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AIA JOURNAL

F. Scott Ferebee Jr., FAIA	Dedication and Rededication	With a new base for AIA operations, it is time to reflect on the past as well as a future course of the profession	19	
Archibald C. Rogers, FAIA	Target for Tomorrow: Design as 'Experiment'	Where architects can lead: out of a 2 stalemate and into an era of vibrant and expanded design processes		
	The Institute and National Issues	When decisions are made that affect 20 the profession and the environment, the architects' collective voice is heard		
	The Institute and the Public's Interests	Above and beyond the concern of de- 30 sign per se, the profession's dedica- tion is to the whole environment		
	The Institute and Departmental Functions	Behind the scene but much in evidence 30 is the AIA staff, promoting the inter- est of the members and of society		
Max O. Urbahn, FAIA	Evolution of the Octagon Building	After more than a decade, the Insti- tute now has a home base that invites the users' most creative performance		
Mary E. Osman	'This Little Piece of Ground'	With its garden, open for anyone to enjoy, the Octagon complex affords an oasis away from asphalt and concrete		
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Cover: Octagon Building, the new headquarters of The American Institute of Architects, with reflection of the Octagon House. The Architects Collaborative Inc. Photograph by Gordon H. Schenck Jr.

Acknowledgements: 8, William Douglas Ganslen; 16, 19, Robert C. Lautman; 20, 21, Art Hupy; 27 through 41, Gordon H. Schenck Jr.; 43, Robert C. Lautman; 45, Gordon H. Schenck Jr.; 47, Paul D. Spreiregen, AIA; 48, Wm. Edmund Barrett; 49, Bess Balchen; 51, Robert C. Harvey Studio; 56, Gordon H. Schenck Jr.; 60, William A. Garnett. Robert E. Koehler, Hon. AIA, Editor Bess Balchen, Managing Editor Mary E. Osman, Associate Editor James E. Ellison, AIA; Dave Clarke, Institute Department of Education and Research, Consulting Editors Suzy Thomas, Art Director Michael J. Hanley, Publisher Michael M. Wood, Sales Manager George L. Dant, Production Manager Michael A. Benoit, Circulation Manager

AIA JOURNAL, official magazine of The American Institute of Architects, published monthly at 1735 New York Ave. N.W., Washington, D.C., 20006. Telephone: (202) 785-7300. **Subscriptions:** for those who are, by title, architects, architectural employees, and to those in architectural education (faculty and schools), and to libraries, building construction trade associa-

tions and building product manufactu rate \$5 a year, \$8 two years, \$4 to architectural students in the US, its possessions and Canada. For all others: \$10 a year in the US, its possessions and Canada; other countries to those who are, by title, architects: \$10 a year. All others outside the US, its possessions and Canada: \$20 a year. Single copy: \$2, payable in advance. Publisher reserves the right to refuse unqualified subscriptions. Change of address: Give Circulation Department both old and new addresses; allow six weeks. Second class postage paid at Washington, D.C. Microfilm copies available from University Microfilms, 300 N. Zeeb Road, Ann Arbor, Mich. 48106. Referenced in The Architectural Index, Architectural Periodicals Index and Art Index. © 1973 by The American Institute of Architects. Opinions expressed by contributors are not necessarily those of the AIA. @ VOL. 59, NO. 6

COMMENT AND OPINION

A Building's Symbolic Mission: In a significant way the capital city of any nation tends to collect or draw unto itself meaningful achievements in architecture, and America has been no exception. Here in Washington all of the people come to view the greatness of their nation stated in its buildings and monuments.

It is a London, a Paris, a Rome or a Brasilia where architects are assembled and their buildings erected to embody the ideas, the institutions and the ideals of the country for all of its people. Indeed, a measurement of civilization is its architecture. As we look back through history, the indicators of the innovational inclination as well as the assertions of the aspirations of an entire people have been embodied in its structures: its buildings, its bridges, its monuments.

In the course of the several centuries of American history, the genius of its architects has expressed itself with a splendid series of architectural statements. And ever since the days of Thomas Jefferson when the White House, the Capitol and the Octagon House were built, Washington has been the setting for buildings which have more than simply a functional aspect. They are also symbols in a dramatic way as in no other American city.

The new administration building of The American Institute of Architects now joins other symbolic structures in this city. It seems to me to be certainly a worthy member of the assembly of architecture which has preceded it in this capital of the world. It has earned the right to join other structures which express the expectations of a people. The building seems to me to sum up in many ways the achievements of American architecture.

As a symbol of the significance of the architect in American history and as a statement of his ability to express the achievements of architecture in this era, this new building becomes a center out of which will be generated the architecture of tomorrow. It is not the building alone, but the ideas and the inspirations which will be generated here that will surely make for a new age of architecture whose aim is the betterment of the American people. It is not the building alone but rather what will happen within it that really counts. Symbolically, then, this structure embodies all of the expectations for architecture to be a wellspring out of which will come dignity and respect for every individual in this nation.

Buildings are only important insofar as they serve to inspire the people who see them and use them. Surely this building will send the architect forth on a mission of service to the people. In the dedication of this structure toward a great architecture for the nation, there is also a rededication on the part of the American architect for the next age of America.

A recent book comments that there are three aspects of a building: structural, functional and esthetic. To these three, another may be added. A building may also have a symbolic significance. The Octagon Building, now being dedicated, has this symbolic meaning, but it is the individual architect, wherever he may be in this country, who has the task of fulfilling its true mission: the betterment of a nation.

Robert E. Koehler

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GOING ON

AIA Flocks to San Francisco in Record Numbers to Enjoy Convention and City

San Francisco, billed as "everyone's favorit city," lived up to its expectations for the annual convention of the AIA, drawing a record-breaking crowd of 5,715 registrants. Likewise, the total of corporate members — 2,168 — was the largest ever. And the students came in unusually large numbers, too, some 600 strong.

The participants were in a relaxed mood throughout the May 7-10 sessions, which were blessed with superb weather, allowing fullest enjoyment of the numerous field trips and tours.

The convention theme was "The Challenge of Growth and Change," but Institute President S. Scott Ferebee Jr., FAIA, told the membership that it might well have been entitled "Opportunities Resulting from Growth and Change." Referring to the environmental crises and stalemates that face the nation, he reminded his audience that "as traditional leaders of the de-



The Ferebees and First Vice President Rogers greet guests at President's Reception at San Francisco Museum of Art.

sign team the architectural profession must accept primary responsibility" for resolving opposing points of views.

Businesswise, the only roll call vote resulted from a resolution dealing with the status of women in the architectural profession. Passing with 997 for and 627 against, it calls for the Institute to conduct

Highlights of the major addresses, the theme sessions and a recap of all proposed bylaw changes and resolutions will appear in the July issue.



Host Chapter Party moves from the Oakland Museum to Mario J. Ciampi's University of California Art Museum at Berkeley (above). San Francisco City Hall is locale of Fellows' Investiture.

a study, the results of which will be reported to the December Board meeting and the 1974 convention. Specifically, it asks for the formulation of policies in the following areas:

 the encouragement of women to become architects

- · the involvement of more women in
- AIA activities and structure

• the initiation of an affirmative action program to implement the "Equal Opportunity Section" of AIA's *Guidelines for a Personnel Practices Manual.*

A fourth point — the elimination of sexist wording in all AIA documents and publications — earlier had been deleted from the motion by a voice vote.

After considerable discussion which, for the most part, highlighted the positive aspects of the Community Design Centers, the convention approved a resolution supInstitute members are charged to assume their leadership role by the president at the annual convention, where delegates take action to support professional equality for women.

porting the Design and Planning Assistance Program of the Office of Economic Opportunity. It recommends that the Institute work for the transfer of that program, if OEO is in fact dismantled, to the Department of Housing and Urban Development, or another appropriate agency, and for funds to be specifically appropriated for this program.

The delegates learned that the Associated General Contractors of America, which had expressed "opposition to much of the content" of the first report of the AIA National Policy Task Force, would work with the Interdisciplinary Coalition for a National Growth Policy.

In his letter to William L. Slayton, Hon. AIA, Institute executive vice president, just prior to the convention, J. M. Sprouse, AGC executive director, explained:

"While there is still substantial divergence in the viewpoints of the AIA and AGC insofar as they reflect on the subject of growth in our nation, I am pleased to tell you that we intend to continue to participate in the work of the coalition. Your attempt to solve the problems confronting our country should not be denigrated just because we disagree with some of the solutions you offer. We will continue to participate, but naturally, we will reserve the right to dissent from all or parts of the final report of the task unit."

The formation of the coalition of over 20 organizations is providing a much broader base for the task force's second report, whose presentation to the Board meeting prior to the convention was delayed due to the debates and discussions generated by the coalition. Archibald C. Rogers, FAIA, task force chairman and president-elect, said that the second report will be presented to the September Board meeting for formal action and be published thereafter. He added that the report —the implementation of the recommendations of the first one—will be distributed to the entire membership.

In the only contested race for Institute office, three vice presidents were elected: Van B. Bruner Jr., Haddon Township, N.J.; Louis R. Lundgren, FAIA, St. Paul; and John M. McGinty, Houston.

William Marshall Jr., FAIA, Norfolk, continued on page 11 Circle 1 on information card

8 AIA JOURNAL/JUNE 1973

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In a major invitational competition, TAC takes first place, while in two annual programs sponsored by an aluminum firm, a German architect and two University of Arkansas students win top honors.

going on from page 8

Va., was elected first vice president and Joseph Tuchman, FAIA, Akron, Ohio, treasurer. All will take office in December, when Hilliard T. Smith Jr., FAIA, Lake Worth, Fla., goes into his second term as secretary.

With Environment in Mind, TAC Wins Johns-Manville Headquarters Competition When the Johns-Manville Corporation invited nine architectural firms to compete for its world headquarters building near Denver, it stipulated as fundamental criteria that the structure preserve the beauty of the land and that it be sensitive to



The model of the winning design illustrates sensitivity to ecological needs.

human values, working conditions, social requirements and site ecology.

J-M President and Chief Executive Officer W. R. Goodman announced the winner at the AIA San Francisco convention: The Architects Collaborative Inc., of Cambridge, Mass., designers of the new AIA Headquarters Building (see p. 27).

TAC's solution was the overwhelming choice of the jury, which found that it integrates with the site and complements the landscape, using the foothills as a backdrop. "All its elements — parking terraces, helix ramps, reflecting pools, greenhouse and wide open ground level — are combined in a sculptural composition of great interest and variety," the jurors concluded.

The site is 18 miles from the center of Denver on the 10,000-acre Ken-Caryl Ranch, where cattle are grazing and will continue to graze after the complex is up, hopefully no later than October '76. The facility will comprise 476,000 square feet net and accommodate 1,920 employees. Ground and roof parking will handle 1,700 vehicles. All utilities will be underground; a bare necessity of landscaping is planned since the aim is to make the structure a natural part of the site. Cost is estimated between \$25 and \$40 million.

J-M, a major manufacturer of construction materials which include environmental systems, will pay special attention to energy conservation and plans the use of wall and window insulation designed to keep energy needs for temperature control to a minimum.

The nine competing firms, which were each given a \$20,000 stipend to participate, were selected by the J-M firm with John B. Rogers, AIA, of Denver as professional adviser. The competition was coordinated and approved by the AIA. Jurors were Harry M. Weese, FAIA, Chicago, chairman; Theodore C. Bernardi, FAIA, San Francisco; Robert L. Geddes, FAIA, Princeton, N.J.; landscape architect Hubertus J. Mittman, Denver; and J-M's Goodwin.

Restoration of German Railway Station Wins Reynolds Award for Its Designer Handsomely reconstructed for use as bank offices, a railway station in Braun-



Cited for the imaginative use of aluminum, the old station has new life.

schweig, West Germany, has won for Hannes Westermann, the designer, the 1973 R.S. Reynolds Memorial Architectural Award. The renaissance-styled station, dating to the middle of the 19th century, was heavily bombed and burned in World War II.

The annual award is conferred for distinguished architectural design in which a significant use is made of aluminum. The main facade of the restored railway station makes use of aluminum at the entrance and in window frames and mullions. The rear facade, except for the end wing, is designed completely in aluminum.

Westermann was praised by the jury for his "sensitive" restoration of the building which is now used by Norddeutsche Landesbank. "The whole restoration project," said the jury, "was handled in a refreshing, delightful manner." Jury members were Max O. Urbahn, FAIA, past president of the AIA, chairman; Worley K. Wong, FAIA, of San Francisco; and Willi Walter of Zürich, Switzerland, 1972 recipient of the award.

Westermann received a \$25,000 honorarium and a sculpture in aluminum designed by Chicago sculptor Richard Hunt. This is the second time in a decade that a German architect has won the award, which is administered by the AIA. Hans Maurer of Munich was winner in 1963 for his design of a pavilion in Hanover, West Germany.

1973 Reynolds Student Prize Winner Features Aluminum Prefabrication

For the second time in three years students at the University of Arkansas have been named national winners of the Reynolds Aluminum Prize for Architectural Students. The 1973 award is shared by Raymond D. Snowden and Steven Lee Kinzler, both in their fifth year at the university.

The award winner is a prefabricated solar living unit which utilizes aluminum both structurally and for capturing the sun's rays for heating and electrical energy. The \$5,000 award is divided equally between the winning student team and the university.

Two \$1,000 honorable mention prizes went to Joseph A. Mulligan Jr., Thomas AIA JOURNAL/JUNE 1973 11 J. Bracken and Charles W. Spidle of the Boston Architectural Center for a temporary emergency facility and to Everett Woodrow Whittington and Kenneth Gene Hill of Louisiana State University for an emergency rescue vehicle. The students share the award with their schools.

Certificates of excellence were awarded to Dennis Alan Purcell, University of Tennessee, for his pavilion design; to Yongsik Cho, William John Stank, Jeffrey



Kinzler, Snowden and Professor James Lambeth (left to right) stand before a model of the 1973 winning entry.

W. Tobin and Judson A. Kline, Miami University, for their urban plaza entry; and to Patrick William Collins and John Dean Davis, University of Virginia, for their kinetic canopy.

The jury members were Robertson Ward Jr., FAIA, of Chicago; Patrick Quinn, dean of the School of Architecture, Rensselaer Polytechnic Institute; and L. Wayne Barcelon, University of California, who was one of last year's winners. The program is administered by the AIA.

Jurors in APA Design Awards Program Praise 'Impressive' Use of Plywood

For the second year the American Plywood Association has honored architects and designers whose projects reflect outstanding structural or esthetic applications of softwood plywood. The jury for the 1973 Plywood Design Awards commented that design excellence in this year's entries 12 AIA JOURNAL/JUNE 1973 Design excellence is praised by the jury in an awards program that features esthetic applications of softwood plywood; a grant is made for the study of energy conservation; and the AIA issues a revised code to assist in the conduct of architectural design competitions.

"was highest in the commercial/institutional category." The jury made no selections in the vacation homes category.

The first award in the commercial/institutional category was presented to Richard L. Dorman, FAIA, of Los Angeles for the southern California Placerita Canyon Nature Study Center.

In the residential/multifamily division, the first award went to H. Ronald Walker, AIA, of Des Moines, Iowa, for a planned community called the Park at Southern Hills. First award recipient in the residential/single family category was the Boston architectural firm of Huygens & Tappé for a two-story home on Rhode Island's Narragansett Bay. An Indian artifacts shop called the Little Red Barn, designed by J. E. McCormack, AIA, of Atlanta won first place in the special awards category. Citations of merit were presented to other architects and designers in four categories.

Judges were Paul Marti, vice president of Smith Entzeroth, Inc., St. Louis; Robert Mosher, FAIA, La Jolla, Calif.; and



The Little Red Barn (top) and the Park at Southern Hills, a planned community, are among the 1973 APA award winners.

Edgar Tafel, AIA, New York City. According to a spokesman for the APA, the response received in the first two years of the awards program has encouraged the association "to continue it as an ongoing AIA-approved design program."

Grant for Study of Energy Conservation Is Made to AIA Research Corporation The AIA Research Corporation is a nonprofit educational organization established by the Institute in 1969 to educate public and private institutions to be more responsive to human needs in shaping the physical environment.

The corporation has received a grant of \$43,560 from the Ford Foundation Energy Policy Project for a study of energy conservation in buildings.

The study will have two facets: The first will concentrate on technological options for reducing energy, the second on institutional restraints to using these options. Principal investigator will be Lee Windheim, AIA, of San Francisco, senior vice president of the Leo A. Daly Co. The study will be conducted under the guidance of the AIA Task Force on Energy Conservation.

Guide Regulating Design Competitions Now Available in Revised Format

It was in 1870 that the AIA issued its first "Schedule of Terms" for the regulation of the conduct of architectural design competitions. The AIA defines such a competition to exist "when two or more architects prepare designs for the same project, on the same site, at the same time, for the same client." On the other hand, an awards program is one where honors or prizes are awarded for projects already completed.

Recently revised, the AIA Code for Architectural Design Competitions (Document J331) is now available at the cost of 10 cents per copy. It has already been distributed to presidents of AIA component organizations and as a part of the Handbook Supplement Service for owners of the Architects' Handbook of Professional Practice.

The code is designed to assure fair conduct and equitable relations for all particontinued on page 79

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Circle 10 on information card

THE INSTITUTE

William L. Slayton, Hon. AIA

More Than a Building: The AIA has had many homes. As Henry H. Saylor chronicled in *The A.I.A.'s First Hundred Years*, published in 1957, the Institute's first headquarters was a sparsely furnished single room in the University Building in downtown New York. Six months later, the AIA had more spacious quarters two rooms. But even this space had to be given up in the years of the Civil War, and for a time books and papers were stored "in a fifty-cent chest" in a member's own home.

By the year 1883, the members had started talking about moving to Washington, D.C., and finally in 1898 the historic Octagon House was leased. Since then, the Institute has been housed in the specially built administrative headquarters building (erected in 1940 behind the Octagon but not occupied until after World War II because the federal government requisitioned it) and in the adjacent Lemon Building, bought from the government to provide additional interim office space and a larger site for the new headquarters. And for a little over two years the Institute staff worked in the old mansion at 1785 Massachusetts Avenue in northwest Washington, D.C., while the new administration building was being constructed.

To go back into history a bit, the first meeting of "13 architects of ideals and vision" was held in the office of Richard Upjohn next to Trinity churchyard in New York City on February 23, 1857. A commemorative tablet on the building at 111 Broadway, which now stands on the site of that inaugural meeting place, was placed there in 1957 by architects of the five AIA chapters of the New York metropolitan area.

The Institute's new home, just completed, was designed by The Architects Collaborative—TAC. So, in a manner of speaking, in the intervening years since the celebration of the AIA's first 100 years was commemorated by the New York architects, the Institute has gone from plaque to TAC.

The physical structure that houses the AIA, important as it is as a symbol of

Mr. Slayton is the executive vice president of the AIA.

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The new headquarters building of the AIA, in which officers, members and staff work to carry out the Institute's obligations to both its membership and society, is a symbol for American architects. The dedication of this structure affords an appropriate time for the profession to rededicate itself to the ever-constant goal of improving the quality of our environment.



American architects, is still but the space in which the Institute carries on its work. And, of course, much of the AIA's work is conducted outside the headquarters building in the offices of the 267 component organizations and by individual architects dealing with their individual clients and with their communities to encourage improvement in the man-made environment.

Thus the dedication of the AIA's new headquarters building takes on a significance beyond the building itself. It is a time for the architects of America to rededicate themselves to meeting the increased and complex problems involved in building the man-made environment.

And this is what the Institute has done. The Board of Directors at its March meeting adopted a statement of rededication. It is presented on subsequent pages. It declares simply and eloquently the aims and objectives of America's architects.

The Institute today is well along in living up to its rededication. Through its component organizations as well as the national one, it has embarked on programs aimed at influencing public policy so as to improve the quality of the manmade environment. It has embarked on programs aimed at assisting the practitioner in meeting the increasing complexities of designing buildings and communities to meet the needs of clients as well as those of the environment.

The Institute has established credibility with those who shape public policy. It has done so by evidencing sincere concern for the public interest and by backing that concern with the expertise needed to support its position and proposed solutions.

It is the architect after all who is best suited to deal with the man-made environment and its impact on, or enhancement of, the natural environment. It is the architect who is trained and skilled in problem solving, in assembling the inputs and in weighing alternative solutions. It is the architect who is trained and experienced in looking at the problem as a whole, not at just its individual facets. His self interest is the public interest—in designing well, in building well, in enhancing the environment.

This issue of the AIA JOURNAL, therefore, not only commemorates the dedication of the AIA's new headquarters building but also rededicates America's architects to continue their work of improving America's environment.

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Dedication and Rededication

S. Scott Ferebee Jr., FAIA



As this is written, The American Institute of Architects has reached a significant landmark in its history: the completion and occupancy of a new headquarters building designed to house the activities of a dynamic professional society.

The president's office in the new building, overlooking the Octagon House and its restored garden, is an appropriate spot to reflect on events that have brought the Institute to this spot.

The AIA has come a long way since the years when staff members stumbled over one another in the overcrowded Octagon and a generous member personally underwrote the cost of reinforcing the floors which were sagging alarmingly under the weight of desks and files. We have come even further since the bitter early days when the fledgling Institute could not afford the \$10 a month rent for the rooms it leased from New York University, and finally had to give up maintaining a headquarters altogether and moved its small archive into a member's home for safekeeping.

Our progress, however, should be measured in more important ways than physical facilities. We have succeeded in making our collective voice heard in the places where national policy is formulated. We have recognized our profession's responsibility to society, and we have acted on that responsibility.

But as the AIA grows in size, strength and influence, it is vital that we keep in mind the beliefs and principles on which our professional society was founded and which have guided its conduct during these 116 years.

Mr. Ferebee is president of the AIA.

Therefore, I hope that as we dedicate our new headquarters we shall also rededicate ourselves as individual professionals to the task for which we are uniquely qualified: that of insuring that coming generations of Americans will enjoy a better man-made environment.

Whether we design individual buildings, complexes of buildings or whole communities, we have an obligation to see to it that our projects do not gobble up our precious and dwindling heritage of open space; that they are designed to conserve rather than to consume our natural resources; that they heighten rather than blunt man's sense of pleasure in his surroundings.

We have a further obligation to become better practitioners of our art; to avail ourselves of the best tools that new technology can provide; to keep ourselves informed about new construction materials and methods and means of making our practice more efficient.

Finally, as informed citizens we have an obligation to work for those political, social and attitudinal changes that are necessary to translate into reality the plans for a better environment that we as a profession are formulating.

On the following pages, you will read the words of the AIA's rededication commitment which will be an important part of our headquarters dedication in Washington, D.C., this month. I hope that each member of the Institute will adopt this commitment as his own. While collectively we can accomplish much that we would find impossible individually, the AIA's image, influence and effectiveness can be only as strong as the professional performance of each of its members. AIA JOURNAL/JUNE 1973 19 We of the American architectural profession rededicate ourselves to the fundamental mission of improving the quality of the nation's man-made environment.

We pursue this mission in design of works of architecture from individual buildings to entire communities, striving to make them serve both their users and the larger environment of which they are parts. We pursue this mission as a professional body, honing and broadening our capabilities, counseling the nation's leaders and the public alike on the nature of environmental quality and the means of its achievement. And we pursue this mission as citizens, bending our energies and professional knowledge to the reshaping and renewal of our institutions-social, political and economicso that a nourishing environment is available to more and more of our fellow citizens.



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Speaking to the man-made environment are an apartment complex in Redmond, Washington (Riley & Bissell); the Academic Quadrangle, Simon Fraser University, Vancouver, British Columbia (Erickson-Massey); and a plaza in downtown Seattle framed by two office buildings (Naramore Bain Brady & Johanson), while two forest scenes portray how diversely we can communicate with nature.



Target for Tomorrow: Design as 'Experiment'

Archibald C. Rogers, FAIA

Experimentation has been an important part of our still short experience as a nation. Our tradition is based on pragmatism rather than on an intellectual philosophy, and the "trial and error" experiment has been its essential tool. Not the least of our contemporary tragedies has been the withering of this tool.

The commercial sector, under limited profit margins, can justify a considerable investment in results-oriented research, but not in experimentation since each experiment carries within it the risk of failure (or "error"). The private individual has little leeway, under our present tax policies, for providing the time and dollars required by experimentation. And government has become so timid and so gun-shy of public criticism that it no longer accepts the risk of failure and therefore cannot really experiment even though it clearly has the resources to do so.

Under these circumstances the design process may offer the most feasible alternative for experimentation. If this is so the place to start is the community design process.

The Contemporary Failure: The new towns built in Europe since World War II have succeeded in the physical sense of housing, in often "above standard" facilities, a measurable segment of the postwar population expansion. Yet in a social sense they seem generally to have failed. This failure may be summarized under the heading of "boredom"—and boredom is a nursery for most symptoms of our current social morbidity: delinquency, drug addiction, alcoholism, the thrill of crime, etc.

Boredom occurs evidently without regard to the quality of the physical design of these new towns. Some are garden

Mr. Rogers is first vice president of the Institute.

cities and some are not. Some are novel and exciting in their appearance and some are quite traditional. Most have included educational, recreational and cultural facilities and have deliberately organized programs to encourage their use.

The only exception to this general failure appears to have been Tapiola, near Helsinki. Its social goals have, at least partially, been achieved, and yet the transferability of this experiment to the urban scene today in the United States is somewhat questionable. Its candidate residents are often handpicked and "trained" before their relocation to Tapiola. Moreover, Finnish society is not yet as mobile as is ours so that most of these new residents may expect to make Tapiola their permanent home.

By contrast there appear to be urban communities with older roots, living in grossly substandard physical circumstances, which beneath this surface have evidently maintained a relatively healthy community life. For example, the residents of the Gorbals, the principal slum in Glasgow, have consistently opted for their present environment when given the opportunity to relocate to the nearby new towns of East Killbride or Cumbernauld.

This is *not* to suggest that new towns are in themselves destined to failure, for the history of human settlements indicates otherwise—from the colonial communities of ancient Greece to the prewar community of Radburn, New Jersey.

Nor is it to suggest that physical design is unimportant, as implied by the recent arguments for the abandonment of physical renewal in favor of something somewhat vaguely described as human renewal. History again indicates otherwise—that physical and human regeneration are in fact inseparable and that one is a catalyst for the other, both in the sense of process and of end product.

It is to suggest that the criteria assumed to govern contemporary physical design may, perhaps quite suddenly, have become obsolete. These criteria are based on the Renaissance esthetic, at a time when the Renaissance may be dying as other great ages have died before, and on the variation of this esthetic in the framework of the utilitarian dictum of the Bauhaus that "Form follows function." The effect may have been an excessive concern by gifted designers (artists) for external appearance, reinforced by their shared experience with their elite, and perhaps somewhat arrogant, patrons.

And the effect of this, in turn, appears in both process and product:

1. In the conventional, ex cathedra design process whereby designer and patron often produce a set piece, built environment judged as "good" by the tests of their experience but which may be alien (and therefore "bad") when measured by the quite different experience of the users.

2. Wherein the users are denied the opportunity to voice their experience and their resulting aspirations since they are presumed to be esthetically ignorant; to be more or less "in need" of (and thus grateful for) that which is produced for their benefit; to be impotent in the exercise of decision making.

3. Whereby the user has, until recently, been denied any role in this decision making, except as he is regarded as a consuming cipher of considerable importance to the practical success of the product, and therefore to be predescribed as an anonymous whole by market researchers and opinion analysts and to be brainwashed, after the fact, by advertising.

4. Whereby the often alien environment so created because it aspires to express art in a permanent form and because, for reasons of economy, it is precisely tailored to fit the predescribed consumer profile, is adamant in its resistance to change and is thus beyond the power of the user to alter.

5. Whereby the deliberate organizing of the life within the product, by virtue

Not the least of our contemporary tragedies has been the withering of the trial and error experiment as a tool. The design process may offer the most feasible field for such experimentation. If so, the place to start is with community design.

of the above adamancy and by virtue of organized activities of the sponsor designed to enhance the success of the product, may be severely inhibiting as regards the exercise of initiative by the user, as an individual or group, in satisfying his need for self-realization and for creative fulfillment.

The Design Experiment: What is needed is experimentation in the design process with new criteria. Design experiments need not be so grandiose as other forms of experimentation. How one puts a community together, socially as well as physically, is a design issue. The development of alternative designs is a routine exercise. They must all be judged against their ability to achieve the stated goals and objectives governing the end product. But the costs of developing additional "experimental" design alternatives are minor when compared with the costs of major technological experiments. Such design experiments are affordable by most clients and are not unimportant in their potential even if small in scale.

Assuming the feasibility of design experiments, it would be wise to carry these out within the framework of the present. Given the demonstrable failures of contemporary urban society in this country, the temptation is to look "backward" or "outward" or "forward" for successful models, thereby short-changing "the here and the now."

No doubt the colonial New England village and the medieval Italian hill town are successful models, as is the Casbah. Yet their success results from faithfully expressing the particular circumstances of their times, their geography and their tradition, all quite different from our circumstances today. These we must understand in order to similarly express the conditions in which we live, but as models they are not importable into the US nor into the 20th century.

It is also helpful to explore the future, as both yesterday and tomorrow are the matrix for today. This exploration may justify the futurism of World's Fair exhibits. But neither is this model really importable as a solution to current problems. (Witness the adverse effects of our simpleminded overreaction to the then futuristic freeway model exhibited at the Chicago World's Fair.)

The feasibility of design experiments is further reinforced by the fact that in most cases they do not actually require building in order to demonstrate success or failure, although this is no doubt always the best test and, for certain kinds of social experimentation, perhaps the only test. The postwar evolution of the computer and its application provide the opportunity to simulate alternative, experimental design models and to predict with reasonable accuracy most of their effects in advance of building, although not yet in terms of effects upon the psyche of the user.

Five New Criteria: All conceivable design alternatives are essentially experiments in that they hypothesize solutions to a given problem, which solutions are then analyzed as the basis for predicting their effects on elements of the problem. These effects are then comparatively evaluated between available alternatives as the basis for their synthesis in the form of an optimum solution to the problem.

"Trial and error" is therefore the name of the design game.

This optimum solution is, however, normally measured by three conventional criteria. If these criteria are obsolete, then the solutions which satisfy them are also obsolete. The three are: 1) functional efficiency, generally quite narrowly defined as the utility of the special purpose to be served in the end product; 2) financial feasibility, the balance between dollars invested and dollars returned, whether the balance be accounted as private profit or the cost/benefit effectiveness of public investment; 3) esthetics, or more generally the external appearance of the end product, which to the designer is in its potential "art" and which to the public and

private sponsor is more likely to be viewed as an influence on the "marketability" of his product.

These three criteria, in their interaction, describe the "Target for Today" toward which "routine experiments" with design alternatives are aimed.

Assuming the obsolescence of these criteria, a new—or better, an enlarged— "Target for Tomorrow" is proposed. This is described by the following five criteria:

1. Competence. Includes but goes beyond the objective of specialized utility. It sees the end product (an individual building or a community of buildings) as but part of a broader system, and its success is judged by the extent to which it fits into this broader system and contributes to its overall competence. Thus a hospital, while being rated as to internal efficiency, must also be evaluated in terms of its fit and contribution to the effectiveness of a medical care delivery system.

2. Financial feasibility. Continues as an essential criterion, but the accounting may have to be broadened. Costs may have to incorporate indirect elements such as those of social dislocation or of preventing environmental damage. Since the opportunity for profit must still be proved, these added costs will have to be borne by the consumer. Experimentation in this area may be designed to test whether the consumer, in an affluent society, is indeed prepared to pay the cost of ameliorating social problems and of improving his environment as added benefits to be derived from his purchase of goods and services including that of shelter.

3. Esthetics. Again, an essential criterion but subject to a broadened panel of judges. Satisfaction of the designer and patron must be tempered by, if not subordinated to, the satisfaction of the users, as dumb and inarticulate as these may be.

4. Equilibrium with nature. Except as regards landscape design, a new and urgent criterion. The end product should, of course, visually fit its natural setting, but it should also be designed in ways that The criteria assumed to govern contemporary physical design, the 'Target for Today,' may perhaps quite suddenly have become obsolete. If this is so, then the solutions which satisfy them are also obsolete. A new — a better, an enlarged — 'Target for Tomorrow' is proposed.

will minimize its withdrawal of irreplaceable resources from nature's bank and in ways that will repay this bank, if not with beneficent emissions, at least with emissions less malignant than is currently the case. Design experiments, for instance, can clearly be justified into ways in which buildings and communities can be put together so as to reduce their reliance on artificial climates and thus lessen their consumption of energy and of the fuels which provide it and minimize thereby the resulting pollution. Design can similarly reduce reliance on mechanical transportation.

5. Sympathy with society. Perhaps a very old criterion in urgent need of rediscovery. Having satisfied in so far as possible the other four criteria, the ultimate test of an optimum end product is its satisfaction of user needs. These needs include the spiritual and the psychological hungers of the individuals and groups which indwell that which is built in addition to their recognized physical requirements for shelter, safety and security.

Potential Experiments: The design experiments, even though they be on a "trial and error" basis, should be coordinated by the foregoing "Target for Tomorrow" in order to insure that each experiment interacts with all others to the end of synergism. For this reason, and also to minimize cost and the risk of failure, the first step in the process should be the design of a matrix deriving from the five criteria and of a catalog of potential experiments within this matrix. (And this in itself is a form of design experiment.) Such a matrix could well be the subject of research and design studios by multidisciplinary student/faculty teams.

Areas which justify experimentation within this matrix could then in addition

be the subjects of similar research and design studios. These are:

1. Alternative designs for the systems which support the life of a community:

• medical care, including preventive care, as a delivery system

 education as a cradle-to-grave delivery system including day care

· security as a system

 information retrieval in many areas, including library services

 recreation, perhaps less as a system per se than as a series of facilities providing the widest possible range of recreational options

cultural and religious activities similarly conceived.

2. The communications technology to service these systems, primarily cable television and its potential use for two-way telecommunications. This can serve all of the above systems and, conceptually, also serve shopping and employment needs, e.g., cottage industries and clerical work.

3. The physical facilities fitting these systems. The educational system may or may not require schools. Worship may or may not require churches.

4. The marketability of alternative housing types and designs which meet the five criteria; which provide a full range of options for expressing differing lifestyles; and which satisfy the objectives of a racial and economic mix.

5. Alternative designs for relieving the development burden on nature and for enhancing its presence within a new community such as:

• the design of buildings in ways that reduce the consumption of energy

· permeable paving to reduce runoff

 an exposed storm drainage system including "sky ponds" and old-fashioned cisterns for roof drainage—all, no doubt, in violation of most codes

 sewer systems that are separable, as between solids and liquids, at their sources.

6. Alternative designs for a process that will incorporate the using community in the decision making that determines the form of its governance. (This will be difficult where there is no community to start with except that which surrounds the proposed community.)

User Needs: Omitted from the above list is experimentation in the area of user needs, perhaps the most important of all areas if we really are to create a "mosaic of community architecture" in sympathy with its using society, as is spelled out in the first report of the National Policy Task Force of The American Institute of Architects. This omission is due to the embryonic nature of our present understanding of the interrelationship between man and his physical surroundings.

There is an emerging sociophysical science, but the data produced thus far is quite limited. Yet it is compelling in its forecast of things to come. For example, Edward T. Hall in The Hidden Dimension (Garden City, N.Y.: Doubleday, 1966) demonstrates the existence of a variable field surrounding the person which influences his reaction as it impinges upon the fields of others and upon his physical surroundings. Perhaps this is the aura which, in the shorthand of the artist, has been traditionally shown as a halo. The existence and the extent of such a field could become a design determinant affecting the densities and the form of physical shelter.

Absent these data, there are nevertheless certain things that we "know" simply because we are members of the species Homo sapiens:

1. We know that man differs from other species while sharing a common heritage. These differences are variously identified as thought instead of instinct; as self-consciousness; as man's obsessive and unrhythmic concern with sex. But perhaps the most significant difference is man's "apprehension." We know that we will die, and we therefore apprehend the irony of living simultaneously in the two worlds of time and eternity.

2. From this knowledge comes a perhaps insatiable hunger for reassurance that time ain't really so or that, if so, we Five new criteria are base for this 'Target for Tomorrow.' Design experiments, even though they be on a trial and error basis, should be coordinated with these in order to insure that each experiment interacts with all others to the end of synergism.

are somewhat guaranteed success in both worlds.

3. And this individual hunger expresses itself in various ways which influence (or should influence) our physical surroundings:

• In the hunger for symbols of eternity (Tillich's "ultimacy"). These symbols vest originally in the regenerative rhythms of nature but also latterly are found in architecture and the other arts.

• In the hunger for order to reassure us that life in time is really part of some cosmic system. This, too, is satisfied by the orderliness of nature and, when orderly, by architecture, as well as by the various structures and customs of society, even including such aberrations as that of Nazi Germany.

• In the conflicting hunger for individual identity to reassure each of us that he or she is "special." This hunger may be best satisfied by a form of architectural chaos, particularly a chaos that is not too antiseptic. For each of us has the need to express his hunger for "specialty" in peculiar and sometimes bizarre ways. (Or constitutionally the need to "pursue our happiness" without let, limited only by the rights of others to similarly pursue their happiness and by the need for some social structure to frame our pursuit.) This implies the availability of a wide spectrum of varying physical arenas within which we may choose to pursue our happiness and from which we may discover that the pursuit itself is the only happiness attainable.

• In the hunger to escape the whole bloody business—to periodically vacate the field of battle in which we are buffeted by the contending forces of time and of eternity.

4. The sum total of these varied and conflicting *individual* hungers have shaped

our society. René Dubos suggests that there are three *communal* needs which have governed society since its emergence among the cavemen:

• The known—the need for a neighborhood within which the individual is secure in that all is known and from which any alien intervention (a stranger, social change, etc.) is barred. In primitive societies the intervening stranger is killed, as may be the case in civilized societies, although in perhaps more subtle and cruel ways.

• The unknown—the need for a wide arena, external to the neighborhood, available for the "beau geste" and for communal catharsis. Here security is found in anonymity. This arena provides the opportunity to share experiences and to compete at the macroscale, with the new experiences and the trophies won being brought back for display within the microscale of neighborhood.

• Simulation—within either scale the need for individuals and social groups to "act out" their life in an anticipatory way. *The* raison d'être for the city is its ability to provide the widest possible spectrum of stages for the above acting out.

From this knowledge, even without the data that will in time be provided by a sociophysical science, we can discern certain experimental principles to govern physical design:

1. The incorporation of nature in all physical designs since this is the source of many of our reassuring symbols and since this has been the womb of man.

2. The design of the public armature, including the skeleton of our system of streets and pathways, so as to satisfy our hunger for order, orientation and permanence. Because of its permanence, this skeleton should be conceived as a great work of civic art and as the home of other art works.

3. The underdesign of the architectural flesh depending from, and given form by, this skeleton in perhaps chaotic ways that provide the opportunity for us to satisfy our hunger for individual self-expression. This flesh should be capable of easy amendment by its using society so that it

can be manipulated from time to time into forms that will fit varying lifestyles and physical needs. It should be designed to accept rather than to resist change since ironically this very lack of permanence will thereby satisfy society's hunger for permanence by reducing the visible impact of change-and perhaps in time eliminating the trauma of the wrecker's ball. Spaces should be designed so that they are adaptable to other and unforeseeable uses, so that a school might be convertible to housing or shopping or industry and vice versa. This may add to the building's first cost but will also extend its economically useful life. Nor need this imply acceptance of the Kleenex theory of design, for a throwaway architecture will surely create an unsupportable addition to the pollution of nature caused by our present disposable habits.

4. The design of this dependent flesh in ways that will provide the greatest number of opportunities for self-realization and for creative release. Perhaps industrialized building systems could be designed in the form of a miniaturized kit of parts that would make possible "do it yourself" homebuilding. Adjacent garden allotments provide an important opportunity for creative fulfillment. So will twoway telecommunication in its support of recreation and cultural activities and in its opening up of the opportunity for selfemployment. All of these will provide a form of reassurance by making it possible for the individual and for social units to once more seize command of their environment in ways that will enhance rather than damage its natural setting.

5. A design for all communities that recognizes the need for a secure home base surrounded by an insecure—and therefore challenging—external arena for the play acting that is essential to man's happiness.

The Institute and National Issues

The profession and the AIA have taken the case for a better man-made environment to legislatures at every level. For example, in October 1972 the President signed into law the Brooks-McClellan-Percy (or A-E Selection) Bill, which insures that architects and engineers for federal projects will continue to be selected on the basis of qualifications and not merely on the strength of a low bid.

Passage of the bill exemplifies the collective strength of architects working in concert with groups representing other design professions. AIA officers and directors testified before Congressional committees; and at the local level AIA's volunteer "Legislative Minutemen," 3,300 strong, wrote, wired and called their respective senators and representatives and the measure was passed.

The Institute's legislative program is based on a balance of public policy issues and professional/business concerns. This reflects the profession's overall interest in the man-made environment and the architect's role as an individual citizen and design professional in its improvement.

The Institute's involvement in questions on the national level ranges from concern over uses of the Highway Trust Fund, funds for housing and urban development, the Metric Conversion Act, occupational health and safety and the design of federal buildings to historic preservation. Many are the issues focused upon by the Institute and which, through AIA efforts, have been brought into the right perspective of importance. One such is the National Policy Plan for Growth (see page 30).

The first report of the AIA Task Force on National Policy formed the foundation for the Institute's work on national and state land use legislation. In testimony before both Senate and House committees, the AIA urged creation of a national growth policy board to establish national development goals and coordinate government programs to meet those goals. Land use planning and management programs at the state level were also endorsed as a means of determining desirable growth patterns responsive to the needs of local areas.

On issues already before Congress the AIA presents its stand in a number of 26 AIA JOURNAL/JUNE 1973 ways. Last year, selected Legislative Minutemen were asked to take action 34 times with communications directed to 23 different groups, each one to a Congressional committee, subcommittee or special group of Congressmen in a key position to act on the particular issue in question. In addition to the A-E Selection Bill, more than 20 instances can be identified where AIArecommended action was taken by the target group.

On some of the issues of consequence to the architectural profession and thereby the American public, the Institute, speaking for the membership, takes the following stand:

The Highway Trust Fund: The AIA is supporting an amendment to the Federal Aid Highway Act allowing money from the Highway Trust Fund to be made available at local option for the purchase, operation and maintenance of all forms of public transportation, including buses and rail transit.

"The primary purpose of the Interstate Highway System is the connection of major urban concentrations," the Institute wrote to members of the House of Representatives. "However, in metropolitan areas the Interstate Highway System has been required to accommodate a disproportionate amount of internal transportation movement, which is not only inconsistent with the primary purpose of the Interstate System, but inefficient as well. Other modes of transportation, particularly public forms, have not been sufficiently developed or supported.

"... If the nation is to meet increasing transportation demands, all modes of transportation must function together in a coordinated manner to serve the purposes of a total transportation system. This goal can best be reached by financing urban mass transit systems through the Highway Trust Fund."

An allied highway issue is the future of the billboard and junkyard control programs of the Department of Transportation. Established by the 1965 Highway Beautification Act, the programs have been hampered until recently by inadequate funding. Now, despite improved funding and Department of Transportation-approved control programs in 49 states, new obstacles are appearing to hinder further progress in roadside beautification.

The damaging proposals, opposed by the AIA, include a two-year moratorium on billboard removal; a new definition for conforming signs that could add 400,000 new signs along highways; and a requirement forcing local communities to compensate billboard owners monetarily rather than using the successful fair amortization system.

The Occupational Safety and Health Act: The impact of this act on the architectural profession has been an active subject of AIA review and testimony before Congressional committees. As the designers of present and future working places, architects seek the administration of statutes that will enable them to fully contribute to the planning and design of safe and healthful working environments.

The AIA supports the adoption, where appropriate, of performance standards rather than prescriptive standards by OSHA as well as the extensive testing and review by technical panels prior to the adoption of specific standards. In addition, the Institute is opposed to OSHA adopting standards that are more appropriately covered in state and local building codes.

Design of Federal Buildings: A significant legislative goal of the Institute is the improvement of architecture and design in public buildings. Good design is clearly in the public interest from the standpoint of economy as well as esthetics and environmental quality. All federal buildings should reflect the finest examples of American architecture.

Coordinating Building Standard Processes: As a means of coordinating these and product testing procedures, the Institute supports the creation of a National Institute of Building Sciences, a nonprofit, nongovernmental entity originally recommended by the Douglas Commission on Urban Problems. The AIA believes that a representative of the design professions should serve on the Institute's Board of Directors to insure a balance of direction to the organization's activities.

Federally Assisted Housing: The recently announced moratorium on federalStatement by the architects of the new AIA Headquarters building:

"Our belief that as simple a backdrop as possible should be provided for the Octagon House prompted us to unite the north and east wings in a strong, continuous curve that frames the garden. The sweep of the building and the vectors of the site are combined in angled spaces, closer to the angles of a hexagon than those of a rectangle, that echo the angles of the Octagon. On the other hand, we did not believe we should design a totally background building, entirely subservient to the Octagon and anonymous in character. We hope the building reaches out to the profession to express its real function and its image; helps to erase the feeling that AIA headquarters and staff are out of touch with the grassroots; and is a building to which the membership will like to return often."



The AIA's legislative program is based on a balance of public policy issues and professional/business concerns, reflecting the profession's collaborative interest in the manmade environment and the role of the architect in its improvement.

ly assisted housing production and community development programs comes at a time when the AIA is developing a National Policy on Housing as an adjunct to its National Growth Policy. With the Nixon Administration and Congress seeking new directions for housing and urban development in America, the recommendations of the National Housing Task Force could make it possible for the Institute to play a leadership role as new legislation is considered later this year. The expected consideration of a special revenue sharing/block grant program for community development should give the AIA a clear opportunity to implement key recommendations of the National Growth Policy.

Energy Conservation: A similar situation is present in the field of energy conservation when another National Task Force later this year develops major recommendations for use by Congress and governmental agencies. The focus of these deliberations will be the importance of building, planning and design to the conservation of energy resources.

Metric Conversion Act of 1973: The Institute supports legislation to establish a national program for conversion to metric weights and measures. H.R. 1234 and other metric conversion bills are introduced in the 93rd Congress. H.R. 1234 fulfills most of the requirements the AIA recognizes as being necessary for a planned, orderly implementation of the inevitable and desirable conversion to a metric system.

The profession is opposed to the concept of evolutionary metrification. Increasing use of the metric system without a program of coordination could cause difficulties which might eventually reach disastrous proportions. Under present conditions, it is the architect's responsibility to coordinate the activities of the various disciplines and skills within the building industry and to interrelate manufactured building materials and components with each other and translate the whole through construction documents into a buildable structure. If the other parts of the building industry were to begin to convert only as their particular needs required and completely without coordina-28 AIA JOURNAL/JUNE 1973

tion, the architect's job would be virtually impossible.

The effects on the architectural profession of a properly planned and well organized program of metrification would be much less severe than those which could result from evolutionary metrification. The optimum time period for architects to convert will be far less than the proposed time period of 10 years, though no one is prepared to say exactly how long it would take. Architects have converted to the metric system for a single overseas project, where the metric system was in general use, but conversion to predominant use of the metric system is another matter. The architect's conversion time would be small but could not even begin until the conversion of product sizes (or at least catalog sizes) and the revision of design tables and their acceptance by the various code groups were well underway.

The direct cost to architects would be primarily in the re-education of employees and the purchase of new standards and reference materials. Both of those costs would be relatively small. The architectural profession realizes, however, that during the period of the conversion it will be required to spend additional effort in terms of dual dimensioning and aiding others on the construction team in interpreting the new dimensioning system. Greater cost will continue for the architect so long as the conversion is taking place, and probably the largest portion of the increase will occur toward the end of the conversion period. Therefore, a minimum of cost to architects will occur if the conversion is completed within the next 10year period.

One orderly approach to planned metrification for the construction industry would be to establish a division of the National Metric Conversion Board with the responsibility to:

1. Establish liaison with all segments of the construction industry and work with representatives of the industry within a fixed time period to: a) establish an overall plan for metrification; b) develop a program for conversion; and c) assign time periods to each stage of the program.

2. Function during the entire period of the conversion to: a) implement and over-

see the execution of the program; b) follow up and assist the industry toward orderly conversion; and c) encourage and aid the industry in coordination of conversion activities.

A union of metrification and dimensional coordination would enable the development of a rational, disciplined and systematic approach to building and design. It can provide the impetus to upgrade codes and standards and provide a base for less expensive in-place cost. If handled creatively and cooperatively, it will provide excellent opportunities for the further unification of the building industry into an even stronger working team, which it deserves to be.

Historic Preservation: The Institute speaks for a far greater priority for historic preservation and restoration among our national programs and goals and has become increasingly involved in conserving our total environment, the character of our cities and their neighborhoods.

The AIA Committee on Historic Resources has organized a network of State Preservation Coordinators who act as direct liaison between the individual in each state government responsible for historic preservation and the 174 AIA chapters across the country to encourage and assist the development of local preservation projects.

These state coordinators have played a major role in helping the states to increase their participation in the historic preservation grant-in-aid program of the National Park Service as authorized by the National Historic Preservation Act of 1966.

However, the need from states for matching grants-in-aid, coupled with the requests by the National Trust for Historic Preservation, is nearly four times greater than the Administration's appropriation for the grant-in-aid program.

It is the Institute's position that the federal government should begin meeting its commitment to historic preservation and it is therefore encouraging funding levels that would match the states' capabilities.

The above are only a few of the national issues with which the Institute is involved, but they clearly demonstrate the weight that the collaborative voice of the profession carries. Most visitors to the Institute arrive via New York Avenue along a oneway, solid front block. To create a stop in the heavy mass before the Octagon House, the first floors of the headquarters building are recessed and the stair tower, in which the prismatic feel of the Octagon reappears, is revealed. The brick and concrete entrance steps soften the transition from old to new, as do the brick and concrete wall on the righthand side of the steps. The facade on 18th Street echoes the hollowedout quality of the New York Avenue side, again to change the pace before the gentle corner.



The Institute and the Public's Interests

By definition, a profession serves a public interest beyond that of its own clientele. Thus the medical profession is dedicated to the service of the nation's health needs; the legal profession to justice and the law itself; and the architectural profession to the quality of the man-made environment.

A professional organization likewise must perform a dual role, serving the needs of its members but also acting for them in service of the broader public. The services of The American Institute of Architects range from the assumption of a leadership position in the search for a comprehensive national urban growth policy to the sending of volunteer professional teams into communities large and small to address specific problems of urban design.

They include efforts to open architecture as a profession to those long excluded from full participation in our society, and they also include efforts to open the architect himself to the impact of his work upon our natural environment and our not-infinite supply of natural resources.

The AIA is a thriving and growing professional organization which has been entrusted with substantial grants from both public and private sources to carry out a number of activities. But the major support comes from the profession itself.

The National Policy Task Force Plan for Growth: In early 1971, the AIA appointed a National Policy Task Force whose mandate was nothing less than to devise a framework for a national urban growth policy. On the task force were Archibald C. Rogers, FAIA, chairman; I. M. Pei, FAIA; Jacquelin T. Robertson, AIA; William L. Slayton, Hon. AIA, executive vice president of the Institute; and consultant Paul N. Ylvisaker, former director of the New Jersey State Department of Community Affairs and now dean of the Harvard University Graduate School of Education. Van. B. Bruner Jr., AIA, has since joined the task force.

The first task force report, delivered to the AIA Board of Directors in December 1971 and approved by the membership at the annual convention five months later, is not a plan for either the encouragement or limitation of growth. Its emphasis throughout is qualitative rather than

quantitative. It is a plan to use the growth that inevitably will occur in coming decades to create a more amenable, conserving and equitable American urban environment.

To achieve this goal, it proposes a new form of public entrepreneurship in which government would take a direct hand in the deployment and development of our most irreplaceable resource: the land. And it proposes that government do so at a scale large enough to provide more than housing alone-at a scale that would permit the creation and re-creation of neighborhoods, with all the elements of community that the term implies.

The basic "building blocks" of development, in the report's terms, would be neighborhood growth units of 2,000 to 10,000 persons each, containing 500 to 3,000 housing units plus a full range of community facilities and services.

These growth units would become the nuclei for renewal of the central cities, linked to new development in the suburbs and beyond, where the growth units could be clustered into satellite communities.

Development at this scale is beyond the scope of most private builders because of the capital required to aggregate large sites and the heavy demand for initial investment that is not returned for years. Hence the need for public involvement if the growth units are to be created in significant numbers-a need that carries with it the opportunity to assure that the growth units will serve all racial and income groups and will be conserving rather than wasteful of natural resources.

The report proposes that the federal government take the initiative by financing the purchase by public agencies of a million acres of land in the 65 metropolitan areas of over a half million population. It estimates that such a special impact program would cost \$5 billion and accommodate a third of the nation's population growth in the coming three decades at comfortable densities.

It also estimates that over these 30 years the entire cost would be covered by profits from sale or lease of the land to private developers who would agree to follow the public agencies' plans. In fact, there would be enough left over to pay

for the streets, utilities and other improvements necessary to prepare the land for development. In the present land marketplace, the public sector pays for these improvements while private owners, often speculators, get the profits from the increased values that the improvements create.

The public bodies that would buy the land, plan for its development into growth units and see that the plans are carried out would be elective metropolitan planning and development agencies. These would not replace existing local jurisdictions but would assume authority over all public investments in their areas that "influence economic development and determine the pattern and character of future urbanization," notably including transportation facilities and water and sewer lines.

The metropolitan planning and development agencies also would have the power of eminent domain to acquire land in both undeveloped and blighted areas for creation of growth units or to block speculation, thus influencing the character of future development. They would establish uniform building codes for their areas and have control over all major zoning decisions.

The report also proposes equalization of the property tax base throughout metropolitan areas, assumption of welfare costs by the federal government and assumption of education costs by state governments with federal help, all with the aim of reducing fiscal disparities among local jurisdictions.

Doing so would make it possible to work toward a goal of ample housingand welcome-for all racial and income groups throughout metropolitan areas. This goal means opening new choices to the present residents of the central cities. It also means (this first priority step having been taken) rebuilding the cities in growth units with sufficient facilities, amenities and services to attract a diverse socioeconomic mix.

The report was widely and favorably commented upon by the press, and to date some 80,000 copies have been distributed. Representatives of the Institute have been invited to present it to committees of

The corner's pedestrian scale is repeated in the almost undistorted reflections in the two-level tempered glass wall. To further ease transition from garden to plaza to building, a concrete band tops the brick retaining wall, in which steps have been added for ready access to the lawn. Sculptures, exhibits and large receptions can be accommodated on the expansive plaza. Though part of the building, the boardroom is not absorbed in it but acts to bridge the two scales on the property; one intimate, one bold. The structure's short wings read as one sweeping curve, uncluttered to play up the Octagon, with the executive wing as a counterpoint to the boardroom.



Congress and, in 1972, to the platform committees of both major parties.

At the end of October '72, with the help of a \$30,000 grant from the Ford Foundation, the report was subjected to the scrutiny of a select group of urban specialists in a three-day working conference hosted by the Harvard University Graduate School of Design.

The group included public officials, planners, economists and minority group representatives as well as architects. The special purpose of the conference was to identify constraints to implementation of the report's recommendations—social, political and economic—and ways of overcoming these constraints through refining the report and building broad constituencies behind it.

The discussion was intense and challenging. Many of the report's detailed recommendations were questioned, but there was general agreement on the overall public policy that it proposed.

The task force met immediately after the conference and agreed that the effort to change the pattern of America's urban growth was at a very early stage. The work done to date by the task force and conference participants is a beginning, not a final formulation of solutions.

The task force also agreed that if other groups and disciplines were to be asked to help implement the report's recommendations, they should be brought in on the process of its further refinement and development. Therefore, the Institute convened representatives of a broad spectrum of groups early this year to work with the task force on a second edition of the report and investigate the feasibility of forming an Interdisciplinary Coalition for a National Growth Policy.

Meanwhile, the Institute is designing a research and development program on the neighborhood growth unit concept to fill it out in more detail and chart its application to specific metropolitan areas. Task forces have been appointed to work further on national housing policy, economic development incentives and techniques of inner city renewal.

The Institute also is preparing model legislation on the report's recommendations and planning a broad public educa-³² AIA JOURNAL/JUNE 1973 tion campaign involving state and local components of the AIA as well as the national office.

These implementation efforts illustrate two key characteristics of the Institute as a public service organization: First, it has the reach and prestige to draw leaders from other fields into discussion of such topics as national growth policy; and second, through its individual members and active network of state organizations and local chapters, it has the capability of carrying the discussion to every level of American life and governance.

Regional/Urban Design Assistance Teams: Perhaps the most significant of the Institute's assets, beyond any listed in its budget, is the willingness of its members to expend their time and skills on public service projects. A case in point is the Regional/Urban Design Assistance Team Program, which has been serving local communities throughout the nation for the past six years.

The teams, comprising architects, planners and other specialists, are organized by the Institute and sent into the communities at the joint request of local AIA chapters and the communities to help find solutions to specific urban design and planning problems.

To date, more than 40 AIA members have served on such teams. Their time is volunteered, and one of the ground rules of the program is that they cannot accept any commission resulting from team recommendations. The local AIA chapter and/or community pay the expenses.

A typical team visit is two to three days in duration. In that time, of course, the team cannot produce finished solutions to complex problems. What it can do is diagnose the problems, dramatize them to the community and devise a plan for planning by the local chapter and other community leaders. It can provide a fresh and expert perspective in which new solutions are generated.

One such visit was made in 1971 to Falls Church, Virginia, a suburban community in one of the fastest growing parts of the Washington, D.C., region.

The AIA team consisted of three architect/planners and a real estate economist. It spent three days studying the community, then went before a meeting of some 100 residents, not to present a firm plan but to propose a change in the terms of the discussion of Falls Church's future.

Rather than contemplating whether intensive development should occur, the team suggested that the community focus on how and where it should occur.

So the team recommended that highrises be accepted, but at the periphery of the city near large existing shopping centers, not at the ragged but historic core.

The Washington Post commented that the team had "demonstrated how the people of Falls Church, who consider themselves victims of urban growth, can become participants in the process of making growth serve change."

The Falls Church City Council subsequently appointed a steering committee to study implementation of the team's proposals and a consultant was engaged to take them into more detail.

The Community Services Program: Like many other groups and institutions in American society, the architectural profession found in the 1960s that it wasn't living up to all that it professed. One agent of this discovery, as far as architects were concerned, was the late Whitney M. Young Jr., who at the 1968 AIA convention declared: "Your profession . . . has not distinguished itself by your social and civic contributions to the cause of civil rights. You are most distinguished by your thunderous silence."

Shock was followed by self-examination, and the Institute found that less than 2 percent of its membership was from minority groups. There were no members of the professional staff nor any national officers from such groups.

Within months after the convention, the AIA had established a Task Force on Equal Opportunity composed of equal numbers of black and white members. Building on the work of the task force, it now has a continuing program aimed at opening the architectural profession to minority group members in two ways: first, bringing more of them into the profession and, second, providing their communities with greater access to the skills and services of the profession.

The major means to the first end has



Garden and plaza are walk-through, sit-in, to-be-lived-in spaces and can be enjoyed even on the hottest days in the shade from the boardroom overhang. Flowers will color the garden from early spring to late fall. Hopes of the Institute to develop still another urban oasis in the center of the city block, which would give new inner life to the buildings, did not materialize. Aggregate and matrix of the headquarters building are held in a muted gray that picks up the hue of the far corner building. This was at the request of the Commission of Fine Arts, which looked for a block of harmonious values. However, a newcomer between the two structures breaks the consonance.



The AIA serves the interest of all Americans in fields ranging from the searching for a comprehensive national urban growth policy to the sending of volunteer professional teams into communities of all sizes to address specific problems of urban design.

been a \$1 million minority disadvantaged scholarship program financed jointly by the AIA and the Ford Foundation. Ninety-six students entered architectural schools thanks to the program, and the scholarships will see them through their entire course of studies (five or six years, depending on the individual school).

The program is now in its third year, and the original funding has been entirely committed. Therefore, the AIA last January launched a fund drive to raise \$600,000 to continue a scholarship program in slightly different form for another three years.

While the AIA's membership is not much changed now from the time Young spoke, minority group members presently account for at least 4 percent of all architectural students—a sure sign of further change to come.

The Institute also has given support to the Council of Black Architectural Schools and, with the Urban League, jointly sponsors a Black Executive Exchange Program to bring black architects into the schools as visiting lecturers.

A second form of response to minority needs, making architectural skills and services available to minority communities, has been accomplished mainly through the more than 70 Community Design Centers throughout the country. These are far from being creatures of the AIA. They are fundamentally, even aggressively, independent entities born out of communities from Harlem and Watts to Helena, Montana, and Honolulu.

Beyond this common characteristic they vary widely, Some are primarily concerned with arming their communities with the expertise to fight harmful incursions such as highways; some are mainly engaged in "counter planning," i.e., the preparation of community alternatives to unwanted ministrations of public agencies; others engage in actual architectural design and even development of community projects such as parks and housing construction or rehabilitation.

Some CDCs rely mainly on volunteer professionals, some on architectural students, or VISTAs, and some operate as professional offices—the architectural analogue of public service law firms. 34 AIA JOURNAL/JUNE 1973 Nationally, the AIA performs a clearinghouse role for the CDCs and provides organizational and fund-raising assistance. Locally, AIA chapters supply volunteer professional help to the CDCs and in many cities make substantial contributions of funds.

Professional Development: Like any other professional organization, the AIA is concerned with the continual development of its members' basic professional competence. At the AIA, however, such developmental efforts extend from the skills of architecture to its impact upon society and the total environment.

"The point of view that the architect adopts and the actions that he undertakes in response to his understanding of the developing energy crisis in the United States will have a significant, possibly vital effect on the national welfare in the decades ahead." So began a report of the AIA Task Force on Energy Conservation to the Board this spring. Architectural decisions, the report continued, have the "longest time impact on energy use of any man-made products—longer than appliances, vehicles or the machines used in business and manufacturing."

On the recommendation of the task force, the Board agreed that the AIA should take the lead in developing a cooperative construction industry program on energy conservation in buildings. The AIA Research Corporation already has a six-month study of the architect's role in energy conservation under way under Ford Foundation funding and is seeking a National Science Foundation grant for a longer-term study of the means of measuring the energy demands of various types of buildings and of the production of materials used to build them.

Public Education and Communications: Too often, professional groups speak only to themselves or closely related colleague organizations. Over the years, the AIA has developed a sophisticated capacity to speak to broad publics on behalf of environmental quality, through publications, conferences, films and regular contacts with the media.

In 1970, for example, the AIA sponsored a meeting of the Town Planning Commission of the International Union of Architects on the subject of open space, its acquisition, conservation, creation and design.

The meeting brought together a unique array of expertise on the subject and generated a landmark set of papers. Had it ended there, the meeting's value would have been limited to the small number in attendance and other specialists who follow the literature of the field. But the Institute put the papers in easily accessible and highly readable form in the 111page book *Open Space for People*, illustrated with examples of outstanding American open space design. Interest in the book has been so wide that requests for it have exhausted the 2,000 copies printed.

Recently completed is a similar book on new communities, growing out of a 1971 AIA conference on the subject that involved planners, developers, public officials and others as well as architects, a virtual "Who's Who" of those most concerned with the potential of new communities for America.

AIA films deal with some of the knottiest problems of our society. "A Child Went Forth," for example, is a film about the need for better and more flexible facilities for urban education. But it is also about what goes on in these facilities and how it relates to the home and street environments of the cities.

The film "Right of Way," about the sometimes disastrous impact of highways upon cities, includes a series of specific proposals for achieving a better balanced urban transportation system and accommodating highways, where they are necessary, into the fabric of the city.

The Institute's media relations program goes beyond organizational public relations to an effort to guide the media toward greater recognition of environmental quality and the means of its achievement.

The effort has included a series of seminars cosponsored by the AIA and the prestigious Columbia University Graduate School of Journalism for members of the national press in all media. This year, the AIA is joining with its component organizations in sponsorship of three such seminars at the regional level. □ Direction of the brick inside and out, of the outdoor ramp and of the boardroom wall combine to give a thrust toward the historic landmark. Whether to have a separate tenant entry was long under discussion; the solution was a central reception area where everybody can enjoy the exhibits in the spacious lobby.



The Institute and **Departmental Functions**

Like all healthy institutions, the AIA is constantly changing. Changes in the Institute reflect changes in the thinking within the profession, the way architects see themselves and their professional role in society.

In 1964 when the first issue of the Organizational Directory of the AIA (then called Structure and Services) appeared, the Institute was composed of these departments: Institute Services; Professional Services; Public Services; and Business Management. The expansion and changes that have taken place even during these short eight years come clearly through in this listing of the present departments and their functions.

Undergirding them all is the Business Management Department which is responsible for the entire business operation of the Institute (with the exception of documents and book sales). Under its broad umbrella are the accounting, purchasing and personnel offices, as well as such functions as maintenance, computer installation and mailroom. It has supervisory control of the records of The American Institute of Architects, Inc.; the AIA Corporation; the AIA Research Corporation; the American Institute of Architects Foundation, Inc.; and the National Architectural Accrediting Board. The controller maintains liaison with financial, investment and legal counsel as need dictates.

Community Services: As a resource to the minority community in its quest for a "relevant state of being," the Community Services Department bases its activities on the concept that architecture is an educational and professional discipline which is ultimately intended to serve the needs of all the nation's citizens. The department's programs center in three primary areas: the minority community, professional development and educational programs.

The department gives aid to the Council of Black Architectural Schools in order for its members to meet and to formulate programs to aid in reaching the goal of accreditation for all COBAS schools.

In cooperation with the National Urban League, the department helps sponsor the Black Executive Exchange Program, offering black architects the opportunity to

speak at black schools of architecture and to assist in their improvement and in their gaining total awareness. It is anticipated that an expanded version of the program will be worked out which will include the predominantly white schools of architecture as well.

In its work with the Community Design Centers, the department aims to improve the status of minorities and to involve them in the mainstream of purposeful decision making regarding matters that affect the total community.

Placing emphasis upon the minority architect, the department coordinates its work with other Institute activities and projects in an "across the board" awareness program. This is to insure that minorities and their concerns are heard - and heeded.

One of the department's more important responsibilities is the administration of the Minority Disadvantaged Scholarship Program whose purpose is to assure minority disadvantaged students the opportunity to obtain an architectural degree and to become a valued part of the architectural profession. The program perpetuates the goals of a scholarship fund begun in conjunction with the Ford Foundation.

The Education and Research: This department is concerned with the full professional development process, including not only career development and environmental education, technician training, professional education, internship and licensing but also continuing education and research activities. In these latter practicing architects must become increasingly involved so they can keep abreast of new information and developments in practice and continually improve their practice skills.

Thus the department must be a regular clearinghouse of information and a link between students, graduates, architectural educators and practicing architects as well as private and governmental agencies concerned with education and research. In this capacity it works hand in hand with the Association of Collegiate Schools of Architecture; the National Architectural Accrediting Board Inc.; the National Council of Architectural Registration Boards; the Association of Student Chapters/AIA; and member professions of the Interprofessional Commission on Environmental Design.

The potential architect can seek and get advice from this department on his formal education, his procedures for internship and licensing and on how to prepare for practice. Once in it, he can benefit from these excellent continuing education resources:

· Architectural Training Laboratories, designed to help architects acquire new skills by hands-on learning by doing in one-andtwo-day laboratory sessions on such vital practice subjects as land development, construction management, selling services, human management, construction cost control and financial management.

Architectural Game Seminars, also developed to provide architects with new skills through learning by doing. However, instead of interacting with an expert resource person as in the laboratories, participants interact with computers in New York. These are correspondence courses which can be completed over a 12-week period. Part of the input to these courses are real problems from the participating architects' offices.

· Review of Architectural Periodicals (RAP), a series of monthly tape cassettes containing abstracts from about 30 publications and information from conferences, workshops, etc., prepared for architects who don't have time to read as much as they should.

· Subject Cassette Series, designed as complete learning packages with a 60-minute audio cassette as the basic medium, augmented in many cases with slides, written materials, worksheets, etc. Each cassette deals with a single definitive subject in depth over time. An architect can build a library of those tapes which are most pertinent to his practice and his continuing education.

Research, which so far has been dominated by scientists, engineers and the social and economical consulting professions, is a natural field for practice and one in which the architect fits because of his training in relating hardware and software via the design process. The research arm of the department works toward opening and expanding this new world for practitioners. The Architect/Researchers Conferences


To involve architects, related professionals and visitors as much as possible in the life and function of the Institute, the first two floors are kept open. Ceiling height shifts from the lobby area in one wing to the lower library ceiling at the end of the other wing; room can thus be given to a variety of exhibits while at the same time the boardroom on the second floor gets the necessary height. The ramp between the two levels is one of the features that makes the building completely accessible to paraplegics. The setback of the three first levels gives cohesion to this part of the building, which is occupied by the Institute. The AIA library, on the New York Avenue side of the ground floor, has out-of-the-way reading spaces along the outer walls; stacks, audiovisual equipment and viewing room are a level below.





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Thrust of the boardroom ceiling pattern parallels the slanted wall and the brick of entrance lobby and plaza. When open and lodged on their tracks, the soundproof doors have the same direction. They can also be rolled completely out of the way. The circular table is quickly dismantled and easily stored, every other of the 8-foot sections being a lay-in type. This makes the space adaptable for a multitude of uses.

are a series of state-of-the-art sessions which introduce architects and researchers to each other and to the latest findings of the research community.

• The Institute has entered into a joint venture with the Royal Institute of British Architects to continue publication of RIBA's successful scholarly journal Architectural Research and Teaching. The AIA will provide substantial input to this quarterly.

• The AIA continues to expand its research survey and information services, which involve maintaining the Institute's contacts with private and government agencies concerned with environmental design research, updating and expanding the AIA's information capability, and feeding to practicing architects the latest useful research information.

• The Design and Behavior Research program meets an important AIA objective: that of developing a new understanding of man's relationship to his physical environment. It deals with research in the behavioral and human sciences related to architecture and the physical environment, and has an objective of translating research results into simple-to-adapt "tips to designers" in architect-language rather than research-language.

Environment and Design: Responsible for three major areas of concern to both the profession and the public, the Department of Environment and Design's activities embrace national policy, urban programs and housing, and design and international relations.

In the area of national policy, staff support and counsel are given to the work of the National Policy Task Force whose aim is to place the AIA in a leadership role by proposing to the nation sound development policies so crucial to this country's future. Its recommendations and programs are carried out in relationship with numerous other Institute activities such as the work of the Creative Economics and Recreating the Inner City Task Forces. Assistance is rendered as well in acquiring outside funding to augment the AIA's commitment in the formulation of national growth policy.

The department assists in developing AIA position statements, based on Insti-³⁸ AIA JOURNAL/JUNE 1973





In attempting to meet the urban and environmental problems that confront us, the Institute has launched a series of innovative and ambitious programs.

tute policy, on community development problems, contemporary environmental issues and housing. One important aim is to develop for the AIA a broad policy position on housing which will be an appropriate supplement to the national growth policy already adopted by the AIA. The staff works closely with federal agencies and Congressional committees on urban and housing problems and provides support to such AIA committees as Urban Planning and Design, Regional Development and Natural Resources and Housing.

The aims of the department are implemented in a variety of ways including the Regional/Urban Design Assistance Teams; major conferences on such topics as housing, the design of growth units and international transportation and urban design; and through publications such as the projected book *The Architect in Regional Planning* and a film on the importance of creating a healthy environment.

Using an ecological approach, the department seeks to develop the profession's help in securing a safe and pleasing environment in the face of technological and social change. Emphasis is placed upon conservation and the proper utilization of natural resources. Recently Congressional testimony has been presented on the national forests, timber supply, energy conservation, environmental information systems and on environmental impact statements.

Of tremendous significance to the profession is the work of the department in the area of programming and design of specific building types. The department supports the work of committees seeking improvement in providing architectural services to the commercial and industrial client; delivering better health facilities; enhancing the process of professional design for educational facilities; improving correctional facilities design; and promoting public awareness of the need for professional planning and designing for the arts and for recreation.

The department directs the Institute's programs relating to the preservation of historic architecture and is a liaison with professional societies, governmental agencies and 52 State Preservation Coordinators, giving guidance to the profession and 40 AIA JOURNAL/JUNE 1973

to others in matters relating to the preservation of historic architecture.

The AIA is a member of the International Union of Architects, a body which seeks to unite architects throughout the world in a search for solutions to common problems. The department directs the Institute's activities in its relationship with this body and with foreign societies, local embassies and consulates and government agencies.

Government Affairs: The Institute is active on several fronts in government affairs — with the US Congress, federal agencies and state and local governments.

During the 92nd Congress, more than 25,000 bills and resolutions were introduced in the Senate and House of Representatives, of which at least 10,000 of possible interest to the profession were individually reviewed by the Congressional liaison staff of the Government Affairs Department. More than 100 bills were actively monitored by the staff. Institute witnesses made 32 appearances before Congressional hearings, and 33 communications were sent to Congress.

The department, as representative of the architectural community, helps promote the enactment of sound state and national legislation and government agency programs and procedures of concern to the profession. This involves lobbying by AIA staff and, as well, by members through the Legislative Minutemen Program. The Institute, through this program, communicates with individual members of Congress through 3,300 practicing architects who personally know the legislators or who are willing to contact them on issues of importance.

The Government Affairs staff keeps AIA members up to date about legislative and federal agency matters of importance to their field. One means to accomplish this is the biennial Federal Agencies Conference, cosponsored by the AIA, the National Society of Professional Engineers and the Consulting Engineers Council, which informs about opportunities and programs in the federal agencies. There is also the AIA-CEC Public Affairs Conference which is conducted yearly and which provides architects and engineers with the opportunity of hearing directly from the lawmakers about development of legislative issues of special interest and, in addition, gives them the chance to meet legislators from their own locales.

Close liaison is kept with professional groups of similar interest to advance issues of common concern.

On the state level, the Government Affairs staff provides similar assistance to components and also cooperates with State Architectural Registration Boards.

Another function is to maintain a program to educate users of architectural services, both public and private, as to the importance of considering the qualifications of a firm when selecting an architect.

A special federal agency liaison fund permits the AIA to finance travel of members appointed by the Institute president for specifically requested contacts and for special purposes deemed important by the executive vice president and/or the Government Affairs Commission. Through this fund the AIA can be more active and influential in the activities of the federal agencies and can maintain a working relationship with the highest executive levels of government.

The Government Affairs staff attends regional seminars for key component officials involved in government affairs at the component and state levels and visits various states to help develop a more significant state government affairs program for AIA components. Consultants are available to give the components direct technical assistance.

Institute Affairs: Assistance in the internal workings of the AIA and its communications with members, sections, chapters, state organizations, component executives and the Association of Student Chapters/AIA is provided by the Institute Affairs Department. In its relationship with the AIA Board and Executive Committee, the department provides logistical support, including notices and recording of minutes; assists the secretary in correspondence on ethical matters; and keeps the bylaws and rules of the Board updated, sending out appropriate notices to the membership concerning proposed changes.

The staff processes corporate and associate membership applications and Open space planning in the working areas invites communication; on the third floor it also leaves open the view of the Octagon and surrounding buildings. The flexible basic unit of the 56-inch-high partitions can be used for storage or display. A feeling of openness in the stairwell is to promote use between Institute floors.





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With its various programs, the Institute provides the tools to its members to assist them in speaking to the needs for better housing, an improved environment, regional planning, better community design, reduction of constraints and the importance of a national policy for urban growth.

changes in status of members; handles fellowship nominations, submissions and elections; processes charges in cases of unprofessional conduct; receives and checks nominations for national office; and accepts resolutions for annual conventions.

The department plans and administers the AIA annual convention and exhibits in conjunction with appropriate committees and officers; manages all meetings and Institute social functions; maintains liaison with the College of Fellows; publishes convention notices and resolutions; and keeps current and distributes, as appropriate, lists of national, regional and chapter meetings of general interest.

In a continuing effort to strengthen the AIA's relationship with the membership in general and with components in particular, the department plans, coordinates and operates three Grassroots meetings: East, Central and West. Also developed for the same goal is the Council of Architectural Component Executives which conducts its annual meeting in mid-August. Among the other tools developed by the department to coordinate the aims of the national organization with local components is the issuance of the monthly "Component Presidents' Letter."

The department administers all awards programs approved by the AIA, both those under the direct sponsorship of the Institute and those developed in conjunction with outside groups. The department works with the Institute Honors Jury in its responsibility for final selection of recipients of the AIA's annual medals. It also provides assistance to the Architectural Design Competitions Committee whose main function is to grant or deny AIA approval for proposed architectural competitions in this country.

Also under the jurisdiction of the department is the AIA library which helps develop and provide a central source of information for members. Occupying a prominent place in the new headquarters building, the library's principal services are available to AIA members wherever they may be. Among them are the lending of circulating books; answering inquiries, particularly those which pertain to the Institute itself or related matters; and supplying short lists of reference on various subjects of architectural interest. The library is also a resource for the AIA staff.

Professional Services. This department is responsible for the Institute's programs involving the practice of architecture.

In its documents program, the department writes, edits, revises and coordinates contract and practice documents. This responsibility is performed in conjunction with the Documents Board which, through the use of special task forces, is developing new standard contract forms in such areas as interior design and construction management. The Board is also working on a manual entitled "Architect's Insurance Guidebook," designed to be a working tool to assist professionals with problems involving the insurance requirements of their clients' projects.

The department also performs liaison with construction organizations, professional societies and government agencies on practice and construction contracting matters; administers programs relating to personnel practices; and provides guidance and assistance on matters relating to the practice of architecture and AIA documents.

In its technical programs, the department identifies and advises AIA members on new practice tools and opportunities; represents the Institute for the administration of the Uniform Construction Index and the assignment of data filing classifications to product literature; and administers programs involving the systems approach to architecture and construction and the development of programs involving automated practice technology.

The Automated Practice Committee is responsible for developing automated practice aids in architecture and preparing specifications for specific programs to be undertaken and funded by the AIA to develop comprehensive computer programs with nationwide applicability to architectural practice.

The department represents the Institute in activities involving codes, regulations and standards and serves as a clearinghouse for information about codes and standards and related legislation. It is assembling a comprehensive collection of codes and standards information, providing direct guidance and assistance in such matters. The strength of the AIA in the area of codes and standards is derived from the participation of some 200 members working within the framework of the AIA Codes and Regulations Center. Organized in 1971, the center now maintains liaison with some 80 organizations.

The department also analyzes and disseminates information about the Occupational Safety and Health Act. Among the specific programs in this area is an AIA conference on OSHA to be held this month, designed to inform professionals and others in the construction industry about the latest developments in the area of occupational safety and health.

There is a program under the department's aegis concerning the role of the architectural profession in the field of energy conservation. Consideration will be given to the development of design parameters which achieve energy conservation per se and to those conditions in the building industry which presently appear to lend themselves to economies in energy consumption.

One of the more interesting and farreaching programs being conducted in 1973 is a survey of the profession to develop quantitative information about various aspects of practice, including questions directed toward the needs of the small office and a study of salaries and employment benefits. The results of the survey will be used to structure future AIA programs.

Instrumental in the publication of a number of books, among them *Development Building: The Team Approach*, the department is working on a book on real estate financing written in terms which relate to architectural practice. It is scheduled to be off the press the end of the year.

Public Relations: The dual objectives of the Public Relations Department are to strengthen the architect's voice and image with the public and to communicate the programs and goals of the AIA to its membership.

Through a series of programs, one example being the national advertising campaign, the public is informed about the architect's competence to produce good design and to coordinate the increasingly In the vast basement over the 75-car garage are boilerroom, the Institute print shop, documents and other storage, accounting and computer operation. Designers of the building are The Architects Collaborative Inc., principal in charge: Norman C. Fletcher, FAIA; senior associate: Howard F. Elkus, AIA; design team job captains: James F. Armstrong, John E. Wyman; Larry W. Richards, Peter Thomas, Ronald Steffek; landscape designers: Knox C. Johnson, Hugh T. Kirley; specifications: Walter Rosenfeld Jr.; interiors: Ann G. Elwell; architects' representative: Richard T. Malesardi; Structural Engineers: LeMessurier Associates, Inc.; Mechanical and Electrical Engineers: Cosentini Associates; Acoustics and Audiovisual Engineers: Bolt, Beranek & Newman, Inc.; Food Engineering: Crabtree, Dawson & Michaels; Soils Engineer: Golder, Gass Associates; Concrete: Architectural Concrete Consultants.



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The Institute, by its actions, is constantly strengthening the architect's role within the construction industry.

complex design/construction process. Through a variety of means, the profession's concern for vital national issues is demonstrated. The department conducts press conferences and receptions to disseminate information of national interest; sponsors regional press seminars to inform the citizenry through local media about matters of Institute concern; provides ads, speeches, radio/TV spots, etc., to component organizations for local adaptation and use; and is preparing to distribute public service radio and television announcements to show the profession's abiding interest in national issues such as environmental quality, land use and public growth policy. Through a coordinated campaign of newspaper and magazine features, the department will promote the report of the AIA National Policy Task Force.

Component publications are aided through an annual workshop for editors where an opportunity is provided to share experiences, to be counseled by professionals in the publications field and to have local magazines evaluated — all directed toward the improvement of component publications.

Through the distribution of a number of films, books and reports the department serves both the profession and the public by developing a climate of awareness and support for programs of concern to the Institute and to the nation. Its publications encourage the participation of the architect in community affairs; provide information for youths seeking a career in architecture; document AIA activities and programs. Such publications as Structure and Services, the Annual Report of the Board of Directors and the AIA Membership Directory are the direct responsibility of the department, both their preparation and dissemination. Through the Memo and other publications the membership is kept informed regarding all aspects of the profession, changes in legislation affecting the architect, trends in design, etc.

It is also the department's responsibility to provide all marketing functions involved in the sale and distribution of AIA contracts, office forms, accounting systems, etc. It prints, markets and distributes AIA books and documents and makes contractual arrangements on books produced in cooperation with other publishers. It also makes arrangements with outside publishers to provide AIA members with books of interest at a discount.

The department develops new tools to help component organizations attract new membership and documents AIA activities in slide shows and filmstrips to be used to demonstrate what the Institute does for members and components. Through its work it strives to help chapters to share meaningful experiences and to develop programs of interest to the profession and to the community.

In addition to the activities and programs executed within its departmental structure, the AIA has established a number of affiliated organizations to carry out specific mandates. They include The AIA Corporation, The American Institute of Architects Foundation Inc., The AIA Research Corporation and the Production Systems for Architects and Engineers Inc.

The AIA Corporation (a District of Columbia business corporation) was organized to hold the land and construct the AIA's new headquarters building. The Institute acquired all the outstanding capital stock of the corporation (50 shares) in exchange for title to the land and other payments. A 15-year lease for the new building has been executed with the corporation, starting February 1, 1973.

The scope of the other affiliated organizations follows.

The AIA Research Corporation: The Institute has become increasingly committed to organized multidisciplinary research as essential for the architect's fulfillment of his professional responsibilities and for the improvement of the quality of life in the built environment.

Architectural research was once the product primarily of the academic community, receiving little attention from practitioners. Recent studies in such areas as user needs, postconstruction evaluation and the psychological and sociological impact of design, however, have emphasized that research is indeed of the greatest importance to the practitioner.

In 1972 the Board of Directors of the AIA reorganized the Urban Design and Development Corporation, calling the new organization the AIA Research Corporation. This was to insure doubly that AIA members will be better able both qualitatively and quantitatively to meet today's architectural challenge to growth and change.

The corporation has its own officers and staff, and its activities have been expanded to conduct a full-fledged research program. It will undertake research studies and disseminate its findings to the profession. The corporation will receive and administer funds, providing the means for involving practitioners as well as research professionals in the quest for a better built environment. It will be a link between the AIA and other professional bodies which engage in research.

Examples of a few of the researchoriented projects to be developed under the corporation's aegis include separate but related studies in the vital area of energy conservation through design. Included is a study for the National Bureau of Standard's Building Environment Division to support and enhance the bureau's energy conservation program and research and also a study, supported by the Ford Foundation, which will investigate the effects of architects' decisions on the energy expenditure in the construction process and also in the operation of a building.

Other projects will be supported as well by foundations, government agencies and private sector organizations. The corporation will administer funding for Institute task forces which will investigate the various economic and technological factors which inhibit the rebuilding of the inner city and the production of housing for low and moderate income families.

The American Institute of Architects Foundation Inc.: In 1942 a small group of architects established what was then known as the American Architectural Foundation. Its charter of incorporation, granted by the State of New York, included certain specific objectives: to receive and expend gifts, legacies and grants for the purpose of providing and disseminating literature and information of use and advantage to the profession of architecture and allied arts and sciences; to assist in activities that would result in the improvement of architecture as an art and a The Institute is fully involved too with the day-to-day needs of its members and their firms, large and small alike, and is constantly tuned in to the many evolving approaches to practice that may have a significant bearing on the future of the profession.

science; to provide scholarships, establish professorships and furnish lecturers and materials for the study of architecture; and to establish awards, prizes and medals for meritorious work in architecture and the allied professions.

In 1959 the organization was renamed The American Institute of Architects Foundation to define its relationship to the national professional society. The Board of Directors of the Foundation has broadened its base in order to achieve its goals of making a major contribution to the nation's welfare and to the improvement of man's total environment.

The Foundation supports programs originating with the Institute. As a taxexempt, nonprofit corporation its funds are channeled into programs established by the AIA in both research and education. It advances studies on the effect on man of many aspects of the physical environment, including such factors as the design of his home, the building in which he works and the community through which he moves in his daily life.

Under the AIA/AAIF scholarship program, funds are made available to students of architecture on the basis of ability and need. And recently the Foundation has established the Adinolfi Memorial Lecture Fund in memory of Tony Adinolfi, Hon. AIA, who was director of the New York State University Construction Fund and a trustee of the Foundation before his untimely death. The annual lectures will be delivered by individuals who themselves reflect the wide-range and innovative interests and accomplishments of Adinolfi.

In 1968 ownership of the historic Octagon House was transferred from the AIA to the Foundation to facilitate maintenance and operation of the mansion as a registered National Historic Landmark. Restoration of the Octagon to return the house as nearly as possible to its original state when completed in 1800 was undertaken the following year with J. Everette Fauber Jr., FAIA, as restoration architect. The Octagon House was reopened in January 1970 under the direction of the Foundation. It is a reminder of the nation's early years and is visited by thousands of persons each year from all over the country as well as from abroad.

Production Systems for Architects and Engineers, Inc.: A separate nonprofit corporation established by the AIA in 1969, PSAE's purpose is the large-scale development and maintenance of various aids to practice which otherwise would be economically unfeasible. In addition to directly improving the individual office's efficiency and proficiency, use of these systems will result in standardization of repetitive practices as well as such other things as technical terminology.

Furthermore, the widespread use of a common system will establish a standard of professional practice for judging the individual architect's performance. Because of this, such systems are effective in defining the limits of professional liability; as such they are a vehicle for improving the architect's professional liability insurance position. The systems "industrialize" the repetitive portions of project production so that the architect has more time and improved capability for dealing with unique project requirements such as design and planning.

MASTERSPEC, for national automated master specification production, is the first such system placed into widespread use. More than 850 firms have subscribed to this system. Its content has grown to 3,400 pages, and it is updated at 90-day intervals. The reference catalogs are arranged in a format organized for project decision making and include editing reminders, product evaluation comments, drawing coordination notes and other instructions. Several different automation systems are available for use by the office that wants to expand beyond direct manual use of the specification text.

The content is the essence of MASTER-SPEC as an individual system. Long-range plans are to build and implement a family of production systems. These then can be integrated into one unified decision-making system which, for the first time, will derive significant benefit from automation on an interactive man-machine basis. The second system, dealing with construction costs, is now being developed for implementation. Subsequent systems will involve detailing and scheduling processes for similar improvements in the architect's capability. □



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Evolution of the Octagon Building

Max O. Urbahn, FAIA

From beginning to end, everybody was determined to do everything absolutely right, or we would have been dedicating our new headquarters long before this month. We were never primarily concerned with quicker or easier ways of getting the space we needed; we wanted to make the solution of our own problem a demonstration of architectural quality and of professional, environmental and civic responsibility.

One of the striking aspects of the history of our new headquarters is the stubborn refusal of successive administrations of The American Institute of Architects, strongly supported by the membership, to espouse "pragmatic" solutions to a succession of dilemmas created largely by our continuing determination to adhere in practice to principles we had long preached.

No less striking is the amount of dedicated effort expended in that cause by literally hundreds of AIA members as officers, directors and committee members, and by thousands of Institute members as contributors of funds. Evolution of the new headquarters has involved the efforts of 13 successive AIA presidents, two executive directors and our present executive vice president, William L. Slayton, Hon. AIA; 15 Boards of Directors; successive headquarters committees; a competition jury and an Architect Selection Committee; and, by no means least, the committees which organized and the members who contributed to the fund drive which, without benefit of professional fund-raisers, raised more than \$1 million to make financing of the new headquarters feasible.

It should be remembered that the new headquarters building is not by itself the headquarters of the Institute. AIA Headquarters is the Octagon House, a national historic landmark now so beautifully restored with \$350,000 of the funds contributed by AIA members; *and* its lovely old garden, so carefully preserved by the AIA for so many years; *and* the new

Mr. Urbahn, 1972 president of the Institute, served as chairman of the AIA Headquarters Committee for a number of years. AIA headquarters from 1899 to 1940 was the Octagon House, built between 1798 and 1800 by Colonel John Tayloe as his residence. The architect was Dr. William Thornton, winner of the competition for design of the Capitol. In 1814-15, after British fire had gutted the President's Mansion, the Octagon House became the residence of President James Madison.

plaza which frames the garden; and the new headquarters building which has been officially named the "Octagon Building."

A new headquarters building would have been easier by far to conceive, design, finance and build if it were *not* all these things and if, in addition, its site were not in the heart of the Federal City, only two blocks from the White House, and so subject not only to special zoning restrictions and to approval of the Commission of Fine Arts but to some of the most sensitive and complex of all the aspirations of architects.

Learning to Be a Client: If we discovered that it may be as hard to be a "great" client as to be a great architect, we have, I believe, still managed to recognize the critical issues and to maintain our commitment to the critical principles in dealing with those issues.

We decided to stay on our present site—historic landmark, Commission of Fine Arts and all—because we felt a continuing responsibility to preserve the historic Octagon House, which had been bought by the AIA in 1902, and because we were ultimately able to make that decision economically possible.

We always agreed that we should "underdevelop" our site, building less than even the restrictive zoning of our White House neighborhood permits. We had planned originally to build 70,000 square feet of floor area against a permissible maximum of 101,000 because we could not think of diminishing the Octagon House or of encroaching on the old garden which was enhanced, thanks in large part, by the skill and love lavished upon it for many years by Henry Saylor, FAIA.

When it became clear that future needs could not be served by building less than 130,000 square feet, we changed the program, revised the financing arrangements and bought the adjacent Lemon Building property, with the balance of that \$1 million from the membership drive. This let us not only get the space that we needed but also let us celebrate the garden, effectively enshrining it with a paved plaza that both separates it from and links it to the new building. We have done it by

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It was in the Octagon House that President Madison ratified the Treaty of Ghent which established peace with Great Britain. The house was designated in 1961 as a National Historic Landmark. Its restoration, funded by \$350,000 in contributions by AIA members, was a key part of the new headquarters program. Restoration architect was J. Everett Fauber Jr., FAIA

underdeveloping—building 137,000 square feet above grade instead of the 166,000 square feet our enlarged site would have permitted.

We held a competition to select the architect for our new building not because we considered it the easiest way to select an architect or get a design for the building but because, while eliminating the possibility of prejudicial selection and providing the possibility of participation by younger and less well-known architects, we wanted an architect of exceptional gifts and a design of exceptional quality. The competition gave us both. But the subsequent changes in program and site required the architect to develop a new design, and there followed an impasse with the Commission of Fine Arts. The Commission would not approve the archiA sketch made in 1966 by Paul Spreiregen, AIA, recalls the view from the New York Avenue side when the administration building still stood across the garden from the Octagon House and the Lemon Building was the AIA's neighbor to the east.

tect's design (or redesign); the architect would not further compromise his design. So our competition winner resigned, we paid him, restated our faith in the principle of design review and started a *new* process of architect selection, in which our competition winner joined us.

We wanted the development of our site to contribute to urbanistic objectives for a neighborhood soon to undergo extensive



In 1940 the AIA headquarters expanded with construction across the garden from the Octagon House of a three-story brick building to serve as the administrative facility for the Institute. The Octagon became the setting for social and ceremonial functions as well as for exhibitions. Architects were D. Everett Waid (president of the AIA in 1924-25), Dwight James Baum and Otto R. Eggers.

redevelopment by action of a number of separate owners or developers. We persuaded the most influential of them, the Federal Deposit Insurance Corporation, which planned a major building extension adjoining our site to the east, to share with us the costs of a master planning study proposed and executed by our architects. The resulting plan, for which we were in the end unable to get other landowners' support, would have coordinated vehicular circulation and access in the block; encouraged greater harmony and unity in the facades which form the walls of the adjoining street spaces; created in the center of the block a new kind of urban space accessible to everyone; and provided greater flexibility in interpretation of zoning requirements by making it possible, through agreement of the several owners, to apply them at block, rather than site, scale.

Why a New Headquarters: The history of the new headquarters effort holds a mirror to a profession at the crossroads, searching for the appropriate response to truly staggering changes in its prospects —its obligations as well as its problems and its opportunities.

The history of this new headquarters begins, in fact, as a recommendation in the 1959 report of the AIA Committee on the Profession (headed by James M. Hunter, FAIA) whose work laid the foundation for so many new thrusts for the profession and for the Institute, including the whole concept of comprehensive architectural services and later sweeping changes in the Standards of Professional Practice.

The committee's charge was to examine "the state of the profession" and the changing architectural prospect and to suggest how the AIA's structure and services should be revised and expanded to support the changing needs and responsibilities of the profession.

A new headquarters facility was regarded by the committee as an essential instrument for what it saw as an essential task: the broadening and quickening of architectural communication—with other elements of the construction industry, with client factors both public and private and with the general public. A greatly ex-48 AIA JOURNAL/JUNE 1973 panded headquarters facility would also be demanded by the rapidly increasing professional staff which the committee foresaw must be developed to provide the many new resources that would be required to equip the profession for a vast expansion of its services and a vast extension of its responsibilities.

Space in the existing administration building, constructed in 1940, was already inadequate for a staff which had grown modestly but steadily in the postwar years as membership grew from 2,951 in 1940



to 12,558 in 1958. But the committee's recommendation for a new headquarters envisioned new requirements which would be beyond the scope of any more patchwork renovation to gain a bit more needed floor area.

Program and Process, 1959-69: From recommendation to dedication, nearly 14 years have passed; but the first 10 were spent in developing a program and after that the processes of design and financing through which the program could effectively be implemented.

The first step in organizing the new headquarters effort was the appointment by President Philip Will Jr., FAIA, in late 1960 of a new Headquarters Building Committee headed by past President Leon Chatelain Jr., FAIA. That committee considered the basic questions whether the AIA headquarters should remain in Washington and whether it should expand on its existing site or find another.

The first question seemed easily answered in the affirmative, considering the importance of quick and easy communication between the AIA and the federal The 80-year old Lemon Building was, despite its elegant facade, an obsolete warehouse-type structure which could not be renovated economically. It was demolished to make its site available for expansion of the AIA's existing headquarters site.

government and other professional and business associations which maintain their headquarters in the nation's capital.

As to the second question, nobody doubted that AIA members would prefer to continue on the existing site from a sense of responsibility to as well as attachment for the Octagon House as a historic symbol. Not so easily resolved was the question whether to stay on the site could be made economically feasible. So the committee commissioned a feasibility study to be done by W. Thornton Owen, then president and now chairman of the Perpetual Building Association, under the supervision of the architectural firm of Satterlee & Smith. That study, which evaluated several alternative sites in comparison with the existing one, indicated that it was improbable that the AIA could recover anything like its \$2 million equity in the old site if it moved to an appropriate new location. What such a study could not take into account was the



cost of putting a suitable new building on the site, especially in the context of the restrictions imposed by the area's "special purpose" zoning. But considered from the point of view of land values, the best advice was to stay put.

The consultants so advised the committee, which so recommended to the Board. The committee also recommended that the Temporary headquarters of the AIA from January 1971 to March 12 of this year, while the new building was under construction, was at 1785 Massachusetts Avenue Northwest, in a building owned by the Brookings Institution. It was built in 1910 as a luxury condominium and had seven apartment units and separate quarters for 40 servants. The top floor was the Washington residence of Andrew Mellon from 1921 to 1929. Jean de Sibour, AIA, was architect. The AIA occupied three floors and part of the basement.

architect for the new building be selected through a nationwide competition open to all members of the AIA. These recommendations were accepted by the Board and approved by delegates to the 1962 national convention.

A new Committee on Institute Headquarters with Charles M. Nes Jr., FAIA, as chairman, was appointed to oversee the next phase of the effort. In 1963 the jury for the design competition was announced: Edward L. Barnes, FAIA; past President J. Roy Carroll Jr., FAIA; O'Neil Ford, FAIA; Hugh A. Stubbins Jr., FAIA; and John Carl Warnecke, FAIA. Appointed as professional adviser was A. Stanley McGaughan, FAIA, and preparation of the competition program began. The 1963 convention again approved the site and the decision to select the architect by completion, but this time voted to put a ceiling of 80,000 square feet maximum floor area, some 20,000 square feet under the maximum allowed by the area's zoning.

In early 1964 the program for a twostage competition was distributed to all AIA members. It was even more restrictive as to floor area than the convention dictum, setting the allowable maximum at 60,000 square feet. Seven finalists were selected that July from 221 entries; and on November 2, 1964, Mitchell/Giurgola Associates was announced as the winner.

The following year was a period of revaluation of the headquarters effort, as President Arthur Gould Odell Jr., FAIA, and Executive Director William H. Scheick, FAIA, recognized that AIA needs for additional space were increasing far more rapidly than had been anticipated even two years earlier. Not only was membership increasing more rapidly than earlier forecasts had suggested but so were new programs designed to back up the "comprehensive architectural services" concept which had been endorsed by the 1962 convention. On the basis of a new 40-year projection of AIA space needs, the Board in 1965 revised the estimated floor area requirement from 80,000 to 130,000 square feet and the estimated budget from \$1.45 million to \$4 million.

So the competition-winning design was obsolete, and the Board asked the winning architect to prepare new feasibility and schematic studies based upon the possibility of a larger building on a larger site. At the same time, the Board began to consider how to acquire a site large enough to permit construction of the floor area deemed necessary.

The question whether the need for a larger site would make it prudent once more to consider other properties was



studied by real estate consultant Randall Hagner, whose advice was that it was most advantageous not to move but if at all possible to find the additional property next to the Octagon site. Two possibilities were investigated. A large parcel-some 40,000 square feet-to the north of the Octagon site was eliminated because it had 13 small houses in separate ownerships and looked like a very tough acquisition problem. The other, to the east, was the Lemon Building property, some 10,000 square feet and just about adequate to make the added floor area feasible. The site was available partly because the old building was not structurally sound enough to permit economic renovation and partly because its site by itself was too small to make construction of a new building economically viable. How the AIA could finance acquisition of the site was the question.

After a nonproductive effort to raise the \$650,000 needed for purchase of the site through nondeductible contributions from members, it was the late Llewellyn Pitts, FAIA, then the AIA regional director from Texas, who had the idea that made a comprehensive and economically feasible program of all the various headquarters objectives. His suggestion was to increase the target for membership contributions to \$1 million to be collected in a general membership campaign and to make the contributions tax-deductible by allocating them not to the AIA but to the tax-exempt AIA Foundation. The funds would be used to purchase from the Institute the Octagon House and garden (\$650,000) and to restore the Octagon House itself (\$350,000). The purchase price of the Octagon House and garden would then be used by the AIA to buy the Lemon Building property.

The Pitts proposal became the basis of the headquarters program developed by the Board and adopted by the 1966 convention. The program encompassed: 1) sale of the Octagon House and garden to the AIA Foundation; 2) restoration of the Octagon House by the AIA Foundation; 3) funding of the new headquarters building by utilizing equity in the land to obtain mortgage loans; 4) creation through membership contributions to the AIA Foundation of \$1 million to be used one-third for restoration of the Octagon House and two-thirds for purchase from the AIA of the Octagon House property; 5) use of proceeds of the Octagon House property sale to finance the purchase by the Institute at an agreedupon price of \$678,000 of the Lemon Building property.

Objectives of the program were clearly enunciated by President Nes: "... To create on an enlarged site a new headquarters building adequate for our growth; a complete restoration of the historic Octagon House as a beautiful landmark of our architectural heritage; and a garden which states our principle for inclusion of open space and natural beauty in urban architecture and contributes to the scale and harmony of the architecture of the two buildings. In short, the design of the entire complex must exemplify what the profession urges its clients to do."

In the fall of 1966 the Lemon Building property was bought; Mitchell/Giurgola was asked to develop the design of a building of approximately 130,000 square feet, retaining and, if possible, expanding the garden; and the fund-raising drive got underway with G. Harold W. Haag,

Acquisition of the Lemon Building property expanded the site for the AIA headquarters building (below). Across page (top) is the competition-winning design by Mitchell/ Giurgola Associates. The design by this firm (center) was for the expanded site and was the first presented to and rejected by the Commission of Fine Arts. The firm's redesign (bottom) was the second to be rejected by the Commission.



FAIA, as national chairman, assisted by three sectional chairmen: Bernard B. Rothschild, FAIA; Jack D. Train, FAIA; and Cabell Gwathmey, FAIA—and 26 regional chairmen.

Schematics for a new headquarters design adapted but substantially altered from the competition design were approved by the Board in December 1966, with some reservations on details. At the March 1967 Board meeting, it was decided to present the new design to the 1967 convention, though not all aspects were entirely satisfactory either to the Board or to the Headquarters Committee (by now headed by Willis N. Mills, FAIA). The design was approved by the Board at its postconvention meeting and formally presented to the Commission of Fine Arts for the first time on June 21, 1967. It was rejected as "out of keeping with the Octagon House."

When the AIA Executive Committee met informally with the Commission the following month to determine whether its objections could be overcome, "the Commission reiterated its opposition to the design," as the Board later reported to the 50 AIA JOURNAL/JUNE 1973 membership, "and restated its belief that the Octagon House required a quiet backdrop, but did not rule out the possibility that the design could be changed enough to win approval." Mitchell/Giurgola Associates offered either to withdraw or to attempt design revisions to meet the Commission's objections; and in September the Board requested that the architects proceed with redesign and authorized additional fees up to \$10,000.

Meanwhile, the renovation and restoration of the Octagon House had been put in the hands of a committee headed by Victorine Homsey, FAIA. In October J. Everette Fauber Jr., FAIA, was selected as the architect. By December the membership drive had reached \$953,000; and on January 15, 1968, it was announced that the drive had gone well over the top with contributions reaching \$1,140,000. The drive had been conducted entirely by AIA members acting as volunteers, and the total fund-raising expenses had been held to under \$25,000, an infinitesimal sum as professional fund-raisers are accustomed to calculate these matters.

In June 1968 the Commission of Fine

Arts rejected the revised design which had been developed by Mitchell/Giurgola. In a number of informal meetings subsequently arranged by the AIA with the Commission, it became clear that the differences between the architect and the Commission were irreconcilable: What the Commission found unacceptable, the architect considered critical to his design concept. And so, in September 1968 Mitchell/Giurgola Associates gave up what surely must have been one of the most difficult, demanding, frustrating and heartbreaking commissions that any architect ever had.

In his announcement of the resignation, President George E. Kassabaum, FAIA, emphasized that, while in this instance disagreeing with the Commission's rulings, the AIA continued to support the principle of design review as "the bestknown means of maintaining order in the face of all of the pressures leading to chaos."

The Board then asked me to head a committee to develop criteria for the selection of a new architect for the headquarters building. At its next meeting in



December 1968, the Board accepted my recommendation that a committee of architects be set up as an Architect Selection Committee, and I was appointed chairman. Other members of that committee were: past President Rex Whitaker Allen, FAIA, then first vice president; Edward Charles Bassett, FAIA; Romaldo Giurgola, FAIA; G. Harold W. Haag, FAIA; past President Morris Ketchum Jr., FAIA; Willis N. Mills, FAIA; I. M. Pei, FAIA; William H. Scheick, FAIA; and past President Philip Will Jr., FAIA.

The committee held its first meeting on January 7, 1969, and on May 5, 1969, was prepared to begin a series of interviews with seven architectural firms that it had selected for final consideration. The choice was not an easy one to make.

Design and Construction, 1969-73: A concept of the building's purpose which emphasized use, activity, involvement and service to and by the profession rather than formal expression has been basic to the architect's attitude about the building from the time that Norman C. Fletcher, FAIA, of The Architects Collaborative Inc., was first interviewed by the Architect Selection Committee.

Fletcher's view of the building as an "environment of action" rather than an architectural "statement" was, I think, significant among the determining factors in the selection of TAC from the seven distinguished architectural firms interviewed.

The building was occupied within four years of TAC's selection as architect. which was announced on May 14, 1969, by President Kassabaum. Approval of the Commission of Fine Arts of the TAC design came almost precisely a year later on May 15, 1970. Working drawings went out for bids on November 1, 1970; bids were opened on January 12, 1971. Demolition of existing buildings on the site began on January 18, 1971 (first the Lemon Building, then the old administration building); groundbreaking followed on March 31; and the headquarters staff moved into the new building during the week of March 12, 1973.

Award of the general contract to Volpe Construction Company of Washington, D.C., the low bidder, was delayed until February 26, 1971, when redesign had chopped \$1 million from estimated construction costs to bring it close to the \$6.2 million budget figure. Volpe's low bid was \$6,983,000, plus \$304,000 alternates, for a total of \$7,287,000. The contract was awarded at \$6,198,500.

Only four other contractors had bid on the job, due in part to the coincidence of our bidding period with that of a \$40 million building for the US Geological Survey at Reston, Virginia. That factor, and the fact that we went out for bids at a time of the most rapid continuous escalation of construction costs in United States construction history, seemed to account for the unhappy surprise we got when the bids were opened. (The other bids, without alternates, ranged from \$7.1 million to \$7.9 million, compared with Volpe's \$6.9 million.) So much for the prebid cost estimates, for which an experienced local cost consultant had prudently been authorized by the Board and



which had indicated that the building should come in safely within the budget.

In close consultation with the contractor's estimators, and with the active participation of William H. Scheick, FAIA, our former executive director who has made a tremendous contribution to this building as owner's representative throughout the design and construction phases, the architect managed to make the necessary \$1 million reduction without altering either the plan or the essential appearance of the building. Three major changes accounted for most of the savings: ordinary shallow-pan construction was substituted for a complex, sophisticated and elegant triangulated ceiling system with air flow above; the concept of a completely cantilevered boardroom was modified to provide some relief for the cantilever; and exteriors became precast concrete instead of concrete cast and sandblasted in place.

The facilities provided by our new building offer significant opportunities for increasing the effectiveness of all our activities and for responding to the new program requirements as they develop. Open planning of working areas ensures maximum flexibility for staff needs which change, and will continue to do so, as programs change. The increasingly important work of committees and task forces will be facilitated by first-rate meeting places; and conference rooms, including the boardroom, are so related to each other and to social and service spaces that more public conferences of a range of sizes can be accommodated as well.

The spacious lobby area adjoining the library on the ground floor, opening on the paved plaza and looking to the Octagon House and its garden, gives us a major new public space for exhibitions, receptions and many other kinds of occasions for architectural communication with the public. The building's architects have brought a high degree of sensitivity and perception to its development and interpretation of our demanding program, and the architectural result is an elegant, functional and highly flexible building which invites our most creative performance as users.

Construction cost was \$7,486,800 in-AIA JOURNAL/JUNE 1973 51 cluding professional services, fitting-out, furnishings and carpeting. Secondary costs, including demolition, financing, taxes during construction, legal fees, etc., etc., brought total project cost to \$8,430,000. The Institute has agreed to endorse the permanent financing instrument totaling \$5,700,000. It also has furnished \$725,000 in secondary financing and in addition has contributed \$5,005,000 (including \$3 million in land).

Construction cost for the new building was financed through a \$5.7 million twoyear construction loan at 9.5 percent obtained from the Union Trust Company of the District of Columbia. A permanent mortgage of \$5.7 million (26 years, 9 percent) is held by a group of construction unions.

To arrange financing at the lowest available interest rate in early 1971, it was necessary to set up a separate corporation since District of Columbia laws prohibit nonprofit corporations such as the AIA from paying an interest rate above 8 percent. The AIA Corporation was established as a "business" corporation, whose officers and directors are the members of the Executive Committee of the Institute, to finance, own and operate the new building. Annual costs of \$1 million for debt service, taxes and operation are covered by tenant rentals of \$550,000 plus \$450,000 annual rental paid by the AIA to the AIA Corporation.

Few buildings in history—perhaps none—have been the focus, either in kind or in degree, of such architectural attention, involvement, anguish, dedication and criticism. Not many have inspired so much public controversy over so many basic issues in architecture. And it may be that this new headquarters which we dedicate this month has helped us all to a more nearly perfect understanding of the implications for our clients of some of our most cherished architectural convictions.

Our new headquarters building is built and occupied, but of course it is not completed. By that I do not mean that there are some aspects of furnishings or of landscaping that remain to be refined, or even that the arts program which was so carefully planned still remains to be funded. I mean rather that only the 52 AIA JOURNAL/JUNE 1973







Three photographs show the evolution of design by The Architects Collaborative Inc., from first presentation to the Commission of Fine Arts in January 1970 (top) to approval in May 1970 (bottom).

changing and continuing activity generated in and by the building can make it complete. In that sense, it will never be completed, for every day of use will make it something else. So the greatest challenge in the creation of our headquarters lies ahead. It is far less important what the new building *is* than what it can *become*. \Box

Headquarters Dedication Committee,

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Institute Headquarters Committee, 1970 Max O. Urbahn, FAIA, chairman; Edward Charles Bassett, FAIA; R. Max Brooks, FAIA; Russell O. Deeter, FAIA; William H. Scheick, FAIA.

Institute Headquarters Committee, 1969 Max O. Urbahn, FAIA, chairman; Rex Whitaker Allen, FAIA; Edward Charles Bassett, FAIA; Romaldo Giurgola, FAIA; G. Harold W. Haag, FAIA; Morris Ketchum Jr., FAIA; Willis N. Mills, FAIA; I. M. Pei, FAIA; Philip Will Jr., FAIA.

Institute Headquarters Committee, 1968 Willis N. Mills, FAIA, chairman; Leon Chatelain Jr., FAIA; G. Harold W. Haag, FAIA; George E. Kassabaum, FAIA; Vincent G. Kling, FAIA; Charles M. Nes Jr., FAIA; Nathaniel A. Owings, FAIA; G. Holmes Perkins, FAIA; president and treasurer, ex officio.

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New Headquarters Building Committee, 1960-62 Leon Chatelain Jr., FAIA, chairman; Arthur Gould Odell Jr., FAIA; William L. Pereira, FAIA; Hugh A. Stubbins Jr., FAIA; James M. Hunter, FAIA, and Philip Will Jr., FAIA, corresponding members.

Headquarters Facilities Committee, 1960 Bryden B. Hyde, FAIA, chairman; Victorine duPont Homsey, FAIA; George B. Roberts, AIA; J. Roy Carroll Jr., FAIA, ex officio.

Headquarters Facilities Committee, 1959 Bryden B. Hyde, FAIA, chairman; Victorine duPont Homsey, FAIA; Dana B. Johannes, AIA; J. Roy Carroll Jr., FAIA, ex officio.

Architect Selection Committee, 1969 Max O. Urbahn, FAIA, chairman; Rex Whitaker Allen, FAIA; Edward Charles Bassett, FAIA; Romaldo Giurgola, FAIA; G. Harold W. Haag, FAIA; Morris Ketchum Jr., FAIA; Willis N. Mills, FAIA; I. M. Pei, FAIA; William H. Scheick, FAIA; Philip Will Jr., FAIA. Jury for Design Committee, 1963-64

Huge A. Stubbins Jr., FAIA, chairman; Edward Larrabee Barnes, FAIA; J. Roy Carroll Jr., FAIA; O'Neil Ford, FAIA; John Carl Warnecke, FAIA; A. Stanley McGaughan, FAIA, professional adviser.

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'This Little Piece of Ground'

The Octagon garden was planned by the AIA in the '40s as a memorial to members who lose their lives in the service of our country. It survives today as the fulfillment of a dictum which calls for open space and beauty in urban architecture. These drawings, by its first landscape architect, Gilmore D. Clarke, were presented to the 1948 AIA convention.

President William McKinley held a reception at the White House on November 1, 1898, for members of The American Institute of Architects to welcome them as new neighbors. Afterward the company adjourned to the Institute's new home at the junction of New York Avenue and 18th Street. AIA President George B. Post introduced Frank Miles Day of Philadelphia, who was chairman of the Building Committee, as the orator for the occasion.

Day explained that the Board of Directors had decided to move from New York City and to establish headquarters in Washington, D.C., and that the historic Octagon House had been chosen finally as best suited for the AIA's purposes. He said that "the house and grounds were in the care of a trust company, and that the feeling of the owners was that the house had no present value." The house had been vacated by the Tayloe family in 1855. Day told how the rooms had been "heaped 6 feet high with piles of rags and rubbish" when his committee first saw the house.

In this present day of inflation, it is interesting to note that the AIA sublet some of the house, reducing "the rental to less than \$500 a year, including the interest on money laid out" for alterations. It was later, during the 1902/03 administration of Charles Follen McKim, that the AIA bought the house. But on the day in 1898 when members inspected their new home, Day ended his speech on an optimistic note, "We hope that the activities of the Institute will be so great in this house that within five years we will have outgrown it."

The orator made no mention of a garden, nor do we know what the garden was like when the residence was occupied by the John Tayloe family in the early 1800s or when it was the home of President James Madison and his wife Dolley for a time after the White House was burned in 1814.

A drawing of the Octagon in 1813 shows a row of Lombardy poplars on the street line; a later drawing dated between 1830 and '40 depicts the trees as gnarled and decayed. Neither drawing shows the garden back of the house. During the 54 AIA JOURNAL/JUNE 1973



time just prior to 1898, the house was occupied by as many as 10 families at a time, and an amenity such as a formal garden was hardly a priority.

About 1917 Glenn Brown, who had been secretary of the AIA, prepared a portfolio of measured drawings of the Octagon House. In the publication a statement is made about some of the plantings around the house at that time: "None of the original trees now stand in the yard, with the exception of the honey locust. The yellow locust, now in the last stages of decrepitude . . . was planted after the house was built. The paper mulberries have sprung up within the last 30 years from volunteer growth.... The remnants of the Kentucky coffee trees or American mahogany seem to indicate that they were nearly contemporary with the house. There is nothing to indicate the original trees, and it is very possible that the section enclosed by the stable wall on the north and the terrace on the west was used for a flower garden in which trees were not wanted lest they interfere with the growth of flowers."

Brown tells us that "an old-fashioned garden" was planted and cared for by his wife after the AIA acquired the property and that box hedges were planted by Robert Stead, who headed a committee which had responsibility for making the Octagon ready for the Institute.

Henry H. Saylor, once historian of the Institute, editor of its official publication and a tireless worker in the garden until he retired, prepared in 1958 a compilation of committee discussions, correspondence, sketches and other documents relating to a memorial garden. He reports that a letter of February 23, 1945, was received by AIA officials from the Iowa Chapter in which a proposal was made for a memorial to be established in the name of Lieutenant Charles F. Bowers, the first member of the Institute to lose his life in World War II.

President James Richard Edmunds Jr. in 1945 appointed G. Corner Fenhagen as chairman of the War Memorial Committee to investigate and report on an appropriate memorial by the AIA "to all members who lose their lives in the service of the country." Edmunds later named John F. Harbeson, Albert Harkness and Saylor to the committee.

The committee investigated the possi-

"The garden as it existed," recalls Hugh T. Kirley, one of its present landscape architects, "had a wonderful residential scale, character and sense of privacy. The plantings were mature and rich in texture and color, and the garden seemed to be as old as the Octagon. The views of it from the surrounding buildings were partially screened, however, and all interest was focused at eye level, thereby diminishing its effect."



bilities and concluded that "this purpose might best be served by the development of a memorial garden between the Octagon and the administration building," the latter having been completed in 1940 and at this time still leased by the federal government. The committee stated that "the spot is enclosed by brick walls, is secluded, is frequently sought by those in search of rest, quiet and peaceful contemplation. So far as man can predict, this little piece of ground is permanently secured against other use."

Landscape architect Arthur Shurcliff, who was associated with the Williamsburg, Virginia, restoration, had made a study for the possible development of a garden a few years before in collaboration with Otto R. Eggers, one of the team of architects of the administration building. The committee reminded the Board that Shurcliff's drawing of 1941 shows a circular group of seats and paving surrounded by the boxwood then in the area. "The Shurcliff plan, of course, is merely offered as a starting point for further development," said the committee. The gentlemen suggested that a dominant feature of the proposed memorial garden

might be an inscribed panel to record the AIA's "lasting memory of self-sacrificing sons."

The committee's recommendation was accepted, and landscape architect Gilmore D. Clarke and sculptor Lee Lawrie, both honorary members of the AIA, were asked to work with the committee. Convention authority was given to use reserve fund money for the design and building of the memorial garden. Early in the proceedings it was agreed that a sculptural work by Lawrie should take the form of a stele, bearing an inscription written by Gold Medalist Charles D. Maginnis. The inscription is broad in scope: "This ancient garden in a new fashioning is dedicated to the memory of the men of The American Institute of Architects who gave their lives in world conflict for the security of their country and the cause of peace.

In March 1947 the committee submitted a report to the Board and a sketch of the proposed garden, each member of the committee having submitted a design. Saylor, however, entered a minority report which was supported by the Board. For a time the garden was no bed of roses. Chairman Fenhagen wrote to Harbeson that "the committee was somewhat nonplused by the Board's action which, in effect, was in support of the minority report and seemed to leave the committee committed to carrying out the recommendations of its one minority member."

Disagreements evidently centered primarily around the extent of plantings, the number of trees, the form of the retaining wall which would separate upper and lower levels of the garden and a walkway to connect the Octagon and the administration building. The committee met again in November to consider the Board action and the majority decided that the committee "is not in agreement and still feels that its original recommendations were in substance sound." A revised plan was submitted to the Board in December. The one important change was the location of the memorial proper, now placed against the blank east wall of the Octagon. One has to admire the committee's fortitude. It even suggested that the semicircular arch on the portico of the administration building be removed because it would be "a disturbing element in the garden." During all this, even the gentle Henry Saylor came to call himself a "minor obstructionist."

The AIA *Bulletin* for September 1948 shows that the War Memorial Committee then had as its members Fenhagen, Harbeson, Harkness and Jack Smith Bass. From his own testimony, Saylor maintained his interest and expressed his views regardless of whether he was a committee member.

Clarke continued to prepare revised sketches for the Board's consideration. In December the Board met and resolved that the president "be authorized to approve contracts, in an amount not to exceed \$15,000 for the partial execution of plans for the Institute War Memorial" and that the Executive Committee be authorized "to proceed with the sculpture of the stele."

Meanwhile, the garden, the restoration of the Octagon and the remodeling of the stable into its possible use as a library for the AIA had been put in charge of a Committee on Grounds and Buildings. The new committee's chairman was former AIA JOURNAL/JUNE 1973 55



President Edmunds who was assisted by Waldron Faulkner, William Dewey Foster, Arthur C. Holden and Louis A. Simon.

It was anticipated that the staff would be moving shortly into the administration building following its release by the government. Thus, the Octagon House would have a different function and would become the "front door" of the Institute. Moreover, the monies gained through the renting of the administration building would now be lacking.

A wooden fence had marked the boundary of the government's lease. Saylor wrote in his book The A.I.A.'s First Hundred Years (Washington, D.C., 1957) that the removal of the fence "made desirable, or even necessary, landscaping of the stable yard area with its incomplete brick enclosure and the unkempt lawn and boxwood within the perimeter of buildings and garden wall." It was essential now to get on with the development of the garden. Edmunds wrote to Clarke asking him to open up the lawn area and to reduce the number of plantings in view of the new use of the Octagon and dwindling funds.

From Saylor's unpublished account of the rather turbulent history of the garden, Clarke was unwilling to remove a low wall and build another on a curve which the Board had requested. Clarke thought that the change was not justified because of the expense involved.

According to Saylor's record, Edmunds wrote a member of the Committee on the Restoration of the Octagon, Thomas J. Waterman, and enclosed Clarke's latest revision. "This does not follow," Edmunds said in an accompanying note, "in its entirety Henry Saylor's idea which the committee adopted at its recent meeting. I hesitate to go back to Clarke again. Instead if you would have Murphy & Locraft prepare a working drawing, changing the wall to suit Henry's ideas, it would be appreciated."

Subsequently, Clarke's duties as landscape architect were terminated, and landscape architect Cary Milholland was employed. Saylor's history of the AIA states that she "designed the two-level garden which is now a major element in 56 AIA JOURNAL/JUNE 1973 "A conscious effort was made," says Kirley, "to retain and fortify the garden's qualities—in architecture by setting back and varying the spaces at ground level and in the landscape by retaining the existing grade change between garden and terrace and by replanting trees and shrubs in key locations to approximate as closely as possible the effects of the original plantings. The impact of the landscape will become more and more evident as new plantings grow in size, form and interest. The garden will regain its settled maturity and will provide its elegant but friendly setting for the Octagon House and its shaded quiet and relief from the busy streets outside its walls. Always belonging to the Octagon in spirit and form, the garden has been rebuilt so that it may be shared by all who enter the new headquarters gates."



the composition embracing the Octagon mansion, the administration building and the stable and its yard—since become the Institute's library and its terrace."

Clarke evidently did not understand the finality of his relationship with the garden. He wrote to Saylor objecting to what he called a "flagrant disregard of the normal amenities."

The unfortunate misunderstanding was closed with an apology to Clarke which was published in the March 1950 Journal of the A.I.A. Signed by President Ralph Walker and Edmunds, the statement is an admission that Clarke had been treated in "an extremely discourteous manner" in that he had not been informed properly that his position as landscape architect had been terminated. "While we believe that the Board had the right to insist upon certain features of the design with which Mr. Clarke was seemingly unsympathetic," the statement reads in part, "we deeply deplore the manner in which Mr. Clarke's services were terminated without proper notice and thanks for the aid he had given, charging only his out-of-pocket expenses."

This chapter of dissension really shows

that the AIA members cared about their garden and cared rather passionately. And for many years it was Henry Saylor who planted it, weeded it and did all the other back-breaking chores that go into making a garden beautiful. Those of us who loved him can recall how he came to the garden even when he was old and in pain to shake the snow's heavy burden from the boxwood. The garden under his care became a place of peace and an area of green linking the past with the more contemporary.

Knox C. Johnson and Hugh T. Kirley of The Architects Collaborative Inc., architects of the administration building just completed, are the designers of the present garden. Changed somewhat to accommodate the new AIA administration building, but still retaining some of the plantings of the earlier version, the garden continues its traditional role of connecting the Octagon House with the administration building, of coupling past and present. It is still a reminder that an urban space can be an urbane amenity and have both a symbolic and an esthetic function-if beauty needs any excuse for being. Mary E. Osman.







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The Octagon House, built between 1798 and 1800, is the focal point of the headquarters site of The American Institute of Architects in Washington, D.C. So when the Institute decided to construct a new headquarters building, the problem facing the architect-designers was twofold: That of preserving the historic old structure—now a designated National Historic Landmark—while complementing it with a contemporary, multi-purpose building. There was also a desire to create a new kind of urban space in the middle of a city block bounded by obliquely angled Washington streets. The design solution exploits the many possibilities of reinforced concrete using Grade 60 rebar to make the old compatible with the new—at no sacrifice in modern function.

Seven striking stories of reinforced concrete.

The dual-wing design of the new AIA headquarters building provides a graceful backdrop of seven stories of reinforced concrete accented only by large expanses of glass. The uninterrupted sweep of the building front is framed by twin towers. These towers also stop the flow of the street facades, emphasizing the open space of the grounds. The top five floors, including a penthouse, afford flexible office space, with unobstructed views. The natural warmth of the new brick terrace and restored brick garden walls is complemented by the walls and spandrels of the new structure, which have been sandblasted to expose the rich, dark aggregate used in the reinforced concrete.



A blend of old and new. A graceful expanse of reinforced concrete harmonizes with the 18th century Octagon House.

One form, many functions.

The design freedom possible with reinforced concrete is evident in the new building's most striking feature: the spatial elements of the first and second floors have been integrated into a single concept. Entrance lobby, exhibition gallery, and library on the ground floor are visually united with a second floor social gallery by a grand staircase. The second floor continues with executive offices and conference rooms in both wings. All floors have space flexibility—offices can be tailored to virtually any size requirement. And reinforced concrete with Grade 60 rebar permitted the design of the special conference center/board room which projects boldly from the rest of the facade.

The utilities have a beauty of their own.

The projecting towers house stairs and vertical air conditioning systems. The ceilings are made from pan-formed reinforced concrete. Lighting units are set into troughs in the triangles. Of course, reinforced concrete has inherently superior insulation values, helps save on heating and cooling costs. And its sound transmission values are low, ideal for a structure such as this, where traffic noise would be obtrusive. Reinforced concrete with Grade 60 rebar also meets the most stringent fire ratings.

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BOOKS

The Spaces In Between: An Architect's Journey. Nathaniel Alexander Owings. Boston: Houghton Mifflin, 1973. 303 pp. \$8.95.

Nathaniel Owings, FAIA, has written a book about Nathaniel Owings. But it is more. Not a documented autobiography, it is rather a series of lifetime memoirs and achievements, chapters of success for the firm of Skidmore, Owings & Merrill and for Nat Owings. He describes with wit and candor, and a bit of ego, SOM's clients and commissions; the firm's growth, partners and associates.

Owings recalls with fond memory his early childhood in Indianapolis with its "tree-lined vistas, broad boulevards and solid buildings" surrounded by "those endless oceans of wind-swept grain." His home, typical of that day, was equipped with now almost forgotten amenities: a front porch, a basement to hide in and an attic for rummaging in. "With the house pared down to bare bones," he writes, "we have discarded the storeroom of sentiment and lost a good many potentially valuable antiques in the process."

In 1920, when a youth of 17, Owings attended the first world boy scout jamboree in London, which included a side trip to France. Here he discovered the grandeur of medieval cathedral architecture in Notre Dame de Paris and Mont-Saint-Michel. He appreciated them "because they were there," and years later he "understood the technical aspects of the miracle of Chartres." It lay "in grasping the truth that a structure, or a group of structures, is an orchestration controlled by one great idea amplified in a thousand ways, but always one great idea which must spring from the basic needs and usages of the people at a given time."

After receiving his architectural education at Cornell University, he became associated with the large and fashionable firm of York & Sawyer and did the "in" thing of the '20's: He laboriously copied the details of classic cornices and capitals which adorned government and private buildings alike. Some of these face Pennsylvania Avenue in Washington, D.C., where in 1970, some 40 years later, plans prepared by an Owings-chaired Presidential committee will hopefully give that ave-⁶⁰ AIA JOURNAL/JUNE 1973



The Big Sur home is called "Wild Bird."

nue a new prominence as the nation's grand axis.

It was while Nat was still with York & Sawyer that Louis Skidmore entered his life. His sister Eloise was in Paris, and so was Skidmore. The two were seen together frequently. "Skidmore's reputation as a gay blade, if not an outright rake, was well known; and my dear sister was, to my mind, not fitted to cope with such a past master in the art of seduction." It was not an auspicious beginning to a future close relationship and successful partnership.

But Eloise and Skidmore were married at the beginning of the Depression with both Owings and the bridegroom out of work. The resourceful Skidmore built a job for them both, landing one of the major assignments of the decade. Skidmore became chief of design for the proposed Chicago World's Fair, and Owings joined him as development supervisor. It was during the hectic days of designing, drawing, squeezing corporations for money and participating in the fair that Nat married Emily Huntington Otis. The rich memories of a lifetime are vividly recalled in Owings' latest book. His own and his firm's achievements are so intertwined that it's hard to tell one success from another.

When the fair was over, Skid and Nat were again jobless. What to do? Travel. Nat and Emily went to the Orient. Finally, they met the Skidmores in London where. sitting on their accumulated luggage in Paddington Station, the firm of Skidmore & Owings was born. The incubation period had been those five years of preparing, executing and maintaining the World's Fair. "Witnessed by Emily and Eloise," Nat writes, "Skid and I pledged our lives to share and share alike-to try to offer a multidisciplined service competent to design and build in part or in whole the multiplicity of shelters needed for man's habitat, patterned after the ancient Gothic Cathedral Builders Guild. But we would build only in the vernacular of our own age, extending and expanding as men and opportunity offered, certain that the greater the base, the greater the return. . . . That we have succeeded is largely due to faith-and perhaps some luck."

On January 1, 1936, Skidmore & Owings Architects opened their office with no capital and one client. The owner of the building on Michigan Avenue in Chicago, in whose attic was their office, accepted their services as architects for the remodeling of tenant spaces in lieu of rent. Their friend and drinking companion at the Tavern Club, architect/engineer John Ogden Merrill, joined the firm "in the only role we could afford: partner." Thus the now almost legendary initials SOM became a reality. Within seven months there was a New York City office of SOM because a new client, the American Radiator and Standard Sanitary Supply Company, had assumed that they had one.

Owings' book flows on and on, and so does SOM. He explains how the experiences gained from the building of Oak Ridge in the hills of Tennessee and the Chicago's World Fair form the basis for an expanded office format with full inhouse architectural research, engineering, planning, interior design services, etc. New commissions follow one on top of the other—often exciting, often resulting in inventive solutions to design problems.

In describing their work as architects for the Air Force Academy, Owings explains the problem of having democracy *continued on page 63*

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books from page 60

for a client. The multiheaded client made up of heads of bureaucratic departments, the military establishment, members of Congress, et al., all wanted their own ideas, limitations and architectural incompetency worked into the final designs. Around, through, over and about all these obstacles worked SOM. The results: "A success story. We had by-passed mediocrity; I am proud of the Air Force Academy design." And it only cost SOM \$1 million to do.

Owings describes his own life which, through most of these years, was devoted almost exclusively to SOM; too little time was left for his wife and their four children. Divorce came in 1953. Owings met Margaret Wentworth Millard just prior to the divorce. About their introduction Owings writes, "This extraordinary apparition startled me so that the glass I was offering her missed her proferred hand. Shattered between us, the glass lay in its own pool of ice, glinting a little on the red brick floor in the evening candlelight." They were married in December, and Margaret forced changes in Nat's life: moving to the West Coast, building a new home at Big Sur and using the New Mexico home as an occasional stopping place. But not yet content to slow down, Nat collapsed under alcoholism. He recovered, however, with renewed vitality.

Although now the only senior partner in SOM, the other two having retired, Owings devotes only a part of his life to SOM. Much of his time is now spent in discovering the vastness of existing life. He views Hopi Indian dances and learns about Kachina dolls and the gods which they represent. With Margaret he fights to conserve vital pieces of our fragile world: the coast road through the Big Sur country and a small valley in New Mexico. With their aid and leadership, and by the establishment of the Las Trampas Foundation, the road through this New Mexico valley was kept at a scale and design which enhances rather than shatters the scale of the village of Las Trampas.

Through the pages of the book we meet those all too often anonymous partners who have been the source of SOM's continuing vitality. Such men as Walter Netsch, Ambrose Richardson, Gordon Bunshaft, Walter Severinghaus, Charles Bassett, David Hughes, Bruce Graham, Myron Goldsmith, David Pugh, Louis Skidmore Jr., John O. Merrill Jr. and more. Anonymity for them has meant fame and fortune for SOM and some of its finest products for the profession of architecture.

If Owings waxes somewhat boastfully, even wordy, about the work of SOM and his personal force in that firm, why not? It is his firm, and it is his book.

The title seems to have little to do with continued on page 67

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64 AIA JOURNAL/JUNE 1973 Circle 11 on information card PECORA'S GC-5 SYNTHACALK SEALS AIA'S NEW NATIONAL HEADQUARTERS...

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AIA JOURNAL/JUNE 1973 65





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books from page 63

the body of the book, but to Owings those "spaces" appear as essential criteria for future planning, better architecture and more humane environments. To him, the town plaza was and is vital. First with the Lever House in New York City, later with the Chase Manhattan Bank Building in lower Manhattan and in many other projects, SOM has been a leader in reintroducing the plaza into the tightly walled canyons that characterize our city streets.

Occasionally in reading the book I became lost in the chronology of happenings, but that is a minor criticism in a book of memories. To read the book is to meet Nathaniel A. Owings, his family, his partners, his clients, his ego and his ideals. To read this book is to relax and enjoy. John P. Conron, AIA

John T. Comon, ATA

The Architectural Index for 1972. Edited and published by Ervin J. Bell. Boulder, Colo., 1973. 74 pp. \$7.

Indispensable for any office or architect who keeps a file of the major architectural journals published in this country, *The Architectural Index* is a real timesaver.

The general arrangement is alphabetically by subject, going from "acoustics" to "zoo." There is cross indexing under the heading "architect or designer" and by location. Where applicable, information is given regarding the author of the article and whether illustrations are included. The title of the magazine in which the article appeared, the date and the pagination are included in all entries.

Nine of the leading periodicals in the field are indexed, including the AIA JOURNAL. Thus under one heading such as "computer aided design" it is possible to locate quite quickly the major architectural articles on the subject that were published in 1972.

The 1972 index marks the 23rd year of publication. Issues back to 1951 are still available, and a hardboard binder which will hold five issues may also be purchased for \$4.50. Additional information may be obtained from Ervin J. Bell, AIA, P.O. Box 1168, Boulder, Colo. 80302.

Playing the Urban Game: The Systems Approach to Planning. Martin Kuenzlen. Boston: i Press, 1972. 119 pp. \$6.95.

A young German architect/planner is of the opinion that the dissolution of cities in capitalistic countries is not the result of technical problems but is caused by the "antagonistic contradictions" within society's structure. Cities are dominated and oppressed by capitalistic power, he believes. He finds questionable the approach of those planners who think that they can save cities from further decay by "new technocratic methods." Social changes must occur both in the planning profession and in society. Restoring and Renovating Old Houses. W. W. Parker. New York: Exposition Press, 1973. 52 pp. \$5.

This little book is addressed to the layman who plans to buy and renovate an old house in city or suburbs. Tips are given on selecting a house, choosing a contractor, initial planning and the restoration of both exteriors and interiors. Two case studies outline the author's own experiences in renovating old houses. One is titled "Unknowledgeable" and the other "Knowledgeable." Parker believes that the renovation of old houses is a service to both the community and to the nation. Materials of Construction. 2nd ed. R.C. Smith. New York: McGraw-Hill, 1972. 468 pp. \$10.95.

Recent advances in such building materials as weathering steel, reflective glass, glass brick, particleboard, plastics, sealants, coatings and exterior finishing products are covered in this updated edition of a book first published in 1966. Additional data is provided as well on basic materials of construction: wood, steel, concrete, etc. Prepared particularly as a textbook for students, the book contains review questions following each chapter and a glossary of terms.



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LETTERS

Let's Care Enough: Comment and Opinion in the March issue titled "Barrier-Free Architecture Begins at Home" was of timely interest to me and to the Architectural Barriers Committee of Nassau County, N.Y. I have been associated with the committee for several years as consulting architect and have been acting chairman since the death of the founder and guiding spirit of the committee, Hal Rosenthal.

The committee is involved in a number of activities, trying to solve some of the difficult problems encountered in making public officials, decision makers and architects aware of the many barriers which the handicapped and the elderly confront in their daily lives.

In my work with the committee, I have discovered:

• Architects generally are in sympathy with the objectives of barrier-free regulations but are really not aware of the entire problem. Only by direct exposure do they become aware of the barriers to free and unhampered movement of the wheelchairbound individual.

• Public officials, decision makers and most of the private sector agree that some-

thing should be done to overcome this discrimination of roughly 20 million (elderly and handicapped) of our citizens, but they have no funds to correct existing facilities and usually promise to make facilities accessible in future developments.

• The handicapped are seldom if ever consulted or asked to advise in the design or redesign of facilities. Consequently, many projects designed as barrier-free are not, in fact, entirely accessible.

• Authorities of parks, museums, libraries, railway stations, throughways and interstate parkways have not recognized the problems encountered by the handicapped. Bathroom facilities and restaurants, for example, are inaccessible to people in wheelchairs. And if they do understand the hardships, they usually plead the lack of funds necessary to make existing facilities accessible.

It is hoped that the AIA will continue to urge architects to design barrier-free facilities, urging that all component organizations follow actions such as those of the Long Island Chapter AIA which approved a project to collect data on buildings in the area that are accessible to the handicapped and to offer its services to all owners, school boards, library officials and governmental bodies of a free inspection and report of their buildings to ascertain if they are accessible and have facilities for the handicapped, and what the possibilities are to overcome the architectural barriers. Also, schools of architecture should be certain that students are exposed to the problems of the handicapped and the elderly.

I would like to suggest that the study of the problems of the elderly and the handicapped with door hardware be added to the research being undertaken under the coordination and direction of Mrs. Sarah P. Harkness of The Architects Collaborative. This study was mentioned in the March Comment and Opinion.

Our committee and indeed most of the handicapped people I know feel that the architect is the first line of action toward effective accessibility. We beg the AIA JOURNAL to continue exposing the discrimination and misunderstanding of the problems of the elderly and the handicapped. Let's all "Give a damn!"

Samuel Scheiner, AIA Wantagh, N.Y.

Help for a Library: The Department of Architecture at Prairie View A & M College is deeply indebted to AIA staff members for so generously leaping to our appeal for books for our emerging departmental library. To date we have received well over 100 volumes from the staff, and *continued on page 78*

Eggers doors and teak paneling chosen for new AIA headquarters

When you visit your magnificent new AIA national headquarters, you'll have a close-up of the striking beauty of the Eggers doors and paneling chosen for this handsome structure by its designers, The Architects' Collaborative, Cambridge, Massachusetts.

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76 AIA JOURNAL/JUNE 1973 Circle 12 on information card We're proud of that! Because it goes without saying that the architect in charge would look closely at whatever he specified for The Octagon, headquarters building for the American Institute of Architects.

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If there is any architect anywhere who is interested in sending us books, I will be delighted to tell him of our particular needs. Israel Stein, AIA

Head, Department of Architecture Prairie View A & M College Prairie View, Tex. 77445

The AIA JOURNAL encourages expressions of opinions from its readers but reserves the right to edit for length and style. Address letters to the Editor at AIA Headquarters.

EVENTS

June 24-29: Conference on the Need for National Policy for the Use of Underground Space, Berwick Academy, South Berwick, Me.

June 25-26: Conference on the Occupational Safety and Health Act of 1970, Statler Hilton Hotel, Washington, D.C. June 28-30: National Council of Architectural Registration Boards Annual Meeting, Regency Hyatt House, Atlanta. July 9-13: Solar Energy and the Environ-



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SECURITY FIRE DOOR CO. 3036-48 Lambdin Avenue, St. Louis, Mo. 63115 Phone (314) 533-5700 ment Conference, Versailles, France. July 16: Entries due, 1973 Red Cedar Shingle and Handsplit Shake Bureau Architectural Awards Program. Contact: Red Shingle and Handsplit Shake Bureau, Architectural Awards Program Department, 1143 Washington Building, Seattle, Wash. 98101.

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

July 26-28: North Carolina Chapter AIA Summer Convention, The Blockade Runner Hotel, Wrightsville Beach, N.C. July 30-Aug. 3: Facilities Management and Inventory Techniques Program, Massachusetts Institute of Technology, Cambridge, Mass.

July 31: Entries due, White Cement Awards Competition. Contact: James A. Frohlich, Portland Cement Association, Old Orchard Road, Skokie, Ill. 60076. Aug. 1: Entries due, Design of Mobile Home Exteriors. Contact: Mobile Home Design Competition, Reynolds Metals Co., P.O. Box 27003, Richmond, Va. 23261.

Aug. 1: Entries due, Lowrise Building Projects Using Architectural Aluminum Products Awards Program. Contact: Architectural Aluminum Manufacturers Association, 410 N. Michigan Ave., Chicago, Ill. 60611.

Aug. 9-11: Michigan Society of Architects Mid-Summer Conference, Mackinac Island, Mich.

Aug. 25: Submissions postmarked, Architectural Awards of Excellence to encourage the creative use of structural steel. Contact: American Institute of Steel Construction, 101 Park Ave., New York, N.Y. 10017.

Aug. 31: Entries due, Energy Conservation Awards Program. Contact: Architectural Products Division, Owens-Corning Fiberglas Corp., Fiberglas Tower, Toledo, Ohio 43659.

Sept. 6-8: Indiana Society/Kentucky Society of Architects Regional Convention, French Lick Sheraton Hotel, French Lick, Ind.

Sept. 9-14: International Congress on Religion, Architecture and the Arts, Jerusalem, Israel.

Sept. 13-15: New Jersey Society of Architects Convention, Playboy Club, Great Gorge, N.J.

Sept. 18-21: Conference on Psychology and the Built Environment, Guildford, Surrey, England.

Sept. 27-28: Virginia Chapter AIA Fall Meeting, The Homestead, Hot Springs, Va. Oct. 15: Request for information materials due, 1974/75 competition for grants for graduate study or research abroad and for professional training in the creative and performing arts. Contact: Institute of International Education, 809 United Nations Plaza, New York, N.Y. 10017.



going on from page 12

cipants in a competition and to insure that the results of the competition are in the best interests of all concerned: owner, public and profession.

Members of the AIA may not participate as competitors or jurors in any architectural design competition in the US that has not been approved by the AIA. It is emphasized that the Institute "has never taken the position that participation in an approved competition should be limited to its own membership," however. The conduct of international competitions is regulated by the International Union of Architects, and AIA members may not participate in them unless the competition has UIA approval.

The AIA Committee on Architectural Design Competitions is chaired by Colden R. Florance, AIA, of Washington, D.C. Its staff executive is George E. Pettengill, Hon. AIA. The committee will provide assistance to anyone who contemplates the selection of an architect for a project by competition. Inquiries may be addressed to the committee at AIA Headquarters, 1735 New York Ave. N.W., Washington, D.C. 20006. The code is issued as a guide, and the committee is charged with interpreting the document with final authority resting in the AIA Board of Directors. Almost never does the AIA act as a sponsor for a competition. Its role is limited to the approval of programs in order that its membership may participate under conditions of fair conduct and equity.

Nationwide Entries from Pool Companies Judged in NSPI 1972 Awards Program The National Swimming Pool Institute recently named the winners of its 1972



This residential pool in Maryland is a gold medal winner for Tahitian Pools.

swimming pool design awards program. The program is held yearly.

Gold medal winners in the three classes

of concrete residential pools are: Master Pools by Florida Bonded Pools, Inc., for pools costing under \$6,000; Master Pools by Monarch for those costing between \$6,000 and \$8,999; and Tahitian Pools, a division of Du-Rite Chemical Co., Inc. for pools costing more than \$9,000.

In the two classes of vinyl-liner pools, gold medal winners are Buster Crabbe Pools by Ray Westdyk for residential pools costing under \$5,000 and Pacific Palm Pools for those costing over \$5,000.

Fiberglass, stainless steel, porcelain and aluminum pools were in a separate category. Gold medal winner for residential pools costing under \$7,000 is Valley Pool Sales, Inc. Top winner for those costing over \$7,000 is Dayton Swimming Pool & Supply Co.

Pollard Pools won the gold medal for semipublic pools and Tony Bosico Pools for public pools.

Judges were Robert E. Koehler, Hon. AIA, editor of the AIA JOURNAL; Lloyd S. Hubbard, president of NSPI; James Labrenz, vice president of the American Society of Landscape Architects; James A. McCarty, president of the National Landscape Association; Gordon Rudd of the National Construction Company; and Ralph C. Wilson, president of the National Recreation and Park Association. *continued on page 80*

from the Architectural Book Builderstitles recently published or coming soon

The Design Necessity: A Casebook of Federally Initiated Projects in Visual Communications, Interiors and Industrial Design, Architecture, Landscaped Environment by Ivan Chermayeff, Richard Saul Wurman, Ralph Caplan, and Peter Bradford \$6.00

Principles of Architectural History by Paul Frankl first paperback edition \$2.95 (hardcover original edition \$12.50)

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by William Allin Storrer Foreword by Henry-Russell Hitchcock \$15.00

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The Nature of Recreation: A Handbook in Honor of Frederick Law Olmsted by Richard Saul Wurman, Alan Levy, and Joel Katz \$4.95

Arcology: The City in the Image of Man by Paolo Soleri first paperback edition \$7.95 (hardcover original edition

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Digest



AIA Names Research Corporation Head,

Two Administrators at Headquarters John P. Eberhard, AIA, former dean of the School of Architecture and Environmental Design at the State University of New York at Buffalo, has been appointed president and chief executive of the AIA Research Corporation. The corporation was established recently to develop research programs related to architecture and to provide a national focal point for existing architectural research.

Arnold J. Prima Jr., AIA, has been named administrator of the Institute's government affairs department. He formerly served as an architect for the chief's office of the Corps of Engineers. Active in AIA affairs, he is currently chairman of the architects in government section of the Washington Metropolitan Chapter AIA.

Ralph B. Johnson, who joined the Institute staff in September 1972 as its director of community development, has been appointed administrator of the AIA's community services department of which he has been acting administrator. Before coming to the AIA, Johnson was an assistant professor at the School of Architecture, Howard University, Washington, D.C.



The revolator is a revolving elevator whose cabs move up and down in unison.

Revolving Elevator on Continuous Belt Speeds Vertical Movement of Shoppers Rising land costs are partly responsible for the acceleration trend toward highrise shopping centers. As a result, there is an increased demand for rapid and efficient mass circulation of customers.

The multilevel Colonial Shopping Mall under construction in Morristown, N.J., is planning to use a new people mover system called the "revolator." Conceived by the Office of Lathrop Douglass, an

Architect Lathrop Douglass, FAIA, whose firm has designed more than 60 major shopping complexes, says that "faster movement of people is not only a customer convenience, but it is essential to provide adequate selling opportunities for stores located on upper levels." He says that another development to speed customer shopping "will be the appearance of integrated systems that will enable all merchants in a shopping center to deliver packages directly to automobiles." He predicts that "omnicenters" in cities and suburbs will operate day and night and that their success will depend upon how efficiently they handle customer traffic.

Diverse Facilities Are Among Winners Of Design in Steel Award Program More than 1,000 entries were submitted in the 1972/73 Design in Steel Award Program sponsored by the American Iron and Steel Institute. Conducted biennially, the program's aim is to recognize architects, designers, engineers and artists for their imaginative use of steel, stressing this material "as an increasingly versatile" one for wide use by the design professions.

The jury selected 24 award-winning designs and cited 84 for excellence in the categories of agricultural equipment; ap-



A superbay maintenance facility at two airports is expected to be a prototype.

pliances, housewares and home equipment; business equipment; educational equipment; environmental enhancement and control equipment; furniture and furnishings; industrial equipment; medical and scientific equipment; transportation; highrise construction; lowrise construction; housing; public works construction;

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and steel in art. Awards and citations were given for both engineering and design in most of the categories.

The award for the design of highrise construction has been given to I. M. Pei & Partners for Commerce Court, Toronto headquarters of the Canadian Imperial Bank of Commerce. Only citations were given for engineering in this category.

The award for lowrise design was won by C. F. Murphy & Associates for the planning and construction of McCormick Place On-The-Lake in Chicago. The en-



The focus of Commerce Court is a 57story tower clad in stainless steel.

gineering of lowrise construction award went to architects Conklin & Rossant for the Superbay Maintenance Facilities of the San Francisco and Los Angeles International Airports. Sharing the award are the engineers, Lev Zetlin Associates.

The award for design in housing went to J. Robert Hillier, AIA, of Princeton, N.J., for his own home on a marshy, wooded site. No award was given for engineering of housing.

The design award for public works construction was received by Clesson T. Wiseman, AIA, Architectural Design Section, Southern California Edison, for an electrical substation. Winning the engineering award in this category was Jack P. Shedd of Howard Needles Tammen & Bergendoff for the Burlington Northern Bridge over Indian Canyon in Spokane, Wash.

Among the jury were two AIA Fellows: S. Scott Ferebee Jr., president of the AIA, and Max O. Urbahn, a past president.

Deaths

JAMES W. BREED, Richmond, Va. THOMAS A. BRUNO, Miami PAUL E. CORRUBIA, Tulsa, Okla. ARDERY V. DEFONDS, Dallas DOUGLASS V. FRERET, New Orleans HARRY J. HARMAN, Port Huron, Mich. PAUL B. KIEL, Newport, Ky. ALBERT H. LARSEN, Honolulu EDWIN LARSON, St. Paul HARRY H. LEFKOWITZ, Pittsburgh EARL G. MEYER, Grosse Point, Mich. ALBERT G. OLIVIER JR., Thibodaux, La. DEE E. RENSHAW, Oklahoma City CLINTON D. SEAMAN, Westfield, N.J. ALLEN G. SIPLE, FAIA, Beverly Hills, Calif. CHESTER A. SIRRINE, Detroit LEE SOREY, FAIA, Oklahoma City DONALD E. STOVER, San Francisco CHARLES R. WAIT, Andover, Mass. GEORGE C. WRIGHT, FAIA, Greenwood, Ind.

Newslines

Edgar Tafel, AIA, of New York City recently lectured in Great Britain and Ireland under the auspices of the US Information Service. He spoke on "The Frank Lloyd Wright I knew" before university and architectural association audiences.

Henry A. Millon will become director of the American Academy in Rome in January 1974, succeeding Bartlett H. Hayes Jr. Millon is presently professor of the history of architecture at the Massachusetts Institute of Technology.

Consulting engineers who are members of Professional Engineers in Private Practice are listed in a 370-page 1972-73 Directory of Engineers in Private Practice. The engineers are listed both alphabetically and by state, with firms listed according to state and engineering specialties. Copies of the directory may be obtained for \$12 (\$6 to National Society of Professional Engineers members) by writing to NSPE/PEPP, 2029 K St. N.W., Washington, D.C. 20006.

The National Woodwork Manufacturers Association has issued its 1972/73 Millwork: Sources of Supply. Included are the major manufacturers in the US of wood windows, softwood doors and flush hardwood doors, as well as addresses and top personnel for each firm. Write NWMA for a free copy at 400 W. Madison St., Chicago, Ill. 60606.

Fred William Forbes, AIA, has been named one of the top five young engineers in the nation by the National Society of Professional Engineers. An engineer as well as an architect, he is senior partner in the recently established firm of Forbes & Huie. He originated the first unified space structures research program in 1961 while serving as chief of the Technical Activities Office of the Air Force Aero-Propulsion Laboratory, Wright-Patterson Air Force Base. He was one of the two men who developed the use of gelatin as a rigidizing element for space vehicles. In 1967 he received the Exceptional Civilian Service Award, the highest given to a civilian by the Air Force.

Florida Association AIA has compiled a handbook to assist the small firm which gives information in outline form for use in evaluating the total operation of a firm consisting of from one to seven persons with two or three principals. The publication may be obtained for \$1 from the association at 7100 N. Kendall Drive, Miami, Fla. 33156.

Dr. William Thornton, architect of the Octagon House in Washington, D.C., owned by the AIA, has been honored philatelically by the British Virgin Islands. A 15-cent stamp bears a portrait of the architect; a 30-cent one shows also the US capitol which he designed. Thornton was born in the British Virgin Islands in 1759; he died in 1828.

The cornerstone for the London Museum was laid recently by England's Queen Mother Elizabeth. The museum, whose sole purpose is to tell the story of London, tracing its growth through archeological exhibits, is the design of a University of Virginia faculty member, H. Cassius Higgins. Higgins, who is visiting professor of architecture and city planning, is also senior partner of the London architectural firm of Higgins Ney & Partners.

Shanghai is the world's most populous city, followed by Tokyo, New York, Peking, London and Moscow, in that order, according to the latest United Nations *Demographic Yearbook*. Belgium, Australia, Sweden, Israel and Uruguay report that more than 80 percent of their populations live in urban areas. By mid-1971 the world's population reached 3.7 billion, an increase in one year of 74 million.

The Third Pacific Architectural Conference, scheduled to be held in Australia this fall, will not take place due to the higher costs caused by the devaluation of the dollar. The conference is sponsored by the California Council AIA in cooperation with the Royal Australian Institute of Architects.

A coloring book for children in third through sixth grades to teach them about the urban renewal process has been published by a New York State planning firm. Called "What's Happening in Centerville," the booklet is designed so that a city's own name can be printed on the cover if 250 copies or more are purchased. Individual copies are \$1; information about quantity purchases may be obtained from the publisher, Raymond, Parish & Pine, Inc., 555 White Plains Road, Tarrytown, N.Y. 10591.

Grady Clay, Hon. AIA, of Louisville, Ky., specialist in urban affairs and a past contributor to the AIA JOURNAL, has been elected president of the American Society of Planning Officials.

Tunisian archeologists are asking the international community to help them save the impressive monuments of Punic and Roman Carthage. There is urgent need to restore theaters, basilicas, houses and cisterns which have suffered from exposure to weather and other depredations. Donations may be sent to the Special Fund for Carthage, Unesco, Place de Fontenoy, Paris 7e, France.

At least 60 percent of America's increased electricity demand will be met by energy from nuclear reactors by the end of the century, predicts the Atomic Energy Commission in a report called "Nuclear Power: 1973-2000." Today less than 4 percent of US electric power comes from such generators.

The Philadelphia Chapter AIA recently joined with other institutions in the community to celebrate the work and personality of Frank Furness, master architect of the Victorian period. The chapter had an exhibit on his library building for the University of Pennsylvania, and the Philadelphia Museum of Art honored him with its first major retrospective of the work of a major architect. The exhibits were complemented by bus tours, a public opening and a catalog.

Nathaniel A. Owings, FAIA, of San Francisco has been appointed by President Nixon to the 15-member board of the Pennsylvania Avenue Development Corporation. Selected to head the corporation is Elwood R. Quesada, who presided over the \$100 million construction of L'Enfant Plaza in Washington, D.C. The corporation was set up last year to design and execute the revitalization of the avenue's north side from Third Street to the Treasury Department in the nation's capital.

The New Jersey Society of Architects has published the 10th edition of *The Directory of Schools of Architecture in the United States and Canada.* Compiled by Helen T. Schneider, Hon. AIA, executive director of the society, previous editions of the directory have become standard reference guides. It can be obtained for \$3 from the society, 110 Halsted St., East Orange, N.J. 07018. □

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