cooperation have been set in motion by the appointment of a committee to formulate a standard building code . . . as varying regulations in force in hundreds of different mu-

The author: Mr. Pellish, who holds master's degrees in both architecture and city planning, served as assistant director of the National Commission on Urban Problems. He is currently executive secretary of the Housing and Technology Panel established by the Department of Commerce Technical Advisory Board and jointly sponsored by the Departments of Commerce, Housing and Urban Development, and Defense.

nicipalities . . . impose an unnecessary cost upon building of from 10 to 20 percent." A model code was actually promulgated under Hoover's direction, but that noble experiment failed.

We would not be in a code morass today, it is often maintained, had this early effort succeeded. But if the solution to the problems of the building industry and the consumer (who suffers most) were to be found in a model building code, it would have to be said that we are all but home free. For we have in this country four widely respected model building codes, contemporary versions of the Hoover prototype.

Aside from differences in format and some subjects, such as fire safety, these models are in general agreement with one another. But their existence has not resolved problems at the local level, as is revealed by a recent survey of code-enforcing cities and towns with populations over 5,000.

The survey, conducted by the Census Bureau for the National Commission on Urban Problems, found that 67.2 percent of the 3,273 cities and

towns with building codes place major reliance on the model codes.

This might have been extremely encouraging had the local officials not been asked a series of detailed technical questions. These queries were intended to determine how closely the communities actually conformed to the standards and related procedures of the model codes. It is to be remembered that three of the four model code groups recognize that changing technology and local conditions require periodic adjustments in code standards. They therefore maintain a formal practice of adopting amendments on an annual basis and issue completely new publications every three years. Codes are far from being static documents; indeed, rapid advances in technology can make them obsolete inside of five years.

And yet the Census Bureau code survey discovered that not even a sixth of the communities was closely following *updated* model codes.

To illustrate, let us examine the questions and replies related to technical standards that have been accepted by the model code groups. Some of the survey queries of the local officials pertained to non-loadbearing stud partitions. In spite of the liberal standards of the model code groups, 43 percent of the communities prohibit 24-inch spacing of 2x4s in these partitions and more than a third ruled out 2x3s for such use. Some of the other questions concerned such items as plumbing trees and plastic tape and elicited the findings that close to 40 percent of the local codes prohibit plumbing trees while the use of plastic pipe in drainage systems is ruled out by over 60 percent.

It can be concluded from this and other survey findings that the existence of model codes will not resolve the key issues. Nor will the existence of a single national code.

A Problem of Deficiency and Abuse

The target is missed completely when all the discussion centers on a national code. What is needed instead is a new, more encompassing approach to the code problem, the essence of which resolves around two critical points:

1. The absence of an authoritative instrument to which all sectors of industry and government can look for definitive technical findings based on incontrovertible scientific methods, and
2. Local abuse of police powers that have been delegated by the states to promote health and safety through code enforcement. This abuse is manifested by judging purely technical matters in the political arena where conflicting and competitive interests have the power to block progress

and are sustained by the arbitrary decisions of technically incompetent public officials.

To meet the first of these two points, it is proposed that an authoritative institution be established which would be responsible for five code and technology areas:

- Development and updating of standards affecting all building materials, including test criteria and test methods
- Development and updating of standards for use in local building codes
- Evaluation and acceptance of new building products, equipment and construction techniques
- Promotion and coordination of research concerned with building technology
- Assembly, storage and dissemination of all technical data relating to building technology.

In discussing codes, it is extremely important to recognize the interlocking relationships between building code requirements and the advancement of building technology. Without some kind of acceptance machinery in a building code system, the design professions and building material producers can achieve little progress. Those who promulgate code standards must be fully aware of all activities relating to building research and scientific evaluation of new products. Finally, all sections of the building industry must be informed of code standards which limit or prohibit the use of new construction methods and materials as well as the changing criteria that may permit technological innovations.

Building Sciences Institute Proposed

To resolve the problems with current codes as they affect the building industry nationwide, it is proposed that the National Academy of Sciences-National Academy of Engineering undertake the organization and establishment of the proposed institution which for discussion purposes can be called the National Institute of Building Sciences. The institute would be responsible for bringing together all groups currently engaged in activities in the five listed areas relating to standards and building technology.

The academies, it must be emphasized, would not engage in any of these operations but would establish the ground rules for a nongovernmental institution which would command the respect of both industry and government.

Institute operations would be directed by a council representative of all building industry sectors, government levels and the consuming public. The critical feature of the council, which would have to be established early, is that no one sector, least of all government, be permitted to dominate the institute.

Recognizing the roles of such institutions as the United States of America Standards Institute,

the American Society for Testing Materials and the National Bureau of Standards, the council would assign specific areas of responsibility to such organizations within the framework of the proposed system. Additionally, other institutions and laboratories would be accredited in a decentralized system geared to function regionally.

The base of all activities would reside in a series of technical committees composed of experts assembled from all sectors. Each technical committee would be responsible for activities relating to a specific subject area. Where appropriate, subcommittees would be formed to consider specific subjects requiring detailed investigation and consideration.

Members of the permanent technical secretariat of the institute, with the responsibility of coordinating and expediting all work, would be assigned to each of the technical subcommittees to provide necessary staff support. The staff would not participate in decisions of the respective technical committees.

One burning question: From which sources will the institute receive financial support? It is proposed that Congress provide initial funding assistance toward its establishment. But once institute work is underway, all sectors of the building industry would subscribe to its services. Also, fees from industry innovators would be required for product evaluation.

While the institute is not intended as a competitor to publishing institutions, bulletins would be issued from time to time to apprise of all developments in building technology.

Will Local Government Conform?

Assuming the establishment of the institute proceeds and the initial hurdles surrounding its primary missions are overcome, we must return to the second of the two critical points relating to current code problems, i.e., the abuse of power at the local level. Can local governments be required to abide by the findings of a purely technical institution?

We must anticipate that several actions will be undertaken simultaneously. The state governments, which delegated to the communities the power to adopt and enforce building regulations, must adopt necessary changes in their current approach. Enabling legislation must be modified to require that communities enforcing building codes conform without deviation to the standards of the proposed institute.

It must be pointed out that no suggestion of a national code has been made here. The focus instead has been on standards—administrative approaches can vary from community to community to meet particular needs.

The states could also assist communities

through in-service training programs for building officials and through the establishment of technical agencies with staffs that would 1) advise local officials on questions of code interpretation, and 2) assist builders and design professionals when appealing local decisions with a fully staffed, technically qualified agency authorized to make such reviews.

Although local governments cannot be expected to abandon traditional prerogatives and approaches, there is reason to be optimistic. First, it is widely acknowledged that the communities lack the technical staffs and testing facilities adequate to judge the merits of technological innovations. And second, the localities need technical assistance to contend with the increasing sophistication of building technology.

The success of the Agrément System in Europe can be attributed in part to its acceptance by local officials who prefer to have critical technical questions resolved by a competent agency ready and willing to take from their shoulders the ever-present onus of wrong judgment.

In order to promote local use of institute standards, the federal government could apply leverage by requiring communities receiving assistance under programs such as public housing an urban renewal to eliminate requirements which exceed those of the institute. Moreover, the federal government could see to it that the multitude of technical requirements developed by its own many agencies conforms to institute standards.

An Aid to the Building Industry

The institute would help the building industry in numerous ways. Instead of spending untold millions for product acceptance in each jurisdiction, producers would obtain from the institute an acceptance certificate that would be recognized by officials everywhere. Again, the Agrément System offers precedence for this procedure. Thus, innovation would have a far better climate.

The design professions would for the first time have a single source of authoritative guidelines on materials and construction methods. It may be expected that this single source would alleviate the anxieties of data-inundated professionals in an era of accelerated technology. The success of the institute would depend upon the participation and support of design professionals who, by and large, have shied away from this area which so significantly affects their work.

But given a successful National Institute for Building Sciences, the means for communities to achieve the kinds of environments they seek would still be deficient. The building code is just one instrument in the typical community's tool kit of standards.

The designer also must conform to a vast array of inhibiting standards found in zoning ordinances, subdivision regulations, housing codes and a host of other related ordinances. Additionally, other standards that control the physical environment may not be incorporated in specific laws. The size and location of community facilities such as schools, libraries and parks are based on administrative guidelines that may vary with each new administration. Also, the technical consultants who advise city officials base their recommendations on criteria espoused by their particular professions.

By taking a more comprehensive view of these problems, it will be seen that there is, in fact, a confusingly wide range of standards affecting physical development and retarding progress. The professions are seriously concerned over the impediments of local building regulations that now inhibit their designs. But concentrating all efforts on improving building codes alone falls short of the mark. It is necessary to consider all standards affecting physical development and the framework in which they are developed and administered.

Separate and Uncoordinated Efforts

For discussion purposes, we will refer to the requirements controlling physical growth, both those found in local regulations and the unwritten criteria of public administrators and advising professionals, as "development standards."

On close examination, it can be seen that the various disciplines concerned with physical development have carved out separate niches in the loose framework now controlling urban growth. Building inspectors and a variety of engineers are concerned with building codes. With the assistance of attorneys, city planners have assumed the responsibility for developing zoning standards. Housing code requirements have been promulgated primarily by health experts. National professional organizations such as the model building code groups and the American Public Health Association concentrate their efforts on distinct segments of current regulations. In some areas, such as subdivision regulations, it is difficult to associate any group with criteria development.

In view of the dedication of professionals who labor from year to year to improve technical standards, it is all the more ironic that their activities continue to be carried out in separate, uncoordinated fields of endeavor. Are such activities so unrelated as this would indicate?

To the contrary; there are threads of commonality running through this complex patchwork. For example, one of the primary legal justifications for local building regulations is the necessity to provide adequate light and air. New York

City's first zoning ordinance was developed because tall office buildings were blotting out the sun. The size and configuration of the building envelope, as defined by building codes, also are intended to ensure light and air. And housing codes, which specify minimum window sizes, deal with the same subject.

It would appear to the casual observer that the building and housing codes and the zoning ordinance each has distinctive but interrelated functions with respect to a common objective, light and air. But assume the following situation: A one-story dwelling is constructed with windows of required size and with the required sideyards. It is adjacent to a vacant lot and soon afterward a large billboard is installed on that lot. From that point on, natural light is denied the rooms facing the sign. Although the dwelling had complied with the regulations, something fell through the cracks.

There is at present no system for evaluating the interface between the separate and distinct codes and ordinances that control physical development. If they have common objectives they should be seen as a single body of requirements.

The Housing Code and the Slums

Another example illustrates a most serious problem. The housing code is considered a primary weapon against the spread of slums. Such regulations require proper maintenance of existing buildings, prescribing standards that are oriented inward. The requirements for proper exterior maintenance are few. Of even greater significance is the conspicuous absence of regulations governing adjacent property having uses other than housing.

Slums contain many such uses, from dilapidated stores to junkyards. Is it reasonable to expect housing codes to prevent blight when they have no application to nonresidential uses which also affect the neighborhood environment?

An examination of codes and ordinances will suggest that common threads can be found in other fields. They include requirements for access and egress, occupancy, water and air supply, water and air pollution and fire safety.

There is general agreement that the urgent environmental problems of our cities require radical measures. Designers and builders must be permitted to utilize innovations now inhibited by all types of local codes and ordinances.

It is impossible to expect any single profession to apply its particular expertise in isolation from others who are also engaged in the urban endeavor. It is absurd to expect that a particular tool, such as the building code or the zoning ordinance, is capable of controlling community development without providing a mechanism for

dovetailing its criteria with other development standards. And it is ridiculous to expect builders and professionals to continue to waste inordinate time applying from one bureau to another within the same jurisdiction for plan approvals.

Institute of Environmental Sciences

As one approach to overcoming these difficulties, it is proposed that activities affecting the development of standards relating to the urban environment be coordinated by a nongovernmental sister entity to the National Institute of Building Sciences—a National Institute of Environmental Sciences.

The activities of this institution, which would also be organized by the National Academies of Sciences-Engineering, would be closely coordinated with the Institute of Building Sciences. However, in contrast to the latter, which is geared to the physical aspects of constructing buildings, the Institute of Environmental Sciences would be responsible for the development of standards for the life that goes on in and around buildings.

There may be overlap between the two institutes. Housing codes, for instance, specify minimum floor areas for each occupant of a dwelling. Recognizing that such a regulation affects the way the dwelling is constructed, but noting also that it is concerned primarily with human needs, it follows that the Institute of Environmental Sciences would be responsible for programs to determine space needs in human occupancy.

The institute would also be concerned with such problems affecting the urban environment as minimum density standards, water and air pollution and air supply systems. It would draw from a broad range of disciplines involved directly or indirectly with the environment. For example, determinations of user needs would be conducted by experts in such disciplines as social anthropology, medicine, psychology and sociology.

As proposed for the Institute of Building Sciences, it is anticipated that a permanent secretariat be available to work with technical committees in each subject area. Research in all fields related to the social environment would be coordinated through the institute and findings would be distributed to all relevant sectors of government, the professions and private industry.

It would be presumptuous to assume that the foregoing represents a panacea for which our cities urgently cry. Pressing social problems cannot be solved through these mechanisms. But if the nation undertakes a serious commitment to improve its cities, new tools will be needed. It is suggested that the proposals made here would provide an appropriate framework in which the various professions, institutions and public agencies can achieve the common objective. □

They Say It with Marble

Eleven sculptors from five nations chiseled away in unison in Vermont recently at an international sculptors symposium, carving clearer the trend back to more use of art with architecture.

With no roof over their studio to dwarf their imaginations, the artists let their fantasies soar and in two months had transformed 227 tons of marble into 11 pieces of art—the heaviest one weighing almost 40 tons.

Their temporary workshop in Proctor, home of the Vermont Marble Company, had other advantages: a network of electric and compressed air lines laid in to make power tools available at each sculptor's worksite; tools designed to specifications by the marble company's toolmakers; and industry

personnel to assist with information. All of which is a start to bridge the gap between art and technology and a new impetus to the use of sculpture in construction and architecture.

To the artists, their work indicates yet another course, one toward better international relationships through the universal language of art. With this in mind, a handful of European sculptors formed the nonprofit Symposium Europaischer Bildhauer in 1959, hoping to inspire artists the world over to create in togetherness.

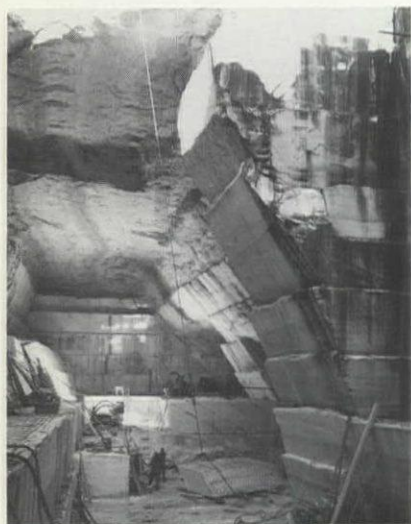
Their monuments to coexistence are now found in Austria, Israel, Japan, Canada, Yugoslavia and Czechoslovakia. And then there's their message by the Brandenburg Tor, a sculpture that went up si-

multaneously with the Berlin Wall.

One of the organization's prime initiators, Karl Prantl of Austria, was among the participants at the Vermont symposium. Others were:

Janez Lenassi, Yugoslavia; Yasuo Mizui, Japan; Erich Reischke, Barona von Sartory and Herbert Baumann, Germany; Victor Rogy, Austria; and, from the United States, Kenneth Campbell, Minoru Niizuma, Phillip Pavia and Paul Aschenbach, who was also director and coordinator of the symposium.

Sponsors were the Vermont Council on the Arts; the National Endowment for the Arts, which with a \$10,000 grant covered administrative, maintenance and travel expenses; and Vermont Marble, which provided the stone, tools, equipment and work space. □



Up go the marble slabs from 350 feet below the surface of hilly Vermont.



Pavia, Aschenbach and Niizuma talking in shape, color, grain and grade.

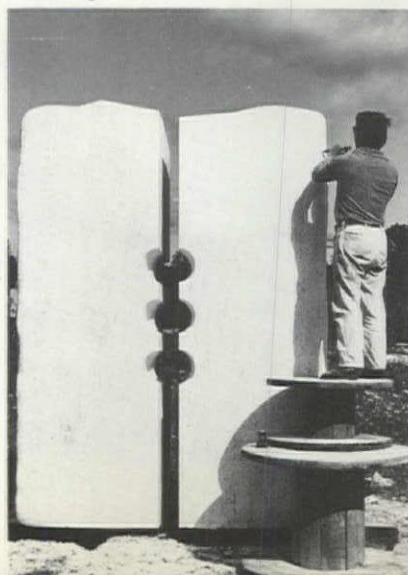


Campbell carving on base of his 18-foot tall series of balanced columns.

Prantl polishing with power tool; Rogy's 15-ton monolith with cone.

Lenassi chipping on his stone, split centrally. Surface is honed within.

Niizuma checking. For an art-with-technology future, no end's in sight.



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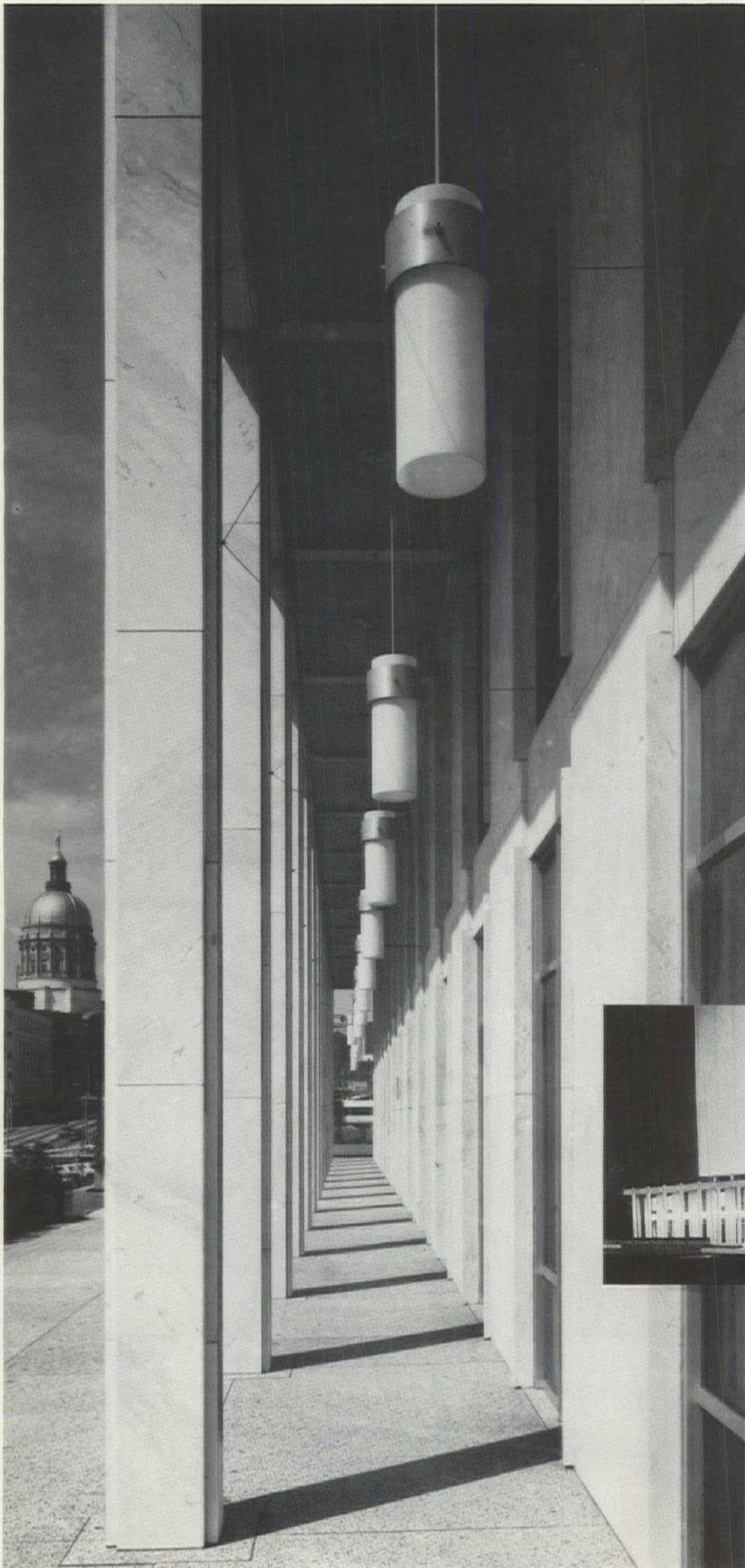


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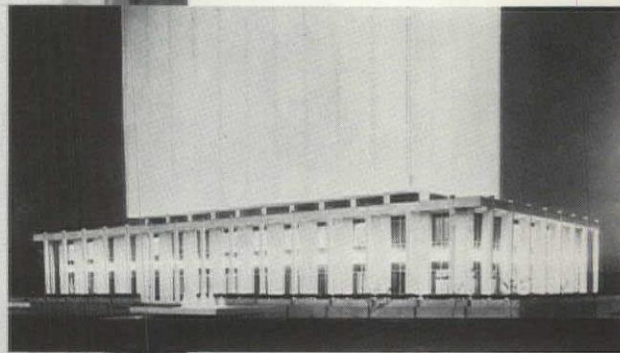
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Books

Land of Urban Promise: Continuing the Great Tradition. Julian Eugene Kulski. Notre Dame, Ind.: University of Notre Dame Press, 1967. 282 pp. \$13.50.

In this profusely illustrated and literate book, urban planning consultant Kulski* leads the visually oriented reader to a great design question of today: How does one bring harmony and order, human understanding and enjoyment to the Northeast Megalopolis of the United States?

His special words "synoptic" and "conspicuous" give a hint of Kulski's preference for that which is visible and that which unifies. The clarity implied in this approach is fully demonstrated by his account of the historical development of urbanization in America. It is fascinating to follow the growth of the Eastern Seaboard as it was first tied together by coastal ships, then by stage coach on the Boston Post Road, later by railroads and eventually by superhighways.

In parallel sequence, he traces the history of urban renewal legislation—by whatever name—from the first attempts to correct the social evils of industrialism in 1865 to the Housing and Urban Development Act of 1965.

Kulski is dedicated to metropolitan centers, their animation and "attraction potential," the Lincoln Centers, the Union Stations, the highway nodes and parking problems. He speaks half-admiringly of "urban quicksilver," of an influx of automobiles in the morning and an exodus at night to the suburbs from which one is never entirely sure that they will return.

While deploring suburban sprawl, the author is not necessarily in favor of intown living. He speaks as well of Reston as of Southwest Washington. He describes with enthusiastic detail many manifestations of life in the "centrum," but he does not try to explore the reasons for people choosing homes in the suburbs as often as they do. He speaks not at all of the strip commercial developments which may well be the real sinews of the megalopolis.

* AIA member Kulski, a professor of city planning at Howard University, wrote about the World Bank, to which he is a consultant, in the July 1968 AIA JOURNAL under the title "The International Architect." He also was a contributor to the Professional Development Program presentation last November.

Altogether, however, Kulski presents us with a total view, one which is illustrated by much of our best existing work, making design on such a grand scale seems to be both desirable and achievable. L'Enfant's plan for Washington indeed has been a great example of urban design, and the star-shaped Year 2000 Plan for Washington may well point a new way to make a sprawling metropolis understandable.

The book brings us inevitably to the point of action and, unlike many others, Kulski bravely steps forward with rather specific policy proposals—"bravely" because design proposals at this scale must be tested immediately against all the forces of human nature, politics and economics.

For instance, he assumes that zoning and "controls" can continue to be effective at the local level, as though good design can be produced by saying "No." Are not incentives and rewards more likely to produce good design than controls? Some of the tools are already available in the process of developer-architect selection and design review as has been demonstrated recently, for instance, in Boston.

But to design megalopolis itself, or, one might as well say, to establish objectives for a national urbanization policy is an even more serious matter. Kulski proposes "a new power structure for the megalopolis," one for each such region in the United States. He speaks of planning and administration and he proposes a supergovernment of which counties are the constituents, not voters nor municipalities nor states.

I would raise two questions to this proposal:

1. What happens when megalopolises overlap? Should there not be at the outset an overriding federal responsibility for all the interstate consequences of urbanization? Kulski makes the excellent suggestion of an office for megalopolitan development next to the President. Perhaps a single such department should be even more comprehensive, with responsibility for all aspects of federal funding and guide lines, but leaving planning to a regional coordinating agency convened by the member governments and implementation, for the time being at least, to existing units of state and local government.

2. What are the advantages of centralized or decentralized policy direction, as applied either to politics or to design? We are seeing in the

largest cities a healthy trend toward decentralization in demands for "little City Halls" and local school boards. At the same time, the refusal of now-autonomous suburban communities to assume their fair share of metropolitan responsibilities creates pressure for the formation of some metropolitan entity. There is a question about having elections for such an entity, since the resulting confusion of voter choices on many levels might lead to voter apathy and therefore to a dangerous invisibility of metropolitan officials. But there is no question of the urgent need for planning and coordination at the metropolitan scale, most likely under the aegis of a "council of governments."

In principle, this is not too distant from Kulski's proposed entity for the megalopolis. I suggest, however, on the one hand that the phenomenon of merging urban centers is more a national (or continental) problem than a regional problem, and on the other that it is essential to leave a considerable area of discretion to the metropolitan core cities themselves where much of the sharpest thinking is now being done.

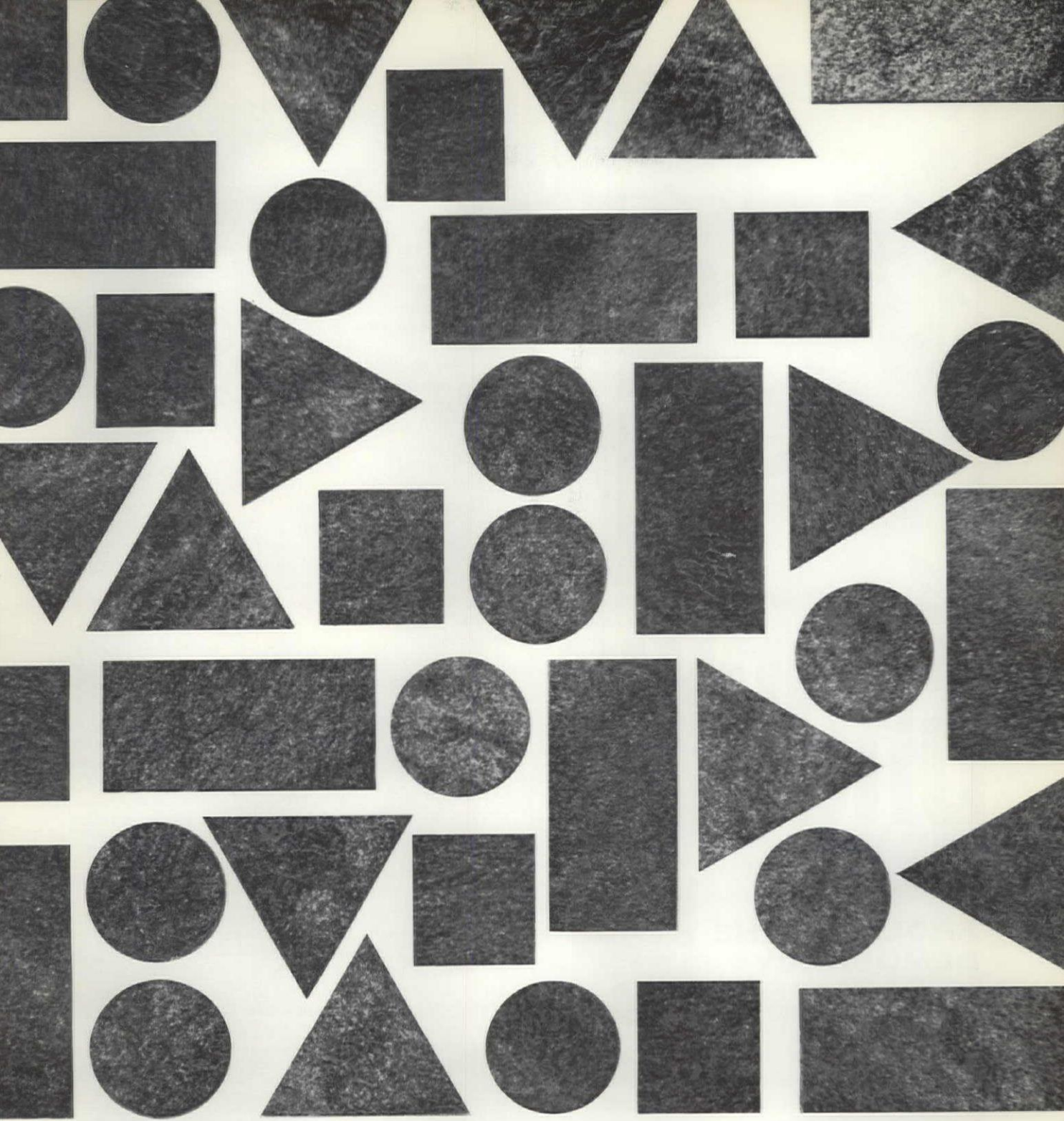
To be critical of Kulski's book, however, should be understood as the sincerest flattery. He is one of the few to meet this vital question squarely, not simply as a scholarly study but rather as a matter for action. It is more important now to get us thinking at the proper scale than it is to be perfectly wise and correct in all of one's ideas. In this sense, *Land of Urban Promise* will make excellent reading for introductory courses in urban affairs.

I especially like Kulski's statement that "a city without a past is not a city." I take this to be not so much a rallying cry for preservationists as it is a call for continuity in the growth of urban communities, meaning a continuity through time as local traditions acquire new associations and a continuity in space as the facilities and institutions of the cities are extended.

In recognition of this continuity, I think we should talk less of "plans," especially of comprehensive plans which attempt to answer all questions in a finite time within the borders of one piece of paper and to talk more of a "design strategy," which, though motivated by conscious intent, is open-ended in space and time. We are indebted to Kulski for raising these points.

ROBERT S. STURGIS, AIA

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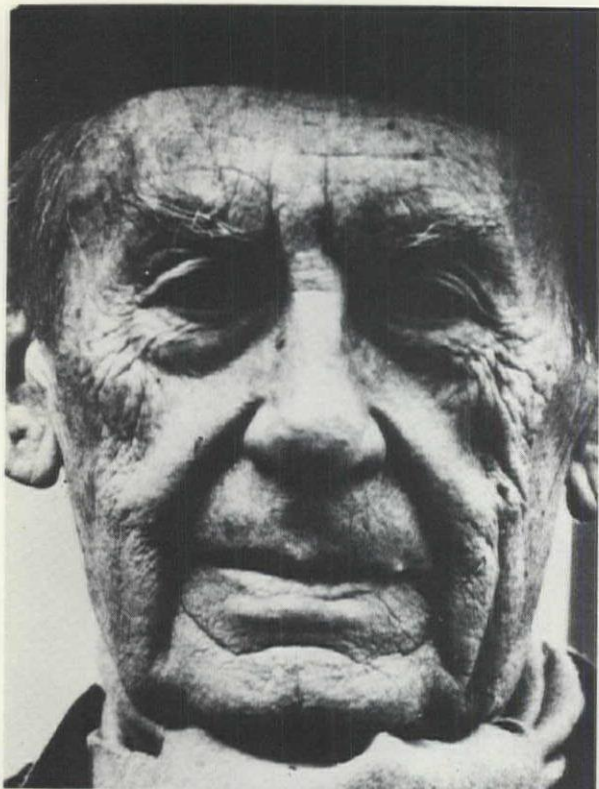
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AIA Guide to New York City. Norval White and Elliot Willensky, editors. New York: Macmillan, 1968. 464 pp. \$6.95.

If anyone wants to prove the worth of an index, he has only to bring forth this new edition of the guide to New York which was developed originally under the aegis of the New York Chapter AIA in connection with the 1967 convention. The first soft-cover edition, admirable as it was, did not have an index, and it has been difficult to use it if you were looking for a particular building and did not know precisely in what part of the city the structure was located.

Now this hard-cover edition, published commercially by Macmillan, has a splendid index. It gives an abundance of information within itself. For example, if you want to know buildings SOM has designed in New York City, there they are listed in the index under the entry for the firm. If you want to know what hospitals are covered in the book, there they are laid out under the reference for that building type.

There is also a great deal of intelligence about other matters. Under the heading "American Revolution," there are almost a dozen references, and under the heading "Air-rights building sites," there are four references. If you are a walker, you can find some 30 tours laid out for you under the heading "Walking Tours." There are other intriguing references as well; for example, those to such personages as Louisa May Alcott and Thomas Wolfe. The book also has an architectural style guide. One can tell immediately where to find examples of Greek Revival architecture or of the Italianate style or of the Romanesque Revival, etc.

Those of us who have used the guide since it was first published in 1967 know that it was unprecedented in its comprehensive coverage of New York's significant architecture, street by street. It is a book to give joy with its nuggets of information, its maps and its completeness.

Villas and Cottages. Calvert Vaux. New York: Da Capo Press, 1968. 318 pp. \$15.

Calvert Vaux's only book, *Villas and Cottages*, was first published in 1857. Containing a record of the architect's early work, it was revised in 1864 and reprinted in 1867 and 1874. In his introduction to this unabridged republication of the book's first edition of 1857, Henry Hope Reed says it was evidently a key year in Vaux's life. He "participated actively in the newly formed American Institute of Architects, to the extent of presenting a paper describing a four-story apartment house which he considered especially suitable for living in New York"; his book was published; and he became associated with Frederick Law Olmsted in the design of New York's Central Park.

Reed's essay on Vaux and his place in the history of American architecture is a rather stirring piece of writing. He tells how Andrew Jackson Downing brought Vaux to this country from London in 1850. During the two brief years he worked with Downing before the latter's death, Vaux had some valuable experiences. He helped design the grounds of the Smithsonian Institution, the Capitol and the White House in Washington, and was primarily responsible for the firm's architectural commissions.

After Downing's death, Vaux continued on his own for awhile. He moved to New York and was largely responsible for the idea of a public competition for the design of Central Park. He persuaded Olmsted

Continued on page 78

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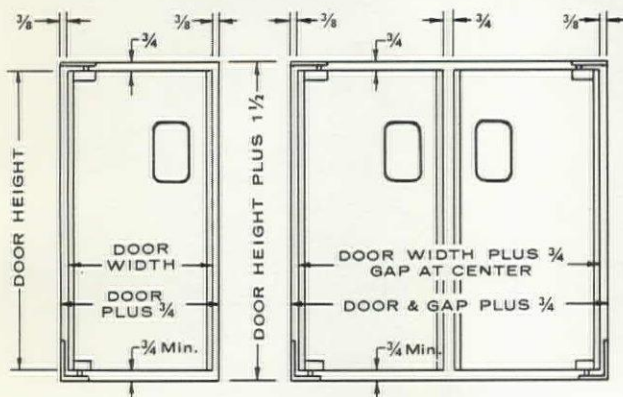
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to join him in submitting a design. As everyone knows, their design won the competition. They worked together also on Prospect Park in Brooklyn, Morningside Park in New York, Fairmount Park in Philadelphia and Riverside Park in Chicago.

After the partnership was dissolved in 1872, Vaux devoted his attention primarily to architecture and received a number of important commissions. He died in 1895. Reed writes: "The shabby treatment which New York accords those who have done the most for it should touch a few consciences. Vaux, along with Olmsted, Richard Morris Hunt, Frederick MacMonnies, J. Q. A. Ward and Edwin Howland Blashfield, belongs among the more neglected of the city's great artists."

This book is important in American architectural history because of Vaux's influence on American design. It is also testimony to a somewhat neglected figure in American architecture who has sometimes been eclipsed by the renown of his distinguished partners, Downing and Olmsted.

The book is one in the Da Capo Press Series in Architecture and Decorative Art, for which Adolf K. Placzek, Avery librarian at Columbia University, is general editor.

Dynamics of Community Change: The Case of Long Island's Declining "Gold Coast." Dennis P. Sobin. Port Washington, N.Y.: Ira J. Friedman Co., 1968. 205 pp. \$7.95.

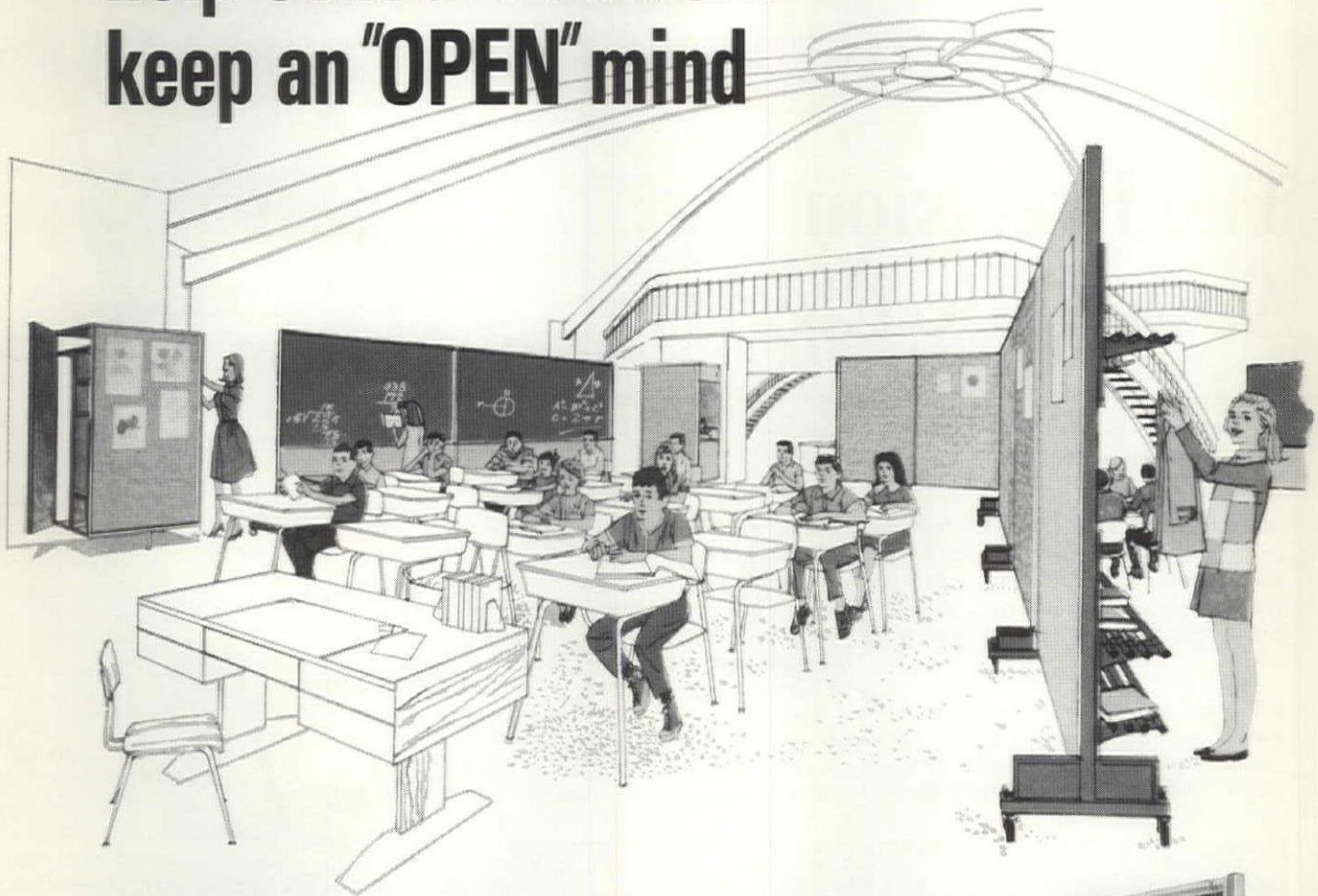
This book is about a corridor some 20 miles long which extends along the North Shore of western Long Island along the Long Island Sound. During the first two decades of this century, the Gold Coast was a community of the enormously rich. Fantastically lavish estates abounded. By the 1920s, the Gold Coast started to decline. Sobin shows how social, psychological, political and economic circumstances converged to bring about a change. Using the area of the Gold Coast as a model, he examines all the processes of community change. Other communities in the United States are deviating from their established character, and Sobin hopes his book "will add to the theory of community change by demonstrating that such change can best be understood with a broad, interdisciplinary perspective."

Systems Management Techniques for Builders and Contractors. Paul G. Gill. New York: McGraw-Hill, 1968. 210 pp. \$15.

Gill has had wide experience as a management consultant in the construction industry and has introduced systems management techniques to many builder and contractor organizations. Presently he is director of master planning for the Ingalls Shipbuilding Division of Litton Industries where he applies systems management techniques in his company's shipbuilding facilities.

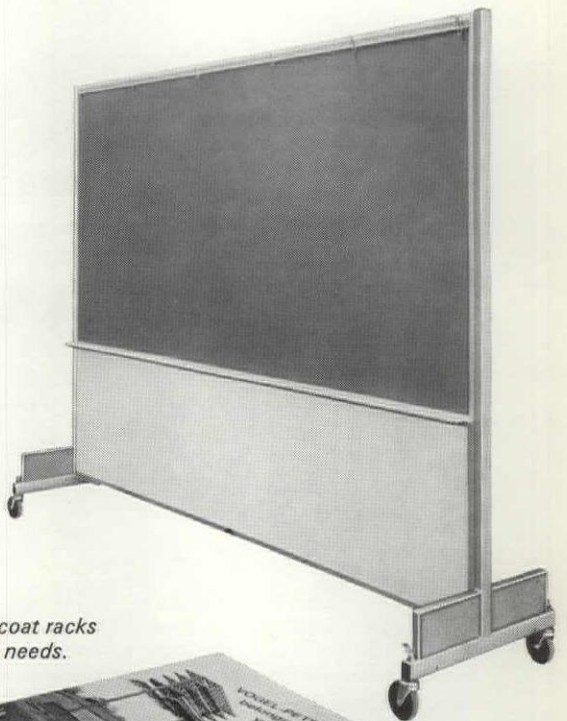
In this book Gill provides builders and contractors with practical and proven ways for using the systems management approach in their organizations. He demonstrates how a construction firm can be organized, managed and controlled, using organization charts, illustrations, business forms, job descriptions, systems and procedures, and demonstrations. Gill tells the reader how to use simple and effective systems and procedures to control day-to-day business activities and how to develop and implement construction plans, schedules and controls. □

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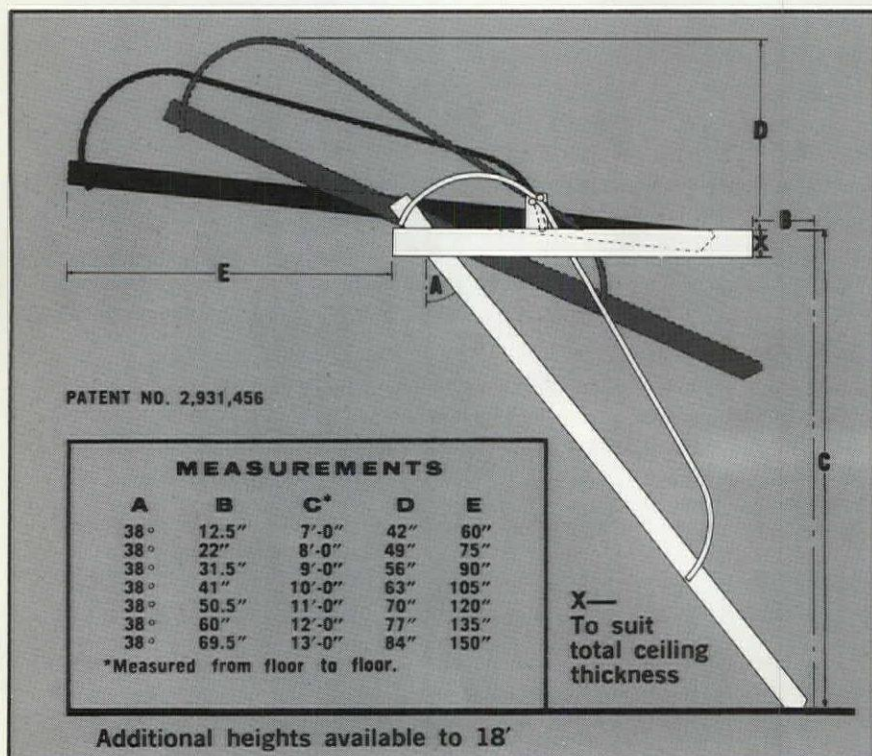
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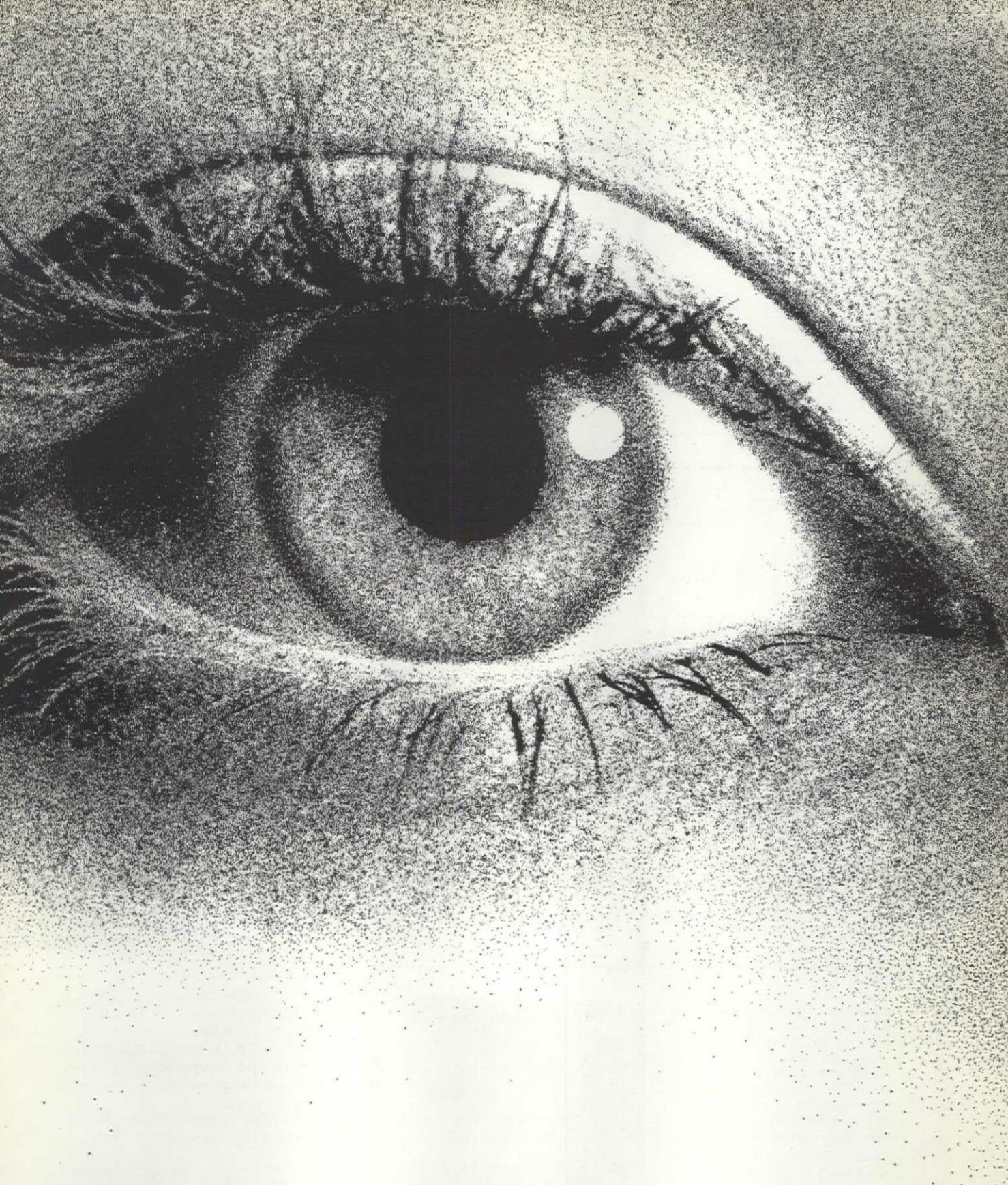
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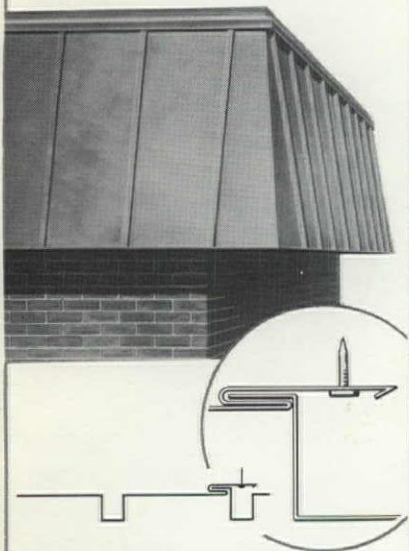


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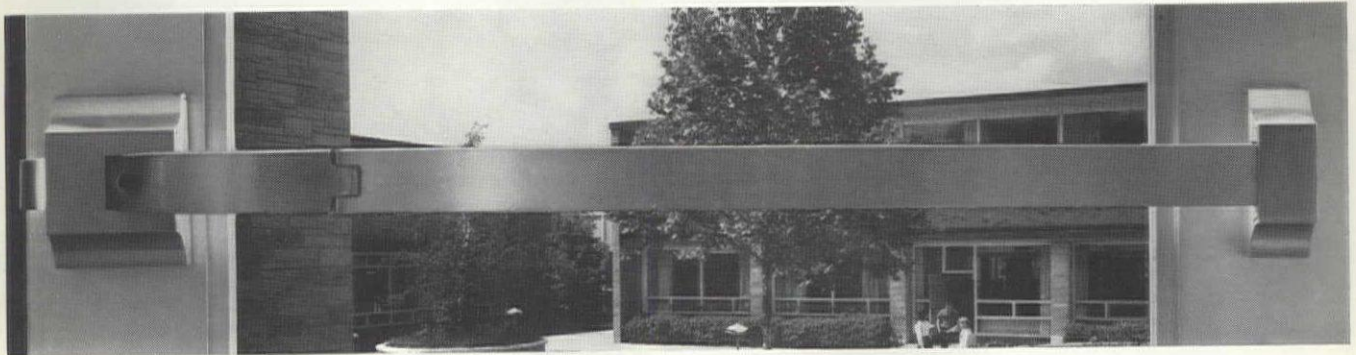
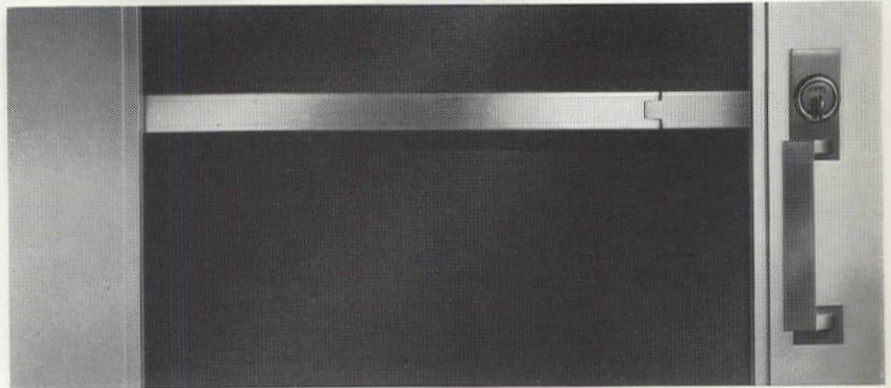
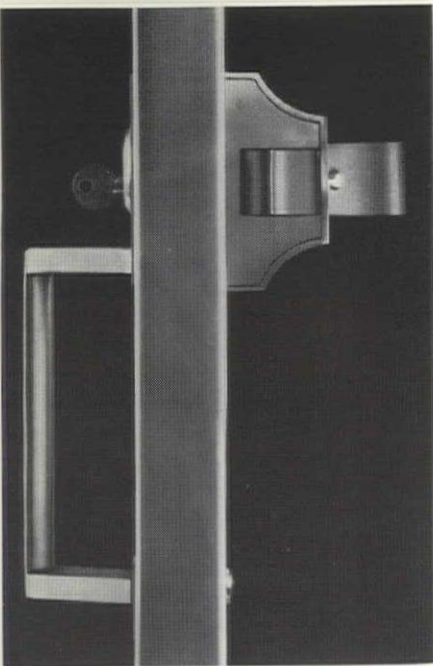
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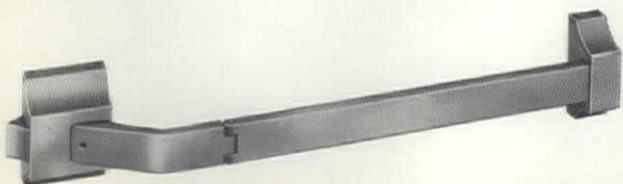
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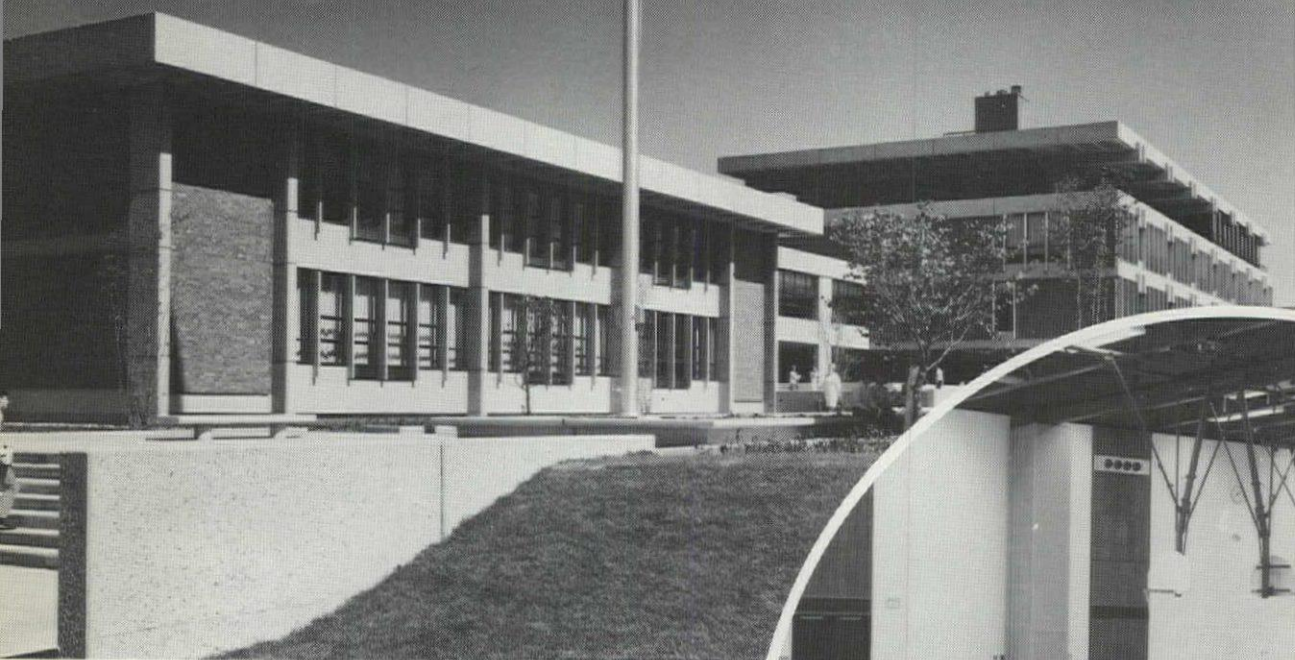
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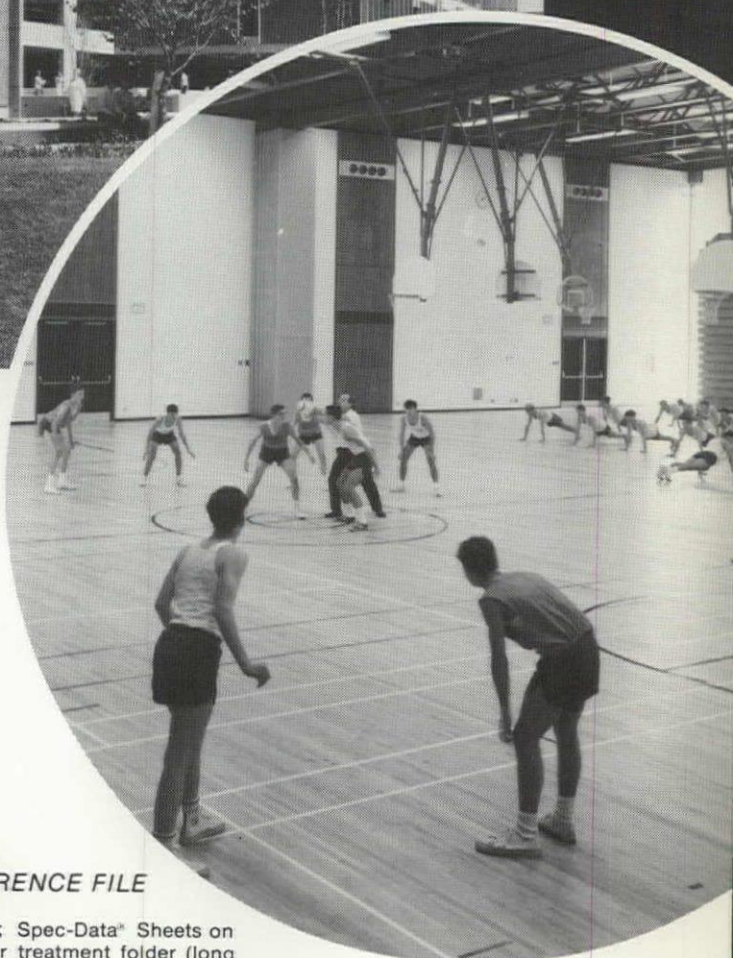
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Calendar

National

- Jan. 30-Feb. 2:** Society of Architectural Historians Annual Meeting, Statler Hilton Hotel, Boston
Feb. 2-7: American Society for Testing and Materials Winter Meeting, Denver Hilton Hotel, Denver
Mar. 17-20: United States Institute for Theatre Technology Annual Conference, Hollywood Roosevelt Hotel, Los Angeles
Apr. 29-May 1: National Conference on Religious Architecture, Chase-Park Plaza Hotel, St. Louis
June 22-26: AIA Annual Convention, Palmer House, Chicago

AIA Regional and State Conventions

- Mar. 19-21:** Michigan Society of Architects, Statler Hilton Hotel, Detroit
Apr. 24-26: Gulf States Region, Jefferson Davis Hotel, Montgomery, Ala.

Continuing Education

- Feb. 20:** Applications due, Pulitzer Fellowship in Critical Writing, a \$2,000 stipend for advanced study or travel. Contact: Prof. John Hohenberg, Secretary, Advisory Board on the Pulitzer Prizes, Graduate School of Journalism, Columbia University, New York, N.Y. 10027.
Apr. 15: Applications due, Kate Neal Kinley Memorial Fellowship, a \$2,400 stipend for advanced study in the fine arts. Contact: Dean Allen S. Weller, College of Fine and Applied Arts, 110 Architecture Bldg., University of Illinois, Urbana, Ill. 61801.
July 1-22: National Trust (British) Summer School devoted to study of historic houses, Attingham Park near Shrewsbury, Shropshire. Contact: American Friends of Attingham, Inc., 41 E. 65th St., New York, N.Y. 10021.

Competitions

- Feb. 3:** Registration due, physical planning of a tourist village in and around the town of Side on Turkey's Mediterranean coast. Contact: Turizm ve Tanitma Bakanligi, Fiziksel Planlama Dairesi, Gazi Mustafa Kemal Bulvari No. 33, Kat 8, Ankara, Turkey.

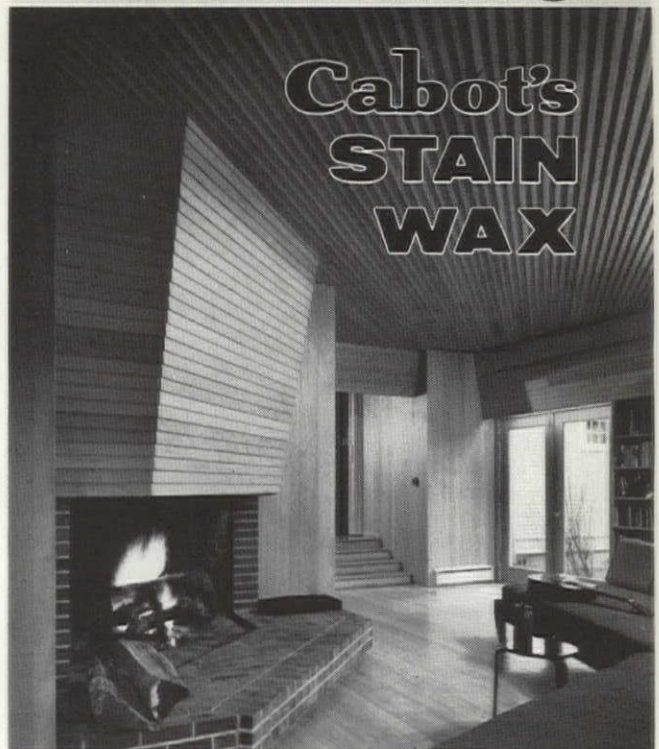
Awards Programs

- Jan. 28:** Submissions due, Reynolds Aluminum Prize for Architectural Students. Contact: Marie Murray, Awards Programs, AIA, 1735 New York Ave. N.W., Washington, D.C. 20006.
Feb. 3: Nominations due, R. S. Reynolds Memorial Award. Contact: Marie Murray, Awards Programs, AIA, 1735 New York Ave. N.W., Washington, D.C. 20006.
Feb. 14: Submissions due, initial program for the imaginative use of precoated metal, aluminum or steel, any application. Contact: Thomas A. Fernley, Executive Director, National Coil Coaters Association, 1900 Arch St., Philadelphia, Pa. 19103.

Tours

- Apr. 4:** Architecture and Gardens Tour of Japan, departing from Vancouver, B.C., 24 days, optional Hong Kong and Bangkok extensions (three days each). Homeward trip may be routed through Hawaii. Repeated in fall. Contact: Kenneth M. Nishimoto, AIA, 263 S. Los Robles Ave., Pasadena, Calif. 91106. □

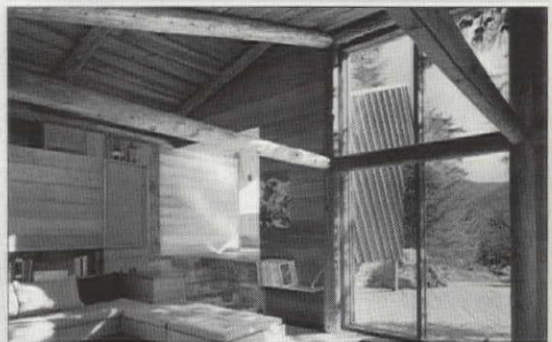
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Letters

Another Negro Speaks Frankly

EDITOR:

I wish to comment on "A Black Architect Speaks Frankly" in October. Robert J. Nash may have something to say which makes sense. But he, like so many Negroes who are being asked to speak for the race these days, makes mistakes which are costly to the majority of us 25 million American Negroes.

The first mistake is to attempt to speak for the race without being involved in media, or a profession, which provide the opportunity for the broad-based knowledge that is necessary before one speaks.

For example, Mr. Nash says: "There are many differences between the way urban blacks and urban whites live. Blacks don't need private psychiatrists, resorts, country club memberships, much less those pedestrian malls and parks that planners and architects always feel we should have."

What Mr. Nash doesn't understand is that we American Negroes are AMERICANS; and, essentially, we are no different from anyone else. Rich Negroes and rich whites are alike; poor Negroes and poor whites are alike, etc. I, for one, have not given Nash nor any of the others of his clan any right whatsoever to say what I want or need—and I can be multiplied by millions.

And one other thing: The vast majority of us don't want to be called black because, to begin with, we simply aren't black and the term is totally meaningless—which is what the bigots, Negro and Caucasian, want it to be.

A. S. (DOC) YOUNG
Editor, *Los Angeles Sentinel*
Los Angeles, Calif.

ED. NOTE: The *Los Angeles Sentinel* is described on its letterhead as the "Largest Weekly Negro Circulation in the West."

Real Estate Pages Revisited

EDITOR:

Ferdinand Kuhn's critique on the real estate sections of the general news media is obviously not a "closed matter." Instead, it is only a beginning to what, hopefully, all architects as well as editors will pick up in order to help "clean up their slums in the news columns, their blighted areas in the real estate sections, and print news and comments that matter."

It is up to the architects and their representative agent, the AIA, to aggressively pursue the news media as do commercial contractors, builders and real estate agents. It is hoped that the Institute will take the responsibility of educating not only the editors but, through them, the public.

CASWELL COOKE
Architect
New Haven, Conn.

EDITOR:

Our real estate section has long been highly regarded by professionals. I keep hearing now and then from one or the other of them about the Kuhn article which originally appeared in the *Columbia Journalism Review* wondering whether it relates a change in our operation.

The main thing we do is to produce a balanced and vigorous section on real estate and homes. At the same time, I recognize very distinctly that much of what Mr. Kuhn had to say about newspaper real estate sections in general had validity.

Yet I question whether reprinting the article a couple of years later was a very good service. It is possible that the author would write somewhat differently today than he did in the summer of 1966. In any event, it would have been nice had you at least inserted a couple of sentences about all the positive things we do that Mr. Kuhn was suggesting newspaper real estate sections ought to do.

ARVILLE SCHALEBEN
Associate Editor
Milwaukee Journal
Milwaukee, Wis.

ED. NOTE: Having the opportunity to see a goodly number of real estate sections from time to time, the AIA JOURNAL and Mr. Kuhn agreed that the article indeed was valid two years later. We hasten to point out, however, that there are some newspapers doing a fine job in this area. Among them are the *Milwaukee Journal* and the *San Diego Union*, as was suggested by the pages reproduced from these two dailies.

The *Milwaukee Journal*, in fact, took a first place and two seconds in the 1968 contest sponsored by the National Association of Real Estate Boards to stimulate creative writing. The *San Diego Union* won a third place and an honorable mention. David E. Link, editor of the Modern Living Section of the *Milwaukee Sentinel* was the overall winner, earning two first places and a third.

A Plug for Practice Profiles

EDITOR:

I always enjoy the consistent high level of contribution to the communication of architects which the AIA JOURNAL provides with good subjects and graphics.

In October I was particularly interested in a comparison of the Grad flow chart (Practice Profile) with similar documentation which we have prepared for our much smaller firm. The similarity of analysis yet difference in detail prove an effective recheck on areas of architectural practice. The exchange of this kind of information is of great value in helping to define the parameters of full service, an area I feel must be further developed soon. ROBERT D. BOLLING, AIA
Los Angeles, Calif.

Salute from Salishan

EDITOR:

We are all very proud of Salishan (Sept.), but believe me, it is always nice to have such efforts recognized.

ALEX MURPHY
General Manager
Salishan Lodge
Gleneden Beach, Ore.

A Case for Tyrone

EDITOR:

In reference to Frederick Gutheim's letter [Oct.], I regret omitting the name of Clarence Stein in my article about the New Mexico Beaux Arts ghost town. He is, of course, free to draw his own conclusions about Tyrone's place in the history of urban design. Perhaps that is for another article and another time. My interest in Tyrone was in its desolate and melancholy grandeur amidst the lonely, windy landscape. My thoughts about Tyrone were personal.

Many people in New Mexico tried to save the town. Their efforts were weak and uncoordinated, hampered by the speed and determination with which Phelps Dodge moved into new mining operations. The problem of finding a new function for the town, in its location, and the investment that would have been required to renew it, were immense. The enormity of the difficulties are no excuse for failure.

The lesson of Tyrone's disappearance is that sporadic, half-hearted efforts, no matter how well intentioned, are not going to solve real problems in the real world. That lesson, if learned, should be of more use for the future than "protests at this cultural desecration." ROBERT B. RILEY, AIA
Albuquerque, N.M.

ED. NOTE: Mr. Riley, whose article appeared in the August issue, is now teaching full time in the Department of Architecture at the University of New Mexico where he is attempting to establish an environmental planning and research program.

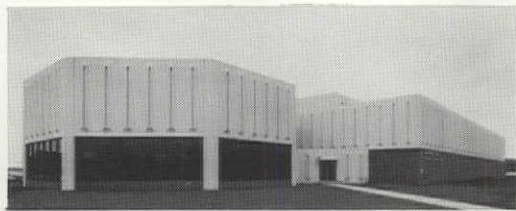
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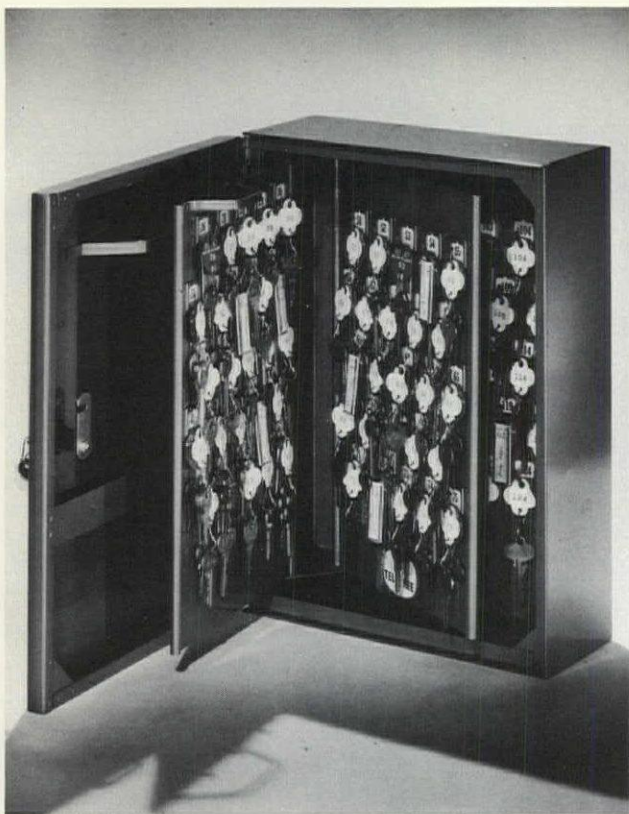
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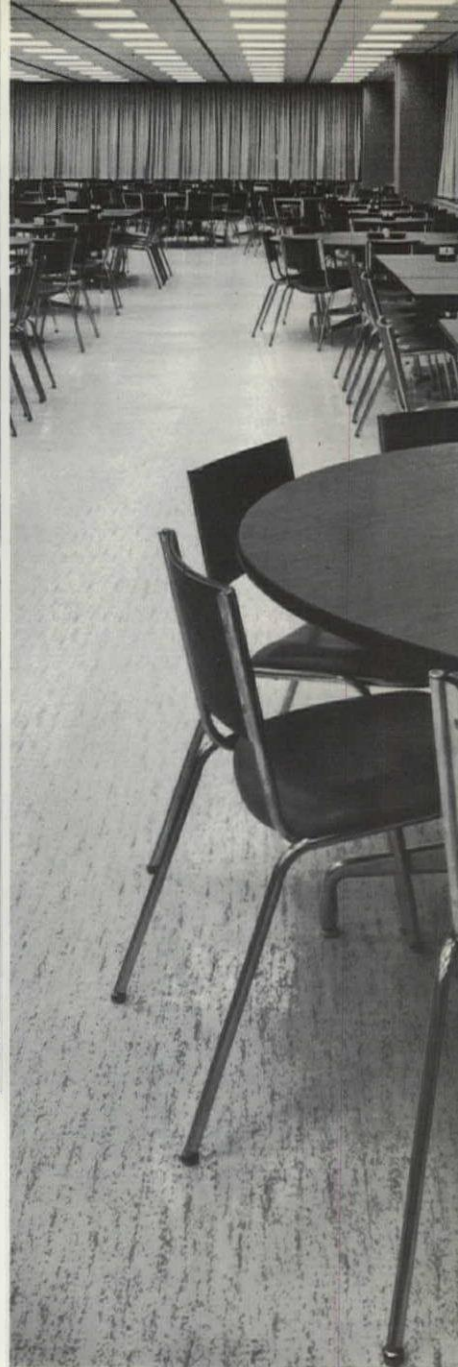
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The new headquarters building of the San Diego Gas and Electric Company rises 21 stories on a square-block site in downtown San Diego. **Architect:** Richard George Wheeler and Associates, San Diego. **General Contractor:** M. H. Golden Construction Co., San Diego. **Interior Designer:** LaJolla Interiors, LaJolla, California. **Flooring Contractor:** Raffee's Carpets of San Diego. **Structural Engineers:** Ferver-Dorland & Associates, San Diego. **Mechanical-Electrical Engineers:** Ebasco Services Incorporated, New York.

For the San Diego utility, the floor chosen was a utilitarian beauty. Armstrong Embossed Travertine Series in Excelon Vinyl-Asbestos Tile. Over 145,000 sq. ft. of $\frac{1}{8}$ " gauge, 12" x 12" tile was installed.

Tough, durable Excelon is perfect for the kind of traffic an office building gets. Embossed, it's all the better. Scuff marks go into hiding. Scratches become invisible. It's a "one-floor" 21-floor building. To achieve a design that unifies as it beautifies, Embossed Travertine was used throughout. With one exception. Smooth-surfaced Travertex™ Excelon was chosen for the computer room. Still, this one exception carries out the rich, classic look of Travertine.

The graining of the Embossed Travertine tile in the San Diego installation runs in the same direction. So there are no visible seams. Don't let the expensive look fool you. Excelon Tile is actually budget-priced. And because it's so easy to maintain, it cuts maintenance costs for the building owner.

The Excelon Tile used in this San Diego skyscraper may or may not be the right floor for your next project. The function of the building and style of architecture will surely influence your choice. Just name your requirements. Armstrong can meet them. We have different floors for different contract interiors.

The floor plan of an off'c

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