

# AIA JOURNAL

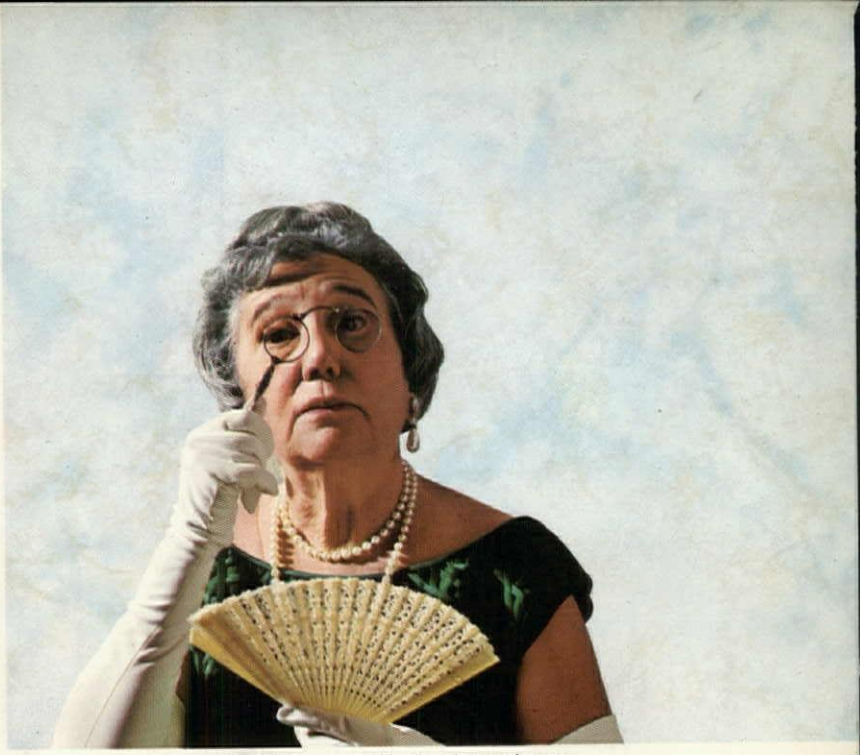
APRIL 1972







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# HOPE'S WEATHERSTRIPPED STEEL WINDOWS

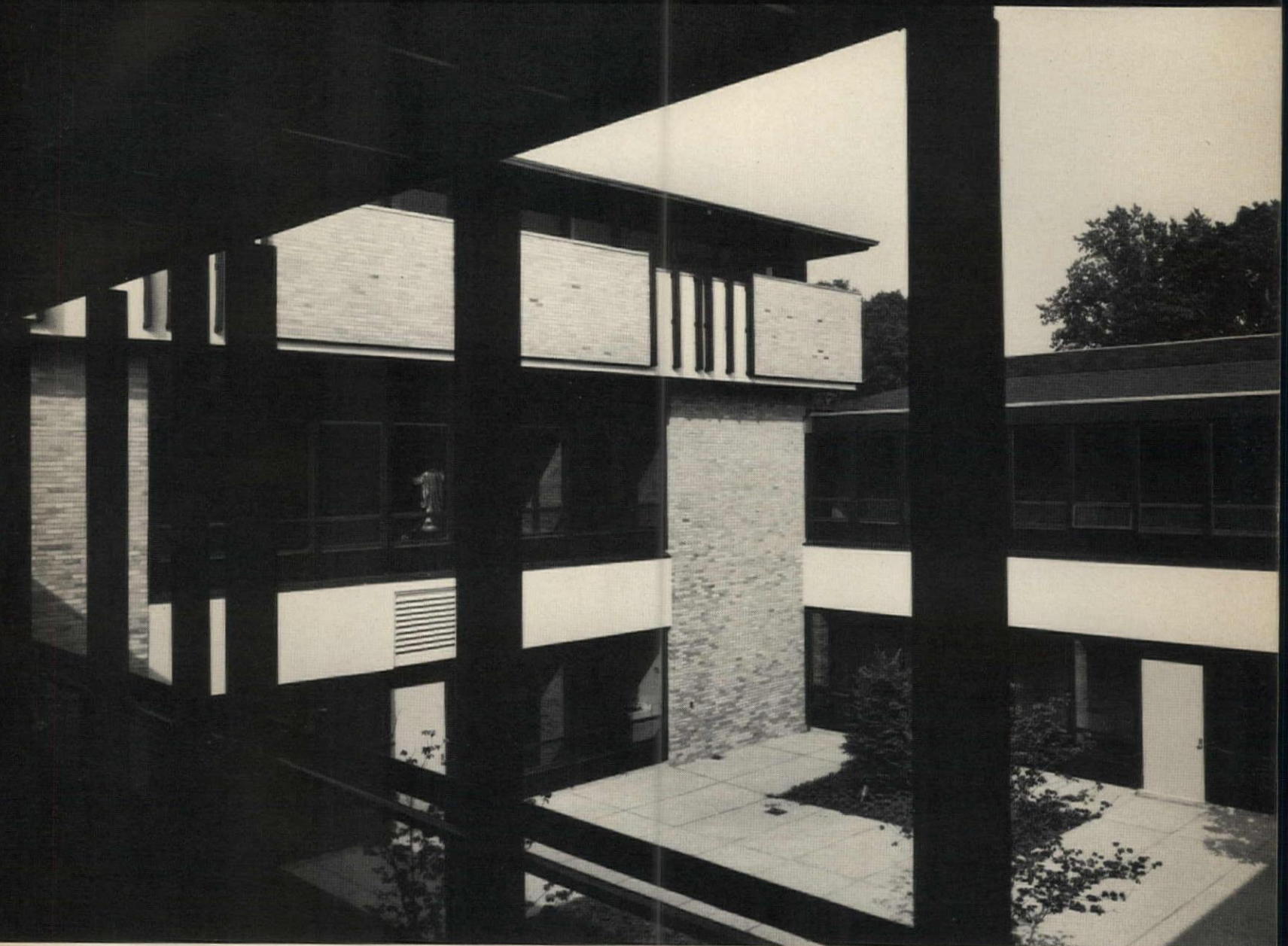


Photo by M. E. Warren

St. Martin's Home for the Aged — conducted by the Little Sisters of the Poor, Baltimore County, Maryland  
*Architects:* Gaudreau Architects, Baltimore, Maryland • *General Contractors:* R. S. Noonan Company, York, Pennsylvania

The concept of "bringing in the outdoors" guided the architect in the design of this handsome and very livable structure. Compatibility with the religious and daily living functions of the aged and a type of ventilation and hardware suitable for the occupants determined the architectural design requirements of the windows. Consideration of these factors prompted the architect to specify Hope's Heavy Intermediate Weatherstripped Steel Windows with clear lights above and hopper vents at sill. Through the large upper fixed lights, the outside scenery is pleasantly visible to both the elderly and the staff during the course of each day's routine. To obtain the desired color and the durability of a factory-applied finish, Hope's Ultra-Coat was

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## HOPE'S WINDOWS

*Jamestown, New York 14701*



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ASSOC. ARCHITECTS: Brown, Guenther, Battaglia, Galvin, New York  
GENERAL CONTRACTOR: Cogswell Construction Company, Baltimore  
GLAZING CONTRACTOR: The Southern Plate Glass Co., Baltimore





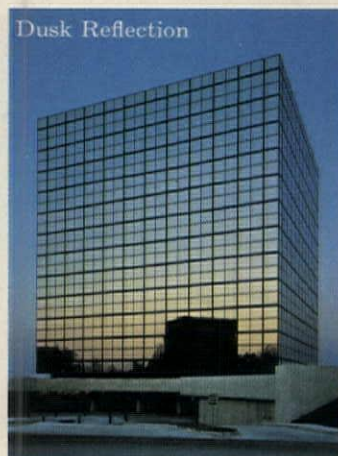
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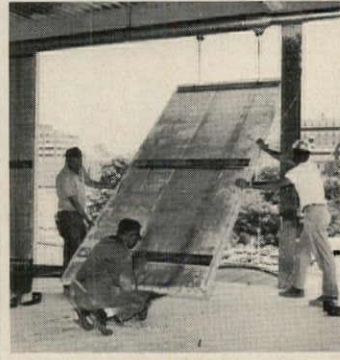
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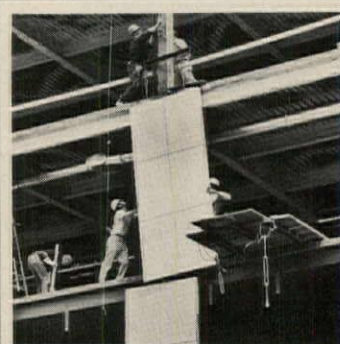
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A DAY  
WITH

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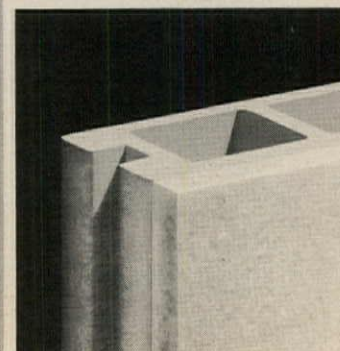
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# AIA JOURNAL

APRIL 1972

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**COVER:** Houston's Alley Theater (Ulrich Franzen, FAIA) seen from Jones Hall for the Performing Arts (Caudill Rowlett Scott). Photograph by Richard Payne.

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VOL. 57, NO. 4



## comment and opinion

YOU ALL COME TO HOUSTON, HEAR? Having been critical, particularly on this page last September, of past conventions of The American Institute of Architects, I think it is only fair to say that the Houston assemblage looks like a winner. Before getting down to the nitty-gritty of this new found optimism, however, I would like to turn over the platform to C. Herbert Paseur, president of the host chapter who, playing his role as a good Texan should, boasted of the glories of his city and his state to the Detroit convention-goers last year. Some excerpts:

"Grind your little doggies and get your swell self down to Houston. If there are any architects who don't know where it is, well, it's just east of the Pedernales. So we'll see you in May, God willing and if the creek doesn't rise! Describing Houston in five minutes is like trying to stick a Brahman bull in a gunnysack—it just doesn't go. We'll do the best we can.

"We have a number of interesting tours. The Houston Ship Channel has been declared the most polluted body of water in the United States, and we think you'll want to see this. That will be a walking tour, by the way. We also have planned the world's shortest tour, and this is of Houston's historic architecture. It's a five-minute cab drive to a building constructed in 1942 and a most distinguished structure, I might add. And we'll have what seems like the longest tour anywhere: a four-day jaunt on the Houston freeway system which is especially nice in May because all of the billboards are blossoming then.

"For the chapter party, we considered such festivities ranging from a Pedernales fish fry to a Cajun feast, and although we anticipate a few problems, we are currently scheduling a combination cattle stampede and western cookout—you rope your own cow. After dinner we will do some really fun things like bull riding, square dancing, tequila drinking and that great Saturday night sport of fist fighting. Oh yes, the dress will be black tie, of course.

The Rice Hotel, being the headquarters hostelry in a sense, deserves a few words. I guess I have to admit reluctantly that it is not the world's best. However, to make up for it, we are planning to put a bottle of bourbon in each room so you can sample that great Texan drink—bourbon and water—but just remember to bring your own water. These are just a few of the events that we have organized."

So much for President Paseur, and if that doesn't entice architects to come to Houston, nothing will. In a more serious vein, the 1972 convention is introducing a format which appears to be more flexible. For instance, while Sunday has normally been reserved solely for registration and social events, this year it will include a major address and presentation of Institute honors. More important, the program emphasizes the practice of architecture by means of a "Marketplace of New Ideas," offering numerous technical seminars, workshops, demonstrations and continuous film showings. Finally, the entire agenda has been structured so as to keep conflicts at a minimum, allowing enough free time so that convention-goers, whether delegates or not, do not have to "cut" classes in order to have some free time for sight-seeing or just renewing old acquaintances.

ROBERT E. KOEHLER

### ACKNOWLEDGEMENTS

8 — right, above, below, Richard Payne  
14 — courtesy American Revolution Bicentennial Commission  
20 through 23 — Vernacular Photo Works  
23 through 27 — Richard Payne  
28 — Joan Rogers  
29 — above left, center, right; below left, John Mazziotta  
29 — center left, Burson, Hendricks & Associates  
30 — above left, below left, courtesy Mexican National Tourist Council  
30 — below right, courtesy American Airlines  
31 — above, courtesy Pan American Union  
31 — below, courtesy Mexican Government Tourist Department  
32 — above, Richard Payne  
34 — Bell & Stanton, Inc.

41 — left, Franklin Wing  
41 right, 42 — Balthazar Korab  
43 — above, below, Franklin Wing  
44 — above, Ezra Stoller  
44 — center, Gerald Ratto  
44 — below, Norman Goldberg  
45 — above left, Hutchins Photography, Inc.  
45 — center left, Stanley Rosenfeld, Morris Rosenfeld & Sons  
45 — right, Frank Lotz Miller  
46, 47, 48 above — Chalmer Alexander  
48-49 below — George Zimberg  
49 — above, Wayne Soverns Jr.  
50 — above, Balthazar Korab  
50 — below, Wayne Soverns Jr.  
52 — Balthazar Korab  
60 — below, Ron Partridge

### NEXT MONTH

"Can Systems Building Be Better?" That's more than a mere question; it's the title of the opening article. The answer in this instance is given in the affirmative by an architect who is deeply involved in the systems approach and, using a University of Delaware student housing project as a case study, tells why it can be quicker, reduce construction cost and still enhance design.

Also in May: winners of the 1972 AIA Honor Awards with photographs, plans and jury comments; ditto for the R. S. Reynolds Memorial Award; and a portfolio of the work of one of America's foremost photographers who got interested in refractions when an advertising agency asked him to shoot a collection of New York buildings.

### ASIDES

For the architect whose last visit to Houston was during the 1949 AIA convention, or for the one who has never been there at all, Houston is bound to produce surprises. It is a much more complex metropolis than appears on the surface, as we have attempted to indicate in the companion articles that lead off this month's issue. Houston is a city, too, which is well aware that its phenomenal growth can produce environmental concerns of the same order unless there is an aroused citizenry.

For the first time in six years, the Houston Chapter AIA has cooperated in the annual Environmental Improvements Award Competition sponsored by the Municipal Art Commission. The goal of the program is to publicly acknowledge individual or commercial efforts to improve their surroundings. Awards are given for fountains and plazas, landscaping and site planning, remodeling and renovations, the use of art or sculpture around private or commercial structures—in short, almost any effort to improve exterior environmental conditions.

The sponsors point out that "It is not intended that awards be made for buildings per se except in such unusual instances as the remodeling of an old structure in an otherwise unattractive environment." The jury is selected annually from the community at large by the co-chairmen, and the certificates of merit this year were to be given by the mayor or one of his representatives at press time.

It is interesting to note, too, that the Texas Society of Architects got underway last year a massive statewide public education campaign to motivate active citizen participation in protecting the environment. Waged under the theme "Texas: Handle with Care," the thrust of the program has been completely positive, extolling the beauties and advantages of the state and urging their protection and magnification. The campaign covers seven areas of environmental concern: conservation, historic resources, transportation, health, education, housing and human resources.

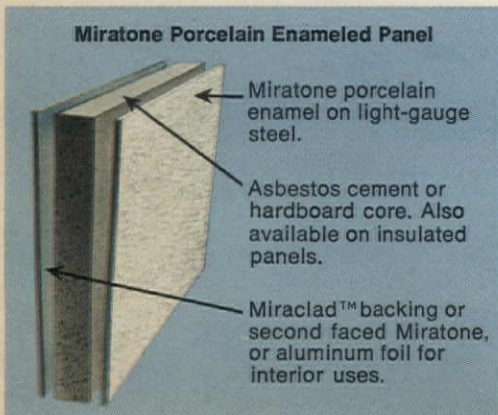
The program is an outgrowth of the Governor's Conference on Urban and Community Affairs, sponsored by the TSA in 1969, in which national spokesmen joined architects in expressing concern for the future. □





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# outlook

## Houston Readies for Next Month's AIA Convention; Mexico City Hosts Portion Too

Governor Preston Smith of Texas has signed a proclamation declaring that it will be "Architects' Week in Texas" during the time that the AIA convention is held in Houston.

The members of the Institute who attend the convention on May 7-10 will have an opportunity to participate in discussions that could help mold the nation's future. They will debate, amend and vote on the far-reaching proposals contained in the report of the AIA Task Force on National Policy (see Institute Page). The focus of the assembly will be on the task force's recommendations which include strategies aimed at insuring intelligent use of dwindling land reserves and providing for the humane rebuilding of chaotic urban areas.

Among the other topics for discussion are time of payment of annual dues and termination of corporate membership for nonpayment. Also to be debated is the matter of raising additional funds for special and unusual expenses through levying an assessment on each member. Another issue for decision concerns the structure of the Institute with emphasis upon representation of members in each region by one or more directors.

In addition to debates and decisions on crucial issues confronting the nation and the profession, the convention will be the forum for other matters of Institute business, including the election of officers.

Nominations for officers were open until March 28. As this issue goes to press, two have been nominated for the post of first vice president: William Marshall Jr., AIA, of Norfolk, Va., and Archibald C. Rogers, FAIA, of Baltimore. Hilliard T. Smith Jr., FAIA, of Lake Worth, Fla., has been nominated for secretary. Other nominations will be reported in the *Memo* prior to the convention.

Current First Vice President S. Scott Ferebee Jr., FAIA, of Charlotte, N.C., will become the Institute's president at the end of

1972. The office of treasurer, a two-year term, will continue the responsibility of Elmer E. Botsai, AIA, of San Francisco.

The keynote address, "In Praise of Diversity," on May 7 will be given by microbiologist and experimental pathologist René Dubos. Author of the Pulitzer Prize-winning *So Human an Animal*, Dubos has warned that man is in critical danger of losing his "humanness" to mechanized surroundings; he asserts that it is through design that man can adapt his environment to his changing needs. On May 8, Senator John Tower of Texas will address the convention.

Something new has been added for the '72 convention. A "Marketplace of New Ideas" will be located in the Albert Thomas Convention Center. It will provide an interesting exchange of ideas and information on the most recent development in architectural practice and the construction process. Through slide presentations, seminars and training laboratories, the marketplace will present more than 50 topics of concern to the architect, including computer systems, federal agency programs, financial management and cost accounting, planning of special environments and ecological anxieties.

All will not be business, however, and plans for social activities are bright. In addition to the Convocation Dinner, the Gold Medalist's Ball and the McGraw-Hill/Dodge Party, there will be the Houston Chapter AIA's Texas Fiesta at which time President Max O. Urbahn, FAIA, and Mrs. Urbahn will receive. A night at the Alley Theatre is also scheduled. There will be visits to the NASA Manned Spacecraft Center, a champagne citywide tour, a trip to the Bayou Bend estate and a tour by the Harris County Heritage Society.

Events for spouses will include a brunch and a shopping spree at the Galleria and a "Yellow Rose of Texas Happening" with a gourmet lunch at River Oaks Country Club, a



Convention-goers will see a bustling Houston, but Main Street lined with its live oak leads to the downtown area.

fashion show staged by Nieman-Marcus and a tour of Houston's finest homes.

On May 10, the second annual Conference for the Building Team will begin. A highlight of the reconvened convention in Mexico City on May 12-13 will be a reception by the President of Mexico in the courtyard of the famed Museum of Anthropology.

The Mexico City portion is an international event with the AIA members joined by the Society of Mexican Architects in a discussion of the city as an integral dwelling for man. Sessions will be interspersed with tours to nearby places of interest and social events.

On May 15-19, commissions from the AIA, the Society of Mexican Architects, the College of Mexican Architects, the Pan-American Federation of Architectural Associations and the International Union of Architects will convene to discuss housing in marginal zones.

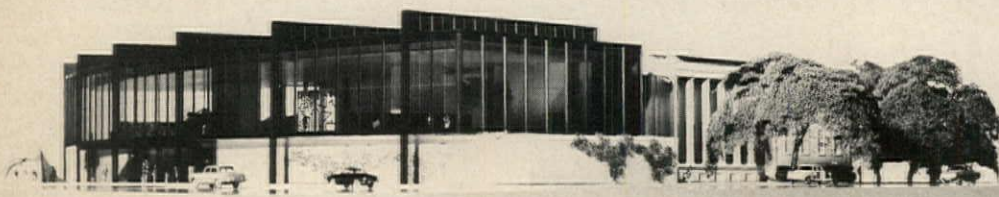
After May 13, architects not involved in the international group meetings may want to choose among five study tours to the outlying areas of Mexico and Central America for final intellectual stimulation.

### Architecture Critics' Medal, Citation

An honorary member of the Institute who once was a staffer at national headquarters and who served for a time as art director of the AIA JOURNAL has been named as recipient of the AIA's 1972 Architecture Critics' Medal. Wolf Von Eckardt, now architectural critic for the *Washington Post*, has been selected for his "continuous effort in the area of public criticism to evaluate structures, plans and programs in simple, direct language. . . ." The medal was established in

*continued on page 13*

## Houston Museum of Fine Arts' New Wing to Extend Beyond Previous One by Mies



Construction of the second and final phase of the wing designed by Ludwig Mies van der Rohe for the Houston Museum of Fine Arts has begun. Working drawings were completed only weeks before the architect's death in 1969. The wing will more than double the museum's present 70,750 square feet of space and will complete the only art museum in the US designed by Mies. The first phase of the Mies wing, Cullinan Hall, was opened in 1958. The original structure (classical facade at right) was designed by William Ward Wadkin, first chairman of the School of Architecture, Rice University. The history of the planning of the entire museum has been published by the school and will be presented as a special gift to AIA convention-goers.



1967 to "stimulate, broaden and improve the quality of architectural criticism in order to increase the public's visual perception of environmental design."

Canadian author, architect and educator Peter Collins has been named winner of the 1972 Architecture Critics' Citation for his "continuously important creative effort in critical literature."

**Soviet Delegation Praises US Highrises; Hosted by AIA Fellows and Others**

Other Soviet architects and engineers than those whose trip was reported in the January AIA JOURNAL have been in our country. The most recent delegation completed an 18-day visit to eight cities in February. Their American hosts were Institute President Max O. Urbahn, FAIA; Lewis Davis, FAIA; John



Urbahn greets Anatoly M. Dyuzhev, First Secretary, Cultural Affairs, of the USSR Embassy.

Carl Warnecke, FAIA; Carl Koch, FAIA; Howard Turner, president of the Turner Construction Company; Lev Zetlin, consulting engineer; Richard Ravitch, New York City builder; Dr. Mitchell Rosenthal, a sociologist; and William L. Slayton, Hon. AIA, Institute executive vice president.

Urbahn headed a group of Americans who visited Russia in 1970. The purpose of both tours was to open avenues of cooperation between professionals in the construction field in the two countries.

Headed by E. I. Sidorov, chief of housing and civil construction in Moscow, the Russians visited Boston, New Haven, New York City, Chicago, San Francisco, Los Angeles, Houston and Washington, D.C. While in the nation's capital, they were entertained by the AIA at the Octagon.

**A/E Procurement Sponsored by Senators, Similar Bill Reintroduced by Brooks**

Senators John L. McClellan (D-Ark.) and Charles H. Percy (R-Ill.) are co-sponsors of a bill introduced on February 9 which would require the federal government to negotiate contracts for architectural and engineering services "on the basis of demonstrated competence and qualification for the type of professional services required and at fair and reasonable prices."

Robert F. Hastings, FAIA, former AIA

president and now chairman of the Committee on Federal Procurement of A/E Services, said that the six professional societies in his group were united in support of the bill. He said that the committee believes that it is of primary importance for the government to competitively select, on the basis of qualification and ability, the best architect or engineer for the job at fair compensation rather than the one who quotes the lowest price.

A similar A/E procurement bill was passed by the House of Representatives in the 91st Congress, but adjournment came before the Senate could act. Therefore, Representative Jack Brooks (D-Tex.) reintroduced the bill he had previously sponsored on February 1. In presenting the bill Brooks said, "In the course of the next few years, thousands of architects and engineers will be required by the federal government to develop plans and specifications for the massive public construction projects that will be undertaken. Our task is to do whatever we can to secure the highest quality, the most efficient and effective service at the lowest reasonable cost. . . . We should act at once to complete this important piece of unfinished business."

**A Bicentennial Park in Every State Is Seen for Country's '76 Celebration**

To make the 200th birthday year of the US "truly national in scope," a major plan for a coast-to-coast network of parks, built on land donated to the state by the federal government, has been proposed by the American Revolution Bicentennial Commission. The park would serve as the focal point of each state's celebration and remain as a permanent residual.

David J. Mahoney, commission chairman, would place no price tag on the overall program, which will be submitted to President Nixon and Congress in the near future. Feasibility studies will determine the actual figures, Mahoney said at a press conference during the recent governors' meeting in Washington, D.C., but one estimate puts the cost at \$15 to \$25 million per park.

The plan calls for the donation of federally owned surplus land or otherwise donated sites varying in size from 100 to 500 acres. The locations have yet to be determined, but it is understood that they would be no further than 40 miles from a metropolitan area. The federal government, through Congressional appropriation with possible state sharing, would fund the design and construction of the park facilities. The respective state governments would manage and operate the park during and after the bicentennial celebration.

Each of the parks would have as its focal point a pavilion, which would remain as a permanent structure. A prototypical model designed by the architectural firm of Davis, Brody & Associates of New York City indicated that each project might include a botanical garden and aviary, an ecology center, an international exhibits center and crafts bazaar, a state crafts workshop, food and recreational facilities.

Chairman Mahoney explained that under the plan, guidelines governing the basic de-

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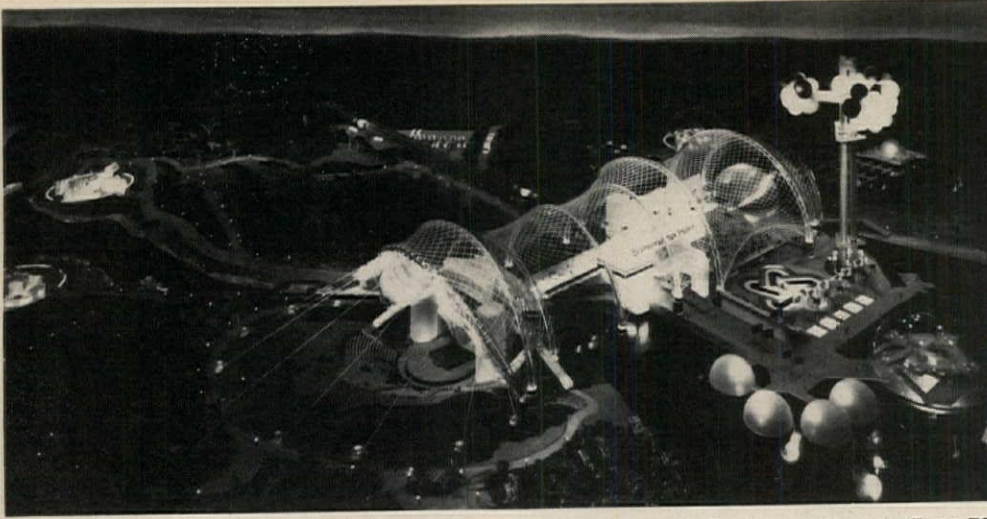
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Prototypical park, conceived by the architects who designed the US Pavilion at Osaka's Expo 70, features a fixed seating area covered by a cable-operated roof structure that could be opened in good weather. The program, however, provides for individuality in each state project.

sign of the parks would be established by a national review board and that special emphasis would be placed on innovation so that the special characteristics of the state and region could be incorporated into the park site. Architects for each park would be selected by the respective state governments.

It is hoped that all of the parks would be open to the public on April 1 in the bicentennial year. Mahoney admitted that many problems at this point are unsolved, "but we are talking about concepts to recreate a new spirit and to bring the people of America together."

#### ASA Convention Set for Houston in May

The Architectural Secretaries Association will hold its national convention in Houston on May 6-9. The aim is to enable the architect's secretary to become a better member of the team "through educational development and improved offices systems and materials." Membership has grown to 319 with chapters in 13 cities. "Thanks to the encouraging support of the AIA, it is felt that the May convention will be an exceptional and productive affair," predicts Mrs. Ginny DeMoen of Dallas, ASA vice president.

#### Building Team, Construction Management Scheduled for Discussion in Houston

With one successful convention behind it (see Sept., p. 41), the National Conference for the Building Team will meet again in Houston at the Albert Thomas Convention Center on May 10-12. Expected to attend are over 1,000 architects, engineers, owners, developers, contractors, manufacturers, government officials and others to discuss such topics as project financing, accelerated delivery, systems and subsystems, building codes and legal liability.

There will be 60 speakers, but heavy emphasis will be placed upon the "give and take" discussion in small workshop sessions.

The conference is a cooperative effort of the AIA, Associated General Contractors of America, Building Owners and Managers Association International, Building Research Institute, Consulting Engineer's Council of the US, Mortgage Bankers Association, National Electrical Contractors Association, Professional Engineers in Private Practice of the National Society of Professional Engineers and Producers' Council, Inc. Registration is being handled by the last named organization, 1717 Massachusetts Ave. N.W., Washington, D.C. 20036.

#### Ranks of Honorary Fellows Increased by 10

The Institute bestows the title of Honorary Fellow upon "architects of esteemed character and distinguished achievement" who are

*continued on page 55*

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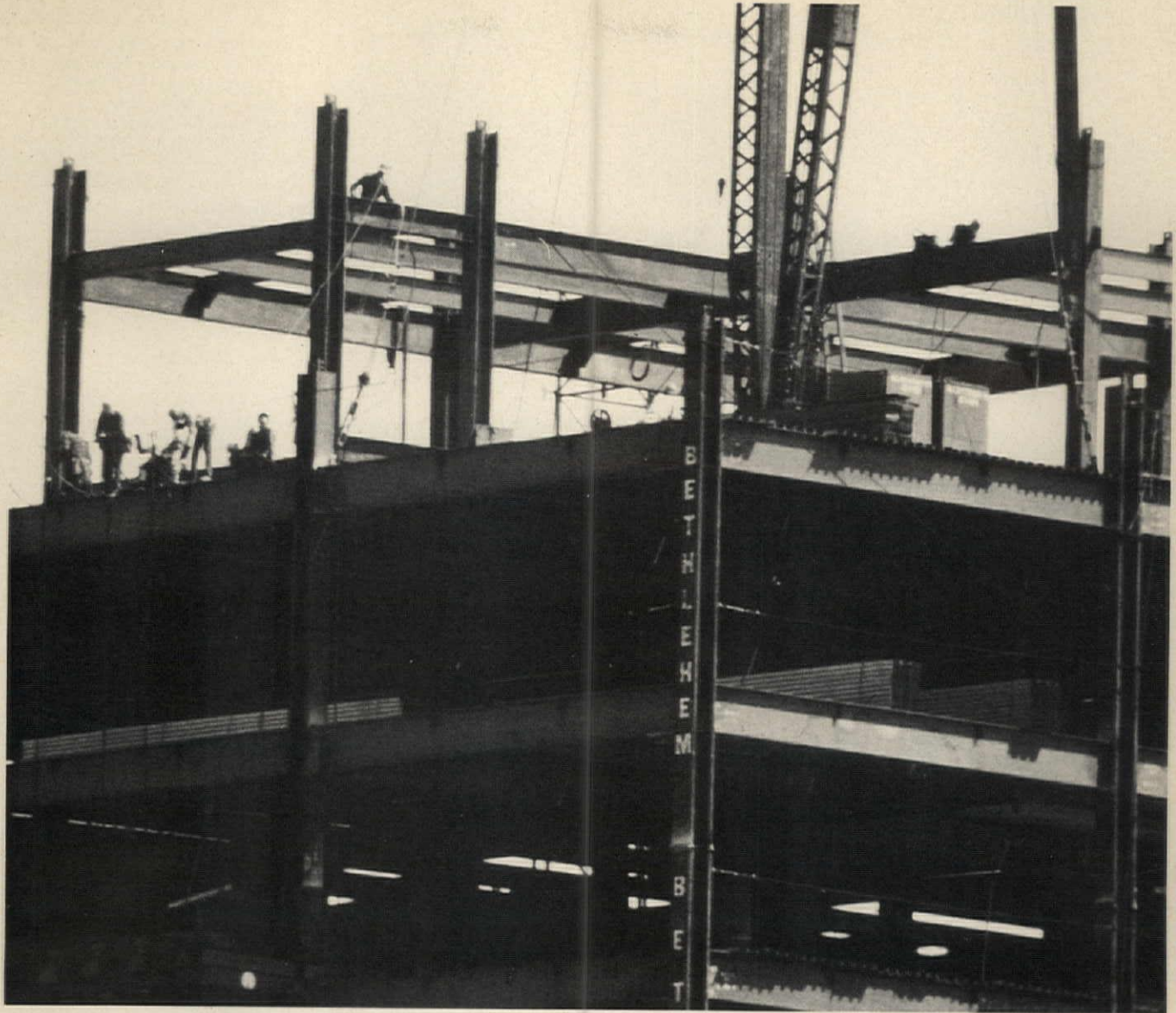
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## 'A Landmark Document'

by MAX O. URBAHN, FAIA  
*President*

By now, most of you members will, I hope, have read the first report of the National Policy Task Force of the Institute. If you have not, let me urge you to do so, and without delay. (It was published as a January 1972 special issue of the *Memo*. If you do not find it in your files, write the Public Relations Department for a copy.)

It is a landmark document: a thoughtful, bold and controversial statement on public environmental policy. It provides a basic framework for Institute involvement in the formulation of public policies on environmental issues at every level of government: national, state and local. It commits the AIA to taking a responsibility for creation as well as for criticism of public policies which have an impact on environmental matters. It assumes that architects have an obligation to lead the public debate on environmental quality.

It is not a finished document, and in fact it neither can nor ever should be a finished document. It is and should remain a living document, continuously changing in response to changing circumstances and to our changing perceptions of circumstances. The members of the Institute must be continually involved in shaping it so that it most effectively helps shape the processes that in truth shape the built environment.

This first report was developed by a National Policy Task Force headed by Archibald C. Rogers, FAIA, of Baltimore, a vice president of the Institute who in his own practice has long been concerned with environmental problems at a large scale. Members of the task force, all of them professionally experienced in environmental planning, are: I. M. Pei, FAIA, and Jaquelin Robertson, AIA, director of the Office of Midtown Development, both of New York; William L. Slayton, Hon. AIA, executive vice president of the Institute, formerly Commissioner of Urban Renewal in the US Housing and Home Finance Agency and later president of Urban America; and Paul Ylvisaker, professor of public affairs and urban planning at Princeton University and former Commissioner of Community Affairs for the State of New Jersey. Ylvisaker is both a member of the task force and its professional adviser.

The task force was appointed early in 1971 by then president of the Institute, Robert F. Hastings, FAIA. Its assigned mission was to make an intensive study of land use throughout the country, settlement patterns, growth prospects and housing and community needs, and to develop a statement of national policy goals and strategies that could become the basis for active participation by the Institute in the development of public environmental policy.

An interim report to the membership was made by Chairman Rogers at the annual convention in Detroit last June. The report was approved in principle by the AIA Board of Directors last December; and the final draft of this report was approved by the Executive Committee early in January.

There has already been membership input through task force consultation with appropriate standing committees of the Institute while the task force studies from which the report was developed were in progress; and from presentation to and discussion with AIA component presidents at this year's Grassroots meetings.

But the most significant opportunity for wide membership participation in this policy development process will come at this year's annual convention at Houston May 7-10, where debate on the report will be a major feature of the program. The revised version of the report that emerges will become the second report of the National Policy Task Force, and it will be used—in this Presidential election year—to test the views of candidates and to inform the judgment of the public.

As president of the Institute, I hope for maximum attendance at the Houston convention so that we will have maximum participation in what I expect will be one of the most important debates in AIA history. Members who cannot be at Houston should register their views through their chapter presidents, their regional directors or by communicating directly with the chairman of the task force.

The report of the task force is a constructive and creative beginning. With the collaboration of all the members of the Institute, it could establish a new dimension of architectural service. □

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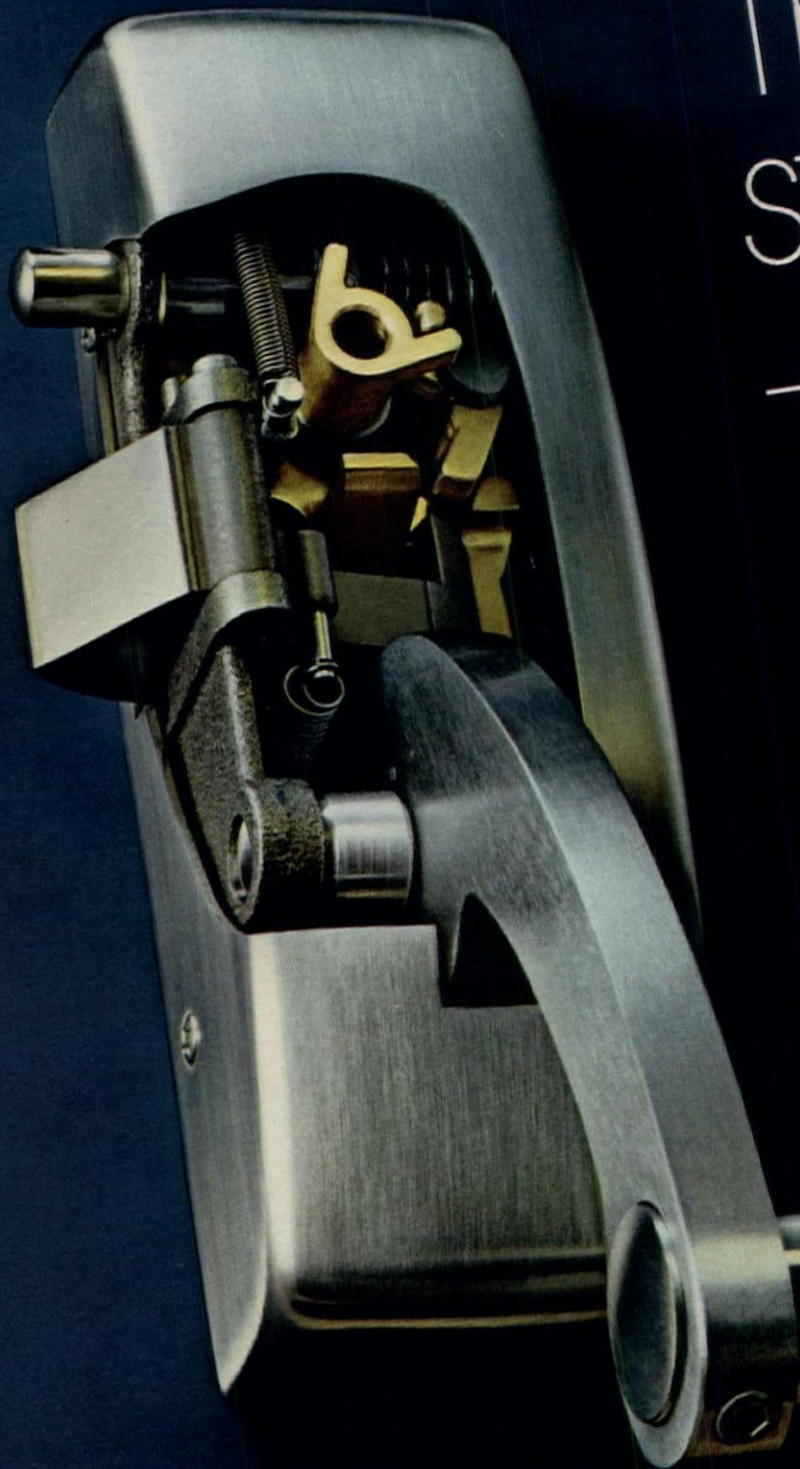
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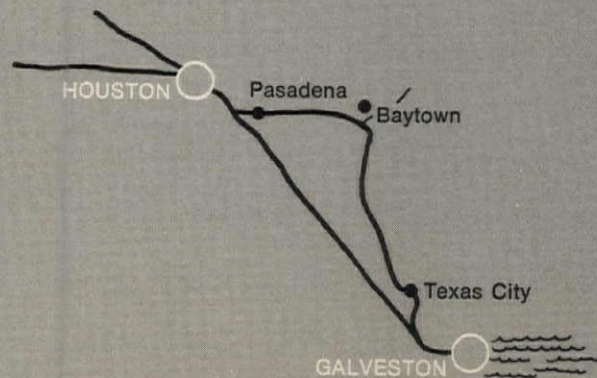
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# ARCHITECTURE IN HOUSTON

A Heritage  
and a  
Challenge

The insights into the city of Houston here are by Peter C. Papademetriou, assistant professor, School of Architecture, Rice University. He is editor of *Houston: An Architectural Guide* (produced by the Houston Chapter AIA, text by Papademetriou, building research by Stephen Fox and Drexel Turner, photography by Paul Hester and William Lukes) which is the first comprehensive documentation of architecture in that vital city. There are also glimpses of nearby Galveston. The buildings illustrated here are from the guidebook, a copy of which will be presented to each registrant at the AIA convention in May.







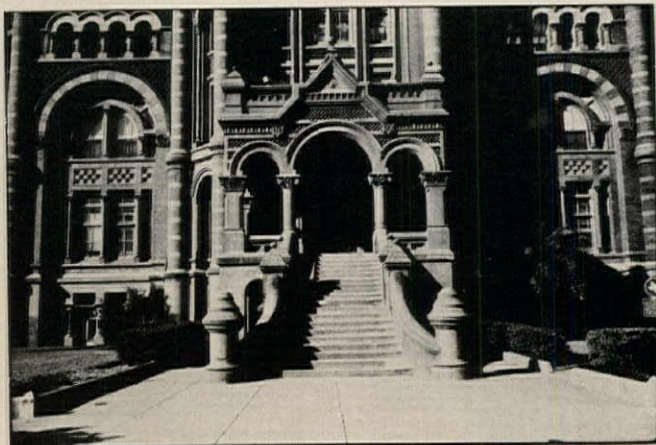
Walter Gresham House ("Bishop's Palace"), Galveston, 1888. Architect: Nicholas J. Clayton



Allen Paul House, 1885



George Kelley's Restaurant, 1926



Ashbel Smith Hall ("Old Red"), University of Texas Medical Branch, Galveston, 1889. Architect: Nicholas J. Clayton

## Historic

Houston as a place has only recently begun to infiltrate the professional consciousness. During a period of time that was characterized by a stalemate in building across America, Houston was unique in that a huge amount of construction continued unabated. This intensity of development and the rapidity of growth which has been a part of the Houston scene for the past two decades contributed to the myth of the "Space City": rising edifices in the image of the evolving corporate state.

Sprouting from the surface of the flat Texan plain, the towers of this image represent forces at work in the United States today. In this respect, as well as in the accompanying sociology of any such pattern of growth, Houston is in fact becoming less Texan and more a symbol of "generalized" America. As a case study, it offers a clear context representing the impact of urban forces which shape the face of our land.

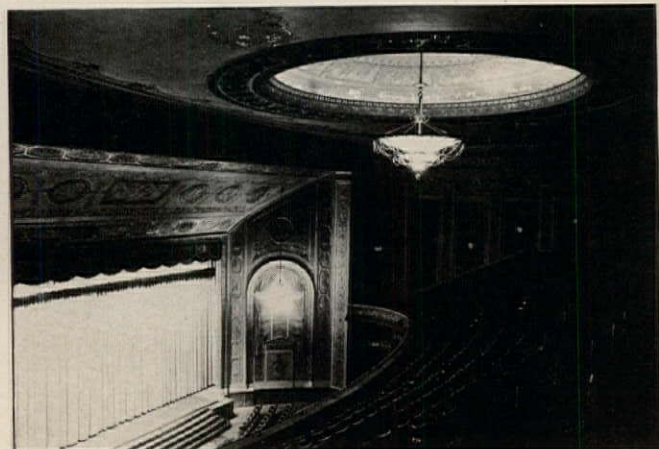
The relevance of Houston, however, lies not only in seeing these forces at work, but also in presenting an opportunity to evaluate other aspects of the phenomenon which may be obscured by the spectacular images of corporate architecture. First, there is a past stock of building of valuable competency whose role in the future remains uncertain; second, there is a present of vivid vernacular which may provide ways of enlarging definitions of architecture.

Houston, bent upon emerging from a provincial second place to a position of prominence among US cities, is trying to catch up with those whose historic development dates from the same point, such as Chicago or San Francisco, but which already are a firm part of the American consciousness.

Houston at this moment is an evolving manifestation of many American attitudes. One of these, regarding buildings, is that if an old structure begins to outlive its "usefulness," it is torn down. Our economy and rapid growth begin to dictate this attitude, but if we create an environment which is all "new," a link to the past is broken.

Our built environment, its continuity and evolution, represent our faith in a place. A question posed for Houston is: Does the past have a future? And, if we have no past, how are we to have a sense of belonging to a place? One very real danger in our patterns of evolving urbanization is the loss of regional

ED. NOTE: Unless otherwise noted, all buildings are located in Houston.



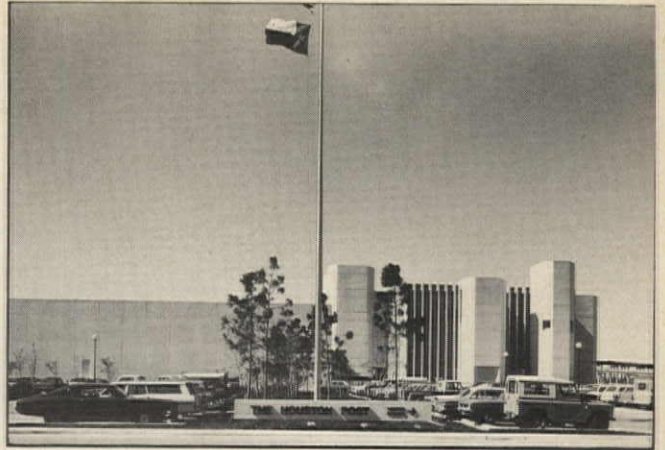
Metropolitan Theatre, 1926. Architect: Alfred C. Fain; associate architect: Jordan MacKenzie



**Contemporary**



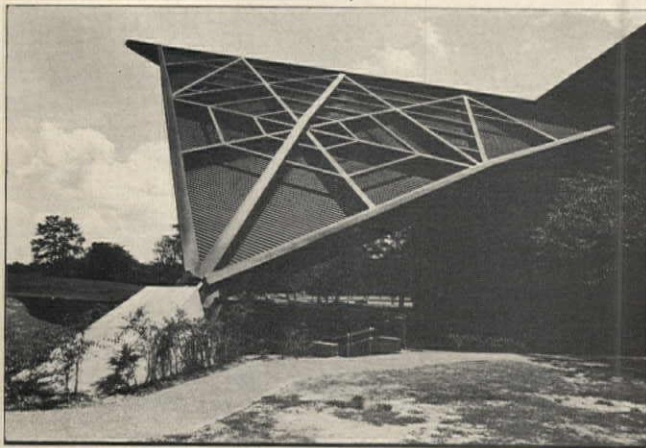
*The Galleria, 1969-71. Architects: Hellmuth Obata & Kassabaum; associate architects: Neuhaus & Taylor*



*Houston Post Building, 1969. Architects: Wilson, Morris, Crain & Anderson*



*The Astrodome, 1965. Architects: Wilson, Morris, Crain & Anderson; associate architects: Lloyd & Morgan*



*Miller Outdoor Theater, 1968. Architects: Eugene Werlin & Associates*



*Houston Independent School District Administration Building, 1969. Architects: Neuhaus & Taylor*

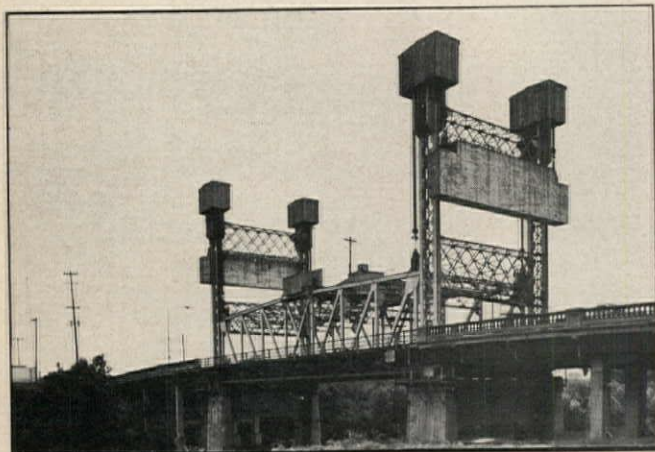


*Congregation Emanu-El Temple, 1949. Architects: MacKie & Kamrath; associate architect: Lanard Gabert, AIA*





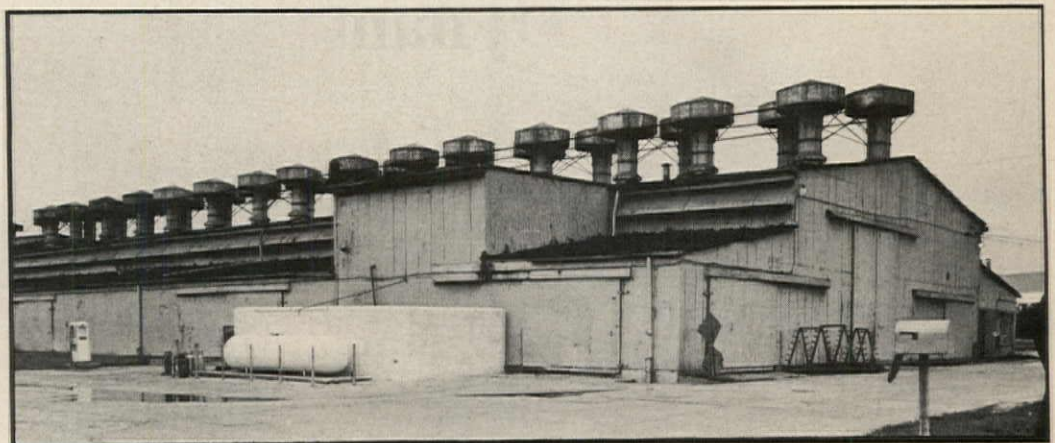
*Alamo Plaza Motor Hotel, 1948*



*Lockwood Drive Bridge, 1928. Engineer: James Gordon McKenzie*



*Old World Bakery*



*Buffalo-Coffield Warehouse*



*Residences, circa 1930*

## Vernacular/Industrial

character and of personal identity with a place. The corporate state and its expansionist economy develop along much the same lines across the country. In a situation where what was before is eclipsed by what is becoming, the need for maintaining a sense of continuity is even more urgent. We must have roots if our cities are to have meaning for the individual.

Forces unleashed since 1950 pose a threat to the fragile stock of old buildings in Houston, but they create situations which are a challenge to architects. The strip vernacular and jarring juxtapositions resulting from unresolved joints between the parts of our urban fabric should engage our abilities. Our vocabulary of building types should be enlarged beyond churches and cultural centers to include commonplace uses which are part of everyday life. Can architects, by choice, begin to broaden the base of what types of buildings constitute "architecture?"

Houston challenges us with the notion of environmental design. To truly deal with the environment, we must remember its psychological connections to people. Maintaining what has been handed to us by previous generations is one aspect. Another is to ponder the shocking energizers which are the forces of society to determine if the architect can deal with the commonplace as well as with the monumental and the "special." □





Despite no zoning laws, Houston's central business district does not infringe upon Sam Houston Park with the city's earliest architecture.

## Urban Dynamics of Nonzoning

by JOSEPH W. SANTAMARIA, AIA

**Houston is the only large city in the United States without zoning laws. Yet it is no more chaotic than other metropolitan areas of its size. In fact, though it has some drawbacks, marketplace determination of land use is working well indeed for "Space City."**

One hundred and thirty-five years young, Houston was founded in 1837 as a mosquito-ridden, one-horse town on the banks of Buffalo Bayou, a small, sluggishly flowing brown stream. A day's trip up from Galveston by small paddle steamer, Houston began life as a trading post and jumping-off point for the interior of Texas.

The city grew slowly until the turn of the century. However, two factors changed this: the petroleum industry and the Houston Ship Channel. Disgruntled at the high wharfage costs of the Port of Galveston, some visionary Houston citizens, headed by Colonel Tom Ball, petitioned the federal government to assist them in dredging Buffalo Bayou from Houston to the Gulf of Mexico to form a deepwater port. This tremendous undertaking, now known as the Houston Ship Channel, was completed by the US Army Corps of Engineers in 1914. Houston's future became manifest. Attracted by deepwater shipping, industry began lining

the banks of the channel. At the same time, "wildcatters," those early oilmen who drilled their wells on little more than hunches, began striking it rich all around the eastern and central parts of Texas. The oil began funneling through Houston. Today, the city is the third busiest seaport in the nation, as well as the acknowledged center of its petrochemical industry.

Houston grew up and grew out. Its earliest architectural heritage is well preserved in Sam Houston Park. There, just west of the central business district, is assembled some remarkable examples of early Texas domestic architecture, each lovingly restored and furnished in their proper period styles by the Harris County Heritage Society. Further north, in the Old Market Square area, a minirenaissance is underway as businessmen, restaurateurs and club operators are refurbishing some of Houston's oldest buildings for their respective uses.

Houston's silhouette contains a collection of skyscrapers, beginning with the delightful neo-Gothic Gulf Building and progressing to a large assortment of fine recent examples, both by local and nationally known firms. The city is unique in that it has three skyscrapers by three different offices of Skidmore, Owings & Merrill: First City National Bank Building (1961,





Main and Fannin Streets are two of Houston's busiest, yet Rice University campus, right, and Hermann Park, left, offset effect with green space.

New York); Tenneco Building (1961, San Francisco); and One Shell Plaza (1970, Chicago).

South of the central business district on Main Street is Rice University. The campus plan and original buildings by Ralph Adams Cram of Cram, Goodhue & Ferguson are worthy of attention. Though the city has grown southward down Main Street and long since has encompassed Rice, Cram uncannily anticipated this in the early 1900s when he wisely left a buffer zone between the campus and Main Street. The entrance to the university is through a beautiful gate; magnificent live oaks and pine trees form the buffer zone.

Rice's original buildings are a delightful eclectic Mediterranean Romanesque style and incredible in their richness of detail; they are a veritable textbook in the use of stone and brick. Also on campus is Rice University Stadium. Completed in 1950 and seating 73,000, it is perhaps the nation's finest.

However, it was not until after World War II that Houston established its real architectural heritage and the basis for its unique position among American cities. With the nation's sixth largest population, Houston is second only to Los Angeles in the size of its geographic land mass. It is the interaction of forces shaping the character of this urban area that should be of primary interest to architects.

After the war, Houston experienced a building boom that continues unabated to this day. Also, it was during the first post-war decade that the city's major patterns of land use as they exist today began to establish themselves. The Houston Ship Channel begins in the east end of town and continues southeast. As heavy industry began to line the channel and secondary industry built up

around it, many of the upper income neighborhoods, notably those in the vicinity of the Harrisburg area adjacent to the old Houston Country Club, started to decline. In 1957 when the club was removed to the southwest part of town, the transition of the east end was completed.

The development of the southwest quadrant of the city is interesting in itself. As mentioned, the city was founded at the spot where Main Street meets Buffalo Bayou. Main Street, running north and south, became the major artery with development extending south. A string of handsome mansions sprang up along Main Street in the early part of the century, terminating at the Rice University campus. An exclusive residential area then evolved north of the campus. But one of its initiators, the prominent oilman/philanthropist Hugh Roy Cullen, returned from a trip to Europe just prior to World War I to find that his interest in the development had been sold. Dismayed and angered, he used his considerable means and established River Oaks, now Houston's most prestigious residential section and the primary generator in making the southwest quadrant of the city into its most desirable neighborhood.

These two generators, the Houston Ship Channel and the residential growth to the south and then the west, established Houston's earliest land use patterns and set the framework for future growth patterns. In 1949 Glenn McCarthy, perhaps the city's most colorful oilman of the modern era, opened the Shamrock Hotel on South Main Street about four miles south of the central business district. Touted as the nation's most glamorous hostelry, the complex became a generative "node" for this area. Before long, a number of highrise buildings began to appear



around it. In the late '50s another such node began forming at the intersection of Westheimer and Post Oak, then the outer limit of the exclusive southwest part of the city. In this case, shopping centers were the first generators of activity, followed by apartments, department stores and highrise office buildings. Now known as the Magic Circle, this area is almost as dense as the central business district yet physically separated from it by more than 10 miles.

In the early '60s, still another node formed far to the southeast in the Clear Lake area. In this case the generator was the NASA Manned Spacecraft Center, bringing with it homes, apartments, shops and offices. Still other examples of such nodes are Greenway Plaza, a large office complex in near southwest Houston, Town and Country Village, a large shopping center in the Memorial Drive area of west Houston, the Galleria complex, Houston Intercontinental Airport, and the Astrodome.

Houston had become a regional city with one central business district and a number of satellite centers of urban activity, all connected by a network of freeways and all seemingly independent of the central business district.

How did this come about? What caused this urban development to break out of the central business district and begin other nodes of urban development?

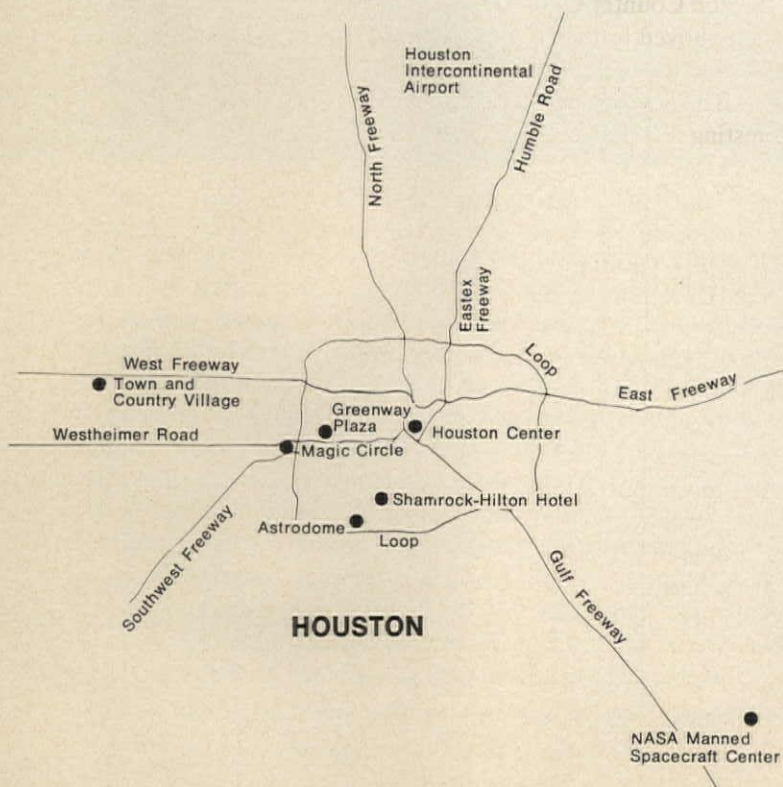
Perhaps the lack of governmental zoning controls has been the biggest single factor, with some assistance from the city's annexation policies. For the last 15 or 20 years, Houston has pushed its boundaries into the surrounding counties before these could be incorporated. Presently, the city has an incorporated area of about 450 square miles and exercises "extra-territorial" rights over all land within five miles of its corporate limits. Within these 2,000 square miles, there cannot be incorporation of new municipalities or annexations of land by other cities or villages without the approval of Houston. This policy, while sometimes taxing municipal services (presently the excellent Houston Police Department is overextended), has been instrumental in keeping the

city from being surrounded and choked off by a lot of "bedroom" communities and being beset by the classic urban ills. With this large incorporated territory under one governmental authority, Houston has been afforded a healthy diversity of social and economic groups as well as an ever-increasing and renewing tax base.

Within this almost regional land mass, the lack of zoning, or nonzoning as some prefer to call it, has been the most important factor in Houston's great growth. Nonzoning allows the land to reach its highest and best use the quickest. For instance, because there is no zone defining the areas in which certain types of buildings can be built, a potential developer may "leap frog" land unsuitable through price, location or some other factor and select another parcel that fills his needs, all without wading through the tiresome legal maneuvers necessary to affect zoning changes.

Nonzoning also permits a developer to assemble land no matter how used and put it to a different use without going through all the work of changing the zoning regulations. Greenway Plaza, one of the satellite urban centers mentioned, is an excellent case in point. In near southwest Houston, its original 55 acres were bordered on the north and east by commercial development, on the south by the Southwest Freeway, and on the west by single family subdivisions. As the project got underway, it became apparent that Greenway's only remaining direction of expansion was to the west. Consequently the developer offered to buy on an all-or-nothing basis every home in the adjacent subdivision for cash and at a better than market price. In addition he granted all owners permission to remain in their homes for five years, rent free. All homeowners accepted this proposal and the next year the developer made a similar offer to the adjoining subdivision still further to the west. Its inhabitants also accepted the offer and in the short span of less than two years, the developer had managed to increase his holdings to 115 acres, again without the usual change in zoning.

With nonzoning and land use subject to the economic pressures of the marketplace, what means do individual property



Private residences differ in grandeur but are dotted throughout Houston between activity "nodes" (some of which are shown on map), keeping the city from being choked off by outlying "bedroom" communities.



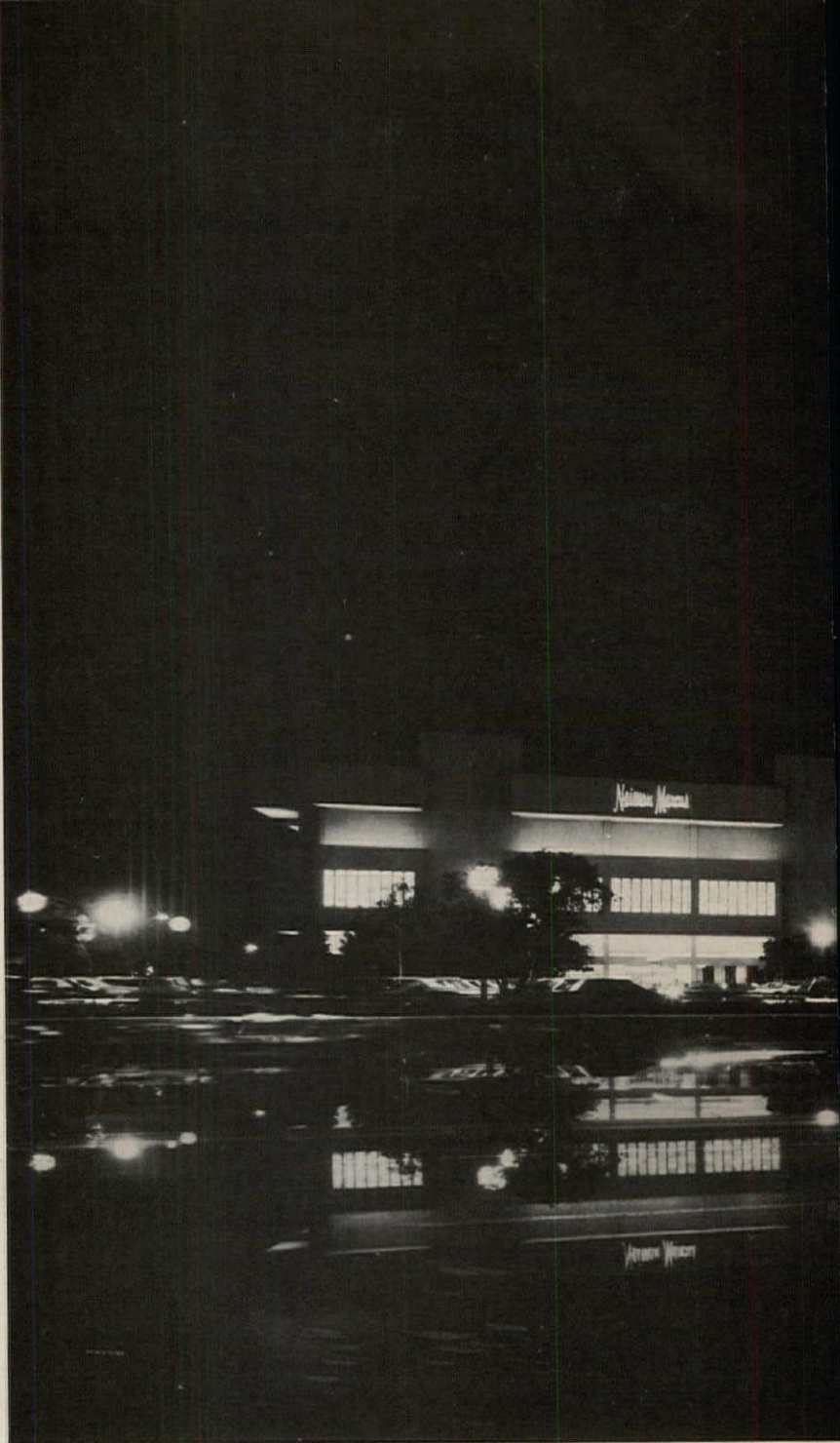
owners have for maintaining the residential character of their neighborhoods? This is accomplished through restrictive covenants included in the deeds of all property in a subdivision. Normally, these restrictions are drafted by the subdivision developer and must conform to the "Rules for Land Subdivision" adopted by the Houston City Planning Commission. They contain many zoninglike controls, such as minimum lot size, building setback lines, architectural limitations, building type and use limitations, etc. Once a subdivision is established, the burden of enforcing the deed restrictions is placed upon the individual property owners and not a zoning board. Usually, this is accomplished through civic clubs. Through state legislation enacted in 1965, solely for the benefit of Houston and Harris County, the City of Houston was permitted to assist such clubs in enforcing deed restrictions through the city attorney's office. Also, in another state statute applicable only to Houston, the city has the power to withhold building permits when the proposed building or improvement would violate a subdivision's deed restrictions.

These controls have worked extremely well in preserving areas whose populations want to retain their characters. While these controls were devised to apply primarily to residential subdivisions, it is interesting to note that many developers of office and industrial parks and large shopping centers have successfully drafted similar deed restrictions for their respective uses.

Herein we see the two major forces which determine and maintain land uses in Houston. Through nonzoning, undeveloped land can be put to the best use as the needs of the city and the economic pressures of the marketplace dictate. Nonzoning also allows the land use of older areas to be reevaluated. Through subdivision deed restrictions, areas desiring strictly to maintain their present character may do so, even to the extent of obtaining the city's assistance in prosecuting violators.

For all the advantages of Houston's nonzoning there are some disadvantages. One major such is that it is difficult for the city and the utility companies to forecast municipal service requirements in various districts. This problem becomes particularly acute when apartments begin to crop up in a single-family subdivision. However, the city has managed to plan municipal services improvements to respond better to such problems.

Another disadvantage is the visual chaos that often occurs when a subdivision's deed restrictions lapse and other land uses infiltrate the area. Westheimer Road, originally the major east-



The Galleria complex (above) is part of the Magic Circle, a generative node started in the city's southwest section. Nonzoning permits the mingling of activities anywhere; any residence may be used for business. In another part of town, on Congress Street, is Houston's oldest building (right), once used as a dwelling by Indian tribes. During the Civil War it was a military command headquarter. Owned by descendants of the builder, pioneer merchant John Kennedy, it now houses the restaurant La Carafe.



west artery of Houston's southwest quarter, is a case in point. When many of the single-family homes at the eastern end of the street were turned into antique shops, bars, beauty parlors and other nonresidential uses, the initial effect on the streetscape was negative. Lawns were dug up and replaced with paved parking areas, neon signs proliferated and other unsightly effects occurred. For a number of years the area languished as a Bohemian quarter and a strip of light commercial developments. Due to the expansion of the central business district and the resulting urbanization of this immediate neighborhood, it has at last overcome the stigma. Presently a number of fine open-air restaurants can be found here. While some say this contributes to congestion, others say all the activity creates an intense urban excitement.

Even though busily traveled streets such as Westheimer experience changes, the interior streets in this and other subdivi-

Mr. Santamaria, a native Houstonian, is vice president of the architectural firm of Clovis Heimsath Associates, Inc., Houston. Richard Payne, Houston architect/photographer, cooperated in providing illustrations.





sions similarly affected usually retain their residential character, even when the deed restrictions have elapsed.

There are other disadvantages to the lack of zoning. Perhaps its absence is responsible for the as yet uncontrolled use of billboards. With zoning and the regulatory climate it seems to create, perhaps more effective billboard control would be possible.

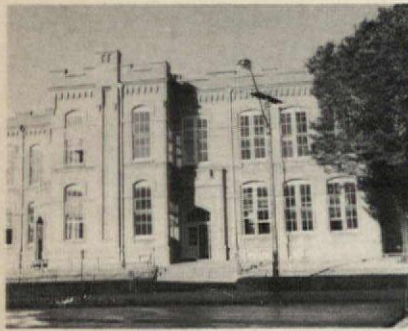
However, for all its lack of zoning controls, Houston does not appear any more chaotic than other cities of its size. At a time when many other major cities seem beset with recessions and other urban ills, Houston continues to grow vigorously, both in new construction and in the self-regeneration of its older areas. Such self-regeneration can be seen in Houston Center, the largest private urban redevelopment plan in the country. Announced last year by its developer, Texas Eastern Transmission Company, and heralded in the nation's press, the complex will comprise about 80 acres of highrise commercial, residential and institutional development in the heretofore dormant "East-of-Main" portion of the central business district. Since most recent construction here has been west of Main Street, Houston Center

should do much to balance out development of both sides of the street. Given the absence of zoning controls, it was possible for the developers to assemble the individual parcels of land at fair market prices in less than one year. Would this be possible in a zoned city?

In a time of increasing governmental controls, particularly in zoning regulations, one could do worse than to study the urban dynamics of Houston, in which less governmental regulations and more reliance on marketplace determination of land use is working—and working extremely well. □

Architectural credits—Gulf Building: Alfred Finn Sr. Rice University Stadium: Milton McGinty (now McGinty Partnership) and Lloyd & Morgan (now Lloyd, Morgan & Jones). Shamrock Hotel: Wyatt C. Hedrick. Manned Spacecraft Center: master plan, Charles Luckman Associates; Brooks & Barr; MacKie & Kamrath; Wirtz, Calhoun, Tungate & Jackson (now Calhoun, Tungate & Jackson); Harvin C. Moore & Associates (now Moore & Associates); design, the latter four firms in limited partnership called Manned Spacecraft Center Architects. Greenway Plaza: Lloyd, Morgan & Jones. Town and County Village: Brodnax, Phenix & Associates. Galleria complex: Hellmuth Obata & Kassabaum; associate architects: Neuhaus & Taylor. Astrodome: Lloyd & Morgan (now Lloyd, Morgan & Jones) and Wilson, Morris, Crain & Anderson. Houston Intercontinental Airport: Golemon & Rolfe and G. Pierce, Goodwin & Flanagan. Houston Center: William L. Pereira & Associates; project managers: Brown & Root, Inc.





## A Victorian Accent in Downtown Dallas

**Can an old deteriorated school on 1½ acres in the heart of bustling downtown Dallas be restored for productive use by a modern corporation as its headquarters and, what's more, become an oasis of green in a desert of concrete, steel and glass? Those who say it couldn't be done haven't reckoned with Texans.**

Anyone who has ever had a conversation with a native Texan knows that the state has some unique characteristics that deserve boasting about. Preservation of its architectural heritage is not necessarily one of them. Like every other place in the country, Texas destroys buildings that could be put to good use, all in the name of progress. Howard Barnstone, FAIA, illustrated this fact dramatically in his book *The Galveston That Was*—with emphasis on the *was*. Although efforts in such places as San Antonio and San Augustine have been gratifying to preservationists, downtown Dallas is not noted for cherishing its old buildings.

Every now and then, however, the story is different, and today Dallas has a bit of Victorian flavor in the midst of the like-any-other-place contemporary office buildings that mark that city's development into one of America's thriving metropolises. The contrast provides interest.

It was reported in 1969 that an old Dallas landmark, the 81-year-old Cumberland School located on North Akard Street, had been bought by William P. Clements Jr., chairman of the board of Sedco (Southeast Drilling Company). It was assumed that this prime area for development would join all the other new office buildings north of the new Fairmont Hotel. Clements had invested \$1,362,667 in buying the site. What the public didn't know at first was that he had no intention of demolishing the old structure which was the oldest public school in Dallas. According to Clements, he wasn't really sure what he would do with his acquisition. Perhaps a boutique shopping area was the answer. "If it was so good for that, why not use it for the offices of Sedco," Clements asked. Sedco is an international offshore drilling, pipeline and engineering corporation.

Even energetic and forward-looking Texans can be nostalgic. According to a story in the May 23, 1970 *Dallas Morning News*, Clements' decision to keep the old building was based on sentimentality and practicality, two Texas traits. His mother remembered the school in its prime when it was something any city could be proud of; and besides, two of his aunts had taught there and his wife's great-grandfather had been president of the school board when Cumberland was built back in 1888.

On the practical side, Clements thought of his plan to adapt the school to modern office use as a "corporate plus." He knew that everybody in Dallas would be aware of the building in the midst of all that glass and concrete and would identify it readily and easily as the Sedco building. He really had another reason for spending the money to buy the property and about another \$1 million for its restoration. He just didn't want to see it torn down. "It has beauty, and Dallas has too few old buildings." He envisioned the restored building as "the most elegant and charming in downtown Dallas" and because of its location "a significant asset" for the city "out of all proportion to its cost."

When Cumberland School was built, it was in the midst of homes owned by affluent citizens, but with commercialization's entry, enrollment dropped and classes were finally discontinued. Put up for auction in 1961 by the school board, no acceptable bids were received. Again in 1969 it was offered for sale, and this time Clements triumphed over another bid, only \$6,000 lower, whose bidder wanted to raze the school for a large-scale redevelopment project.

Sedco employed the architectural firm of Burson, Hendricks & Associates to unify and restore the original character of a building that had been remodeled and added to several times and to make it a contemporary office building within the limitations of a load-bearing masonry structure that had been designed for school usage in the first place.

The architects faced a challenge. The structure had been remodeled and added to in 1901, 1905, 1913 and 1919. The last remodeling introduced elements that were foreign to the original Victorian style. A Dallas journalist called it "architectural hash." The building had little resemblance to the two-story original with its four classrooms on each floor. Its steep pitched roof and cupola had been removed, and a parapet embellished with crenellations had been added. Also a corner entry with battlements and pointed arches had been devised which further detracted from the building's former integrity. Bricks of different size and color had been used in the various additions. With each remodeling, the building had deteriorated architecturally.





Paneling is used effectively in first floor offices, but often the original brick adds an interesting contrast, as in the reception hall (above). The old brick really comes into its own, however, in the basement's executive dining room and corridor (top right).

"Until we saw an old picture of the original building," recalls James L. Hendricks, AIA, one of the firm's principals, "we didn't fully realize what was wrong with the building. It was that flat roof. We sketched the building with a pitched roof and cupola, and it was right."

The architects gave the building a seam metal roof with a ribbed effect similar to other Texas restorations of 19th century structures. The exterior brick was cleaned and sealed and painted a unifying ocher color to be a waterproofing membrane for the masonry. They ridded the structure of all the extraneous elements, creating a new entry from the rear parking area and a front entrance with a porch and stairs. The cupola became the central focus of the building with its own bronze glass, slate roof and black grill.

The interiors, on which A. H. Pierce collaborated with the architects, were completely remodeled for today's usage by the corporation. A two-story open well and a grand stair became important elements of the main reception lobby. The Victorian character of the building is accented by its furnishings.

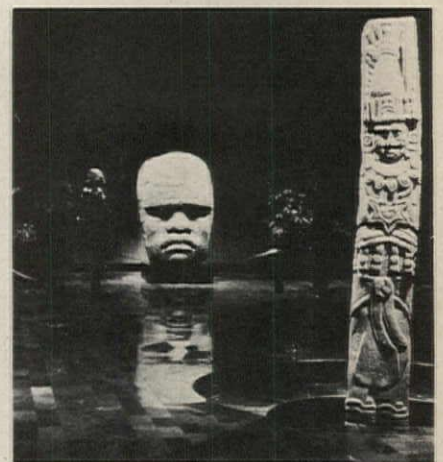
Site planning and landscaping by the Lambert Landscape Company further unify the building and add to its Victorian quality. Landscaped terraces with brick retaining walls provide a natural transition from sidewalk level to entrances and the roof pinnacle, cupola and weather vane.

"The building demonstrates that a corporation from private enterprise can undertake and accomplish the preservation of a building of historical value for contemporary use with all the economic factors inherent in such a project," says Roger Burson, AIA, one of the restoration architects. Its value as an asset to downtown Dallas is emphasized because the restoration with its landscaping is a major anchor point for green open space. Furthermore, it provides an interesting contrast to all its contemporary neighbors.

The restoration has won awards from the Dallas Chapter AIA and the Texas Society of Architects AIA. It has received the Dallas Beautification Award, as well as a plaque from the Texas State Historical Survey Committee. As Burson comments, "The acceptance and appreciation by the general public here in Dallas has been fantastic."

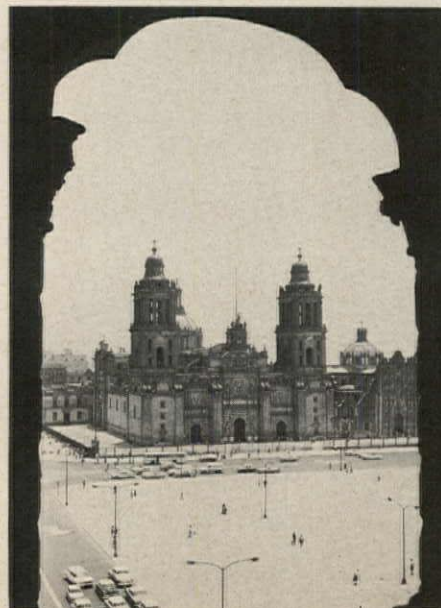
The story is told by Dallas writer Dorothea Erwin that back before the restoration really got underway, Sedco's late planning manager William Dyer came to the site one day. There he found a Dallas citizen who had his young son in tow and a professional photographer as well to take pictures of the boy with the building's cornerstone. He explained that he wanted the son to have a memento of a Dallas landmark before it was destroyed forever. Dyer was pleased to tell the man, "We're not tearing it down, mister, we're putting it back." When old buildings are "put back" with such sensitivity, they are civic assets. □





The exhibits in Vázquez's Museum of Anthropology, featuring a column sculpted in bronze by brothers Jose and Tomas Chavez Morado, are as rewarding as the structure itself.

While contemporary architecture is flourishing, the public cherishes landmarks like the Cathedral of Mexico City and Chapultepec Castle.





# In Praise of Mexico

by PEGGY COCHRANE BOWMAN, AIA

In recent years Mexico has developed a revolutionary architectural style of its own which has to be seen firsthand in order to be appreciated. The style of form, texture and color is exemplified by the Museum of Anthropology designed by Pedro Ramírez Vázquez, University City, the Pedregal Gardens developed by Luis Barragan and the free-form churches of Felix Candela with their thin shell, concrete roofs and stained glass walls. A good many of us architects have been south of the border, and in every visit we discover more and more progress, from the new subway being built in Mexico City to the highrises transforming the skyline. Even in the smaller towns, schools, hospitals, factories and housing projects are being completed—many of them certainly in the category of award-winning projects. The Mexican Government is constantly encouraging new building and urban development. Such impressive edifices as the Palace of Justice, the Medical Center and the Plaza of the Three Cultures have been subsidized by the government, mostly from funds of the National Lottery.

Mexican artisans still retain a pride of craftsmanship and believe that every project, large or small, should be a work of art. They are able to be experimental in design because of their own freedom of imagination, more uniform building codes and inexpensive labor.

The architecture of Mexico reflects the personality of the people: vivacious, creative and colorful. In order to understand Mexican architecture, it is important to understand the characteristics of the people it reflects and represents. Because of Mexican "machismo," the form is strong and bold, and because of the country's proximity to nature, the colors are wild and vivid. Such unusual schemes as mustard and magenta, daffodil and persimmon, pale pink and cerise are inspired by the wild flowers of San Miguel and the sunsets of Acapulco. The hidden convent at Tlapan with its orange and gold chapel by Barragan, the architect's own residence with its shocking pink entrance hall and the adventurous decor of the Restaurant del Lago by Leonides



The campus of the National University of Mexico provides a field day for camera buffs who never fail to shoot the Library, designed by Juan O'Gorman who also did the solid mosaic mural, Gustavo Saavedra and Juan Martinez de Velasco. The Paseo de la Reforma is the showcase for monuments and fountains as well as many new buildings and construction underway.





Among the favorite spots for visitors either on tours or on their own are the beaches of Acapulco, the historic town of San Miguel (top) with its large American colony and archaeological sites such as Tula Hidalgo with its Toltec civilization remains.

Guadarrama in Chapultepec Park are striking examples of color. Texture is achieved by the honest expression of materials. In the Pedregal Gardens, near University City, contemporary homes of glass cantilever over lava beds of rough, gray rock, landscaped with tropical vegetation. Rough concrete walls are combined with natural wood panels; rugged stone contrasts with smooth tile. To truly appreciate the architecture and the people it signifies, one should delve further back into the history of the country. Mexico is very proud of its heritage, and the Museum of Anthropology is a must on everyone's list. After first viewing the museum, each visitor should see the archaeological sites of Teotihuacan, Tula, Oaxaca, Yucatan and Palenque. The latter has often been compared to Angkor Wat in Cambodia. For those interested in Mexican Colonial architecture, three cities have been proclaimed as national monuments to this particular style: San Miguel de Allende, Taxco and Alamos. In these towns, no new buildings can be constructed nor alterations made without the approval of the art jury which adheres strictly to the old Colonial style.

The architectural idiom of Mexico, whether it be the old Colonial or the recent contemporary, has a feeling of evolving from within. The murals on the exterior of many buildings, such as those by Juan O'Gorman, Diego Rivera and Orozco, are a part of the design and are not applied for mere decoration.

Every element blends smoothly without clashing. Numerous structures are original yet classical in their proportions. They have a peaceful, inviting atmosphere where a person wants to enter and relax, reluctant ever to leave. Mexico itself is like its architecture—peaceful, yet exciting and colorful. It is a land of contrasts, good and bad, but never, never mediocre. □

**Mrs. Bowman**, who has her own architectural practice in Sherman Oaks, California, is an extensive traveler but claims Mexico as her favorite land. The work of a number of architects referred to here was illustrated in an article she wrote for the *AIA JOURNAL* in October 1968.





# The ABC and Why of Development Building

by C. W. GRIFFIN JR.

**Architects all over the United States are expanding their practice into a new domain: project development. Breaking loose from their traditional roles, they are getting involved in the initial decision stages, some as project co-owners, others as consultants in programming and economic analysis. Such services not only assure that the architect can be part of a project early enough to get control over design; they also increase his remuneration. This article is an excerpt from a book to appear in May, *Development Building: The Team Approach*, prepared under guidance of the AIA Architect in the Development Team Task Force.\***

The scope of architect-managed projects is tremendous. They range in size from large office/retail complexes to office buildings for three or four tenants. In between the two poles is a full spectrum of project sizes and types—industrial buildings, motels, highrise office buildings, garden and highrise apartments, shopping centers, nursing homes, medical centers and even hospitals—all with architects playing entrepreneurial as well as design roles. Public projects are also involved, with architects doubling as joint venture developers in turnkey public housing projects, i.e., designed and built by private developers and then sold to a public housing authority.

Why should architects want to expand their services into an entrepreneurial role? What's wrong with maintaining their traditional design and design-related ancillary services only? Why should architects want to participate in the owners' decisions?

Better design control is the unanimous reply from architects who have strengthened their roles in the decision stage. Programming and budgeting decisions made during this stage without the architect's participation can strip him of effective design control. Excluding the architect from the program-writing phase may lock the design into a preconceived solution, severely limiting design options. This restriction holds even when the project budget is based on accurate cost estimates. When the architect makes a late entry into the development process, the reduced time allowed for completion of preliminary and final design intensifies the pressure for a fast design solution. Lacking time to study imaginative alternatives, the architect is more likely to stand by an old tried and tested, but possibly inferior, design concept.

When the budget is set too low, the problem is obviously far worse. A program tied to an unrealistic budget can cost an archi-

tect lost fees, additional work and irreparable damage to his professional reputation. An unreasonable program-budget combination does not present a challenge that the architect should attempt to meet. It is an archaic and inefficient practice that he should attempt to reform. Participation in the decision stage is essential for the architect to fulfill his professional obligations.

As a co-owning, equity-sharing partner on the development team, the architect can demand a key role in the decision stage. Even as a nonowner consultant, he can contribute vital technical data and provide creative design solutions to the developer's problem. The essential point is not whether the architect is a co-owner but whether he participates in the basic preliminary decisions that shape the project's design. As his chief professional benefit from sharing ownership, the architect can insist on his owner's right to help shape the project design. His participation in the decision stage largely determines the project's design quality. As co-owner or as a consultant given design control early in the development process, the architect has his greatest opportunity to serve the public.

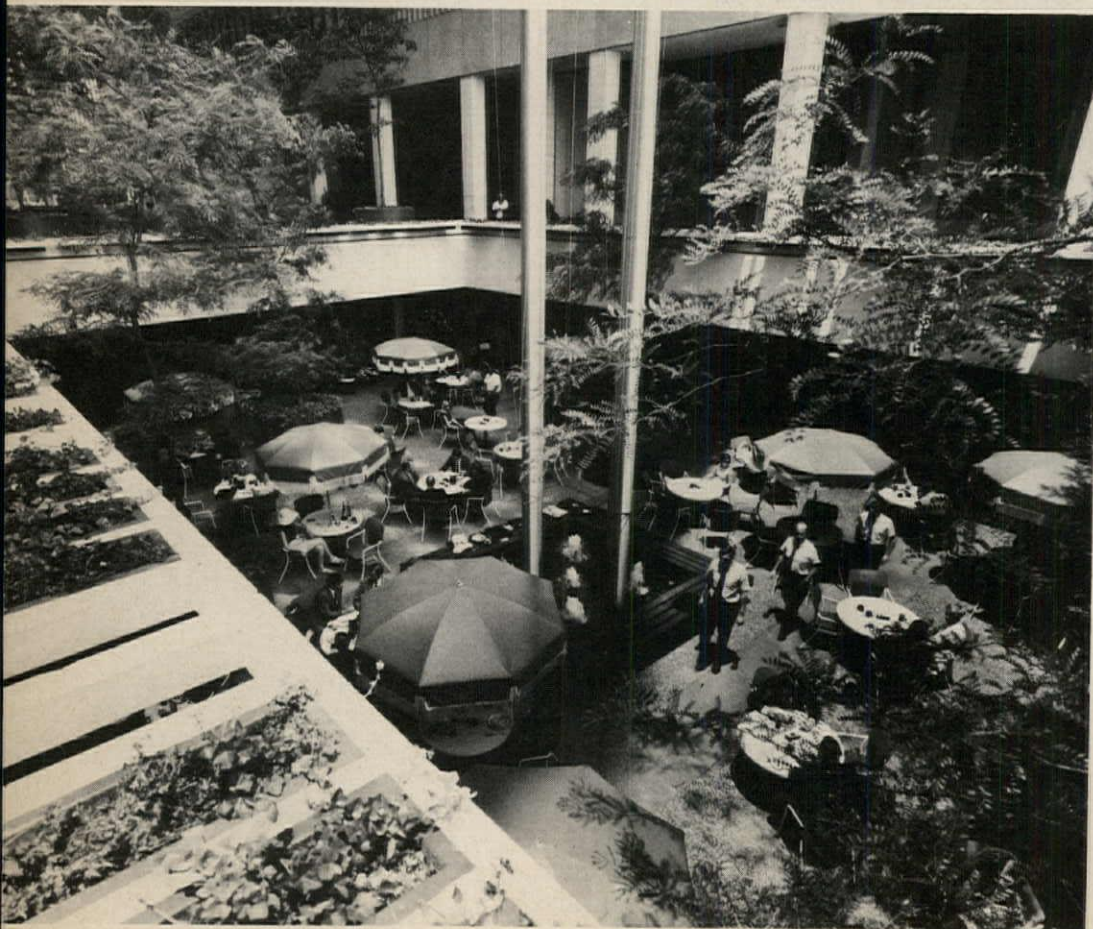
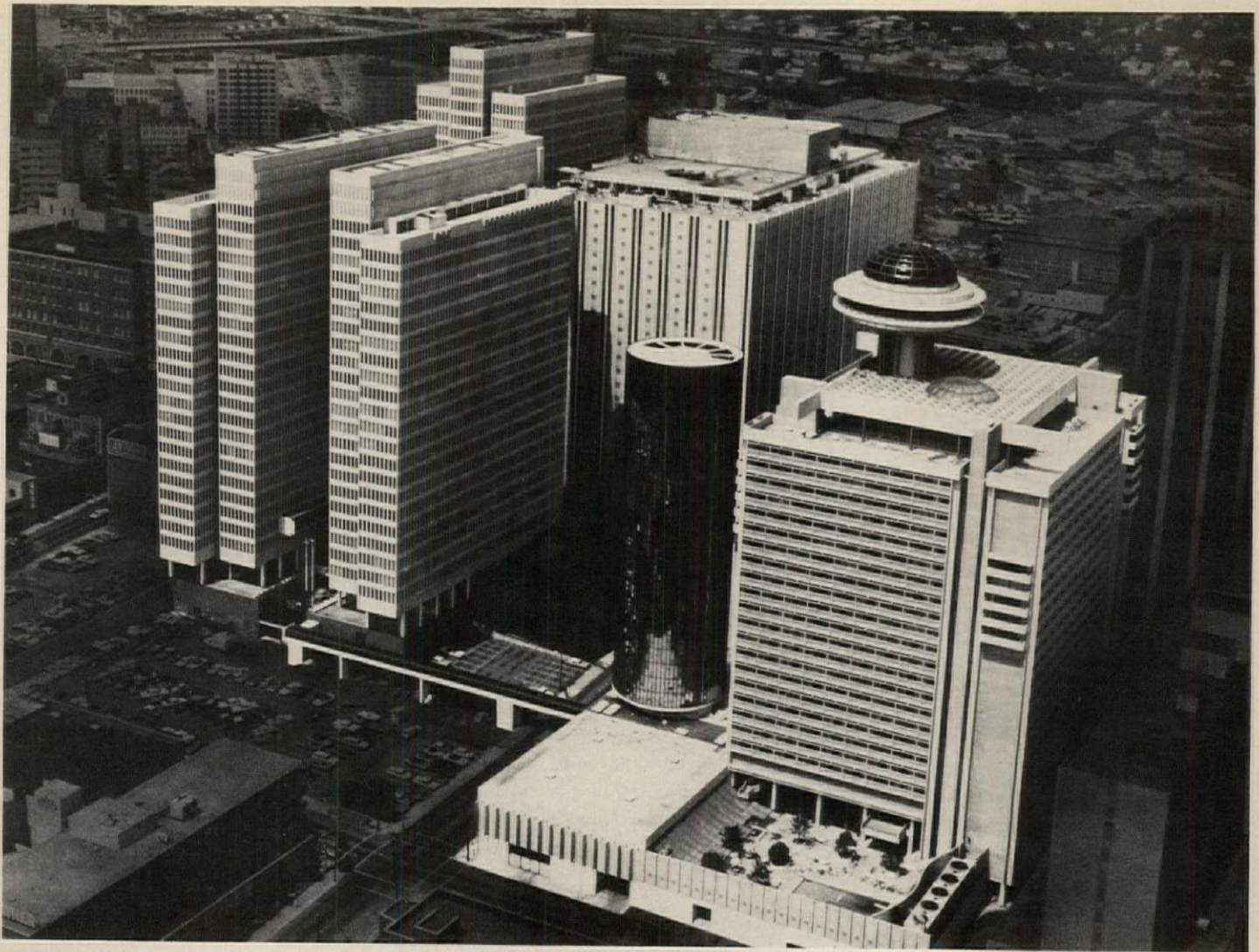
As one of several ancillary motives for the architect to get into development work, it can help him recruit new clients. The case of John Portman & Associates of Atlanta shows how. In the dual role of architect and developer for that city's famed Peachtree Center hotel/office/retail complex, John C. Portman Jr., FAIA, built a reputation for sound economic design coupled with imaginative architecture. His boldly conceived Regency-Hyatt House with its highrise atrium concept provoked a skeptical reaction from conservative hotel people; they confidently predicted that the project would never fly. After the Regency-Hyatt's success, the Portman firm was retained for several major hotels. The design control assured by its status as architect/developer gave the firm an outstanding opportunity to display its hotel-designing skill, plus an obvious opportunity for lucrative investment in a good development project.

The architect offering the same services in the 1970s that he offered in the '50s may follow the trail of the dinosaur. This is not to say that all architects should become developers. Development work is not for everyone. Temperamental, psychological, financial and even technical obstacles bar many architects from entry into development work. Many may remain happy, content and possibly prosperous in their traditional design roles. But viewed pessimistically, the profession's future may be jeopardized if too many architects stand pat.

Expansion of the architect's role may be a condition of sur-

\* Task force members: Herbert E. Duncan Jr., AIA, chairman; Harry A. Golemon, AIA; Michael Maas, AIA; Robert L. Stelzl. Staff executive: Robert Allan Class, AIA.





Peachtree Center in Atlanta is designed by John C. Portman Jr., FAIA, who together with Trammell Crow of Dallas developed the hotel/office/retail complex. Through the design control he held as architect/developer, Portman, in addition to having a good investment, could prove his skill and consequently attracted several clients. Above at left are twin office towers, behind them the Peachtree Center Building and the 2-million-square-foot Merchandise Mart, at right the Regency Hyatt House with its cylindrical guest tower. Still another office structure will be added to the center and is now under construction. The lower mall of the center has an outdoor restaurant, shown at left.



vival. A host of competitors—package builders, project feasibility analysts, space programmers, space planners, cost consultants, building system consultants—have appeared on the construction scene. These aggressive newcomers are steadily chipping away at the architect's work, actual and potential. In view of the accelerating changes underway in the building industry, the conservative architect who faces the future with equanimity may be the proverbial ostrich. Development work is one of several ways for an architect to expand his services. And expanded services appear to be a condition of survival for the architectural profession as a major force in the building industry.

Misunderstandings account for the failure of many architects to exploit opportunities in development work. Some fear that they lack the necessary expertise. Judged by the flood of inquiries received at the headquarters of The American Institute of Architects, many architects erroneously believe that equity participation in their projects is unethical. Still others, who may know better, nonetheless nourish a vague distaste for the entrepreneurial role, with its public image of the conniving wheeler-dealer.

All these objections can be readily answered. By working on a development team, an architect can ally himself with the required experts: mortgage bankers, realtors, tax accountants, cost consultants, lawyers and contractors. He doesn't need to be a Renaissance man, expert in all development fields. Moreover, he doesn't have to dominate the development process merely to participate in it. Analyzing this inferiority complex inspired by the prevailing image of the dynamic Ronald S. Senseman, FAIA, another pioneer architect/developer, comments:

"Participating in development work changes an architect's professional outlook. Instead of passively waiting for others to initiate projects, the architect aggressively creates projects himself. Before our firm got into development work, I was inspired with a kind of awe for the developer's financial acumen and his bold action in launching projects. But after our firm got into development planning I found that the only thing some developers have to offer is the ability to get money. We found them highly dependent on our advice, and not only on design. The architect's ability to visualize a project gives him a tremendous advantage in the planning stages of the development process. The same talent that creates projects can also initiate projects."

In the normal course of his practice, an architect may al-

most subconsciously assimilate a vast pool of knowledge applicable to the development process. His mind may be brimming with ideas for satisfying community needs and with valuable knowledge about local land values and the availability of potentially valuable land. He may be an expert in the technique of negotiating zoning changes. Among his professional and business friends, he may have potential equity investors and even mortgage lenders. This reservoir of expertise may lie impatiently awaiting the architect's recognition and eventual use in a real, live development project.

The idea for a development project can be triggered adventitiously. Deeter, Ritchey, Sippel Associates' proposed Mon Plaza project in Pittsburgh was conceived in a traffic jam, when DRSA President Russell O. Deeter, FAIA, sat in his crawling automobile, looking down from the Fort Pitt Bridge onto a wasted, 48-acre riverside tract directly across the Monongahela River from the city's Golden Triangle. In place of the motley collection of warehouses, scrapyards and parking lots occupying this superbly located site, Deeter visualized a thriving residential/commercial complex extending Pittsburgh's central business district. Later, questioned in a local television interview for ideas to improve the city, Deeter outlined his plan for the wasted site.

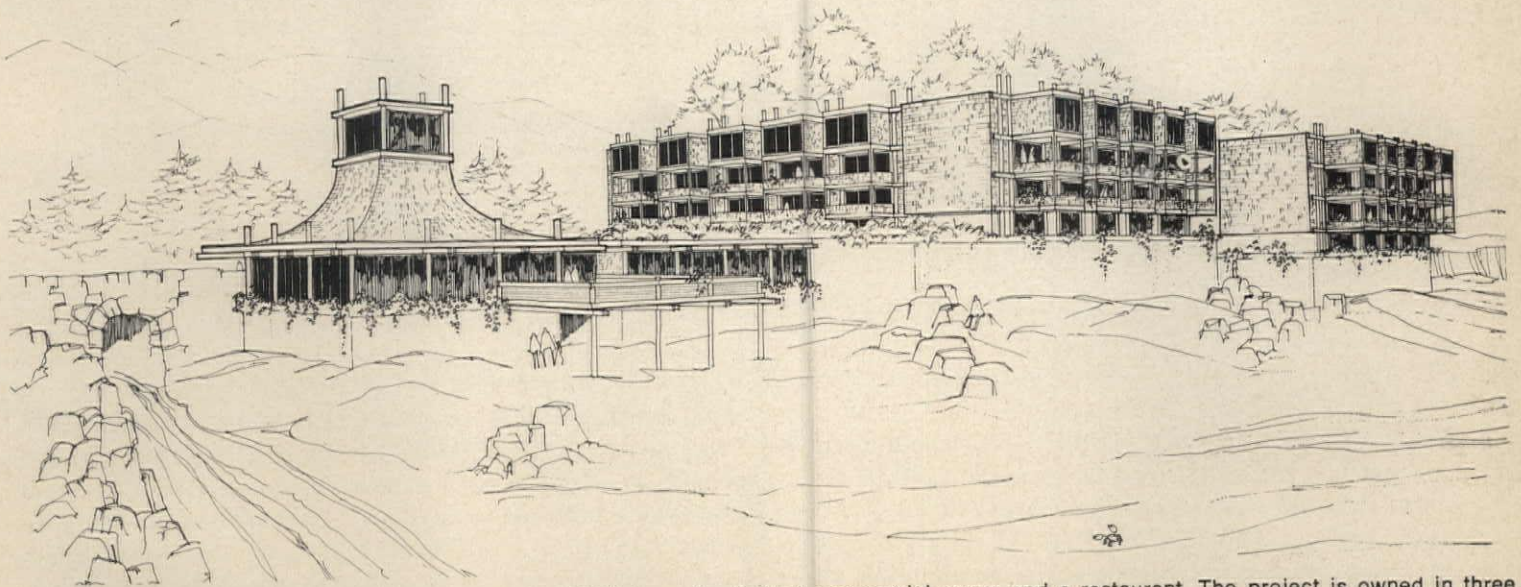
DRSA initiated the proposed project by joining with a real estate company and a finance company incorporated as Mon Plaza, Inc., with each owning a percentage of the stock. The development integrates the expertise in three key elements of project development: land, money and design. The real estate member identifies potential markets, absorption rates and possible major tenants. The financial company finds sources of front-end money, capital financing and available government programs. The architect handles the physical planning, design and construction management.

Current plans for the Mon Plaza complex include office buildings, apartment towers, a hotel, shopping complex, marina, heliport, rapid transit station plus a 12,000-car parking garage.

Inhibitions inspired by fear of violating the professional standards of ethics spring from misunderstandings. In an interpretation published last year, the AIA board laid this fear to rest:

"As a participating owner of a project . . . [an architect] may perform in any role consistent with the position of ownership."

As brief ethical guidelines, architects can protect their pro-

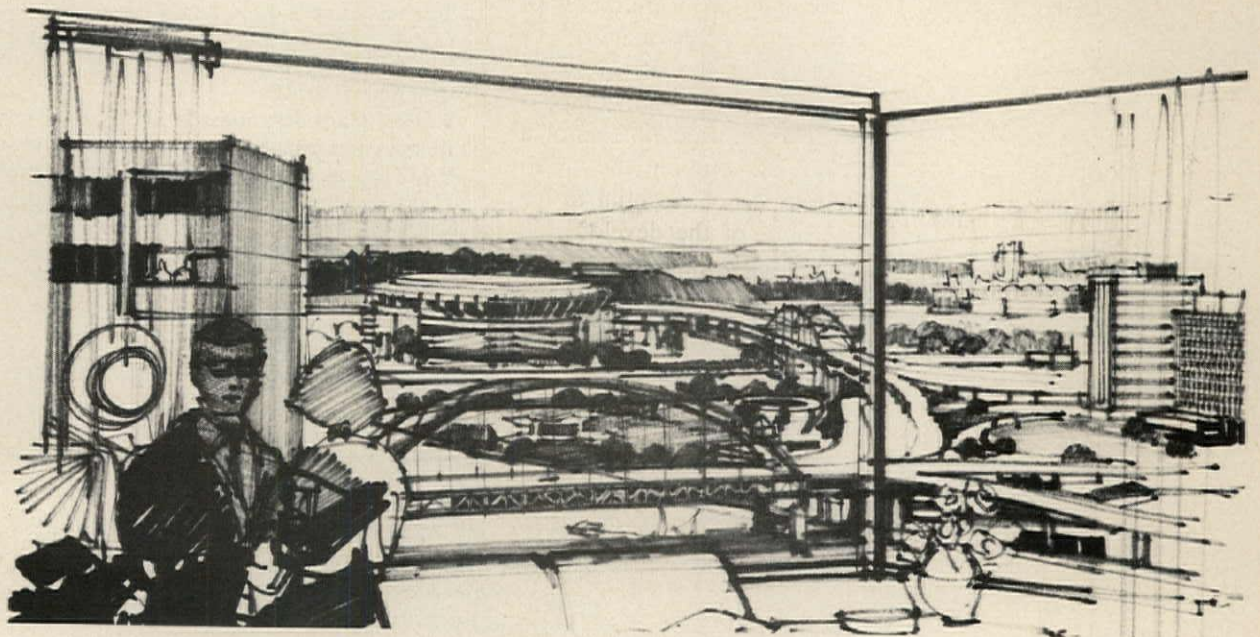


Miramar Beach in California is a planned community of 94 living units, limited commercial space and a restaurant. The project is owned in three equal parts by a contractor and a realtor, both local, and the children of John T. Law, AIA, whose firm Law Woodson Hammond designed it. The property is located between five miles of undeveloped state beach and one of California's best harbors. It was previously occupied by a hotel which burnt down in 1969. Law created the ownership group in 1970. The first units will be completed this summer, the rest when feasible.





Mon Plaza in Pittsburgh is a town-in-town project conceived by Russell O. Deeter, FAIA, and now being designed and developed by Deeter, Ritchey, Sippel Associates. Located on the river within 900 feet from the central business district, the site was before a wasted tract. The complex will include apartments, a shopping mall, hotel and convention center and will have an internal transportation system which connects directly with a bridge across to the CBD.



professional status, avoiding real and apparent conflicts of interest, by observing two basic rules:

1. Inform clients of any personal financial interest (apart from professional compensation) in the project.
2. Contractually separate the design consultant function from the development team.

Concerning some architects' distaste for the entrepreneurial role, one need only cite such nationally known firms immersed in this type of work as Charles Luckman & Associates and Vincent G. Kling & Partners in addition to DRSA and the Portman firm. Smaller and newer firms are also entering development work. One notably successful architect/developer, John T. Law, AIA, of Law Woodson Hammond (*see* AIA JOURNAL Nov. '70), started with a small restaurant/bar renovation and has since

gone into moderate-size residential projects in the dual role of architect/co-owner.

For the small practitioner concerned about preserving his professional independence, suspicious of the trend toward mergers and acquisitions of architectural firms, development work can offer survival insurance. Despite the apparently inevitable monopoly of large A/E commissions by large firms, smaller projects will continue long into the foreseeable future as a substantial, if diminished, proportion of total architectural work. By remaining alert to development opportunities in these projects, small architectural firms can possibly find their own route to prosperity. By increasing their depth of services and by exploiting opportunities for equity investment, they should increase their annual income despite a diminished potential clientele.



Opportunities for architects to participate in project development, often in an entrepreneurial role, are increasing both in public and private work. The slowly expanding roles of government in urban development offer promising opportunities for architects in master planning and other services far beyond the architect's conventional building design services. The New Communities Program, Title VII of the 1970 Housing and Urban Development Act, will ultimately accelerate the trend toward regional planning, by providing federal grants and loan guarantees for new town and planned-unit-development projects. The national drive for the planning of our urban environment, replacing our traditional submission to the chaotic urban sprawl, means more work for the qualified architect.

The federal government's expanding use of turnkey construction also promises new development opportunities for architects. Apparently inspired by the success of turnkey public housing, the General Services Administration solicited proposals for its first turnkey projects: five federal office buildings in Illinois and Wisconsin. Among the respondents to the bid invitation are package builders and architect/contractor joint ventures. They are suitable for small as well as large architectural firms.

Opportunities for architects to take part in private projects were never greater. Inflation has evaporated a large part of the perennially shallow pool of interest-bearing mortgage funds available for development financing. Developers have sought new sources of financing through a host of new techniques designed to lure equity capital into development projects. Through their professional involvement in the development process, architects have an exceptional opportunity to become joint venturers with developers, contractors, mortgage bankers, lawyers, realtors, accountants and other experts contributing to the development process. They may take all or part of their professional compensation in equity shares in the project, like the stockholders of a corporation. But to repeat the previous admonition, the architect's sharing of the entrepreneurial role is not essential to his participation in the crucial early decisions of the development process. It does, however, assure his participation in those decisions.

The way to successful equity sharing has been well charted. Today's architects can profit from the mistakes of the pioneers. The rules derived from this experience still allow plenty of room for individual experimentation in assembling development teams and assigning roles. Portman, for example, never brings in a general contractor as a partner in a development project, preferring to keep an arm's-length relation with the contractor. Other successful architect/developers find contractors excellent partners. There are also many formulas for apportioning an architect's equity share, and an apparently limitless combination of roles he can play, provided only that he is qualified. Some architects function as developers, market analysts, financial analysts, architect/engineers, construction managers and, after project completion, as building managers. But despite the vast area suitable for individual experimentation, the lessons learned by pioneering firms at great anguish and financial expense suggest several general guidelines:

**1. Start cautiously.** Don't dive; wade into development work, constantly testing the water temperature. Development work entails financial risks along with opportunities. The architect who boldly plunges into the biggest game in town for his initial devel-

opment project may find himself financially drowning. By limiting his equity participation to 20 percent of his professional compensation, an architect can assure that he will break even, or at worst suffer relatively slight losses on a development project. Yet this conservative investment, worth possibly 10 to 15 percent of the equity investment, greatly enhances his chances of controlling the design.

**2. Do not compromise on professional compensation.** Equity participation in a development project puts the architect's "blood on the line," in the words of Vincent G. Kling, FAIA. As members of development teams, architects, engineers and planners run the risk of having their contributions undervalued compared to those of contractors, developers, realtors, lawyers, etc. If the developer attempts to justify a low architectural fee as the price

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of an alluring equity-sharing opportunity, withdraw from the project. It may be the biggest game in town, but it cannot be the only game in town.

**3. Ally yourself with competent, trustworthy partners.** Set high standards for integrity. Consider even social compatibility with prospective co-joint venturers. A development project's co-owners are committed to a long-term association that is inevitably more intimate than the more formal architect/client relationship. It is one thing to have a so-and-so for a client; it is something else to be married to him as a business partner.

**4. Attain at least some elementary comprehension of market and financial analysis and financing techniques.** Learn, for example, how to make a review of the project's financial feasibility.

**5. Investigate all aspects of equity participation.** The architect should check into all these issues *before* getting involved: professional liability, possible ethical conflict arising from some peculiar aspect of the deal, financial investment prospects, etc.

The United States is starting its climb toward a higher, more sophisticated cultural level. Americans are beginning to appreciate quality as well as quantity and to demand environmental amenities and public beauty. The architect is uniquely qualified to deliver these goods, and the developer's role enhances his opportunity to do so. □

Mr. Griffin, a freelance writer, author of several books and a former senior editor of *Engineering News-Record*, is licensed both as an engineer and as a planner.



# BASIC REAL ESTATE FINANCING

Architectural firms are increasingly becoming developers as well as designers of projects. Even though he can get expert assistance in real estate financing, any architect can assist in achieving an economically sound project if he has a basic knowledge of 14 methods of finance which represent those used in over 99 percent of all real estate transactions.

by PAUL B. FARRELL JR.

Over the past two years, I have asked many architectural firms, large and small, about their activities as developers. The firms questioned are responsible for an estimated \$4 billion of construction. One-third of them stated that they had been a developer or had taken a "piece of the action" rather than a fee on at least one project. Another third outlined plans to move in this direction in the near future. This healthy trend is perhaps an outgrowth of the realization that the architect must become something more than an independent consultant in order to assume any leadership in the real estate and construction business. Of course, the potential economic rewards also encourage such activity.

As a result of this trend, it becomes extremely important that the architect be thoroughly familiar with the basic tools of real estate financing and with some of the criteria used to apply these techniques.

There are 14 basic methods of financing real estate with which the architect should be familiar.

**1. Construction or Interim Financing:** Funds advanced to an owner to pay contractors, subcontractors, professional fees, land costs, property taxes, interest charges and other project costs that come due during construction are normally advanced by short-term lenders such as commercial banks and real estate investment trusts. These lending institutions make such payments on the assumption that their cumulative investment in the project will be refunded by the permanent lender at the completion of the project. That is, the construction lender does not want to invest in the project beyond the point where it becomes operational or income-producing as an office building, apartment complex or shopping center—usually 18 to 24 months. The permanent lender, however, normally wants to invest in the project only on a long-term basis—typically 25 years—after it is completed.

The short-term construction lender, therefore, is looking down a tunnel, so to speak, and he wants to see light at the other end. If he fulfills all the necessary conditions set by the permanent lender—for example, waivers of liens to assure payment of all subcontractors, an income appraisal including a specified value, compliance with specifications, marketable title to land, etc.—he expects that he will be repaid his funds upon completion

of the project. Conversely, the permanent lender relies on the construction lender to assure that the project is built according to plans and specs, is unencumbered with mechanics liens, etc.

The construction lender will insist on an accurate estimate of all project costs before advancing any funds. Usually, this estimate is a sum larger than the amount of the loan. Thus, if the cost is \$2.4 million and the loan is \$2 million, the difference is \$400,000. This is the amount of cash or other equity that the developer must invest in the project *before* the construction lender will disburse any funds under his loan commitment. He does this to assure that the project will be completed without running out of funds.

The cost of construction money includes 1) the interest on funds advanced (usually a percentage point or more above the prime rate), plus 2) various fees to brokers and lenders of about 4 percent. The fee usually must be paid immediately upon receipt of the commitment to lend. In some cases, arrangements can be made to take the fees out of the first "draw," i.e., advancement, on the loan. In the above example with a project cost of \$2.4 million and a loan value of \$2 million, the loan could be used to pay the initial financing fees if the developer had already advanced his own equity capital to pay for at least \$400,000 of the project costs. The same result can occur without actual cash outlays if, for example, the land owner and the architect take part ownership in the completed project rather than cash payments when the land is acquired or architectural services are rendered.

**2. Permanent First Mortgage Loans:** The basic method of long-term financing for any real estate is the "permanent" loan, usually for a 20- to 30-year term. This money is lent by institutions such as insurance companies, pension funds, savings and loan associations and mutual savings banks. The loan is secured by a first mortgage, which means that if the borrower of the money defaults by stopping to pay back the loan, the lender can foreclose—sell the project—and recover his investment out of proceeds of sale. Normally, if a foreclosure does occur, the lender can be expected to make a bid to purchase the project outright for the amount of its investment. Therefore, the borrower usually loses only his equity investment.

The amount of a permanent loan is not necessarily determined by the *cost* of a project. In fact, a project's value is never



based on the costs of construction but rather on the amount of future income the project will produce. That is, if an office building will produce about \$300,000 in net income after paying all expenses, including property taxes, cleaning, heating, etc., then its value is worth some multiple of \$300,000. This method of evaluation is called income appraisal. The net income is capitalized (divided by the "cap rate" which today is about 9 to 11 percent). Thus \$300,000 capitalized at 10.5 percent, a multiple of 9.53, results in a \$2,850,000 value. Now if the lender will loan a ratio of 75 percent value, this loan should be \$2,140,000.

The permanent lender does not lend his money until the project is completed. He will, however, commit himself before construction begins to lend the money at some future time if certain conditions are fulfilled, such as completion according to plans and specs, etc. It is this commitment which is the light at the end of the construction lender's tunnel. Thus the permanent lender will agree to lend money at some specific future date and at specified terms.

The most important terms are 1) the interest rate, for example, 9½ percent; 2) additional compensation, for example, of 2 percent of the gross income, a sum approximately equal to an additional ¼ to ½ percent interest; 3) the term of the mortgage, or the total time scheduled for repayment of the loan; 4) the amortization period; a loan may be made for a 15-year term with an amortization schedule based on 25 years, in which case the borrower makes annual interest and principal payments as if the loan were a 25-year loan with a balance payment for the unpaid portion of the loan at the end of the 15th year; 5) the debt service or amount of interest and principal due each year; this is usually a constant amount equal to the first year interest payment plus approximately 1 percent for a 25-year loan; and 6) prepayment privileges; limiting the rights of the borrower to pay off the loan before the end of the term and specifying any penalties, for example, 3 to 5 percent of the loan amount, if the borrower pre-pays his loan before certain dates.

**3. Gap Financing:** Permanent lenders typically condition their loan commitment on a rental achievement. For example, they may agree to lend 80 percent of the loan upon completion of the building and the remaining 20 percent when the building is leased up to 85 percent of a specified rent level. Later the building may actually be 100 percent leased when it is ready for occupancy, but most structures are usually not preleased so there is a risk of not leasing; there is a gap between the floor and ceiling of the permanent loan. The construction lender now will only lend 80 percent of the permanent commitment for the remaining 20 percent of the permanent loan. This commitment can cost a fee of an additional six points—6 percent of the amount of the gap loan commitment.

**4. Standby Commitments:** A popular form of financing in periods of tight money is the standby commitment. It is a viable perma-

nent mortgage against which a construction lender will advance his interim financing. The standby commitment, however, differs from the usual permanent commitment in three notable ways: 1) Neither the lender issuing such a commitment nor the borrower intends to close this commitment as the actual permanent loan; both expect that the borrower will obtain another permanent loan at or near completion of the project. 2) The interest rate is set purposely high and the term quite short to discourage the borrower from closing the loan, or "taking it down," i.e., actually borrowing the money committed by the lender. 3) Even if the borrower decides to close the loan, he is not locked into the loan but may repay it at any time. Most permanent loans of 25 years, for example, prohibit a borrower from prepaying the loan for a minimum of 10 years.

The standby commitment is used for various reasons. When money is tight, the terms of a loan commitment on a project yet to be built are usually not as favorable as they would be in 18 to 36 months when the same project is completed, occupied and a proven income-producing investment. Inflation will probably result in actual rents being greater than projected ones, resulting in a higher economic value and a larger mortgage. And since a developer normally has to take the risk of leasing up the project anyway, the more sophisticated ones use standby commitments as short-term financing techniques and then go for their permanent financing later after the completion of the project when they feel confident that they can obtain a better loan.

The standby loan is also used because a developer may be convinced that he can achieve rents which are higher than other existing projects in the area. Once he has proved his point, he can then obtain a favorable mortgage based on rents achieved. This type of commitment is also used to support construction loans for condominium projects since the construction lender usually will not accept the individual permanent loan commitments as sufficient light on the other end of the tunnel. So the construction lender will usually insist that the borrower provide a standby loan commitment in a condominium project.

**5. Leasehold Financing:** A developer may be constructing his building on leased land. If the ground rent (rent to be paid on the land) is reasonable, based on the value of the land, and the owner agrees to subordinate his interest in the land to the lender holding the mortgage in the improvements, i.e., give the lender the right to sell the building *and* land if there is a default on the mortgage payments, then a developer will be able to get a loan which will cover his total costs. There are other advantages to this method of financing. While land cannot be depreciated for tax purposes, land rental payments can be fully deducted for tax purposes by the developer. Moreover, if the land is sold, the seller must pay an immediate tax on his gain. A lease to the developer can be used to avoid such a tax, although taxes must later be paid on rental incomes.

If the land owner will not subordinate his interest in the land, but the ground rent is reasonable and the developer has financially strong tenants ready to lease space, it is still possible to obtain permanent mortgage on the improvements. These rates, however, may be slightly higher, the terms of the mortgage will

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likely be tied to the tenants' lease terms and the loan to value ratio will probably be less than where the land owner does subordinate.

**6. Land Sale-Leasebacks:** There are various methods of sale-leaseback financing. In a typical deal, the land is sold to the lender providing the leasehold financing on the improvements. The land is then leased back to the developer for a long term, for example, 40 years with two 10-year renewal options. The land is usually sold for 100 percent of its current appraised value and leased back for an annual payment of 9 to 14 percent of that value.

The land sale-leaseback terms may vary considerably depending upon the lenders in the market for such projects. Some lenders may commit to a favorable leasehold loan but refuse to negotiate repurchase options. Other lenders may look for a low yield but limit the lease and renewal options to a short term, thereby restricting refinancing opportunities. In any event, careful attention must be given to the total economic impact of these sophisticated financing packages.

**7. Sale Leaseback of Energy System:** A developer may also sell and leaseback the energy system in his project. Certain lenders are willing to purchase total energy systems, etc., and subordinate their interests to that of the first mortgage lender. These lenders then assume responsibility for maintenance of the system and lease it back or simply charge the owner for power utilized. In a typical installation, the developer is able to recapture 10 to 15 percent of his total project costs, thereby substantially reducing his equity invested. Such investments are usually made on larger high quality projects.

**8. Sale Leaseback/100 Percent Financing:** A developer with an established record of successful projects may have one that is supported by leases from financially strong tenants, in which case a lender may provide virtually 100 percent financing by purchasing the land and building and leasing them back to the developer. He in turn manages the project and subleases to his major tenants. The rate of return and lease terms will depend upon the strength of the tenants, the terms of their leases and other factors. Moreover, renewal options, repurchase options and "participations" (developer's and lender's shares of the rentals or rental increases) will be of prime concern to the developer. This type of real estate financing can be prearranged before the development begins, in which case the sale will likely be contingent on rental achievements, or later after completion.

**9. Installment Sales Contract:** In a sale-leaseback, the developer receives maximum financing, but he no longer *owns* the project and therefore is not entitled to take depreciation deductions on its value. This result can be avoided with a sale and repurchase agreement or installment contract, thus permitting the developer to retain the depreciation while giving him the maximum financing potential inherent in the sales-leaseback.

**10. Bonded Lease Financing:** A high credit tenant, such as a municipality or corporation with an established record of earnings, can provide the basis for 100 percent financing for a developer's project if the tenant is willing to enter into a noncancelable absolute lease which will be at least sufficient to cover the mortgage payments. The terms depend upon the length of the lease and the strength of the tenant.

**11. Wraparound Mortgages:** After an owner has had a project for several years, he may want to refinance it in order to get his equity out of the project. However, he may not be able to prepay his existing loan and/or his existing loan may have a lower, more advantageous interest rate. A wraparound loan can be arranged under which the obligations to the existing loan are assumed by a new lender who places another mortgage on the property. The

borrower then is able to get some or all of his equity investment out of the project and will probably have loan terms more favorable than would exist if the total mortgage debt was completely refinanced. As usual in refinancing, the money received from the mortgage lender is not subject to federal income or capital gains taxes. Moreover, a larger portion of his debt service payments would again be tax deductible interest. While debt service is usually constant over the life of the mortgage, the interest part declines each year.

From the lender's viewpoint, he can leverage on the lower interest rate of the existing loan. Thus, if a wraparound lender's loan is for \$3 million which includes the responsibility for a \$2 million balance on the existing mortgage, then this new lender will actually advance \$1 million to the developer. If the new loan is for 9 percent interest on \$3 million and the old one is at 7 percent, then the wraparound lender is making 9 percent return on \$1 million actually advanced. This is likely to be less than the going rate for a new loan, *plus* the 2 percent difference between the rates on the new and old loans on the remaining \$2 million balance on the existing loan. This is equivalent to 13 percent on the \$1 million actually advanced.

**12. Secondary Financing:** Additional debt financing is often available from lenders willing to take a second mortgage subordinate to the first mortgage lender's position. That is, if the owner defaults and there is a foreclosure sale, the first mortgage lender must be paid first out of the proceeds. If any funds remain, they are then distributed to a second mortgage lender. In other words, the second mortgage lender's risk is higher and therefore the terms of his loan are understandably more expensive than a first mortgage. For example, the interest rate for a second mortgage is likely to be 1.3 to 1.8 times the rate on a permanent loan, and the term is likely to be about five years.

**13. Purchase Money Mortgages:** Frequently a seller of property will transfer the land and take back a second mortgage called a purchase money mortgage to cover the unpaid balance due on the land sale's price. The seller may use this form of installment sale for his land because of the tax advantages to him and also because the developer purchasing the land wants to minimize or defer his cash investment in the project. The seller need not take a second mortgage position but will frequently do so in order to assist the developer in obtaining the necessary first mortgage for financing improvements. In many states, the land contract functions like the purchase money mortgage to effect installment sales of land.

**14. Development Loans:** Occasionally certain lenders will advance funds necessary to acquire land and finance the installation of basic improvements such as utilities and roads. Such loans are made, if at all, to established developers or exceptional projects, and are subject to strict inspection requirements. The loans are usually made before a developer has arranged his permanent financing on the project, and the risk involved in such a loan is naturally greater than a permanent or construction loan. Therefore, the lender will expect a higher yield and probably some form of participation in the developer's profits: a percentage of the gross income or an actual equity interest in the project or, perhaps, a share of the builder's profits.

These 14 techniques of real estate financing by no means cover all the methods available to the developer, but they probably do represent the ones commonly used in over 99 percent of all real estate financing transactions. The architect familiar with these basic techniques and their applications will be better equipped to advise his client on how to create an economically sound project. □



# 1972 LIBRARY BUILDINGS AWARD PROGRAM

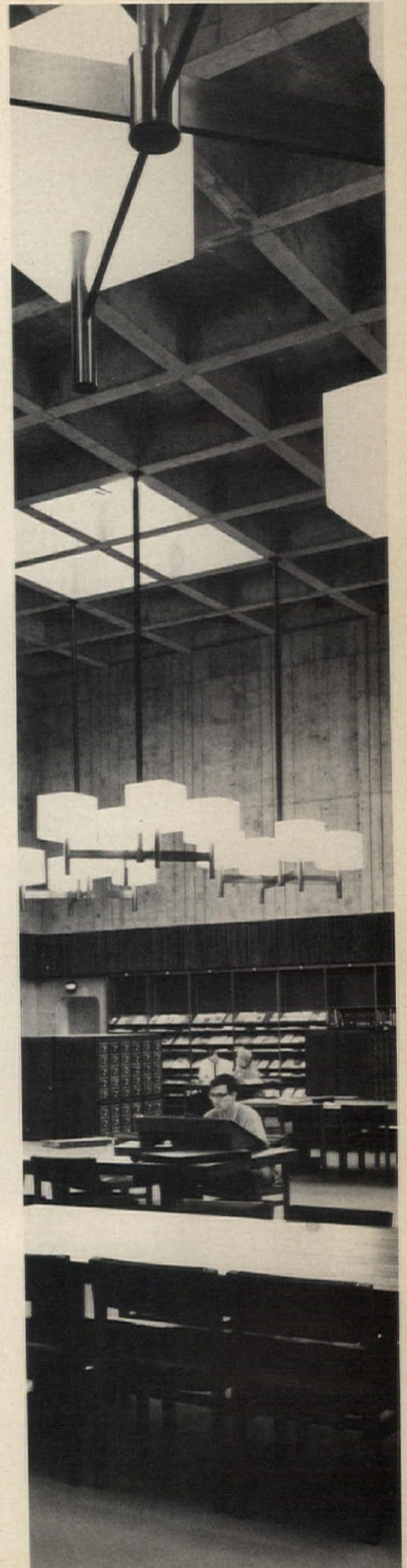
For the sixth time, jurors have selected winners in the Library Buildings Award Program which is sponsored jointly by The American Institute of Architects, the American Library Association and the National Book Committee. With 204 submissions before them, the judges called their task of evaluation "almost insurmountable." To reach their decisions, a "spirit of unity" was required, and they first promulgated a basic philosophy which defined broadly the qualifications a library requires to be a successful design solution. Then, after much give and take, they arrived at the final selections with unanimous agreement on two Honor Awards and seven Awards of Merit.

The biennial event which honors the design and planning of buildings which have been erected here or abroad includes the categories of academic, public and school libraries.

Jurors for the sixth awards program included architects Alva L. Hill Jr., AIA, chairman; and Leo Kornblath, AIA; librarians Cora Paul Bomar, Donald O. Rod and Robert H. Rohlf; National Book Committee representative Foster E. Mohrhardt of the Council of Library Resources; and AIA student representative H. H. Smallridge. □

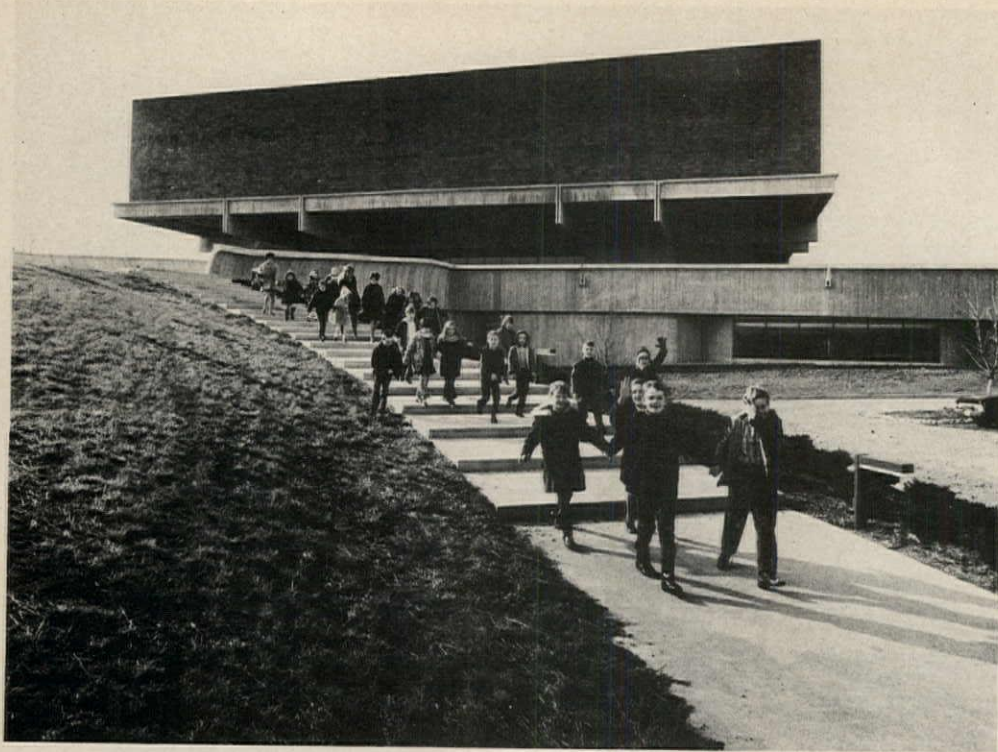


Providence College Library



Ohio Historical Center

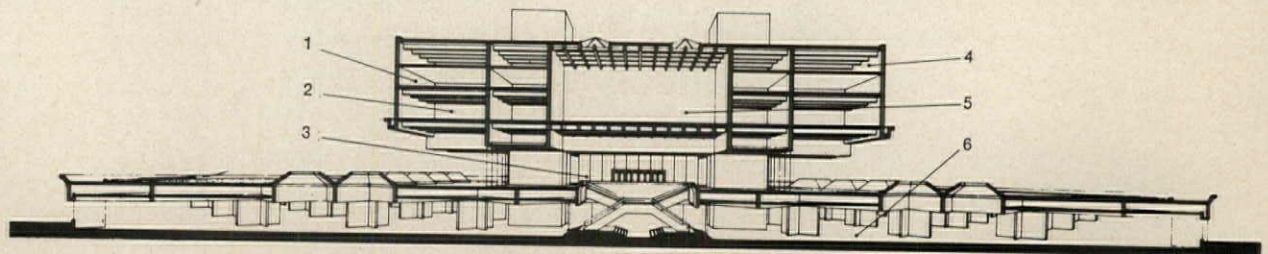




HONOR AWARD

**Ohio Historical Center Library/Archives,**  
Columbus, Ohio. Architects: Ireland/Asso-  
ciates, Inc.

"A bold, imaginative, almost startling struc-  
ture which admirably fulfills its role as sym-  
bol for the center complex. The lobby and  
museum spaces are a featured base over  
which the majestic library superstructure  
soars. In concept, structurally, spatially and  
symbolically, it is an outstanding building."



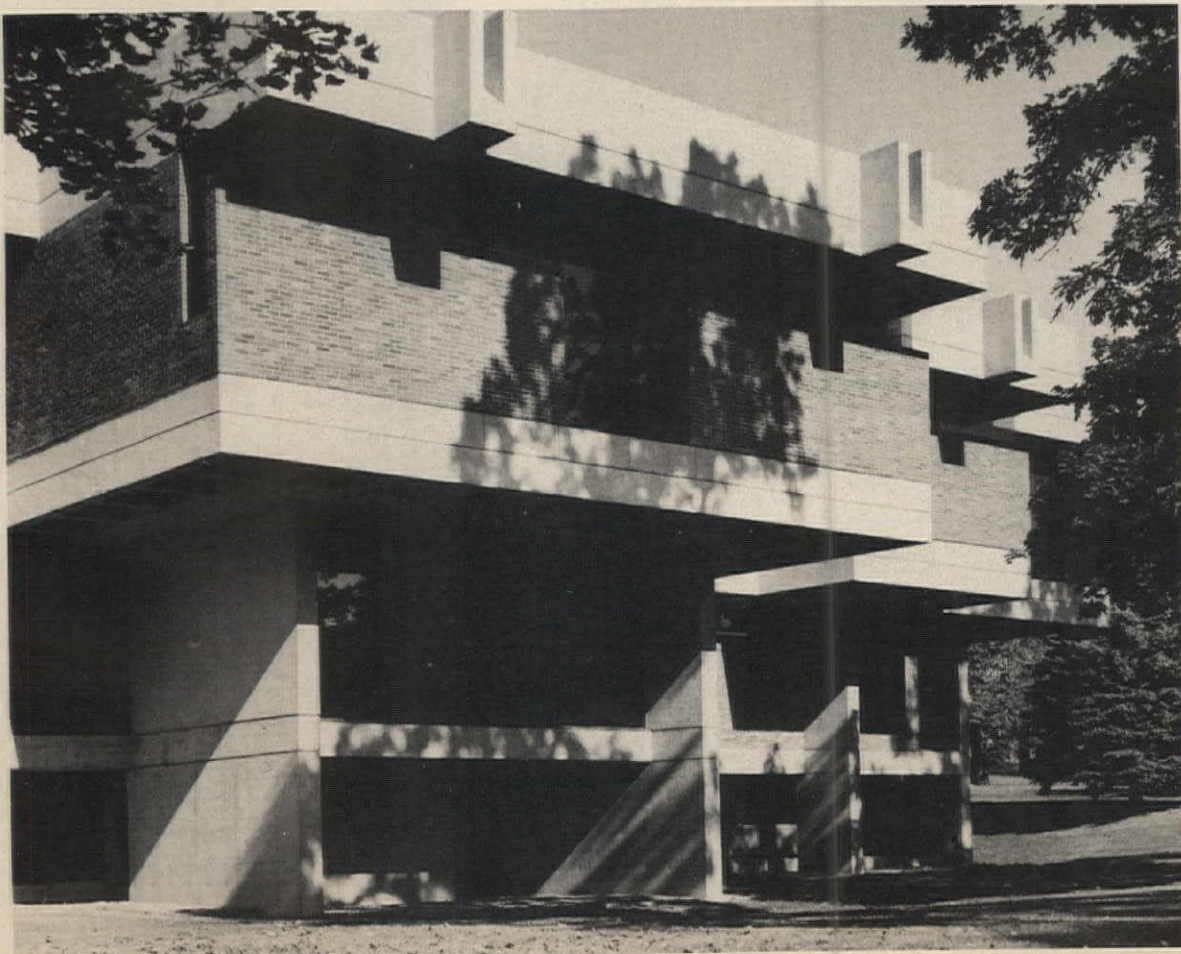
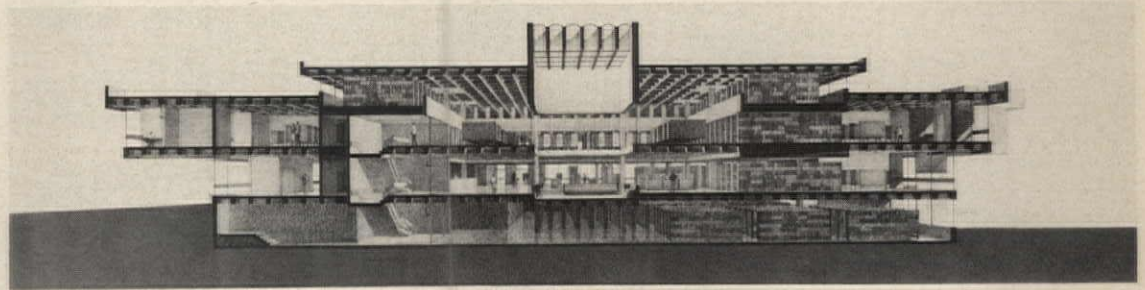
- 1 Library stacks
- 2 Library/archives offices and processing,
- 3 Plaza level/public entrance
- 4 Archives stacks
- 5 Public reading room
- 6 Museum exhibits; labs and offices



HONOR AWARD

**Providence College Library**, Providence, Rhode Island. Architects: Sasaki, Dawson, DeMay Associates, Inc.

"The pinwheel arrangement of the stack groupings and the relationship of stacks to study and reading areas are excellent. There is an excitement in the interplay of spaces. Scale and use of color are outstanding. The expression of the structural system, choice of materials and integration of the mechanical elements are sensitively handled."





## AWARDS OF MERIT

**Joseph Regenstein Library, University of Chicago, Chicago, Illinois.** Architects: Skidmore, Owings & Merrill.

"This building is unusually efficient in serving its function as a graduate research library. Approximately 585,000 square feet in area containing 3,525,000 volumes, it is one of the largest buildings entered in the program. It is a significant achievement in library planning and design."

**Corte Madera Branch, Marin County Library, Corte Madera, California.** Architects: Smith Barker Hanssen.

"Although there is some criticism of the apparent difficulty in supervising the adult stacks, this deficiency is counteracted by this library's having the best children's area of any library submitted. Delightful spaces; a bold structural concept in wood."



**South County Library Branch, Deale, Maryland.** Architects: RTKL Inc.

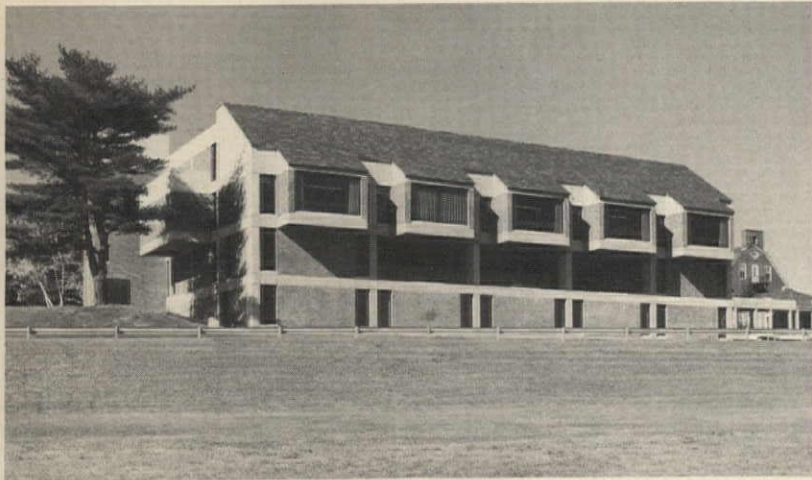
"In using the simple cruciform plan, the architect defines beautifully those areas that he wishes to express and yet he maintains a workable plan. The central tower adds the needed touch of dignity to the structure."





**Loomis Library, Loomis Institute, Windsor, Canada.** Architects: Sasaki, Dawson, DeMay & Associates.

"There is great feeling in the interplay of interior spaces with the mezzanine sensitively related to the sloped roof plane. Here is a building which belongs in its environment, respecting the Georgian character of its neighbors without a hint of pretense."



**Bailey Library, Hendrix College, Conway, Arkansas.** Architects: Philip C. Johnson, FAIA; Wittenberg, Delony & Davidson, Inc.

"The plaza atop the underground library structure enhances the quadrangle, and the nonarchitectural quality of the visible expression of the building does not conflict with the traditional character of existing structures. The library presents a highly disciplined plan with well-positioned service and technical elements."



**Tate Library, Fieldston School, Riverdale, New York.** Architects: Murphy & Mackey.

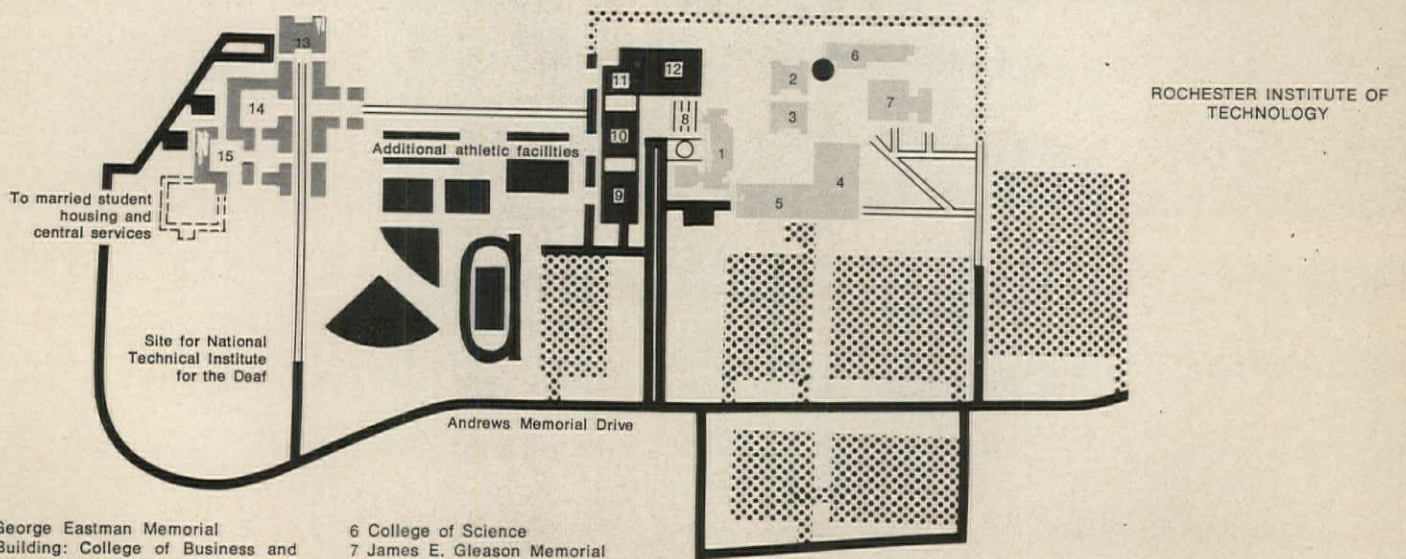
"Called a 'librarian's library,' this building is sensitively adapted to the site and its immediate environment. The interior space is functional and has a feeling of warmth and receptiveness." (For a more complete description of this library, see AIA JOURNAL, Aug. '70.)

**Richardson Public Library, Richardson, Texas.** Architects: Jarvis Putty Jarvis, Inc.

"The first structure of an ultimate civic center complex, this building is well sited, well organized and well designed for the climate. It is a beautiful building inside and out."



# Team Approach for a



- 1 George Eastman Memorial Building: College of Business and College of Continuing Education
- 2 Wallace Memorial Library
- 3 College of General Studies
- 4 James E. Booth Memorial Building: College of Fine and Applied Arts
- 5 Frank E. Gannett Memorial Building: College of Graphic Arts and Photography

- 6 College of Science
- 7 James E. Gleason Memorial Building: College of Applied Science
- 8 George Eastman Memorial Building: Administration Tower
- 9 Frank Ritter Memorial Arena: ice rink
- 10 George H. Clark Memorial Gymnasium
- 11 Edith Woodward Memorial Pool
- 12 College-Alumni Union

- 13 Grace Watson Hall: dining facility
- 14 Kate Gleason Hall: residence complex for women
- 15 Nathaniel Rochester Hall: residence complex for men

Parking



# Unified Result

by VILMA BARR

**"This is a successful example of collaborative design which may well be cited as a model for other professionals to follow in the development of future projects," concluded the jury in awarding the 1972 Collaborative Achievement in Architecture Medal of The American Institute of Architects to the firms which had combined their efforts in planning and designing the Rochester Institute of Technology campus. Two participants comment on how such a large team could function and come up with an orderly product.**

The new Rochester Institute of Technology campus is the work of five widely separated architectural firms which collaborated to produce a center of learning for 4,000 day students and 10,000 evening students. In close cooperation they carried out the client's objective: to move all activities concurrently from outgrown quarters in downtown Rochester to a 1,300-acre site several miles distant, close to the Genesee River and New York Route 252.

The \$60 million project conveys "a sense of many people caring how it came out," in the opinion of Lawrence B. Anderson, FAIA, of Anderson Beckwith & Haible, who served as coordinating architect for the project and who with landscape architect Dan Kiley helped recruit the other architects for this extraordinary undertaking: Edward Larrabee Barnes, New York City; Kevin Roche, John Dinkeloo & Associates, Hamden, Connecticut; Hugh Stubbins & Associates, Cambridge, Massachusetts; and Harry M. Weese & Associates, Chicago. The Anderson Beckwith & Haible firm is based in Boston.

Each architect was matched with two RIT deans in allied fields to develop the buildings. Anderson Beckwith & Haible did the College of Applied Science, the College of Science and the central services buildings; the residential and dining complex was under the direction of Edward Larrabee Barnes; the Roche-Dinkeloo firm was assigned the administration, physical education and athletic buildings, the College of Business, the College of Continuing Education and the College-Alumni Union; Stubbins was responsible for the College of Fine and Applied Arts and the College of Graphic Arts and Photography; the Weese firm designed the Wallace Memorial Library and the College of General Studies.

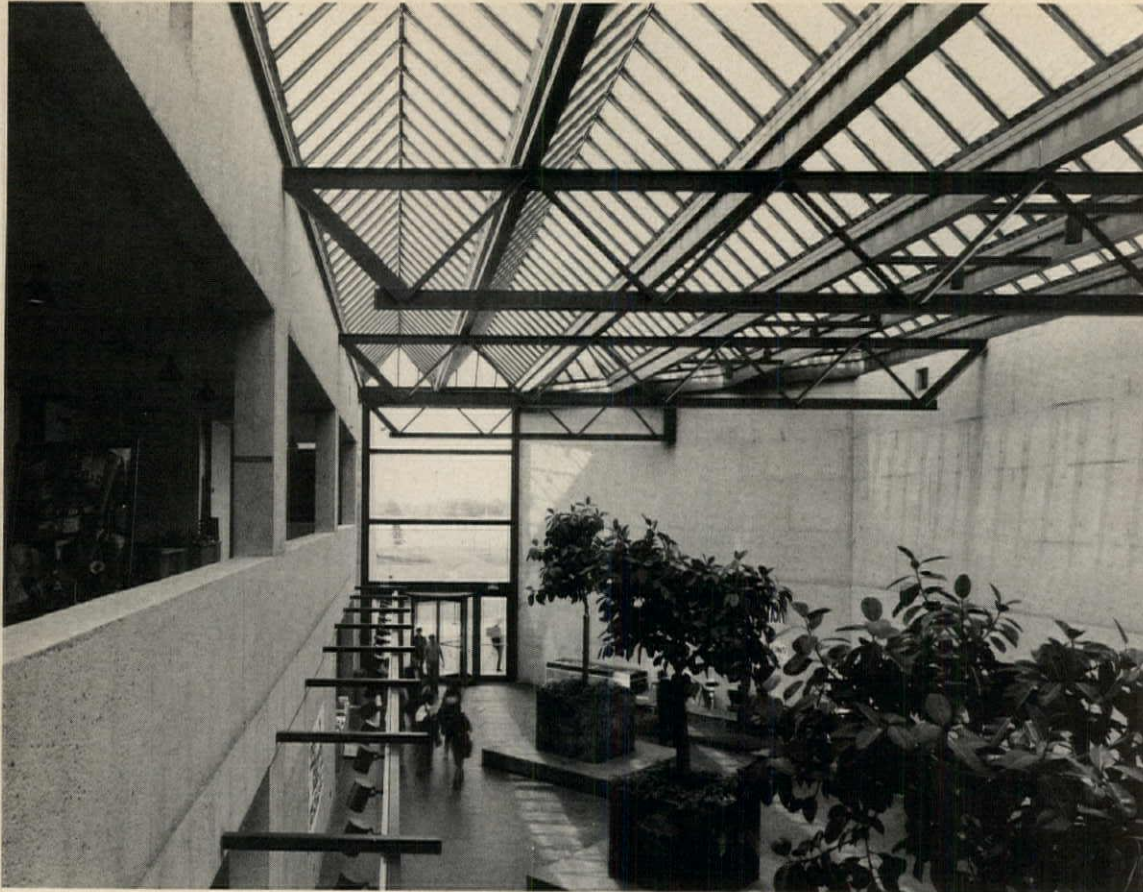
Married students' housing, located about a half mile from the center of the campus, was not a part of the collaborative effort. Due to budgetary limitations the school administration decided not to get involved in the same heavy construction format as that of the other buildings. They asked Rochester architects Corgan & Balestiere to submit a proposal and their solution was



Developed from master planning through design by five architectural and one landscape architecture firm jointly, the Rochester Institute of Technology has been given a quality of integrity since all the firms partook in the overall planning of the campus. However, each architectural firm was responsible for particular buildings, The Administration Tower of the George Eastman Memorial Building (across page), focusing point of the complex; a closeup of the tower with the Frank Ritter Memorial Arena ice rink and the George H. Clark Memorial Gymnasium to the left (above), Kevin Roche John Dinkeloo & Associates.

Mrs. Barr is a Boston-based freelance design writer and editorial consultant. Several of her articles have appeared in the AIA JOURNAL.





Lobby of the College-Alumni Union with bronze tree boxes by Harry Bertoia (left), Kevin Roche John Dinkeloo & Associates; the arts complex with a Henry Moore sculpture (below), Hugh Stubbins & Associates; and entrance loggia of the College of Applied Science (across page), Anderson, Beckwith & Haible.

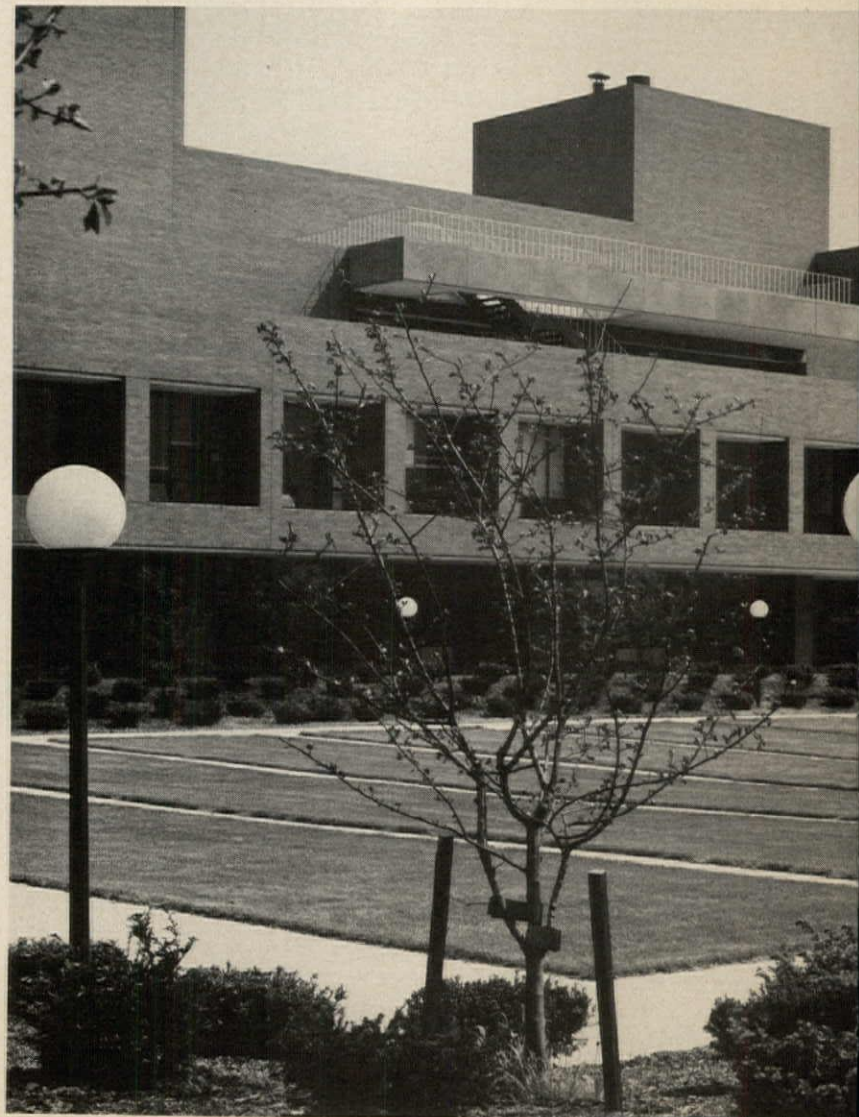
to use conventional wood frame construction for this spread-out garden apartment development.

What were the inner workings of the collaborative effort? How did ideas emerge? Were the architects challenged by each other? Criticized? Modified? What was the scope of the professional interaction?

Comments Hugh Stubbins, FAIA: "Considered as a whole, I think the project turned out very successfully, probably the first and only successful collaborative venture of that many architects. I think the final result is a homogeneous group of buildings that proves that such a collaborative work is possible and need not end up in chaotic individualism. For that time and place the collaboration was, in my opinion, a good thing. Personally I enjoyed the relationship although I hate to think of how long it took to come to conclusions—almost seven years—but in the end it was a rewarding experience."

In 1962 and '63, principals from each firm met periodically in New York City to work on the site plan. Kiley, winner of the AIA 1971 Allied Professions Medal and whose firm Dan Kiley & Partners is based in Charlotte, Vermont, contributed greatly to these sessions, and Mrs. Vanderbilt Webb, a patron of the arts and a member of RIT's board of trustees, was a catalyst in getting the entire project in gear. Mrs. Webb also heads the board of trustees of the American Craftsmen's Council, and it was in a room on the top floor at this group's headquarters building on West 53rd Street that the architects had a permanent place for their conferences, models and plans.

Each architect made contributions to the site plan as spokes-





man for his own program. "It was dynamic—you had to do your homework," says Stubbins.

On the other hand, coordinating architect Anderson feels that this stage might have been overly time-consuming. Often, he admits, he considered the alternative of having a single designer take on the overall site planning. "But I didn't want to tell the other architects what to do. That was the problem; I didn't attempt to ride herd on them." So the original outline was followed, i.e., each firm had a different program to solve and knew more about *it* than could one firm with the usual hierarchical setup trying to know about *all* programs, and the site plan would be hammered out from the architects' combined ideas. In the end, Anderson feels, the multiple effort focused on the campus resulted in a more diversified environment than could have been created by the single-firm approach to overall planning and building design. He believes that the design of a modern college campus should be the result of a community effort.



The final three-dimensional outgrowth of the master planning into a series of different buildings was only one of many proposals considered during the year of conferences. Because of the climate and the terrain of upper New York State, the megastructure idea had recognizable advantages. Plans were drawn up which defined a platform base with one common use area and wings radiating from it. But arguments ran the gamut from each school for its own identity, to the projected 1975 enrollment of 20,000 (which would make the megastructure inadequate), to whom the space should be allocated and to how it should be divided.

As the building designs evolved, Kevin Roche, AIA, became convinced that the campus needed an anchor, a point of visual orientation. The landscape was rather flat to begin with, and the buildings, up to that point, were all echoing the horizontal plane. Roche worked up an elevation of the entire campus that included his definition of the architectural reference locus. He brought it to a combined meeting, set it up and proceeded to describe, illustrate and elaborate his convictions. He did a convincing job. His fellow architects voted "aye," and RIT's visual focal point is Roche's seven-story administration tower.

Roche also suggested the type of brick that was ultimately used, a Belden iron-spot with a smooth, production-made look. Stubbins favored a more textured, hand-made New England type. "But this is a contemporary school," it was argued. Mark Ellingson, then RIT president, had wanted the school to look like a technical institution, not an Ivy League university. The architects had quickly agreed that brick would be the vocabulary of





College of General Studies (above) seen from arts center, Harry Weese & Associates; residential complex (below), Edward Larrabee Barnes.



design (about 7 million were used) but each architect stood by his own selection.

They engaged in lengthy correspondence—and found themselves getting nowhere quickly. They finally got together, confronted each other's brick candidate, gave the nod to Roche's protege and the job of coordinating and controlling the special shapes to Anderson's firm.

The meetings gradually developed their own ground rules, taking on what has been described as a rational, structured approach. "There was *not* a lot of fighting," Stubbins points out.

"They couldn't afford to fight; there would have been a loss of interest had anyone in the group seen others 'winning' consistently," Anderson reflects. On the other hand, he feels that these peaceful meetings may, at times, have been too cautious. "They were reluctant to be frank, wary of the reactions of the others," he adds.

When such facets as the number, location, scale and character of outdoor spaces had finally been arrived at, the collaborative members went back to their respective offices to complete the designs and drawings for their buildings. The client (described as patient, understanding, cooperative, helpful and courageous throughout the entire proceedings) had contracted with the architects to take over the supervision of the project when plans were ready and accepted. RIT established an office for a director of planning to supervise construction and act as project manager.

Although the five architectural firms had agreed to the appointments of common engineering firms for structural and mechanical design, they now had to work with different contractors. A glut on the Rochester construction market forced the start of the campus into a staggered timetable.

RIT's vice president for business and finance, Frank Benz, coordinated budget expenditures, which broke down roughly into \$40 million for buildings, \$20 million for improvements. "The budget was low," says Anderson, "but it did *not* oblige standardization that would have made for a duller result." Yet he feels that one of the "most surprising features is the remarkable resemblance" of the buildings to one another: close enough in appearance to convey cohesion while at the same time interpreting the needs of the several individual deans. (Anderson was at the time a dean in his own right, heading the Massachusetts Institute of Technology's School of Architecture and Planning.)

The client was multiple; the architects were multiple. Will the pattern be repeated on other campuses? "Probably not," Anderson ponders. "At least not with this same group. Some of us may elect not to take on another project requiring so much mutual accommodation. Many architects would hesitate to commit so much time and effort to collaboration. It is administratively simpler to have a single architect develop and impose the formal rules. On the other hand, to offset the difficulty of arriving at decisions the collaborative method did permit telescoping site planning with detailed program/building and individual project design," Anderson adds. "It would now be optimal if the subsequent expansion could be carried out under the control of one architect, someone who cares to follow it closely over a long period of time.

"The interiors suffered in some places; not all of the architects could bring their furnishing programs to completion, mostly due to lack of funds. But the interiors can always be built up. The framework is there. The people who live and work there, the students and faculty who spend so much time on campus, will make it better all the time." □



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# Reflections on the Rothko Chapel

**The ecumenical house of worship in Houston, named for the American abstract expressionist painter Mark Rothko whose work it houses, represents a project of 20th century religious art and a retreat where all men are brothers.**

Because it is devoted to the creations of a single artist, the Rothko Chapel in Houston has been compared to the Sistine Chapel in the Vatican. Art critic Paul Richard says of it, "I have visited Iona, the Isle of the Druids, the burial place of Macbeth and of Viking kings, and I have seen the chapel of Le Corbusier at Ronchamp, but never have I sensed more surely the presence of the holy."

A center for the celebration of all religions, the octagonal shaped, skylit chapel contains 14 immense paintings called "the supreme achievement" by artist Mark Rothko. The enormous dark and mysterious paintings—some are 15x11 feet in dimension—glorify the simple building which houses them. The walls on which they hang are of muted gray cement.

Dedicated in February 1971, the chapel had long been the vision of Houston patrons

of the arts John and Dominique de Ménéil. "Their involvement in the life of Houston has become a commitment," as someone has remarked.

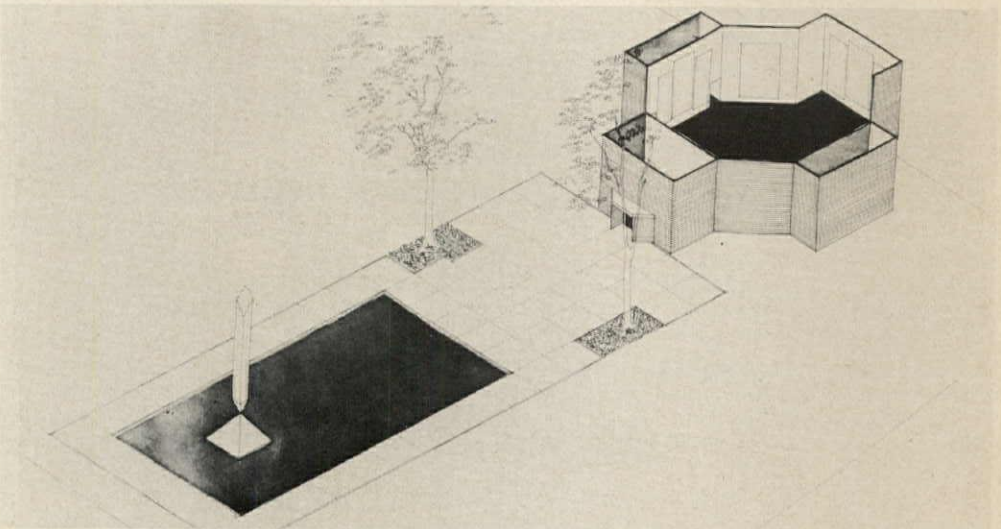
Friendship between Rothko and the de Ménéils began in the early '60s when they saw in the artist's studio in New York City some of his paintings which had been commissioned for a restaurant but which had never been placed in their intended site. The de Ménéils considered them as "sacred paintings," and it was then that they thought of a Rothko chapel for Houston. For three years before his tragic suicide in 1970, Rothko worked on a series of enormous canvases commissioned by the de Ménéils which he called "the most important project of my life."

After a series of rejections, the paintings and the chapel to house them came under the control of the Houston Institute of Religion and Human Development, a group formed in 1954 by doctors and clergymen associated with the Texas Medical Center. Designed by Barnstone & Aubry, the chapel's

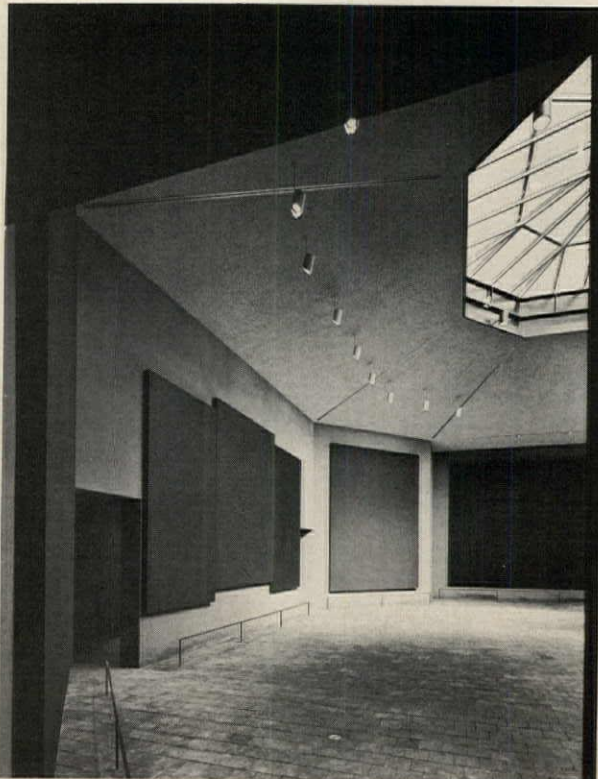
planning and construction was underwritten by the de Ménéils who also gave the Rothko paintings.

In addition to Rothko's death, there are others which "haunt that little church." Sculptor Barnett Newman, whose work "The Broken Obelisk" was to stand nearby, did not live to see his creation in place. The de Ménéils had provided the entire funds to buy the obelisk as a memorial to Dr. Martin Luther King Jr. Twenty-six feet high and made of steel, the obelisk stands in a reflecting pool near the chapel in a small park. As one critic has said, "It serves the chapel as a steeple serves a church."

"The Broken Obelisk" before its siting in Houston had stood outside the Seagram Building in New York City and on a space near the Corcoran Gallery of Art in Washington, D.C. When it was decided that it would go to Houston as a memorial to Dr. King, Newman asked that its rustproof surface be sandblasted clean. He wanted the sculpture "to build up a fresh patina that would be entirely from Houston." □



Rothko collaborated with the architects on final plans for the chapel in which are hung 14 of his giant canvases. Barnett Newman's sculpture is sited nearby. A critic says of him, "Measurement, proportion and shape awakened in Newman . . . ideas about God, man and destiny." Thus art makes the chapel a more meaningful religious experience.



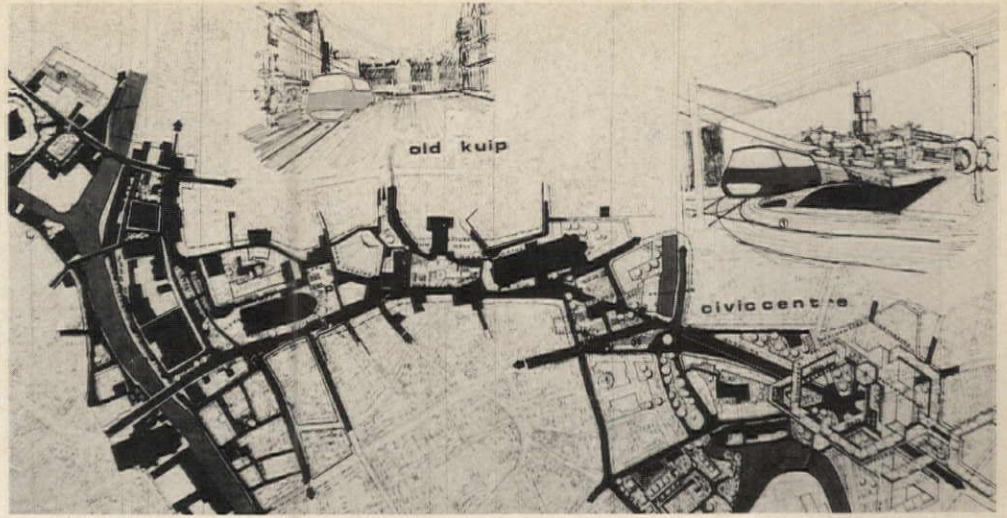


not US citizens and do not practice in this country or its possessions. Ten such persons from nine foreign countries who have been elected this year are Luis Arizmendi of Spain; Jai Rattan Bhalla of India; Henri M. Delaage of France; Sir Roy Grounds of Australia; Thomas Howarth of Canada; Jean Louis Lalonde of Canada; Vayden R. McMorris of Jamaica; Gueorgui Orlov of the USSR; Luis Ortiz Macedo of Mexico; and Michael Scott of Ireland.

**Ghent Competition in Regional Planning Won by Husband/Wife Team at Harvard**

An international competition called "Ghent Tomorrow" has been won by two students, husband and wife, at the Harvard Graduate School of Design. Nicos and Georgia Polydorides will receive a prize of about \$4,460. Working with them on the winning proposed regional plan were Greek architects Picas Kastasianakis and Yanis Patronis. The competition was sponsored by the Ghent International Fair in collaboration with local, regional and national agencies of the Belgian government.

The winning plan proposes the "tranquilization" of the historic center and development of tourism there; location of dynamic central activities along a Y-shaped axis through the city, which is about the size of Charleston, S.C.; organization of educational/cultural zones across the Y-axis; creation



Winning designers respond to plan corresponding to region, central city and small core area.

of two defined industrial zones near transportation facilities; and development of limited access highways and freeways in a grid pattern across the city with elimination of cars in the historic center.

The international jury of architects, planners and Belgian officials was headed by S. J. Van Emden of The Netherlands.

**Federally Guaranteed Financing Sought, Adequate, Safe Housing for Poor**

A bill which would direct the Federal Housing Administration to guarantee long- and medium-term loans at prime interest rates

for the renovation of low and moderate income housing has been introduced in the US Senate.

The proposal to provide federally guaranteed financing to upgrade "intolerable" slum housing was originated by three University of California at Berkeley law scholars: Kenneth F. Phillips, David B. Bryson and Bryan Gaynor. "Rat-infested, garbage-strewn buildings with broken stairs and handrails, non-functioning furnaces, hazardous wiring and leaky roofs are commonplace," says Phillips. Families are required "to spend undue portions of their limited incomes for rent, causing unbalanced budgets and a lack of money

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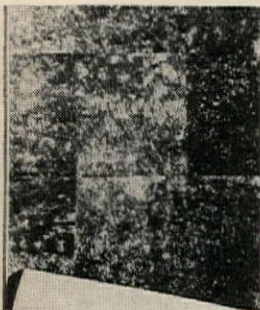
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If the bill is passed, Phillips predicts an influx of private capital to finance modest but critical repairs and improvements. The bill was introduced by Alan Cranston (D-Calif.) and Robert Taft Jr. (R-Ohio) and is co-sponsored by Jacob K. Javits (R-New York).

## Journalist's List of "Bests," "Worst" On Chicago Architectural Scene

An end-of-the-year roundup of architectural "bests" and "worsts" appeared in the December 26 *Chicago Sun-Times* with the appraisals by journalist Rob Cuscaden. As he said, he threw "a melange of bouquets and brickbats, orchids and onions."

The "bests" as Cuscaden finds them:

- Best architect: Rodney Wright, AIA, "who grew disgusted with designing colonial homes in Lake Bluff and now devotes his considerable talents to working with the Uptown Area People's Planning Coalition, an alliance of neighborhood organizations."
- Best building: the IBM Building on Wabash Avenue, designed by Ludwig Mies van der Rohe, for its "enormous restraint, precision and thoughtfulness of austere detail."
- Best idea: two new riverfront observation platforms on Wacker Avenue designed by city landscape architect David Carlson.
- Best book: *Lost America*, edited by Constance M. Greiff (see AIA JOURNAL, Jan., p. 53) which "attempts to wake us up before it is too late."

## In-Plant Printed Firm Brochure Winner, Cited for Quality, Exceptional Method

Recommended reading for small firms is an article by H. Samuel Krusé, FAIA, in the January/February issue of *The Florida Architect*. Entitled "How to Get Architectural Commissions," the article contains recommendations of the Small Office Task Force of the Florida Association of Architects AIA. The first recommendation is to develop a "first-rate brochure" which will "emphasize the unique characteristics and services of the firm."

The Perkins & Will Partnership headquartered in Chicago has long heeded this admonition and was recently named national in-plant printing winner in 3M Company's annual Printing Job of the Year competition, receiving a \$2,000 scholarship for the graphic arts education of an employee's child.

## Indiana Architect, Noted for Good Design, Civic Leader and Talented Painter

When Walter Scholer Sr., FAIA, retired from the practice of architecture in Lafayette, Indiana, handing on his mantle to his son Walter Scholer Jr., FAIA, the whole community turned out for a banquet in his honor. The citizens were in his debt, they agreed, for the many schools, college buildings, hospitals and other structures he had designed.

They also honored him for his multitude of civic services which culminated in his giving the former Scholer office building to the agencies of the United Community Services. He was praised as well for his paintings

which grace and beautify many local homes and the Lafayette Art Association.

When Scholer died at the age of 81 on January 29, he was eulogized by a lengthy editorial in the *Lafayette Journal and Courier*. It stated, "For all who knew him . . . the mark of Walter Scholer most cherished will be the warmth and far-ranging interests he brought to every friendship—the delighted chuckle and the quizzical gleam in his eye as he probed, backgrounded and appraised every topic. Walter Scholer left his marks here. They are deep, enduring—and appreciated." *continued on page 59*

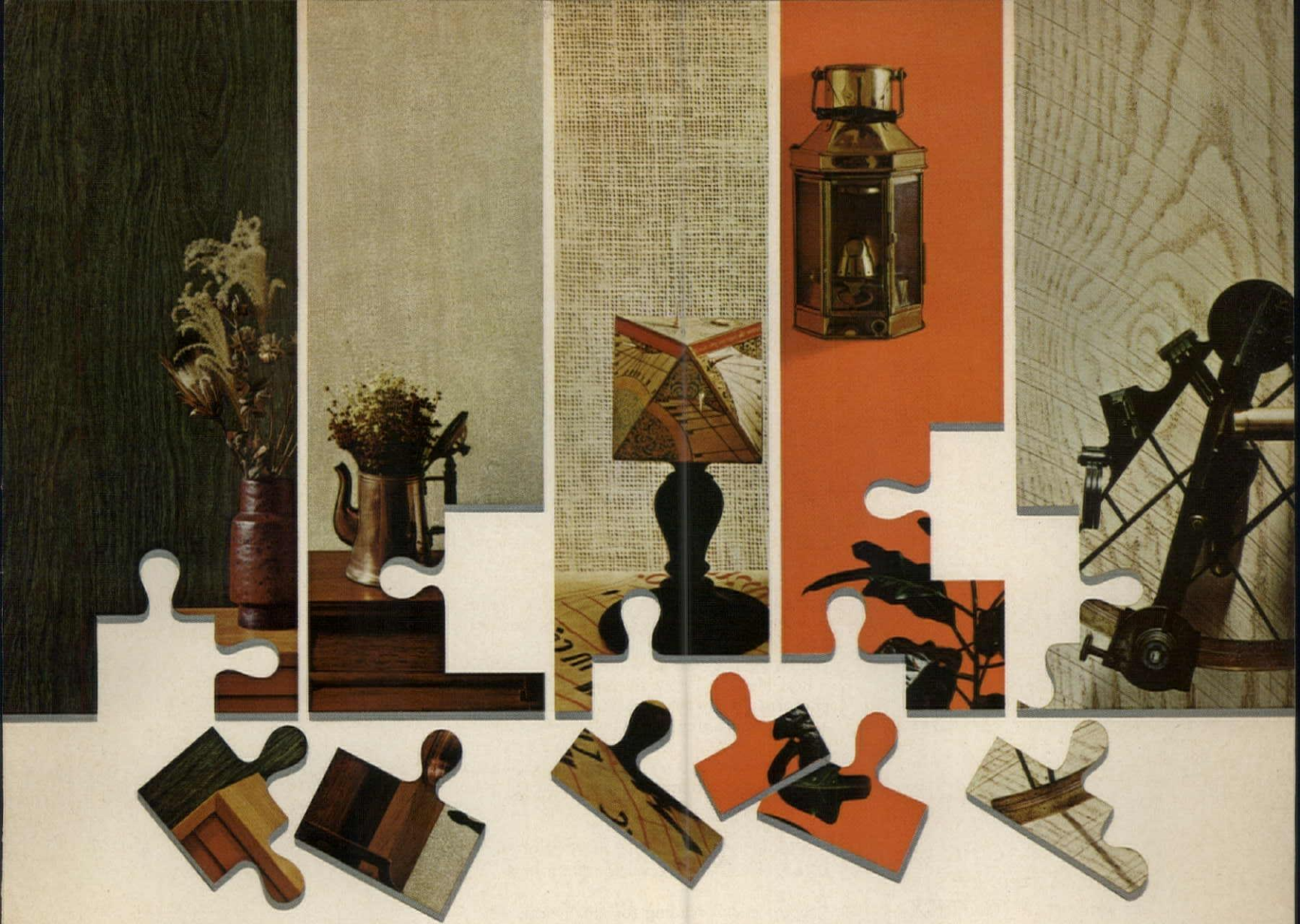
## Deaths

- GEORGE ADRIAN APPLGARTH  
*San Francisco*
- LOUIS A. AXT  
*West New York, N. J.*
- EDWARD A. BERG  
*Denville, N.J.*
- WILLIAM J. BUCKLEY  
*Dedham, Mass.*
- J. THOMAS CAMLET  
*Clifton, N.J.*
- JOHN P. CHAMPLIN  
*San Jose, Calif.*
- H. GRIFFITH EDWARDS, FAIA  
*Atlanta*
- RICHARD PHILLIPS FOX  
*Newark, Del.*
- CLIFFORD E. GARNER  
*Philadelphia*
- ROBERT D. GOODWIN  
*Dallas*
- RICHARD GOULD  
*Sausalito, Calif.*
- WILFORD P. HOOPER  
*Wellesley, Mass.*
- ANGUS MCSWEENEY  
*Hillsborough, Calif.*
- GILBERT T. RICHEY  
*Indianapolis*

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*Phoenix*
- BENJAMIN BRAUNSTEIN  
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*Madison, N.J.*
- CARL C. GERLACH  
*Philadelphia*
- HAL HENTZ, FAIA  
*Winter Haven, Fla.*
- WILLIAM A. KELLER  
*Rensselaerville, N.Y.*
- WILLIAM R. MANNING  
*Greenville, Del.*
- NELSON L. PAGE  
*Darien, Conn.*
- NELSON P. RICE  
*Encino, Calif.*
- WILLIAM F. RUCK  
*Alhambra, Calif.*
- ARTHUR T. SMITH  
*Philadelphia*
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Newslines

■ **A new town**, Riverton, will be built near Rochester, N.Y. It has received a \$12 million guarantee from HUD, making it the seventh such issue under the New Community Development Act of 1970. Riverton will eventually house some 25,000 people with between 30 and 40 percent of the 8,000 homes and apartment units for low and moderate income families and the elderly.

■ **Thomas F. Galvin, AIA**, of New York City has resigned as chairman of the city's Board of Standards and Appeals to become executive vice president of the nonprofit corporation that will build a \$100 million convention center on the Hudson River waterfront (see Nov., p. 18).

■ **A national urban growth policy** is detailed by two experts in the February issue of *Urban Land*, a publication of the Urban Land Institute. Land planner John Carson and HUD official William J. Nicoson direct their attention to the shortcomings of present land use planning and indicate specific ways of overcoming them.

■ **Knoll International** is the first American company to have been invited to exhibit in the prestigious Musée des Arts Décoratifs au Palais du Louvre in Paris. The show, which closed in March, featured furniture designs of such architects as Mies van der Rohe, Marcel Breuer and Eero Saarinen. Chanticleer Press in New York City has issued a catalog of the exhibition.

■ **George E. Kassabaum, FAIA**, former president of the AIA, has received an Alumni Citation from Washington University in St. Louis for his contributions to the field of architecture.

■ **Eugene Zwoyer** has been named by the American Society of Civil Engineers as the organization's executive director. He will assume his duties when W. H. Wiseley retires in April. Zwoyer is presently professor at the University of New Mexico and head of a consulting firm in Albuquerque.

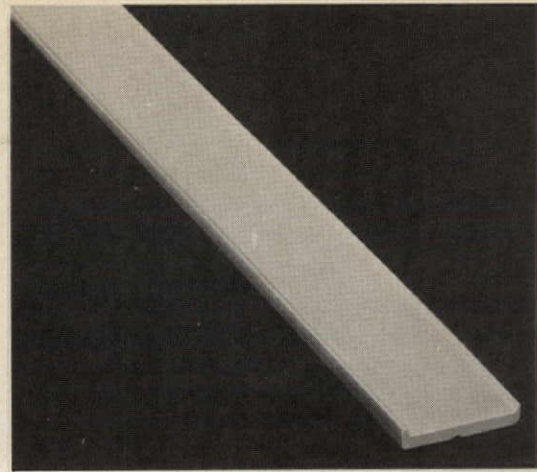
■ **HUD will evaluate requests** for funding of federally assisted housing programs on the basis of eight standards which are found in *Project Site Selection Criteria*.

■ **Mobile home shipments** will soar this year 18 percent over 1971's estimated 485,000 dwellings, according to Donald L. Greenawalt, chairman of the board of the Mobile Home Manufacturers Association. Meanwhile, General Motors has announced that it will make motor homes in 1973. A motor home is a self-contained and self-propelled unit, differing from a mobile home which is usually detached from its motive source when its destination is reached.

■ **Community Design Centers** are featured in a film documentary called "We Have to be Able to Do It Ourselves" released by the AIA. Produced by the Institute's Department of Community Services, the 26-minute film illustrates mechanisms to provide professional design and planning assistance to the urban poor. Free loan prints may be obtained from Modern Talking Pictures, Inc., 2323 Hyde Park Road, New Hyde Park, Long Island, N.Y. 11040. Purchases may be made through the AIA library, 1785 Massachusetts Ave. N.W., Washington, D.C. 20036, for \$100 each.

■ **Walter Gropius, 1883-1969** is the title of a show at the Fogg Art Museum, Harvard University, which opened in March. Another exhibition honoring an architect is "Marcel Breuer in France," which is being shown in Paris at the Knoll International Building.

■ **Benjamin Henry Latrobe** documents, drawings and plans are being sought by the Maryland Historical Society for inclusion in its collection. If readers know of the whereabouts of any correspondence (both from and to), manuscript writings, published works, watercolors, sketches and architectural drawings and plans, notify Edward C. Carter II at the society, 201 W. Monument St., Baltimore, Md. 21201. A complete microfilm edition and a selective letterpress edition of the great architect's works are planned. □



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## books

**Architecture by Team: A New Concept for the Practice of Architecture.** William Wayne Caudill. New York: Van Nostrand Reinhold, 1971. 346 pp. \$17.95.

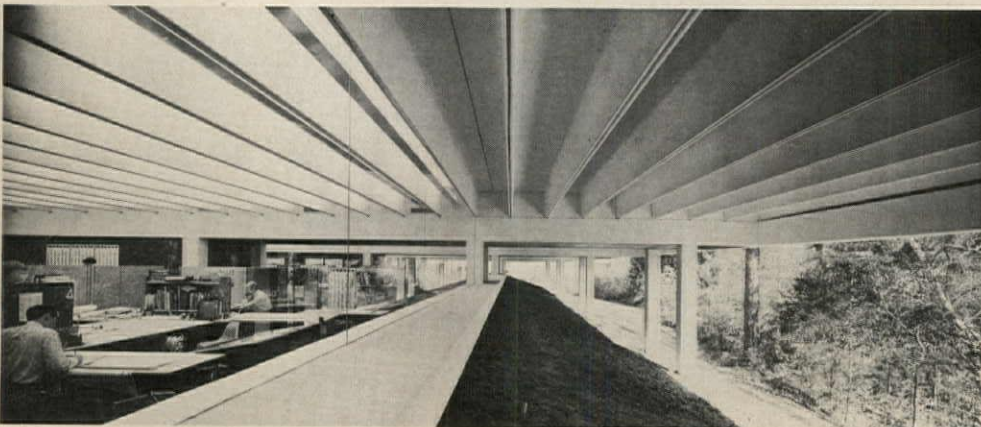
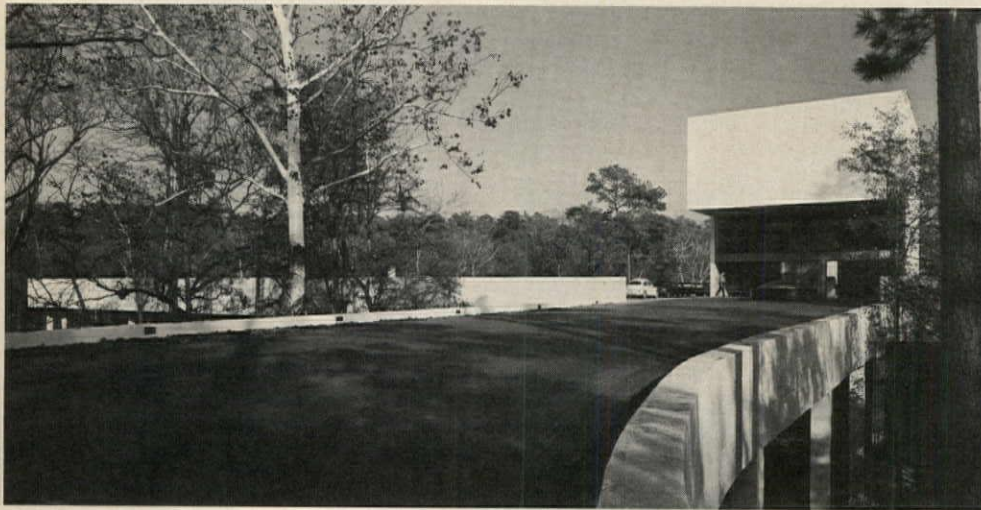
"The day of the prima donna approach to designing buildings has passed. The new way is by team. Almost any team can produce mere shelter, but to produce buildings which possess architecture takes a new kind of team—one sensitive to human needs and values. The idea of architecture by team has three underlying, secondary ideas: 1) The team is a genius, 2) the client/user is a member of the team and 3) the team is an ever-expanding unit, not limited to the design profession."

These initial statements in the preface of William W. Caudill's book *Architecture by Team* summarize briefly his philosophy of architectural practice, but the book says much more than this. It states that the practice of architecture is changing to meet the needs of a more complex society and that it must meet these needs in a variety of scales and in a much stricter time frame.

"It might be that the single-building projects from which most of today's architects make their living will be a thing of the past.

Land is becoming precious. A neighborhood is becoming too complicated to deal with building singly," writes Caudill. "The next 10 years will offer the greatest challenge architects, engineers, planners, manufacturers and builders have ever been faced with," he continues. "The government's involvement in ecology, conservation, air and water pollution, housing, schools and hospitals for all people will stimulate unbelievable large-scale, multibuilding-type projects. The country will either see one of the biggest building booms or face a revolution. In either case, the architectural profession had better be prepared."

But large complex multi-entity projects are not the only reason for architecture by team. The book traces the development of Caudill Rowlett Scott from its early beginnings in 1946 as a partnership of The American Institute of Architects fellows William W. Caudill and John M. Rowlett (considered then as a team) to its present structure as a diversified architectural corporation with eight fairly autonomous profit center divisions. Recently CRS, Inc., was incorporated under the umbrella of CRS Design Associates, Inc., a holding company which also in-



Houston office of Caudill Rowlett Scott, winner of the 1972 Architectural Firm Award.

cludes CRS2, the Computing Research Systems Corporation and CRS/CM, the Construction Management Corporation. CRS, Inc., headquartered in Houston, has been expanded to include divisions in New York City, Los Angeles and Chicago.

Even in the early days, the team approach prevailed, and the introduction of squatters, a specialized programming and design team sent to the locale of the project to develop the program and design concept, brought the users and the administrators of the projected building into the decision-making process and made them part of the team. The squatters team exemplified the kind of team action that Caudill says must be taken in the development of any architectural project, large or small. This kind of team work has required recognition of the specialized skills of the various members of the team and has led to the evolution of a process that properly applies these skills to the solving of problems and the development of design solutions.

A balanced problem-solving approach requires that simultaneous and serious consideration be given to each of three components of architectural practice: management, design and technology. In 1970, CRS formally initiated the Troika Plan (although it is apparent that the principles were already being followed), which provides a task troika consisting of a manager, a designer and a technologist at the head of each team. Caudill states that "the underlying idea behind the Troika Plan is to improve the output—all products, including everything from a technical report to plans for a new university—by further strengthening the process of doing things through an administrative structure which provides balanced leadership—manager, designer, technologist working together on each major task."

While the book traces the development of CRS, it also exposes the development of Caudill's philosophy of architectural practice, a theory that has evolved through actual practice of the team approach. Caudill's experiences as an educator and a spokesman add breadth to his presentation and make the book exciting reading for the layman, the student, the educator, the manufacturer, the builder, the client, the government official and the architectural practitioner. Numerous original sketches help illustrate the principles of team action, and photographs of CRS designed buildings chronicle the results.

Architectural students and their teachers will find the chapters on "What Is Architecture" and "Education for Team" of particular interest. Few authors have been able to define architecture in such explicit terms as does Caudill when he states, "Architecture is an aura which emanates from the man-made environment, evokes emotional response in the individual who experiences it, fulfills both physical and psychological needs, transcends mere shelter and reflects the extent of man's development."

In the quest for the aura that is architecture, he believes that there are two things that those who sponsor architecture must know. "First, they must know that every individual has the right to experience architecture, just as he has the right to experience



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painting, sculpture, music and the dance. But the responsibility relating to architecture is greater, for one can escape poor painting, smash a sorry piece of sculpture, turn off inferior music or walk out on a bad ballet. But it is most difficult to escape the physical environment from which architecture may or may not radiate. . . . Architecture is a birth-right. Second, we must realize that although the experience of architecture is a highly personal matter, almost no architecture can be created for one person alone; that so-called 'private architecture' is rare; that almost all architecture, regardless of the matter of 'private' ownership, is truly in the public domain."

The understanding of these considerations carries the responsibilities of the architect beyond that of only satisfying the client's needs. Architecture by team makes it possible for the client and users to also accept their share of these responsibilities. In order that a building be instilled with the aura of architecture and that this aura be experienced by the maximum number of people, Caudill recommends: "Bring a lot of people—especially the users of the building—into the planning."

In "Education for Team," Caudill explores the seven paradoxes of education: Should the student be trained to think or do? Should he be taught by a master teacher or a teaching team? Should he engage in competitions? Should he do individual problems or group problems? Should he be trained as a generalist or as a specialist? Should he start his architectural training early or only after he has had a broad exposure to the liberal arts? Should he follow an integrated curriculum or be allowed unlimited options to fulfill his individual needs? The in-depth discussions of these paradoxes should provide both students and teachers with excellent material for decision making and will, perhaps, bring about a new orientation for the teaching of architecture, one that is more in keeping with the practice of it, particularly if the practice of the future is to be by team. Caudill says that it will be.

While the early teams included the client/user along with the manager, the designer and the technologist, today's team must also include the manufacturer and the builder. The chapter on the team and building systems explains how the three sectors of the building industry—manufacturer, designer and builder—are getting together. Caudill defines and discusses systems building, building systems, industrialized building and the new management processes that are shortening the time required to program, design and construct a facility.

Fast track scheduling, a means for overlapping design and construction activities which are normally scheduled in sequence, was developed with the client as part of the team (State University Construction Fund) and was later utilized by CRS to reduce the overall time it takes to program, design and construct a school. The application of these scheduling techniques, particularly in the public sector, has opened up a whole new field of project management; and the CRS team has been expanded to include expertise in the management of construction activities.

The combination of fast track scheduling and the utilization of preselected systems suggest possible savings of 45 percent in time over traditional processes.

Utilization of larger components and reduction of on-site labor are necessary to provide the large volume of building, particularly in housing, required to meet the social needs of this country and others. Caudill rightly points out that time of construction will have as much influence on the building as any other design determinant. The past decade concentrated on low square foot cost; the next decade will focus on faster delivery time and the way in which the building is to be packaged. This requires managed team action.

*Architecture by Team* is more than a chronology of the development of CRS and its approach to architecture. It is an excellent documentation of the changes that have occurred in our profession over the past 25 years. It highlights the directions that the front-running firms have been taking and indicates the way that architecture must be practiced in the future. The book describes in a personal way the various team members and the roles they have played in the development of the CRS approach. In this way, Caudill is able to indicate how Rowlett, Scott, Pena, Bullock, Paseur, Nye, Lawyer, Maddox, Thomsen and many others have all had a hand in developing the philosophy that states "The architect is a team."

FRANK J. MATZKE, FAIA

**Management with Computers.** James J. O'Brien. New York: Van Nostrand Reinhold, 1972. 302 pp. \$10.95.

This is not an architectural book nor does it relate directly to the construction industry. It is a work that gives a good overview of the world of the computer to those with management responsibilities but who are not computer oriented. As the computer injects itself more and more into the design and construction process, the architect's need to know increases correspondingly. O'Brien, author of *CPM in Construction Management*, provides a good general introduction to the subject.

Starting with a brief history of the development of computers, the text quickly flows into an adequate description of hardware, both main frame and peripheral equipment. Means of input, storage and output are well covered.

The author's lack of bias is apparent in his equal treatment of the products of several manufacturers. Both software programming and languages are examined in sufficient detail for a good understanding of the process, and three chapters are devoted to operational modes. Discussions on staffing, applications, operations and implementation round out the amply illustrated text. The book closes with an almost exhaustive glossary of computer terms that will put you at ease with the jargon so that you will be able to hold your own at a cocktail party of computer people.

There are signs that the book has been in preparation over an extended period of time, as some of the references are a bit dated. This does not detract from the overall thrust, but it serves as a warning to the reader that the computer world is a fast changing one.

In the author's words, "Computers with-



out management are useless." The book will start you on your way to understanding managerial skills necessary to embracing application of the computer to architectural practice.  
ROBERT ALLAN CLASS, AIA

**The Architecture of Italy.** Doreen Yarwood. New York: Harper & Row, 1969. 128 pp. \$7.95.

A broad chronological sweep of the complete architectural development in Italy from the days of the Greek colonies in the 6th century B.C. to the present time. There are 287 drawings and eight pages of plates. Perhaps of primary interest to tourists, the book will aid a cramming student as well because it gives a general outline of how and why styles evolved.

**Aging and Society. Volume 2: Aging and the Professions.** Edited by Matilda White Riley, John W. Riley Jr. and Marilyn E. Johnson. New York: Russell Sage Foundation, 1970. 410 pp. \$9.50.

Each of the chapters in this book is written from the perspective of a particular field. Among the professions covered are social work, medicine, the law and the ministry. The chapter on "Aging and the Fields of Architecture and Planning" is by John Madge, English architect and sociologist.

Madge raises issues for architects and planners who determine the policies, develop the programs and design the housing for older people. He suggests solutions likely to succeed in specific circumstances and describes things to be avoided.



**Irish Houses & Castles.** Desmond Guinness and William Ryan. New York: Viking Press, 1971. 352 pp. \$35.

This stunning and weighty book on the great houses of Ireland traces the development of Irish architecture from the castle strongholds to the Gothic revival. It documents a part of architectural history that is not often covered by publications.

The photographs, many in color, show exteriors as well as interiors, gardens, parks and follies. Many of them were taken especially for this book by the authors, and they add greatly to the successful presentation of the principal houses and castles of a country that never fails to charm.

**Reflections on Greece. Photographs by Roy Moore, with Quotations from Nikos Kazantzakis.** New York: Walker, 1971. Unpaged. \$30.

The photographs which comprise this large tome are truly magnificent. Freelance photographer Moore has captured on film all the familiar sites as well as fields, village streets and vistas of the sea. Brief lyrical passages are by the late author of *Zorba the Greek*. An

appendix provides maps and historical notes on the temple sites portrayed.

**Restaurant Architecture and Design: An International Survey of Eating Places.** Max Fenger. New York: Universe Books, 1971. 176 pp. \$18.50.

This book aims to show how technological and social changes influence the design of eating places. Among the examples cited are such city restaurants as the snack bar in the Opernpassage in Vienna; department store restaurants in Kingston on Thames, England; airport restaurants in Zürich; and the Guild Hall in Hamar, Norway. Nor are eating places in the countryside slighted. Among the examples are the Water Sport Center in Tacoma, Washington; a restaurant at a swimming pool in Evian-les-Bains, France; and the Park Restaurant at the Rhine Falls, Neuenhausen, Switzerland. Cafeterias are included as well as student dining halls. There are photographs, diagrams and floor plans for most of the examples. All very efficient and clean. But some of us may still be nostalgic for former elegance, and for dining rather than "eating places."

**Thomas Cubitt: Master Builder.** Hermione Hobhouse. New York: Universe Books, 1971. 168 pp. \$32.50.

Thomas Cubitt, "the archetypal Victorian entrepreneur," was a central figure in early 19th century building. He was responsible for much of London in which the aristocrats lived; he was also a builder of hundreds of more modest London dwellings. Called "Em-

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peror of the Building Trade," Cubitt was chosen by Queen Victoria as contractor for extensions to Buckingham Palace. He created some of the suburbs of London, and there is a full account of his building of such areas as Belgravia and how he enticed wealthy tenants to come to the "new settlement."

The author calls Cubitt the greatest of London's speculative builders. "His methods," she writes, "are of interest as they are essentially those by which so much of the city has been built, adapted and refined by Cubitt himself from those he found in use, and passed on to apprentices and workmen trained in his works, and used in the next generation in the great suburban building boom of the 1860s and '70s."

**Pugin.** Phoebe Stanton. New York: Viking Press, 1971. 216 pp. \$7.95 hardbound, \$3.95 paperbound.

Augustus Welby Pugin was an exponent of the Gothic Revival in English architecture. As the author of eight books, perhaps he is better known for his writings than for the more than 100 buildings which he designed from 1835 until his death in 1852. Miss Stanton remarks that Pugin set out to practice architecture and to change it and succeed in both. Although Pugin himself was not particularly happy with what he accomplished, his present biographer finds that he emerges as "a pioneer scholar of medieval art and architecture" and a man well ahead of his time.

**Illustrated Handbook of Vernacular Architecture.** R. W. Brunskill. New York: Universe Books, 1971. 230 pp. \$8.95.

Recently, vernacular architecture has been studied by a number of scholars. This book, for the student as well as the interested layman, is what it says it is: an illustrated handbook. The author examines various types of vernacular construction and the materials used. He discusses walls, roofs, windows, doorways and ornamentation. A section is devoted to farm buildings; another to urban and minor industrial buildings. The restoration architect, in particular, will find the book a handy reference.

**William Mason: The First New Zealand Architect.** John Stacpoole. Auckland, N.Z.: Auckland University Press, 1971. 198 pp. \$10.75.

In 1838 William Mason emigrated from England to New South Wales and from there sailed on to New Zealand to become the first architect to live and work in that country. This book, which tells of his life as an architect as well as farmer, auctioneer and politician, also relates much about early building in New Zealand.

**Christopher Wren.** Margaret Whinney. New York: Praeger, 1971. 216 pp. \$8.95.

There are those perhaps who think enough has been written about Wren. But this rich and rewarding book about him is a contribution to architectural history. Well written and authoritative and abundantly illustrated, this study of his work gives new and keen insights into the entirely self-taught architect and his place in the history of architecture.

**Environmental Criteria: MR Preschool Day Care Facilities.** College Station, Tex.: College of Architecture & Environmental Design, Texas A&M University, 1971. 108 pp. No price given.

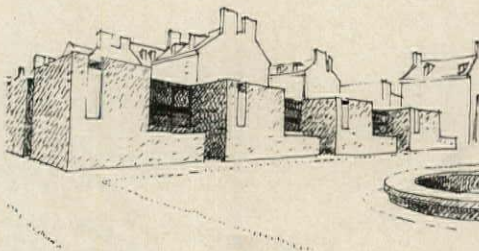
This report, prepared with the financial assistance of the Department of Health, Education and Welfare, will be of great assistance to architects who are planning preschool day care facilities for mentally retarded, culturally deprived and normal children. Using an interdisciplinary team of psychologists, nurses, planners, educators and architects, the project gives guidelines for a physical setting which would complement objectives of day care facilities for children from 2 through 7.

While each of the six parts of the book should be read by any planner of such facilities, the fifth part gives specific guidelines for design, showing how the physical facility can be a "catalytic agent in the learning process."

**Our Man-Made Environment: Book Seven.** GEE! Group for Environmental Education. Cambridge: MIT Press, 1971. 80 pp. \$4.95.

GEE! is a nonprofit corporation engaged in developing innovative curricula for the study of man's interaction with his physical environment.

*Book Seven* for the study of the man-made environment is intended for use in the intermediate school. It focuses the student's attention on his own environment—home, school, neighborhood, town or city. Built around four questions—What is the man-made envi-



ronment? Why do we build our environment? What determines its form? How do we change it?—the book gives the young student exercises to work out which bring into play his own experiences, judgment and creativity. A pocket in the back of the book contains cardboard punchouts that can be folded into a series of three-dimensional models.

#### Two Dozen Worthwhile Paperbacks

**American Architecture and Urbanism.** Vincent Scully. New York: Praeger, 1971. 275 pp. \$5.95.

**Architectural Principles in the Age of Humanism.** Rudolph Wittkower. New York: Norton, 1971. 173 pp. \$3.45.

**Architecture: Nineteenth and Twentieth Centuries.** Henry-Russell Hitchcock. Baltimore: Penguin Books, 1971. 682 pp. \$8.95.

**The Architecture of Michelangelo.** James S. Ackerman. Baltimore: Penguin Books, 1971. 373 pp. \$4.95.

**Brick Architecture of the Colonial Period in Maryland and Virginia.** Lewis A. Coffin Jr.

and Arthur C. Holden. New York: Dover, 1971. 295 pp. \$6.95.

**The Concise Townscape.** Gordon Cullen. New York: Van Nostrand Reinhold, 1971. 199 pp. \$3.95.

**Design with Nature.** Ian L. McHarg. Garden City, N.Y., Doubleday, 1971. 198 pp. \$5.95.

**Early Homes of Ohio.** I. T. Frary. New York: Dover, 1970. 334 pp. \$3.50.

**Early Illustrations and Views of American Architecture.** Edmund V. Gillon Jr. New York: Dover, 1971. 295 pp. \$6.95.

**Guide to Alternatives for Financing School Buildings.** New York: Educational Facilities Laboratories, 1971. 39 pp. \$2.

**Henry Moore on Sculpture.** Edited by Philip James. New York: Viking Press, 1971. 327 pp. \$5.95.

**Lost New York,** Nathan Silver. New York: Schocken Books, 1971. 242 pp. \$5.95.

**The Modern Metropolis: Its Origins, Growth, Characteristics and Planning: Selected Essays of Hans Blumenfeld.** Edited by Paul D. Spreiregen. Cambridge: MIT Press, 1971. 379 pp. \$3.95.

**The Rise of an American Architecture: Henry-Russell Hitchcock, Albert Fein, Winston Weisman, Vincent Scully.** Edited by Edgar Kaufmann Jr. New York: Praeger, 1971. 241 pp. \$4.95.

**The Rules of Work of the Carpenters' Company of the City and County of Philadelphia, 1786.** Annotated, with an Introduction by Charles E. Peterson. Princeton: Pyne Press, 1971. 160 pp. \$3.50.

**Selected Rehabilitation Facilities in the United States: An Architect's Analysis.** Thomas K. Fitz Patrick. Washington, D.C.: US Government Printing Office, 1971. 58 pp. 65 cents.

**The Shingle Style and the Stick Style: Architectural Theory and Design from Richardson to the Origins of Wright.** New Haven: Yale University Press, 1971. 174 pp. \$6.95.

**Stone Shelters.** Edward Allen. Cambridge: MIT Press, 1969. 211 pp. \$4.95.

**Two Chicago Architects and Their Clients: Frank Lloyd Wright and Howard Van Doren Shaw.** Leonard K. Eaton. Cambridge: MIT Press, 1969. 259 pp. \$3.95.

**The Ultimate Highrise: San Francisco's Mad Rush toward the Sky.** Edited by Bruce Bruggmann and Greggar Sletteland. San Francisco: San Francisco Bay Guardian Books, 1971. 255 pp. \$2.95.

**University Urban Research Centers.** Edited by Grace M. Taher. Washington, D.C.: Urban Institute, 1971. 299 pp. \$2.75.

**Villas and Cottages: A Series of Designs Prepared for Execution in the United States.** Calvert Vaux. New York: Dover, 1970. 348 pp. \$3.

**When Faith Takes Form: Contemporary Churches of Architectural Integrity in America.** Donald J. Bruggink and Carl H. Drovers. Grand Rapids, Mich.: Eerdmans, 1971. 126 pp. \$3.95.

**With Man in Mind: An Interdisciplinary Prospectus for Environmental Design.** Constance Perin. Cambridge: MIT Press, 1972. 185 pp. \$2.45. □





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a recent encounter with influ-  
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 ver subsided, I went through a  
 A JOURNALS covering 1970 and

lack of interruptions and the  
 of unbroken reading, I found  
 ring the vast range of articles  
 nner of presentation.

practicing architects, I find that  
 issues of office and home do not  
 for periods of analysis, reading

my week with the magazines an  
 one. I note that 1) the AIA  
 a well-developed organ of pro-  
 analysis; 2) it has stimulated a

ideas, particularly the one of do-  
 ting; and 3) it brings to the sur-  
 ber of professional experiences  
 which help develop ideas and  
 practice in proper perspective.  
 done. Thanks for your help in  
 ence. ALBERT MELNIKER, AIA  
*Staten Island, N.Y.*

**the People!**

architects' visit to the US was  
 cant event. Bess Balchen's arti-  
 cular issue about the visit was  
 ritten. I met our Russian visi-  
 ton only at an AIA meeting,  
 regret, because they seemed to  
 ay the persons discussed in Mrs.  
 cle.

of help but reflect on this visit  
 arm, understanding and unin-  
 light of the cold war, spy ships,  
 e three-mile limit encounters,  
 rfare, billions for defense, etc.  
 he threat of being called naive,  
 elp but wonder what might hap-  
 rld if diplomacy were placed in  
 he people.

more such visits and compliment  
 artment, the AIA and the AIA  
 l Bess Balchen on a job well  
 HARRY A. GOLEMON, AIA  
*Houston*

**ion**

ten article in the January 1971  
 ark Service Serves Architecture  
 en read with more than usual in-  
 52, I became deeply concerned  
 chitectural trends beginning to  
 rks and monuments across the  
 as editor of *National Parks*  
 wrote an article "For a Return to  
 Park Architecture" which was  
 the October/December 1952

say that since the article was

published, I have seen no justification for op-  
 timism. In fact, there have been a number of  
 errors too preposterous to ignore. Cases in  
 point are the new headquarters and visitor  
 center building at Acadia and the massive  
 visitor center at Paradise Valley in Mount  
 Rainier.

The Interpretative Design Center at Har-  
 pers Ferry, illustrated in your article, may  
 suit its purpose, but I find the exterior any-  
 thing but pleasing. It seems oppressive,  
 gloomy and grim as a prison might be. Fur-  
 thermore, it is not consonant with any style  
 established there and tends to give the town  
 a conglomeration of design.

Your photographs of the Everglades visi-  
 tor center on page 22 was taken at a strategic  
 moment when the roof cast a shadow on the  
 upper half of the concrete lace, adding a  
 horizontal line that makes the building ap-  
 pear slightly lower than it is. Why such large  
 and imposing structures are thought to be  
 necessary in parks is not clear. If all that floor  
 space was needed, couldn't it have been more  
 satisfactorily gained by building around a  
 court or patio and so obviate any supposed  
 need for all that height?

On page 21 you show the nature center at  
 what no doubt is Platt National Park. It has  
 been built since my visit. Certainly the lines  
 and texture of the building are pleasing and  
 suitable—not imposing and attention-getting.

Your illustration of the lodge at Glacier  
 Bay does not show the odd looking dormers  
 and badly designed gable ends. How do such  
 eye-catching oddities get by?

National parks and nature monuments are  
 intended to preserve primeval nature and  
 magnificent landscapes intact. Any man-  
 made structure intrudes on their landscapes  
 to some degree, however slight, and to that  
 degree defeats their purpose. That is why it  
 is of foremost importance to minimize the  
 impact of structures on their surroundings.

In 1935 the National Park Service pub-  
 lished the book *Park Structures and Facili-  
 ties*. Park Director Arno B. Cammerer is  
 quoted as saying, "In any area in which  
 preservation of nature is a primary purpose,  
 every modification of the natural landscape,  
 whether it be by construction of a road or  
 erection of a shelter, is an intrusion. A basic  
 objective of those who are entrusted with  
 development of such areas for the human  
 uses for which they are established is, it  
 seems to me, to hold these intrusions to a  
 minimum and so to design them that, besides  
 being attractive to look upon, they appear to  
 belong to and be a part of their settings."

The book emphasizes the need to unify ar-  
 chitectural styles in any one park. In that re-  
 gard, back in the '40s and '50s, I considered  
 the architecture of the Shenandoah National  
 Park, the Blue Ridge Parkway and Great  
 Smoky Mountains National Park as fitting  
 for the mountains and forests of the three

areas and uniform in style and  
 excellent. When the harmonious  
 room building at Skyland burned  
 for granted that the new one wo  
 the old style. Not at all. A squ  
 stained, flat-roofed, boxlike stru  
 appeared which was completely o  
 mony, like a discord in an otherw  
 ful melody.

The architect faces a challenge  
 sign of park structures—a test of  
 sensitivity, of understanding—fo  
 not at liberty to design structures  
 personal whim or to experiment w  
 styles. He proves his greatness by  
 ing to a special set of principles  
 for self discipline.

I doubt that any architect who  
 in tune with nature is equipped  
 park structures. It is possible to cr  
 monious ensemble. For example, t  
 and attractive headquarters, visi  
 and residences in Olympic and the  
 headquarters in Bandelier Nation  
 ment seem ideal for their areas.

Stagecoach days are gone, and  
 asked increasingly whether it is  
 any longer to live and camp on t  
 Today how can we justify marring  
 scapes with more and more hote  
 lodges, restaurants, curio shops  
 stores, gas stations, huge parking  
 lifts, platter pulls, rope tows, marin  
 other such facilities, including he  
 buildings?

At almost all parks and monume  
 ties can be provided by private ente  
 side the boundaries, thus reducin  
 water and light systems as well as t  
 on the federal taxpayer. Further,  
 Service would be relieved of end  
 consuming problems which usurp  
 from the things the service shoul  
 concerned about: interpretation  
 protection.

It is hoped that the new parks-  
 lands, Redwood, North Cascades  
 ageurs—will be spared landscape  
 by break architectural design and  
 opment. Isn't that an objective w  
 ing for?

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 The Third Alternative" in Decem  
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 for the mobile home industry if it  
 tinue as a successful operation.

PAUL R. M  
*President, Production Home*  
*Pasaden*

**A Reply to a Letter Writer**

We were pleased to read Lenwood  
 Jr.'s letter in the October issue (1  
 which he commented on the NCA  
 We think that much that he said  
 true, and we join with him in ho  
 the new exam will improve on past i  
 Robinson stated in his letter tha



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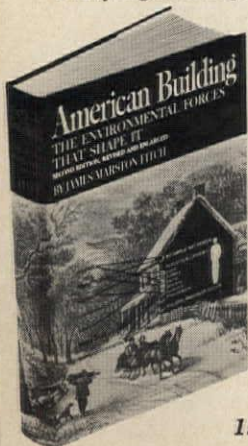
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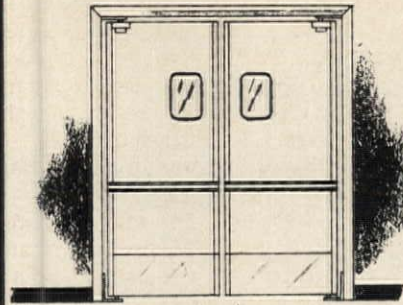


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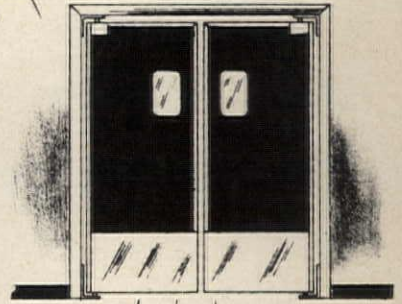
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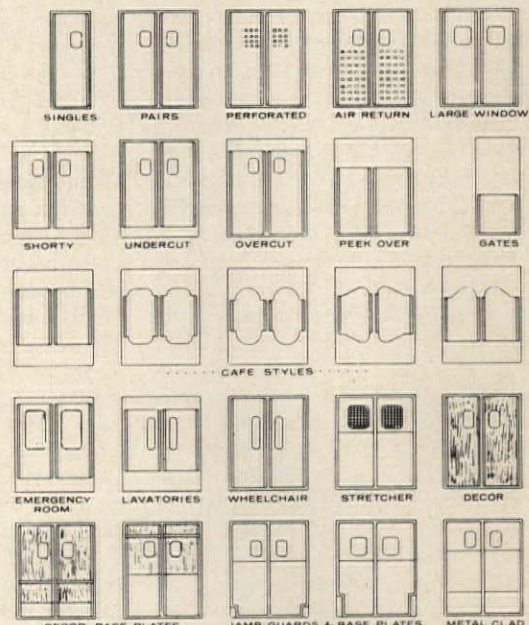
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studying material issued by Architectural License Seminars but he finds it "boring in many respects." We are sorry that he has had this reaction. Although we realize that our material cannot be lively and fascinating in all its aspects, we do genuinely try to make it interesting as well as enlightening.

We hope that the fault may be due in part to the examination subject matter, the stress on obscure factual material and perhaps to an obsolete system that is scheduled for replacement.

LESTER WERTHEIMER, AIA  
Director  
Architectural License Seminars  
Los Angeles

### It's a Whole New Ball Game

News item for any architectural publication since 1968: "The architect is urged to become part of the housing development team, etc."

Sports item: He made it! Archie Teck, 6 feet, 1 inch tall, 190 pounds, medium long hair, man-about-town, all-around esthete, was finally coaxed, cajoled and coerced out of his solid ivory tower (by the conservationists, who else?) and is now an active full-time participant in the national pastime. According to Farge Cromney (Michigan '63), HUD coach of the Washington Modules, affectionately known as the "Mod Squad,"



Archie runs a good chance of being voted the least offensive player of the year.

He has speed, particularly in open terrain. He demonstrated his unusual ability as a ground gainer in last year's memorable contest with the Apathetics when he went all the way for a showdown. Anything more at his age would have resulted in sudden death.

Archie has stamina under stress and is a master in the execution of the block-and-tackle play. He is particularly resolute in the line, as evidenced last week when he was confronted by a 250-pound bottom line banker whose sole ambition was to prevent any return and to not concede Archie a single point.

On defense Archie is a recognized expert at man-to-man coverage. It was through no fault of his own last week against the Philistines when he attempted to take advantage of good field position that he discovered too late that his adversary was not only a woman but also a stout advocate of Women's Lib with a face mask that would stop a clock. This, however, did not prevent Archie, with the backfield in motion, from making masterful use of the screen pass.

Archie overcame his basically defensive posture when, after emerging from the HUDdle, he was transferred from his earlier position of bitter end to tight feedback. Shortly after this, his ability as quarterback was displayed. He was able to coordinate the Steelers, the Oilers, the Carpenters, the

Plumbers and even the Masons into a single constructive unit. This was largely responsible for his success in the thrilling bout against the Meanies, known for their aggressive tactics and pile-driving techniques.

(Don't miss the great half-time show, sometime between now and the year 2,000. Maybe about 1984.)

Archie gave us his early use of the formation known as the Wishful T (T for thinking) and proved thus that he was a likely drafting choice since he was the only player on the team who could draw.

In one instance, he drew a whole crowd and was unceremoniously decked when he attempted to put the ball (the bomb, the projectile, the project) into the air against a stiff zoning defense. Due to his innate resistance to plastic, he lost his footing on the much touted "Disastroturf" and what started out to be an exciting and award-winning cliffhanger turned out to be an embarrassing dud, due to intentional grounding. Nevertheless, after several confrontations with the Intolerants, he was miraculously able to gain good yardage in the form of play-yards, all of which fitted perfectly into his game plan.

Later in the season, Archie showed his true greatness when he moved to the inside with great individual effort and attempted a conversion. In an admirable example of wall-control, he delivered a superb block, proving that he could guarantee a return.

In short, Archie Teck possesses an extraordinary combination of charisma, chutzpah and what Hemingway refers to as co-jones. He has the makings of a true sportsman, worthy not only of the classic moment of truth but a full hour, not including timeouts and commercials, and penalty markers all over the place for conflict of interest.

With Archie in the lineup, it promises to be a great season, if time doesn't run out.

ROBERT H. MUTRUX, AIA  
Wilton, Conn.

### Required Reading

The December issue is required reading for all staff members in my office. In particular, Abraham D. Levitt's concise summation of housing issues and policies provides great insight for architects who are striving to "learn and relearn our own trade thoroughly."

WILLIAM H. SCARBROUGH, AIA  
Syracuse, N.Y.

### A Board Meeting to Remember

Back in 1949 when I was regional director for the Middle Atlantic chapters of the AIA (then New Jersey, Pennsylvania, West Virginia, Maryland, Delaware, Virginia and the District of Columbia), I met Cy Silling of Charleston, West Virginia, and he suggested that it would be fine to hold a conference at the time of the board meeting at the Greenbrier Hotel in White Sulphur Springs. As we planned it, there would be no business—but just a get together of architects to talk, eat, drink and be merry.

Now this place called White Sulphur Springs is one of the loveliest spots in these United States. Down in the southeastern corner of West Virginia, nestled in its moun-

tains, there has been a bubbling always and a foul-smelling and evil-tasting spring. Discovered by the early colonial settlers, its waters were found to be beneficial and healing to the ills of mankind. In the early days, an inn was built on the site to which the elite of society journeyed by coach and by stage to partake of the waters and indulge in leisurely pleasures. Today, the immense Greenbrier stands on the site of the old inn. Used as a Navy hospital in World War II, it has been rebuilt, renovated and redecorated—credit: Small, Smith & Reeb, Cleveland architects, and Dorothy Draper, New York decorator.

Anyway, Cy Silling girded his loins and his gab with the result that President Harry Nay and his fellow members of the West Virginia Chapter AIA (only 38 members) threw a party in November 1949 which will long be remembered by the 260 or more architects and their chatelaines who attended.

All architects have imagination — or should. Use yours and visualize the kind of time we had. I might add that there were also serious happenings to ease our collective conscience for all the money we spent.

Previous to the festivities, the AIA board held its three-day semiannual meeting. One morning, Pietro Belluschi, FAIA, of Portland, Oregon, delivered a lecture with slides on regional design. In his gracious manner, he endeavored to explain what he was trying to do with residential architecture in a modern way and related to the region. His lecture was thoroughly enjoyed.

The next day, Serge Chermayeff really baffled us with a lecture on "Painting Toward Architecture." To go with his erudite talk, there was hung on the surrounding walls a painting exhibition that was even more baffling. I didn't understand very much of either, but he made us all feel very cultivated.

We also enjoyed a tour of the hotel, swimming in the luxurious pool, bingo parties, ladies' bridge games, an architects' sing, cocktail parties and informal entertainment. Bob Schmertz sang his inimitable songs, Emory Mick twanged his banjo and Charley Stotz regaled us with his stories in dialect.

I was even able to organize a chapter officers' meeting, at which 15 of us gathered around a table and really let our hair down. To top it all off, we had a big banquet at which President Ralph Walker delivered an address on "The Architect as a Modern." He was in top form.

It was a fine meeting—convivial spirits, friendly discussion, luxurious surroundings, lovely ladies, festive boards, flowing bowls—making possible this pleasant interlude in our busy lives.

ALLAN H. NEAL, FAIA  
Pittsburgh

### Clarification of Credits

In the February issue on page 48 illustrating the Awards of Merit winners in the Chief of Engineers Architectural Design Awards program, the architectural credits inadvertently were omitted in the release submitted to the AIA JOURNAL. Rochlin & Baran & Associates received the award jointly with Charles W. Jones Engineering. Both firms are based in Los Angeles and have collaborated on five observatory projects in recent years. □



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	Edition	Catalog Number	Retail Price	AIA Member Price		Edition	Catalog Number	Retail Price	AIA Member Price
AIA Building Construction Legal Citator	1971	M119	\$35.00	\$28.00	Financial Management Computer Users Manual (CLM/Systems Inc.)	1971	M129	10.00	8.00
American Architect's Directory (Bowker)	1970	M118	37.50	33.75	Furnishing the City — Malt	1971	M127	16.50	13.00
Anatomy of a Park — Rutledge	1971	M126	15.95	13.00	Glossary of Construction Industry Terms	1970	M101	1.25	1.00
Architectural Delineation: A Photographic Approach to Presentation — Burden	1971	M128	18.50	14.50	House in the City (A) — McKenna	1971	M132	12.95	10.25
Architectural Graphic Standards (Ramsey & Sleeper)	1970	M103	39.50	36.00	Manual of Built-Up Roof Systems — Griffin	1970	M110	14.50	11.60
Architectural Hardware Specifications Handbook — Brownell	1971	M125	14.95	11.95	Manual of Steel Construction (American Institute of Steel Construction)	1971	M117	12.00	10.80
Architectural Programming (Emerging Techniques 2) — Evans and Wheeler	1968	RP102	5.00	4.00	Methods of Compensation for Architectural Services (Case & Company)	1969	M111	8.00	6.40
Architect's Handbook of Professional Practice		M104	18.00	14.50	Model Building for Architects and Engineers — Taylor	1971	M133	14.75	11.75
Art in Architecture Series, Vol. I — Renaissance Architecture — Murray	1971	M122	25.00	20.00	Opportunities in an Architecture Career — Piper	1970	M112	3.75	3.00
Art in Architecture Series, Vol. II — Baroque Architecture — Norberg-Schulz	1971	M123	25.00	20.00	Clothbound		M112A	1.95	1.95
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Building Facilities For the Mathematical Sciences (Educational Facilities Laboratories Report)	1963	M124	5.00	4.00	Professional Construction Management and Project Administration — Foxhall	1971	M121	15.00	12.00
Cities Fit to Live In — McQuade	1971	M131	7.95	6.25	Profit Planning in Architectural Practice (Case & Company)	1968	M113	5.00	4.00
Comprehensive Architectural Services (Hunt)	1965	M105	10.00	8.00	PUD — A Better Way for the Suburbs (Urban Land Institute)	1971	M130	10.00	8.00
Creating the Human Environment (Future of the Profession)					Restoration Manual (The) — Bullock	1966	M115	9.95	7.95
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# events

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- Apr. 27-28:** Annual Conference on Religious Architecture, Regency Hyatt House, Atlanta
- May 7-10:** AIA Convention and Exposition, Albert Thomas Convention Center, Houston (Mexican portion, May 12-13, Mexico City)
- May 10:** Inter-Society Color Council/ American Ceramic Society Conference on Color, Washington, D.C.
- May 10-12:** National Conference for the Building Team, Albert Thomas Convention Center, Houston
- May 17-20:** Associated Councils of the Arts Conference, Downtown Radisson Hotel, Minneapolis
- May 18-19:** Built-up Roof Seminar, Pennsylvania State University, University Park, Pa.
- May 22-23:** Washington Paint Technical Group Symposium, Marriott Twin Bridges Motel, Washington, D.C.
- May 23-26:** Conference on Industrialized Building Processes, West Virginia University, Morgantown
- June 15-17:** ACSA Annual Meeting, Aspen, Colo.
- June 19-21:** Construction Specifications Institute Convention and Exposition, Downtown Radisson Hotel, Minneapolis

## International

- May 13-16:** International Union of Architects Housing Group Meeting, Mexico City
- May 21-24:** World Colloquium on Theatre, Television and Lighting Symposium, Pick Congress Hotel, Chicago
- May 27-June 4:** International Transportation Exposition, Dulles International Airport, Va.
- May 30-June 4:** International Federation of Housing and Planning Conference, Liverpool, England
- June 10-14:** Panamerican Congress of Architects, São Paulo, Brazil (reconvenes in Asunción, Paraguay, June 14-17)
- June 17-22:** International Design Conference, Aspen, Colo.

## Awards Programs

- April 28:** Letters of intent to enter due, AIA/ Naval Facilities Biennial Awards Program for Distinguished Architectural Achievement. Contact: Commander, Naval Facilities Engineering Command Headquarters, Code 041, Washington, D.C. 20390.

## Tours

- June 2-17:** Environmental Workshop Tour to Denmark, Russia, Finland and Sweden. Contact: *Environmental Monthly*, 420 Lexington Ave., New York, N.Y. 10017.
- Sept. 30-Oct. 4:** European Professional Tour. Contact: American Institute of Interior Designers, 730 5th Ave., New York, N.Y. 10019. □

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