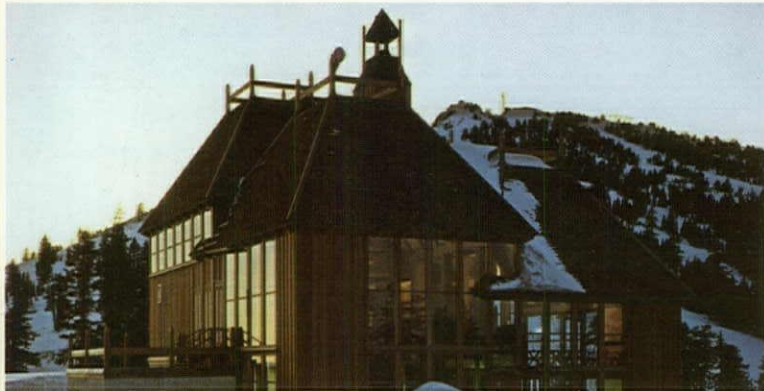




# More Environmental Control with Shatterproof Insulating Glass



1. Residential Complex, The Children's Hospital Medical Center, Boston, Mass.  
Architects: The Architects Collaborative, Cambridge, Mass.
2. Imperial House Apartments, Kenosha, Wisconsin  
Architect: Sheldon Segel, A.I.A., Milwaukee, Wisconsin
3. Delta Airlines Waiting Rooms, Standiford Field, Louisville, Kentucky  
Architect: Pierce, Wolf, Yee & Assoc.
4. Ashland Ski Bowl, Ashland, Oregon  
Designer: Robert L. Bosworth, Medford, Oregon
5. Bismarck Municipal Airport Terminal, Bismarck, North Dakota  
Architects: Ritterbush Brothers, Bismarck, North Dakota

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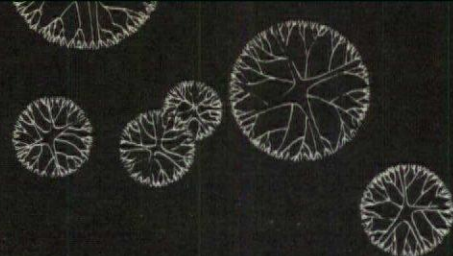
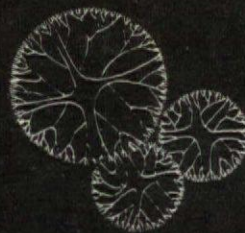


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# AIA JOURNAL

JANUARY 1972

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## comment and opinion

THE ARCHITECT AND AGING, OR VICE VERSA: "Everyone wants to live a long life, but there is one trouble—you have to grow old to do it. For many of America's 20 million citizens who make it past 65, the trouble is hardly worth it." So wrote columnist Colman McCarthy in the *Washington Post* as the White House Conference on Aging was taking place in the nation's capital—a conference where housing was an important issue, but more about that later. It is interesting to note that the word "the" was omitted before the word "aging," and purposely so, since this is a process that begins the minute we are born. But it was significant in another sense, for the 3,400 or more delegates—many named by the governors of their home states, others representatives of national organizations and still others just individual citizens—ranged from the ages of 17 to 95. John B. Martin, Commissioner of Aging, in his welcome put it this way:

"You include young people who must take the long view toward what surely now seems a very distant future. You include men and women already in their later years, happy and successful there. And you include also those to whom those years are difficult and sad. You include representatives of different races and ethnic groups—some burdened by discriminations added to other problems of old age. You include men and women of middle years who have been long devoted to the service of the elderly and now approach that period of life themselves."

And so, with such a conglomeration of persons assembling for almost a week, a good many of whom were frustrated and disheartened and a few perhaps even bitter, I am sure I am not alone in saying it was a heart-rending experience, one which I encountered with mixed emotions. For here were people making eloquent pleas, displaying talents obviously wasted in their later years, but all with deep convictions about the dignity of mankind at every age and in every income level. The truth of the matter is that although older persons comprise only 10 percent of the US population, they make up 20 percent of all poverty victims, spending 33 percent of their personal income for housing while the younger generations spend 23 percent.

The conference was complex, being broken down in 14 subject-area sections of interest; thus I was able to attend only the general sessions and part of the housing section, but I am happy to report that Noverre Musson, FAIA, of Columbus, Ohio, did the profession proud when he presided at the policy meeting at which all the sub-sections came together to draft their final recommendations (see p. 46). As co-chairman he demonstrated what one practitioner can do among a group from other disciplines, since to the best of my knowledge only a handful of architects participated in the entire conference. But it was Musson who was in a position to explain some of the terminology, such as multidisciplinary teams, and, in a sense, to steer the participants in a direction which acknowledged professional standards.

It is the hope that the voluminous report which is bound to result from the White House Conference on Aging, encompassing the recommendations of all 14 sections, will not simply collect dust on library shelves and be hidden away in the archives. "Only a new national attitude toward aging can end the 'throw-away psychology' . . . Only a new attitude toward aging can reopen the doors of opportunity which have too often been closed on older men and women. And . . . only a new attitude toward aging can keep older Americans from 'slipping through the cracks.'" Those words came from President Nixon who ended his speech by saying, "In a real sense, this conference is just beginning. For all of us are going home with promises to keep." And among those with such "promises to keep" is the entire architectural profession as it makes a firm commitment to uplifting the lives of all Americans through better housing.

ROBERT E. KOEHLER

### ACKNOWLEDGEMENTS

6, 8 above — Mel Chamowitz  
13 through 22 — Bess Balchen  
23 through 26 — Courtesy Photo Service of  
the Union of Soviet Societies for Friendship  
and Cultural Relations with Foreign Countries

27 — Julian Wasser  
28 center — Los Angeles Evening & Sunday  
Herald-Examiner  
28 below — City Center Photography  
30, 31 — Richard Williams

### NEXT MONTH

How do schools come about? Today, by involvement by all concerned: the architect, the client, the community, the users. Programming a learning facility isn't what it used to be, and this is clearly spelled out in four articles in the February issue. A fifth article is a questionnaire analysis on temporary facilities for higher education.

Two other in-depth articles round out the issue. One deals with a movement to imaginative contemporary architecture, in spite of constraints, in India, followed by two pages of sketches of historical work. The second explores the new specifications of the American Institute of Steel Construction for the design, fabrication and erection of structural steel, which are having a tremendous impact upon buildings, both esthetically and economically, with emphasis on innovation.

### ASIDES

The article on "How to Dedicate a Building" in this issue reminds us of what must go down in American architectural history as one of the most provocative events of its kind. And it happened, of all places, at an abbey—Mount Angel Abbey to be exact, whose conference on architecture for the layman was the subject of Comment and Opinion last May.


The three-day dedication of Alvar Aalto's library just out of Portland, Oregon, could be called a swinging affair, literally and figuratively, for it all began with a Friday night concert by Duke Ellington who presented the music of Ann Henry in a premier performance of "Pockets—It's Amazing When Love Goes on Parade." Miss Henry, by the way, who composes music in a popular idiom and has written a Mass and a number of hymns, has done some of her creative work in residence at the abbey.

On Saturday the architects of Oregon and the Northwest had an opportunity to tour the library, and when Aalto found he could not be on hand for the dedication, a panel was assembled to discuss the features of the building. Its members included Vernon DeMars, FAIA, Berkeley, architect of record; Erik Vartiainen, San Francisco, on-site architect; Professor Marion D. Ross, head of the Department of Art History at the University of Oregon; and Ada Louise Huxtable, *New York Times* critic, who said the building is Aalto's most successful library and one of America's important structures.

Later that day, the Portland Junior Symphony presented a concert in the library, and Professor Richard W. Southern, president of St. John's College, Oxford, England, lectured in the abbey church.

Sunday's festivities got underway with a concert by the Lewis and Clark College Choir and Abbey Schola, followed by the "official" dedication and blessing of the library, with addresses by the head of the Benedictine Order from Rome and the Finnish Ambassador to the United States—and just for good measure a presentation of a collection of books on Judaism.

If any client can top that performance, we would like to hear about it! □

The image contains two technical line drawings. The upper drawing shows a cross-section of a window or door frame with various weatherstripping components, including a bulb seal and a counter flashing. The lower drawing shows a perspective view of a window frame with a grid pattern, illustrating how the weatherstripping is applied to the frame's edge.

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## Housing Gets Big Play at White House Conference on Aging from Nixon on Down

"A national policy on housing for the elderly worthy of this nation must enjoy a high priority and must embrace not only shelter but needed services of quality that extend the span of independent living in comfort and dignity, in and outside of institutions, as a right wherever they live or choose to live."

So begins the preamble to the 25 policy recommendations which were drafted by the housing section, one of 14 which made up the White House Conference on Aging.

Echoing that statement was the President himself who addressed nearly 4,000 persons at the closing session on December 2 at the Washington Hilton Hotel. Referring to the upgrading of nursing homes, he added, "The greatest need is to help more older Americans to go on living in their own homes. Income programs and tax reforms can help us achieve this objective. And so can a number of additional decisions which we already have made."

Mr. Nixon continued, "We want to begin by increasing the present budget of the Administration on aging nearly fivefold to the \$100 million level. We plan to give special emphasis to services that will help people live decent and dignified lives in their own homes—services such as home-health aides, homemaker and nutrition services, home-delivered meals and transportation assistance. Much of this new money will be used to help marshal existing and expanded resources more effectively at the local level."

The housing section's preamble went on: "Of particular concern and priority are the poor, the minority groups, the disabled and the aged located in isolated rural areas."

"Availability of housing in great variety is imperative. Such housing should respond to health and income needs and provide a choice of living arrangements. It should include sales and rental housing. It should be produced by public agencies and by private profit and

nonprofit sponsors, with incentives to encourage such housing in all communities.

"Funds to support a massive and varied housing program and mechanisms for assuring appropriate services are imperative to the well-being of the elderly of this nation. A decent and safe living environment is an inherent right of all elderly citizens. It should become an actuality at the earliest possible time," the preamble concluded.

More specifically, among the 25 housing sections recommendations (see p. 46 for the complete list) was one calling for the reinstatement of Section 202 of the 1961 Housing Act, a move which has been supported by the AIA as "the most effective way of providing housing for the elderly."

The Institute favors Section 202, a direct loan program, over Section 236, a rent subsidy program, because of its relatively simple administrative procedures and the free hand in planning which it gives to architects.

What will actually come out of the White House Conference on Aging remains to be seen. The President has asked the chairman, Dr. Arthur S. Flemming, Secretary of Health, Education and Welfare in the Eisenhower Administration, to stay on during the post-conference year and to serve as a special consultant on aging, working with Mr. Nixon and John Martin, Commissioner on Aging.

Meanwhile, the concern for the aging was being considered on other fronts. The Gerontological Society conducted "Environments for the Aged: A Working Conference on Behavioral Research Utilization and Environmental Policy" in San Juan, Puerto Rico, in December.

And at the University of Michigan in Ann Arbor, researchers are carrying out a study to determine how the relocation of elderly and disabled patients from one medical care facility to another affects the patients' general outlook and health.

## CRS Is Selected to Receive the Highest Award Bestowed on a Firm by the AIA

The Institute's 1972 Architectural Firm Award will go to Caudill Rowlett Scott, headquartered in Houston with offices in New York City, Chicago and Los Angeles. It is being given for "continuing collaboration among individuals of the firm" as the "principal force in consistently producing distinguished architecture."

Since its founding 26 years ago, the architectural/planning/engineering firm has performed work in 40 states and 10 foreign countries, and has earned nearly 100 design awards, five of them national Honor Awards from the AIA.

CRS, with its diversified staff of about 300, is one of the pioneers in the now widely practiced team approach to design (see Practice Profile in AIA JOURNAL, Aug. '69). For each commission it brings together experts in all related fields into a team that also includes the client.

Another CRS innovation is its "squatter" technique of moving each design team to the actual site of the project where, in a nearby meeting room, decisions are reached through intensive work sessions involving the client and the team.

The firm also pioneered in applying systems building and the development of fast track scheduling, a technique which helps to shorten design and construction time.



Institute President Urbahn receives his medal of office from predecessor Hastings.



Forecourt of Pan American Union Building, designed by competition winners Albert Kelsey and Paul Cret and completed in 1910, is resplendent with tropical plants.

## Urbahn Is Installed as Institute President; Ceremony Shared by Mexican Colleagues

"I believe in architecture, and I do not believe that the profession will disappear, be gobbled up, absorbed or even disregarded."

On that note of optimism, Max O. Urbahn, FAIA, became president of the Institute early in December as the Board of Directors met in the nation's capital. (For his inaugural statement, see the Institute Page in this issue, along with a listing of the complete set of officers for 1972.)

Urbahn was installed by his predecessor, Robert F. Hastings, FAIA, in a ceremony conducted at the Pan American Union Building. Among the honored guests at the dinner were several Mexican architects, who extended a welcome to that portion of the national AIA convention which they will host in Mexico City following its conclusion in Houston, May 7-10.

The new AIA president heads the firm of Max O. Urbahn Associates of New York

*continued on page 8*





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**CONTENTS AND CONTRIBUTORS:** Preface. Weathering and Performance—*Brian Atkinson*. Concrete—*J. Gilchrist Wilson*. Clay Products—*H. W. H. West*. Timber—*Gavin S. Hall*. Metals—*W. D. Hoff*. Plastics—*Kenneth A. Scott*. Index.

1970 286 pages 64 illus. \$10.00

### URBAN STRUCTURE

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Hastings presents a citation to Ramón Corona Martin, Hon. FAIA, who heads the International Union of Architects. Also honored was another Mexican colleague, Rafael Norma, Hon. FAIA, president of the Panamerican Federation of Architectural Associations.

City. Prior to his term as president-elect, he had been director of the Institute's New York Region for three years and concurrently commissioner of the AIA's national Commission on the Environment.

Hastings, who received an honorary membership in the Society of Mexican Architects and earlier was awarded the Gold Medal of the Detroit Chapter AIA, had the distinction of welcoming the first woman to the AIA board. She is Fay DeAvignon, a fifth-year student at the Boston Architectural Center, representing the Institute's Association of Student Chapters.

S. Scott Ferebee Jr., FAIA, of Charlotte, N.C., president-elect, recognized the retiring board and introduced the six new directors.

### Architect's Role in Early Development Phase Is Becoming a Popular Topic

Plans are going forward for the publication this year of a book which will concern the role of the architect in project development and will provide guidelines for the application of the architect's professional skills in the development process. A national AIA task force chaired by Herbert Duncan Jr., AIA, is supervising the preparation of the manuscript. This book will complement other AIA publications on professional construction management and project administration, new business development and comprehensive services which together will emphasize new opportunities for the architect.

In 1970, the AIA JOURNAL published two articles on "A Piece of the Action," written by Robert Allan Class, AIA, the Institute's director of Technical Programs (see Feb. '70, p. 46, and July '70, p. 38). The companion articles explored the emerging potentials of the architect in the early decision phase of project development and urged component organizations to hold meetings similar to those of AIA's Committee on Professional Consultants and representatives of members of the development team. As a result, an increasing number of component organizations around the country have included this subject as a part of their programs relating to expanded professional practice.

For example, the Central States AIA re-

gional conference in October brought architects from five states together for a comprehensive program. Evidence of the success of the conference, which was developed under the chairmanship of Kansas City's Bruce Patty and Keith Herrin, is that registration was nearly double that of previous years and that the jam-packed seminars were so intense and of such interest that the usual in-and-out people motion which typifies most large meetings did not occur.

Keynoter Vincent Kling, FAIA, and Herbert Lembecke, AIA, described the approaches of larger offices to the role of the architect as developer, emphasizing the opportunities for enhanced design control, increased management supervision, cumulative generation of additional work and occasional equity participation in development projects. John Law, AIA, related the many development opportunities available to small offices, while Paul B. Farrell Jr., an attorney, got down to the nuts and bolts of development financing and economic analysis as essential basic knowledge for the architect. Robert F. Hastings, FAIA, the Institute's immediate past president, wrapped the whole thing up, urging participants to broaden their scope beyond the traditional design phase and to venture forth into the earlier decision phase of project development and the later delivery phase of project management by building upon their own unique professional skills.

### US Group Among Winners of Competition Sponsored by Historic Italian City

Four prizes have been awarded in the international competition for the design of the business district of Fontivegge-Bellocchio, Perugia, Italy, with an American entry capturing second place. Sponsored by the municipality of Perugia, the competition was judged by a jury of 15 from the US and various other countries.

In designating the winning projects, the jurors cited the following heads of each group: first prize: Tsuto Kimura, Tokyo; second: Warren Schwartz, Cambridge, Mass.; third: Ludovico degli Uberti, Rome; fourth: Alena Sramkova, Prague.

### Architect of Capitol Questions Budget As AIA Reaffirms West Front Position

The AIA has reaffirmed its position that the West Front of the US Capitol should be strengthened and restored in its original setting. In so doing, the Institute endorses the findings, method of analysis and conclusions of the Praeger-Kavanaugh-Waterbury engineering report, a study commissioned by Congress two years ago to determine the feasibility of restoration.

The Praeger report says that restoration is feasible without exceeding \$15 million. A special AIA task force which studied the report noted that "it would be impossible for anyone at this stage of study to guarantee a total restoration cost." But it felt that the Praeger report methods and budget "allowed for adequate contingency."

However, the Architect of the Capitol, George M. White, FAIA, recently told the Senate Appropriations Committee that he does not believe the restoration can be done within the \$15 million budget. He asked Congress "to decide upon the relative importance and the appropriate methods of providing for its space needs, as compared with the admittedly high desirable goal of preserving the exposed physical wall."

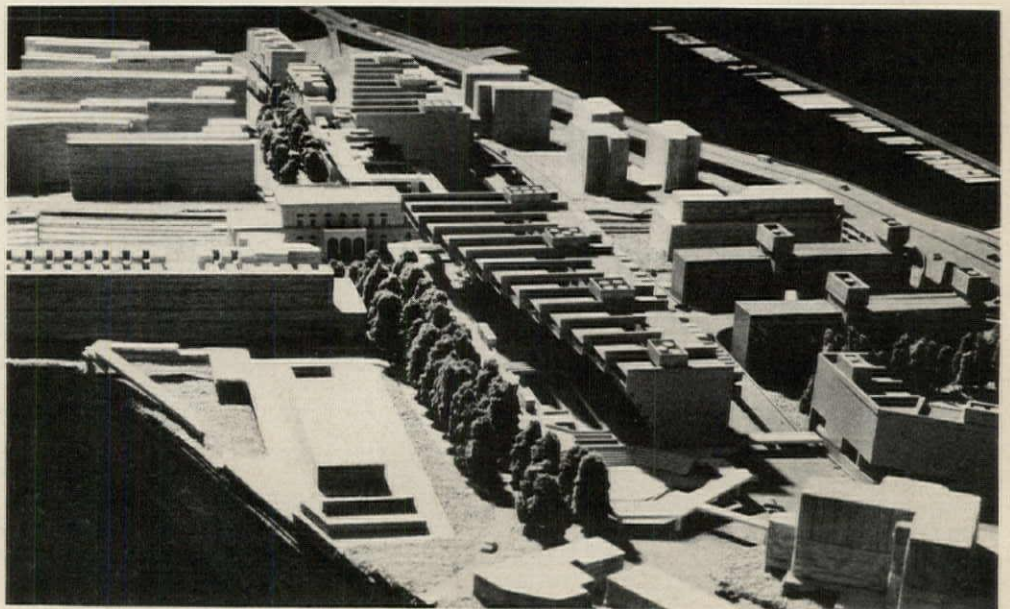
A proposal to extend the wall and provide more space in the Capitol was first made eight years ago by the late J. George Stewart, the previous Architect of the Capitol.

### Papers at California Conference Relate Original Research to Practice Needs

An array of significant papers will be presented at the AIA Architect-Researcher's Conference to be held jointly with the Environmental Design Research Association Conference, at the School of Architecture and Urban Planning, University of California, Los Angeles, on January 24-27 (see AIA JOURNAL, July '71, p. 8). Organizers of the conference sought contributions which specifically emphasize the matter of relating research to practice.

As in previous years, papers prepared for

*continued on page 50*



Winning project is "based on a clear and well-defined structural framework," the jurors report.

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## An Architectural Credo

by MAX O. URBAHN, FAIA  
President

I begin this year as your president with both pride and humility, but above all, with great faith and hope.

I believe in architecture, and I believe that architecture is here to stay.

I believe in the obligation of architects to improve the human condition as they solve the problems of clients.

I believe in the responsibility of the architect to his client. Designing within the budget and with attention to maintenance as well as first cost is an important obligation of the architect. And so is follow-through in the construction process. Design must not be an end in itself.

I believe in the power of architecture to uplift the human spirit as it provides for the ordinary activities of daily life.

I believe in the potential of architecture to serve the indigent, the weak and the powerless as it has served the rich, the strong and the powerful; the whole community as it has served privileged individuals and established institutions, public and private.

I believe in architecture, and I do not believe that the profession will disappear, be gobbled up, absorbed or even disregarded. I do not think it will (or should) change its name, abandon its principles or forget its historic responsibilities.

I know that architecture is changing and that it will continue to change. I know that the problems are changing, the clients are changing, the techniques are changing and ways of organizing for architectural practice are changing. I know that the competition is sharper, the economics tougher, the politics more complicated and all the processes infinitely more complex.

But I also know that architects are reacting to these circumstances as opportunities for expanding their services and extending their influence. They also are responding to the demand of the times for higher and higher levels of performance.

I do not hesitate to say that all over this country today more architects are designing better buildings than ever before. I remain convinced that the function of architecture is the provision of well-designed spaces.

I sometimes think we are, these days, mesmerized by the idea of change. So much is changing, and so fast, that we fall into the trap of expecting that everything must change. But the human needs and values which are the central concern of architecture have not really changed in 2,000 years—or

perhaps since the caveman. The manners and mores change, but the basic needs are unchanged. You can think of examples as easily as I: the need for shelter, for food, for love, for spiritual inspiration.

The challenge that awaits us now is to expand the opportunities for fulfilling this responsibility by undertaking a new kind of professional obligation. We must now participate in the development of policies that determine the processes that really shape the man-made environment.

If architecture is to continue to serve the real needs of people, we shall have to help design the processes which determine the way land is used, and the kinds of quantities and locations of buildings. We must expect as well to design for new kinds of clients, new kinds of projects which will be responsive not to market demand but to user needs.

We must accept a professional responsibility for communicating to a public which desperately needs to know the truth about how its physical environment happens. The physical environment of this country as of now is a "happening": It is a canard on design to call it "designed."

It is my deep conviction that only if we learn to take this leadership role on public environmental policy will we have any possibility of making an effective contribution as architects to the design of a more livable environment for all Americans. Only then can we hope for the adoption of a rational housing policy which will enable us to design the kind of housing in the quantities and with the amenities that people of all income levels want. Only then, with a major national commitment of will and of money, can we hope to design the kinds of communities that people want. Only then can we hope for a national land use policy that by creative channeling of development will effectively support the full range of human needs.

With the approval in principle by the Board of Directors of the report of its Task Force on National Policy, the Institute has taken a giant step toward a new era of architectural public service.

We have recognized the limitations of architecture when it is subject to the constraints of existing processes. We have acknowledged the obligation to lead public debate on public environmental policy. And finally we have accepted responsibility for advocating truly revolutionary changes in institutions and processes affecting the built environment. □

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# US • USSR • US • USSR • US • USSR • FOR MORE • USSR CONCRETE RELATIONS

"I think in the entire world the recent rapid development of science and technology creates a leveling effect in architectural affairs. We have proved that we can build up to 100 stories. The height of a building is no longer an important factor. Our task now is to create the most optimum conditions for living, working and recreation," comments Iraida V. Shishkina, secretary of the USSR Union of Architects and leader of the first exchange delegation of practitioners between the USSR and the US. The visit left hope that the profession in both countries might possibly start molding at least a grillwork out of the Iron Curtain.



*Iraida V. Shishkina  
Secretary, USSR Union  
of Architects, Moscow*



*Igor A. Pokrovskiy  
Head of Architectural  
Workshop, Moscow*



*Dmitri V. Bruns  
Chief Architect  
Tallinn, Estonia*



*Igor A. Aljerov  
Chief Architect  
Kharkov, the Ukraine*

It hadn't happened before: a government-sponsored exchange of architects between the Union of Soviet Socialist Republics and the United States. It came about at the initiative of the USSR Union of Architects, which proposed through diplomatic channels to the US Department of State reciprocal visits by delegations of four, to be worked out in conjunction with The American Institute of Architects.

The Soviet architects suggested that their team be the first, to arrive in the US in the fall of 1971; and that a US team go to the Soviet Union in 1972, whenever convenient for the team members. The financial part of it could be taken care of this way: The sending side would pay for international travel, the receiving side for intercity travel and all accommodations, and for an escort interpreter.

Both the State Department and the Institute jumped at the unexpected opportunity to

broaden the mutual understanding between the two nations and agreed that State would pay for the visitors' intercity travels as well as for all expenses for the interpreter, and that the AIA chapters in each city to be visited would be asked to foot the bills both for the accommodations and the entertainment of the four. For the first time a group of Soviet exchange visitors would be staying in private homes.

In a way, this was like asking individual practitioners to fund a project which rightly belonged under State. No matter, the membership clearly saw the significance of the exchange and there was never a question what each could get in return. Maybe Ted Hoener, president of the Saint Louis Chapter, hit their sentiments when he discussed the Russians' visit afterward: "It occurred to me that some of our world problems might be better handled if placed in the hands of

architects—all we attempted to do was to be ourselves and what we found is that our Russian professionals were also 'just real people.' Our friends have similar goals of trying to help create a better world through a better environment."

Maurice Payne, director of the Institute's International Relations, took care of all the formalities with the State Department and staked out a course which would take the four to New York, Boston, Chicago, St. Louis, San Francisco, Houston and Washington, D.C., with about three days in each city. The stay in Houston and the capital had to be cut back to one-and-a-half and one days respectively, since the visitors had to be back in Moscow earlier than expected to attend a meeting. (This will not interfere with the reciprocal visit, which will still cover seven cities for a full three weeks.)

How were the four chosen, someone asked Iraida V. Shishkina, secretary of the USSR Union of Architects in Moscow and leader of the delegation. "Easy," she explained, "the selection was left to me, and so of course I picked myself first, then three of my favorite and most prominent young colleagues." (Ages of the four ranged between 41 and 45.) The three were: Igor A. Pokrovskiy, head of a 160-man workshop in Moscow; Dmitri V. Bruns, chief architect of Tallinn, Estonia; and Igor A. Alferov, chief architect of the city of Kharkov in the Ukraine.

She couldn't have made a better selection: Everywhere they went, the reactions and the adjectives were the same: courteous, intelligent, warm, witty and friendly.

They had come, they said on arrival, to see architecture and to meet people. That was putting it straight on the line, and that was the way the hosts made it happen. Sure there were drawbacks to such a whirlwind tour. Even for these four bundles of energy who after an 11-hour flight from Moscow and dinner in Greenwich Village with George Lewis, the New York Chapter's executive director, insisted on doing Times



"It's difficult to imagine the scale of New York's tall buildings; you cannot see them! They don't dwarf the human being since the streets are so long, but it's like being in a labyrinth."

Square at midnight, faces and buildings must have appeared blurred now and then even in an hour's retrospect. And favorite buildings were often left with regret and all too quickly. Yet there were advantages which would have been missed by longer stays: The impact of each city was forceful and true; there was time to get only first impressions, none to get used to and possibly forgive the eye-sores: bad structures, bad traffic, bad pollution, bad slums, decay. The measure of each in each city spoke of the city itself and the way it was planned—or not planned. If they were curious about the underlying reasons, they didn't reveal it but they never—as we have become so used to doing—blamed it on architecture per se, and they just about never voiced their opinions unless asked. They hadn't come to criticize, they explained, but to learn. Yet in answering specific questions they were true to their profession no matter how unflattering their replies.

New York? "It's like a sculptural entity, like a cluster of crystals with tall and short buildings in quick and repeated succession," they said over lunch at Miller's in the Woolworth Building. "It's difficult to imagine the scale of your tall buildings—you cannot see them! We cannot orient ourselves here, even with the grid system. There's a constant changing of orientation and perspective since we have to look up all the time. The tall buildings don't dwarf the human being since the streets are so long, but it's like being in a labyrinth.

"In our country, we feel that such strong architectural forms as tall buildings must be treated with the utmost care. Each must have lots of light and air around it and must be seen from everywhere in the city."

Their hats were off to American construction companies, which can build these outsize buildings on such limited lots. And they thought the World Trade Center a technical





“We are impressed with the way  
Boston’s old buildings are being restored and kept  
alive and new buildings  
are set into the cityscape in a  
fitting manner.”

marvel as they went through from bottom, the newly opened, delightfully clean and bright subway station, to almost top, the 103rd as yet window- and ceiling-less floor, which gave them a chance to see the flexibility which project manager Joseph H. Solomon, AIA, explained to them can be provided with interstitial spaces.

New York State Urban Development Corporation’s plan for Welfare Island, to transform it into a pedestrian-oriented green community, also won their praise, but on a visit to the site Mrs. Shishkina was quick to point out the power plant—a major polluter—right across the East River. “This seems strange, here you have such an impressive project and then a plant like this so close that it will ruin the whole effort! Is there no one authority in charge who can eliminate the conflict of interest?”

This was a point they brought up again and again on the entire trip. It came up too

when Kennedy Airport was the topic: “It looks like a world’s fair, with each structure competing with the next. Is there no overall authority?”

In the Soviet Union, they explained, each city has a chief architect who is responsible not only for the overall planning but also for all construction. Nothing can be built without his approval. However, all projects are generally discussed and passed upon by a building council, which includes the best architects in each city. In Tallinn, Bruns explained, the city plan carries into the next century. Deviations from it will be minor.

The unplanned mishmash surrounding the many architecturally good and exciting buildings in New York City ruins their effect, they concluded. A trip to a UDC housing project in the Bronx hardly helped improve this impression. The question was inevitable: “Are these streets never cleaned? Why aren’t there any wastebaskets anywhere?”

There weren’t any efforts to show only the good: Their subjection to New York—and to the other cities also for that matter—went from the shocking to the drab to the splendid. They drove through the slums, politely ignoring sleeping winos in doorways and on park benches; they rode the Fifth Avenue bus and the subway in the near-rush hours; they were entertained by the chapter at the Yacht Club and at “21” by Jordan Gruzen, attended the opera at the Lincoln Center and admired the Beaumont Theater there and later the Guggenheim Museum, two of their favorites and both described as “an experience.”

Still, Boston was a relief to them. “Here we can breathe! Coming from Logan Airport to the city we saw several buildings that still stand out in our minds. The ride from Manhattan to La Guardia leaves no impressions, there are no buildings of any distinction.”

They liked Boston. “Maybe it was the concern our guests felt for the preservation of their past that struck such a responsive note,” said Huson Jackson, Boston Society of Architects president. “Wooden dwellings and buildings devoted to everyday purposes have largely vanished from their cities in successive fires. The surviving buildings of exceptional quality and importance are largely churches, which are increasingly less frequented in their officially secular society. This gives rise to two problems: first, to find contemporary uses for these buildings which are compatible with their nature and value, and second, to design an urban setting in which the old and the new will be able to co-exist harmoniously.”

Perched on a bed in the Jackson summer cottage—a former submarine sighting station—to get a dark place away from the picnic party (American style — indoors), Bruns showed slides from his hometown and the restoration work going on there. Tallinn was 47 percent damaged during the second World War and therefore the interest in conserving whatever is left is strong. “It’s difficult, expensive and probably impractical,” Bruns ad-



“Even with the tall buildings,  
Chicago has so much more air! Here we can  
see the entire structures.”

mitted, "but this is the history of my people in stone."

He described their efforts to architectural writer Bill Marlin: "We have established a state commission on antiquities and set aside certain protected districts in which extensive restoration work is being done. Old churches and palaces have become museums or ministries. In Tallinn, and of course in Leningrad, we have tried to keep the historic character intact. There are many service organizations which can occupy old buildings. In fact, we are holding off on building any more office structures. We try to make good use of the protected areas, which also enjoy a high profit margin from tourism. These profits are plowed back into restoration work. The problem is that we lack the skilled labor. Such work is a science as well as an art, and it takes time and great care to do. Because of this, we have a surplus of restoration funds."

The question came back to modern design and Bruns told of the battles he and his staff had had to prevent a nine-story building from coming up in Tallinn where the planners had visualized a low building. The city architects had won, he reported happily. "But you've been gone a week," quipped Mrs. Shishkina from her perch on the Jackson bed, "and it's probably up to nine stories again."

Architects in New York had steered them on to Charrette in Boston, the architectural office outfitter. There they were presented with supplies they had seen and liked in offices they had visited: templates, grid paper, lettering sheets, Zipatone, even electric pencil sharpeners. "There's something wonderfully seductive about this decadence," remarked Blair Brown, Charrette co-president, as he stuffed three of them into a big box for shipping.

The abundance to select from not only in office supplies but also in building material struck them at once. "In the US we have almost *too* much," said one architect along the way. "Would you like to exchange?" was Bruns' retort.

"What a difference from New York! Even with the tall buildings, how much more air!" they said about Chicago. "Here we can see the entire buildings." They went wild with their cameras (in all, they used some 150 rolls of film on the whole trip). With great expertise, they pronounced names such as Wright, Mies, Pei and Weese and also discussed the Chicago School of Architecture with knowledge.

"They took great pleasure in identifying many of the classics they recalled from photographs, noting that their clarity and boldness were even more forcible in reality than in pictures," said Vernon Geisel, architect with Skidmore, Owings & Merrill's Chicago office. Geisel, as one or more architects every stop on the way, had the advantage of discussing with the visitors in their own language, being fluent in Russian after several years of study and two visits to the Soviet Union, one of which was to accompany the US Information Agency's "Architecture USA."

"Another pleasant surprise for them was that the American city at night is not so cheap and flashy as American filmmakers make them appear," Geisel continued. "Alferov told me: 'You Americans are to blame for creating that sort of image. Your movies always show gaudy, tasteless streets of neon, but this,' he said, pointing to a floodlit advertisement on Chicago's Near North Side, 'is artistic. It makes the city a more enjoyable place at night.'"

Their favorite apartment house of all was Marina City, but this again brought out their strong feelings that architects should be concerned with the surroundings: How could Chicago planners have let the IBM building happen so close to Marina City?

"The two are in complete disagreement with one another. Is there no one authority who can stop such destruction?" Pokrovskiy asked of Martin Dubin, president of the Chicago Chapter during the luncheon Dubin hosted for the group. Said Dubin: "We

would rather make mistakes and have the right to self-expression than not to have that freedom."

With Dubin, they had visited some of his firm's apartment projects and naturally the conversation turned to housing. The quality of American construction, they admitted, is superior to that of the USSR, but why so many highrise apartment buildings, Mrs. Shishkina asked, "It is much better for children to live in lowrise buildings; they are so much like office buildings." She went on to explain the general ways of planning in her own country.

Mixes such as found in US cities, with apartment houses, office buildings, museums and even warehouses or empty buildings in one mélange, more often than not with no trees or grass in sight, can just not be found in the USSR. There, the residential sections are separated from incompatible structures, even a gas station cannot be closer than one half kilometer because of the fumes and the noise. On the other hand, necessary amenities are always close at hand, such as shopping centers, medical centers, schools and open land. Take your schools, for instance, Mrs. Shishkina said, "We are surprised by the fact that they are built without regard to where the students live and that you solve the logistics by busing. In our school construction program, the maximum distance from the residential area to the school must be an easy walking distance. We are building new neighborhoods for 12,000 to 15,000 people. These will have no major transportation systems, highways or railroads running through. We're surprised at what's going on here. Our planners are learning from your severe traffic problems," she went on. "We concentrate on mass transportation, and make it attractive and inexpensive enough to compete effectively with the cars, which we hope will only be used for recreation."

Here she struck common ground with Dubin and his brother Arthur, also a partner of the firm of Dubin, Dubin, Black & Mou-

toussamy. "Really," said David Dubin, "the questions they ask us are the same that we ask ourselves every day!"

With the Spencer Cones, Walter Green, chairman of the Chicago Chapter's Western Section, and Geisel, they zipped up to the top of the John Hancock Center on a night so clear that all the lights showed up. But the thought of living at that height, they told Geisel, with no operable windows, struck them as an unnatural and difficult adjustment for human beings to make. And as with New York's strong entity, they told him, they were surprised that pure happenstance had created the Loop's strong, impressive architectural ensemble.

But Big John at night wasn't enough: They weren't satisfied until Dubin had taken them up once more in the daylight, where they marveled at the sight of the rush-hour traffic radio reporter with his binoculars and admired the greenery along Lake Shore Drive. The Hancock Center itself they looked at as a strong statement—technically.

It was pouring down in St. Louis but it didn't matter. They were one with the city from the moment they crossed the city line in the Maxi Van that Chrysler had lent the chapter for the occasion. "This city is designed for people," they exclaimed. "We feel at home here." "This is closest to our souls," said Mrs. Shishkina, "It's more like our own cities, it has broader streets, more greenery."

"It looks like a city in the middle of a park," Alferov told architectural critic George McCue, "I most like the alteration of low and high buildings. St. Louis looks like a city that has been properly planned." Diplomatically, McCue didn't volunteer any information about the planning of his hometown. Added Bruns: "The architecture is never oppressive, this is one of the most striking features." And Pokrovskiy agreed: "St. Louis gives the architect an opportunity to design a building which can be best expressed in all its aspects, instead of having other buildings shielding it from view and

totally destroying the esthetic effect as we have seen in overcrowded cities."

A highlight was the evening when the Hoeners and the Angelo Corrubias took them to Powell Hall to hear the Saint Louis Symphony Orchestra play four Russian masters under the direction of Walter Susskind. "Magnificent, superb!" they exclaimed, "on par with our own best orchestras and the hall with the best of ours."

Right away Bruns spotted Rudolfs Mikelsons' name among the first violinists and when Corrubia, partner of the firm that restored Powell Hall, took them backstage, Mikelsons, in fluent Russian, explained the hall from the musicians' point of view. To Pokrovskiy especially this was of interest not only as a talented musician but also because he was one of the architects on the team that renovated the Bolshoi Theater. Said Corrubia: "He told me it was an exhausting task and wanted to know if we had similar feelings. I told him that we literally lived Powell Hall while the work was in progress."

The evening at Powell Hall brought the newly opened Kennedy Center for the Performing Arts in Washington, D.C., into the discussion over Sunday breakfast at the Charles Lorenz's, where the four were staying. The morning paper had brought a critical article on the center by a well-known writer, and when it was translated to them they jumped like architects might anywhere: "It's only a personal opinion, completely unprofessional," they agreed. "It's unfair journalism, nothing is substantiated, it's nothing but carping. We haven't seen the Kennedy Center, but that doesn't change our views of the article."

Should a critic be an architect, someone asked. Yes, said Alferov; no, said Mrs. Shishkina, "that's not necessary as long as the writer has enough basic knowledge to substantiate the criticism."

It all brought back Jackson's words in Boston: "What struck me most was the large number of problems we have in common. At

first this would seem surprising given the great differences in our economic and political systems. But on second thought perhaps it should not surprise—we are on both sides professional people filling similar roles in industrialized and growing countries. In fact, they seem to share all of our problems, possibly excepting those of finding the next job and of keeping the office supplied with funds!"

The common problems of housing were brought up again as the four poured over the plans for St. Louis' Operation Breakthrough project in the offices of Hellmuth, Obata & Kassabaum. Again, as they had before, they remarked on the windowless kitchens. In Russia, they told Gyo Obata, there must be daylight in the kitchens; people demand it. The long winters make sunlight important to home interiors; all dwellings have to be assured of a minimum of three hours' daily exposure. Another point, bathrooms in new housing have separate toilet compartments; a two-bedroom apartment has a bath and two lavatories, only in a studio type apartment are bathroom and water closet combined.

The overwhelming amount of building in the USSR is housing, they said. Moscow alone got 130,000 new units last year; the national goal before 1976 is 20 million. All of it, as well as every single other building that goes up anywhere in the nation, must have an architect; that's the law even when the designs follow a prototype. "Of course we have complaints of monotony," they explained. "Maybe the prefab building isn't the best, but after the war when speed counted so much, it was the best solution we could think of."

As Alferov had told Marlin: "In about two years, all construction processes will be done in factories, leaving only the mechanical assembly of parts on the site. In Kharkov last year, we built a 200-unit apartment house in 18 days. Finishing work took 18 more. We used only 12 assemblers and 30 finishers, averaging 29 men a day at the site. In two



“St. Louis is closest to our souls—  
it is more on the scale of man. Tall buildings are placed in  
good relationship and proper balance.  
The Arch is a very  
interesting structure architecturally.”

years, such a performance will be the norm.” “What we’re after now,” said Bruns, “is to combine the blocks so that we avoid monotony. We cannot retool now because of the cost, but we will be producing smaller, more flexible units so architects can use them in a greater variety of combinations.”

San Francisco’s St. Francis Square (*see* AIA JOURNAL, Dec. ’71) topped the list of the housing projects they saw on the entire trip, if not of anything they saw in San Francisco. The Golden Gateway Highrise Redevelopment they found intriguing, with the integration of highrise apartments, town houses and office structures adjoining.

As a whole, the city made a strong impression with its climate and with its topography. They gave architects credit for not having leveled it but instead for having made an asset out of the hilly terrain. (“Hats off to San Francisco drivers for stopping on red lights on top of the hills!” remarked Mrs.

Shishkina.) But they eyed with dismay the many new tall buildings. “One New York is enough, even in a country this size.

“The strongest and most beautiful things we have seen in San Francisco are the bridges. Even from photographs we couldn’t imagine that they would be so well placed and attractive.” Quite apart from the beauty, the bridges intrigued them because crossing them is taboo to the staff of the Russian consulate in San Francisco. Their farewell to Vladimir A. Sinitsyn, the vice consul, when Russian-speaking Garo Dorian took them across the Bay Bridge: “We’ll promise to inform you of the secrets on the other side!” What Dorian took them to was the Oakland Museum, a definite favorite, and the campus of the University of California at Berkeley, which they highly admired.

Richard Olmsted and his Russian-speaking wife Vera took them to the Marina Safeway. “We have some supermarkets at home, they

are the most convenient—but ours are placed closer in.”

There was no doubt in their minds what Houston was: a strong, young city with an energetic population. “And imagine, in this heat,” Bruns commented, “just like a sauna.” But the chapter was prepared: In an air-conditioned camper equipped with stove, fridge and lavatory, the four were given the grand tour while sipping cold beer. And since time was so limited, with only one full day to cover the most important sights, lunch was consumed on board. They didn’t find life in an American camper hard to take at all. But after viewing such attractions as the Alley Theater, Jones Hall, the Astrodome, the Galleria complex and Houston School District Administration Building, they came back to the people of Houston: “These are the handsomest, best dressed and most elegant citizens we have seen in any of the cities.”

However, what Mrs. Shishkina in particular found curious in Houston was to see a couple of women skaters on the rink in the Galleria at 10 a.m. and others playing tennis at the same time in the morning. “How can they stand not to work?” she asked, “In Russia, just about every woman works, not because we have to but because we want to.”

Proof of that may be her own profession: Of the some 20,000 architects in the Soviet Union, more than 40 percent are women. And of all students in the 42 schools of architecture in the USSR (2,300 enrolled in 1971), about 50 percent are women. Of the three male visitors two were married to architects, one to an architectural historian. Mrs. Shishkina, whose husband is also an architect, had just been re-elected to her position for another five-year term when she arrived in this country, a position roughly similar to that of AIA executive vice president. Membership in their union also is on a volunteer basis, she explained; applicants must have three years of practice and one project already built. It’s an open organization and therefore, nonmembers also have

benefits from it, but some advantages are for members only; for instance, only members were considered for the visit to the US.

Asked how she felt about her elevated position, Mrs. Shishkina made it clear that she missed designing (among other work was her part in the restoration and modernization of the Kremlin, for which she received an award). Then she quickly resorted to an example of the difference of being a designer and an administrator: "The head of an architectural workshop chided one of the young employees for putting away her templates and T-square at a quarter of five. 'Don't you know that hours are from nine to five?' he asked. 'Yes,' she replied, 'but leaving my board neat at night is part of my job, and all you have to do is to shut your mouth and go home.'"

Their joking and laughing was a nonstop affair. "Have you ever heard four people start having such fun and so many laughs at seven in the morning?" asked Ruth and Burton Rockwell, who put them up in San Francisco.

They were right at home, it seemed, wherever they went; the atmosphere of a place could never influence their naturalness. In Boston, they went swimming in the Atlantic—a must on Bruns' list. In swimming trunks and wrapped up in the Jacksons' bright red towels, Alferov and Bruns were stepping over a pebbly path back to the cottage in the light drizzle. Said Alferov to Bruns: "D'you know, without long trousers you and I could pass for two American architects." A dip in the Pacific was another of Bruns' musts (which he missed) as well as one in the Mississippi River. According to Russian legend, a dip there guarantees that you will be back some day. But the weather was foul and the river filthy, so instead he settled for just wading, trousers pulled up, while enjoying the sight of the moored-up Becky Thatcher and Huck Finn riverboats.

At a Sunday barbecue at the Kenneth Schaefer's in St. Louis they mixed, with obvious pleasure, with children, architectural students, colleagues, cats and dogs, played table tennis and other games. Alferov especially was mean with a racket; in Houston he exchanged a few balls with the tennis pro at



"The many new tall buildings in San Francisco are dismaying but yet, a project such as the Golden Gate Highrise Redevelopment is intriguing with the integration of apartment buildings, town houses and office structures."

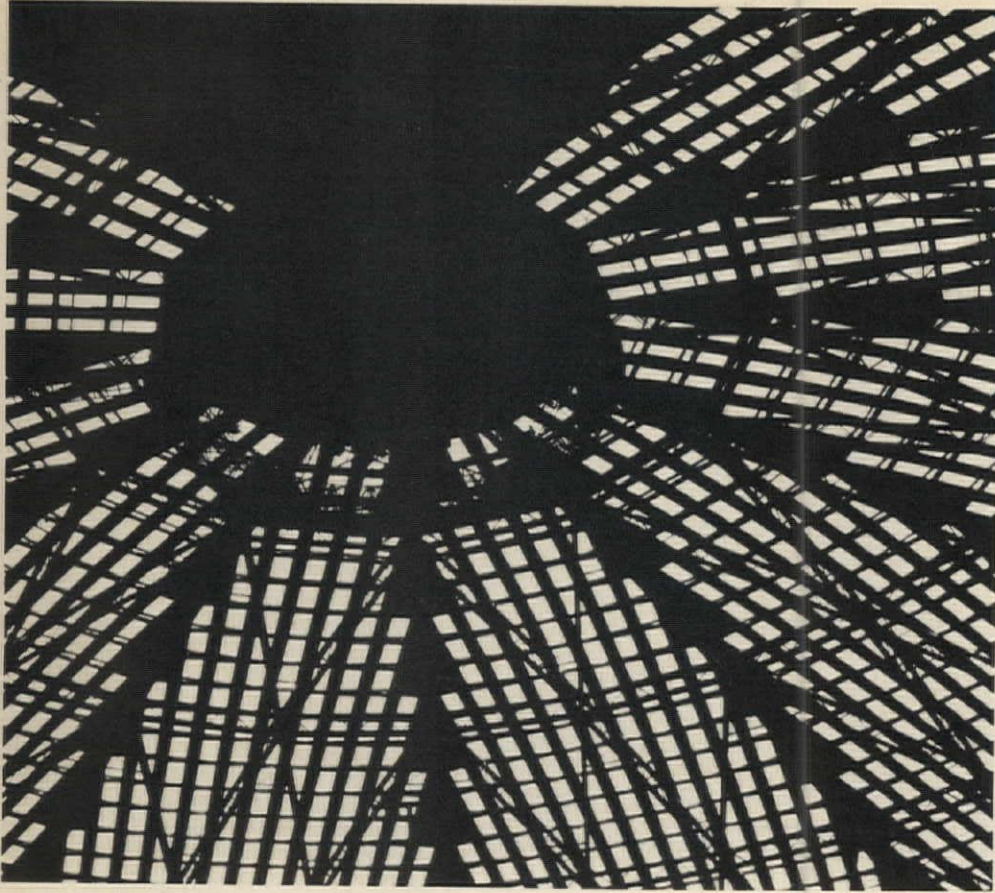
the Galleria center and gave him a run for the money. Keenly interested in tennis, they were in constant search of a turf court to see the quality of the grass. Finally Joe Cernik took them to a St. Louis country club putting green, which they inspected scrupulously in spite of the downpour and whose quality thrilled them no end. Later, they putted across the Cernik living room floor, and Mrs. Shishkina, who had putter in hand for the first time in her life, got the ball smack in the cup. Said Cernik: "Their warmth and enthusiasm made it difficult not to be good hosts. Our stop at Burger King to let them see one of our drive-in hamburger establishments, the barbecue in the rain, their singing during the tour around town in the Maxi Van all made for a pleasant day. Hearing 'It's a Long Way to Tipperary' sung in Russian still has the children smiling."

The Gil Thweatts and the Tom McKittricks in Houston, who each put up two of the visitors, felt the same way. "We mostly sang, grunted, tested broken French and Spanish expressions, and eventually realized that both Mrs. Shishkina and Pokrovskiy understood many English words. Our best communication when the interpreter was absent was through music. They sang for us

and we sang for them, and Igor played the piano and the guitar," said Thweatt. "We got the children out of bed and all sat around singing and playing until somewhere between two and three in the morning."

With the interpreter always staying in hotels, the language barrier could at times be a nuisance, but never serious, for the host families. None of the visitors spoke English, although Mrs. Shishkina had a good supply of English words since her son is studying the language. Bruns was fluent in German, and all had at least a few expressions in Spanish or French; however, not enough for a conversation. "Our communication was through a combination of German, spoken haltingly by my wife Barbie, a few words of English and Russian and primitive sign language. We thus learned some of their concerns, aspirations and a little about their lifestyles," said their other host in Houston, McKittrick.

Probably Jim Polshek, New York Chapter vice president, was the one who got along best without knowing a word of Russian. Speaking with arms, hands, eyes and sometimes his whole body, he somehow seemed to manage to explain even the most complicated architectural problems. But the Russian-speaking



“We really didn’t want to leave Houston so soon. During our brief stay the Astrodome was of most specific interest since we are planning a 75,000-seat covered stadium in Moscow.”

practitioners were at a distinct advantage. Marcel Sedletzky in San Francisco, for example, who had come from Carmel for the occasion, conversed with them on topics ranging from “piquant stories to matters of city planning.” He found them pleasantly uninhibited in communication. “They are knowledgeable and sensitive professionals and seem to be fully aware of what is going on on the international architectural scene. Likewise, they seem to be openminded and admire freely the work we ourselves admire.

“I have an impression that what they produce at home is entirely their own thing influenced primarily by their own conditions rather than by trying to follow trends. They seem to be honest in evaluating their own efforts; they do acknowledge, for instance, their shortcomings in artistic expression in their work, yet accept it as a necessary compromise imposed by the severity of the post-war conditions and demands. At present they feel that these demands are easing somewhat and that now is the time for them to attach more importance to the aspects of art in architecture. By this I mean the art of architecture itself, not the use of other art in buildings which they seem to have been doing all along.

“I think that in respect to our separate approaches to base our architectural and urban development on humanitarian principles, the cultural exchange between our two countries, specifically among architects and city planners, is of tremendous importance for it may open up a better understanding of how we all function. No amount of pictorial material can replace a direct exposure and experience gained from seeing a reality. I think that the short trip to St. Francis Square housing development gave them more understanding of our humanitarian principles than, for instance, the Japanese commercial center across the street, which is foreign to their ideology in its very concept.

“They feel that their main contribution to the international development of architecture lies in mass-production techniques to meet emergency demands and in city planning. Personally I feel that their shortcomings are in architectural education and in unbalanced subordination of the aspect of art—but then I feel the same about our own architecture,” Sedletzky concluded as he gave his impressions of the visit.

Of course, limited time was a constraint, especially in Houston and Washington, much to the regret of the hosts. Said Jack McGinty,

vice president of the Houston Chapter: “They were a delightful group—but time was too short. While worthwhile and enjoyable, there was no time for person-to-person conversation, and I didn’t learn as much as I had hoped about life and architecture in the USSR. The last-minute schedule changes and the resultant rush to accommodate left everyone here exhausted; I doubt if our guests really had a chance to know us or our city.”

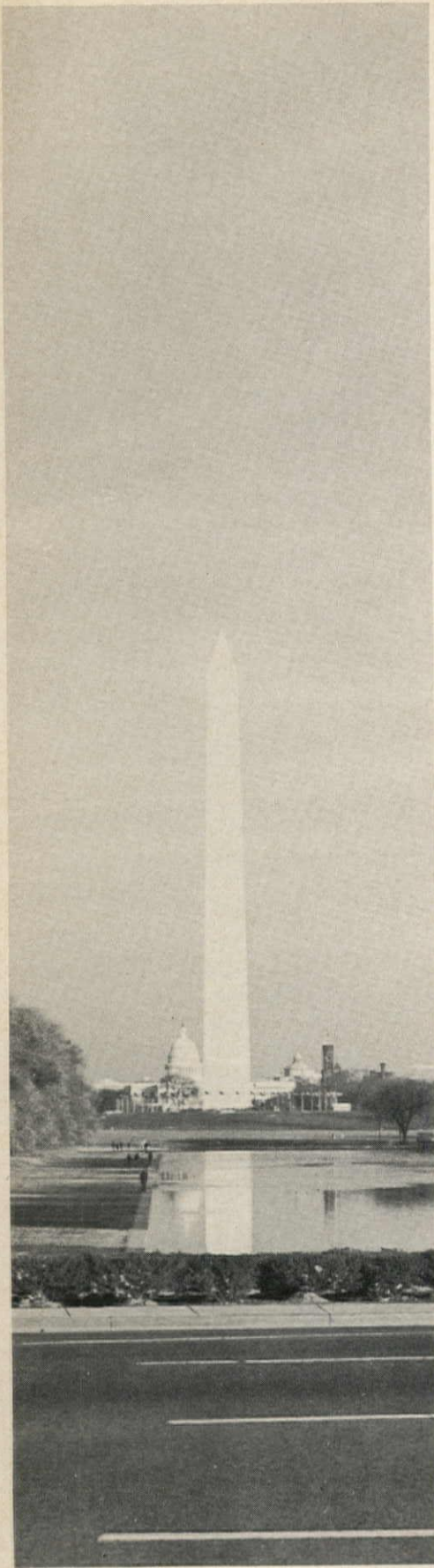
The visitors felt about Houston this way: “We really didn’t want to leave so soon!”

Even in cities where the length of the stay was not changed, it involved a lot of planning, cash outlay, time away from work for chapter members who participated, and paper- and telephone-work for executive directors and secretaries. Was it worth it?

While there seemed to be agreement between most of the chapters that the financial arrangements could have been worked out better, that the government and the national AIA should have assisted the chapters more since they are not budgeted for visits like these, there was complete consonance everywhere that such exchanges are highly desirable. Here are some reactions along the way:

“More could be gained if contacts could be continued,” said former Institute President George Kassabaum. “It seemed to me that this first meeting was a little guarded in that, perhaps, both sides were a little guilty in convincing the other that they were not all bad. We did not have a chance to talk technology nor urban design principles to any great degree but I gather they have many of the same problems that we have. This seems to be based on the desire for quantity rather than quality, and since this frequently seems to be the goal of our government programs, I don’t know why we have to repeat all of their mistakes.”

Bob Sturgis, vice president of the Boston Society of Architects: “It is rather difficult to figure out what I learned or what the Russians may have learned during their visit because of the language barrier. What I learned of the Soviet planning system was not much more than that it was structured as I might have structured it in my school days. The subtleties of management and im-



“Oh,  
Washington’s  
famous  
axis!”

plementation which I would now be interested in were well beyond our ability to communicate.

“I do not know yet whether the US method of development, financing and politicking which was revealed in part of its splendor at the Model Cities visit was of any interest to them whatever. Perhaps only to justify their own methods. To have gotten into any of the reasons why we put up with the inefficiencies of our system would involve an extensive political discussion of the most interesting sort.

“Other than that, I found our friends interesting as personalities and it was fun to speculate (it could be no more than that) as to what life might be like working in the bureaucracies each was in charge of. Frankly, my impression is that it would be rather good, better certainly than working with our FHA types. We here found the visit very stimulating.”

And Olmsted: “Vera and I indeed enjoyed our all too brief visit with them. Like all Russians whom we have met, they were charming and we both felt a depth of friendship which we will always remember. But the most significant thing we noticed was their unwillingness to ask questions. I asked Marcel (Sedletzky) if his group was more inquisitive than ours; he said *he* seemed to be asking all the questions. Also, I found it impossible to detect their reactions to the architecture while traveling with them, yet, comments and criticisms made at their press conference seemed quite specific.

“Iraida (Shishkina) in particular gave us great joy, especially when, with clenched fist outstretched, she ordered a Black Russian from the waiter at Vannessi’s.”

Commented Geisel: “They were extremely well informed about generals and particulars of the contemporary scene in American architecture—indefinitely better informed than their American counterparts are concerning the problems and achievements of Soviet architects. My favorite knowing comment came from Bruns in the midst of an explanation I was making about a large development

underway in Chicago: ‘Economics, ah, yes,—the Alpha and Omega of American building.’” (The price of a building or project, no matter how high, never impressed them. They only evaluated the result.)

Washington was a mere 24-hour stop, but it gave Institute Executive Vice President Bill Slayton the opportunity to exchange greetings and opinions with the four. “As we have traveled,” Mrs. Shishkina told him, “we have become more and more convinced that the two nations know little about each other and hope that the contact can be expanded, not only with more exchange visits but also with exchanges of literature and exhibitions.” Slayton heartily endorsed the suggestion.

The hours left to see the nation’s capital were few, and it was pouring down to boot when Payne, who knew Mrs. Shishkina from International Union of Architects meetings, and Mike Barker, Institute director of Urban Programs, took them for their last sightseeing fling. It sounds corny, no doubt, but the weather was a compliment to everyone’s feelings when the time came to see them off. McKittrick had expressed it for all of us: “My most lasting impression of their visit was the feeling that the traditional Soviet handshake-cum-bear hug was an entirely appropriate departing gesture, for we felt that these were warm, friendly, sincere people with whom we have much in common. It is a small planet we share!” BESS BALCHEN

Architectural credits: World Trade Center—Minoru Yamasaki & Associates; associated architects, Emery Roth & Sons, Vivian Beaumont Theater, Lincoln Center for the Performing Arts—Eero Saarinen; Skidmore, Owings & Merrill, Solomon R. Guggenheim Museum—Frank Lloyd Wright, Marina City—Bertrand Goldberg Associates, IBM Building, Chicago—Ludwig Mies van der Rohe and C. F. Murphy Associates, John Hancock Center, Chicago—Skidmore, Owings & Merrill, Powell Symphony Hall—restoration architects: Wedemeyer Cernik Corrubia Inc, John F. Kennedy Center for the Performing Arts—Edward Durell Stone & Associates, St. Francis Square—Marquis & Stoller, Golden Gateway Highrise Redevelopment—Wurster, Bernardi & Emmons, Inc. Oakland Museum—Kevin Roche, John Dinkeloo & Associates, Alley Theater—Ulrich Franzen, FAIA, Jones Hall for the Performing Arts—Caudill, Rowlett, Scott, Astrodome—Lloyd & Morgan (now Lloyd, Morgan & Jones) and Wilson, Morris, Crain & Anderson, Galleria complex and Houston School District Administration Building—Neuhaus & Taylor.



# LOOKING BEHIND THE IRON CURTAIN

by GEORGE VERNON RUSSELL, FAIA

**To a Westerner, Russia is no bowl of cherries but all the same there's a lot to be learned from Soviet planning and Soviet ways.**

Ten years ago contemplation of the results of our efforts—or lack of efforts—in architecture and city planning roused a desire in me to see what was going on behind the Iron Curtain in these fields. Maybe it was spurred off by the various derogatory news items concerning the failures of the Russians in creating a decent earthbound environment; it seemed to me that these were somehow not completely credible when compared to the news of their competence in other fields.

As a consequence, in 1961, at a time when information about motoring through Russia and her satellites was practically nonexistent, my wife and I made our first sortie by car into Soviet territory. We made a second and a third trip in 1965 and 1967. The time spans, therefore, gave us some basis for comparative analysis as well as opportunities for new vistas. A portion of our second trip, which took us to Uzbekistan and Kazakstan in Central Asia, was made by Aeroflot which provides effective, if not luxurious, coverage of the vast territory under Russian dominance. As a result of these junkets, I have come to the unhappy conclusion that some of the reports we read have been prepared by laymen even more staunchly Republican than I am, and that their observations are often singularly murky.

Dreary as many of the Soviets' developments are, I must state categorically that one finds no slums in the true sense of the word. Some old houses, yes, but in small sections which are doomed for early demolition. On our first trip to Moscow the few old wooden shacks we did see were better than thousands we have in Los Angeles. Four years later, they were gone and new structures, though drab, were completed or being built on the old sites. I subscribe to the criticism of the shoddiness of the construction of housing behind the Iron Curtain. However, during the intervals between our visits there has been a marked improvement in the quality of both design and construction.

Their government buildings, including the new Assembly Hall within the Kremlin walls, can lay claim neither to design greatness nor high quality even though first-class materials have been used—and abused—in their execution. Schools, though plentiful, are very rudimentary. Hospitals are only fair by our standards but good compared to those of much of Europe. New



Kalinin Avenue, one of Moscow's busiest with shops, restaurants and a cinema, links downtown with the highway to the west of the USSR.



A new residential complex on Maurice Thorez Avenue in Leningrad is in a forest park which the architects and builders strove to preserve. Ponds

ones are being constructed at a fast rate and, from an architectural point of view, compare favorably with many of ours.

In Russia, institutes of higher learning dot the country, all specializing in narrow segments of the arts, sciences, or crafts. Architecture has its own institute, as does building construction. After a few days I suspected that even the street sweepers—elderly women with short-handled brooms—had theirs.

The product of such specialization is hard to assay in such a short time. My own participation in education has led me to feel that even in the United States too much emphasis has been placed on the isolating slot of specialization which cannot help but remove us from the understanding of man's diverse needs and aspirations. But specialization seems to be the fate of the young Russian if the Moscow Institute of Architecture can be used as a criterion.

In 1961, as a guest of the Moscow Institute of Architecture, I was shown the design projects of top students in various years of their six-year training period. Their work was of the highest order, and creative ability was certainly apparent. Along with design competence, the students' grasp of the problems as a whole was on a high level; the drawings were comparable to the best work done in our universities before design became subordinate to dialogue.

During a discussion of educational methods in our respective countries, the dean pointed out that students begin specialization in various facets of architecture at the fourth-year level. Some enter the field of industrial facility design; others choose housing, hospitals, or public offices, etc.

There was every evidence that Russian architectural students were in the hands of capable and dedicated educators. I was particularly interested in their work in industrial architecture, which indicated excellent design in their hypothetical projects. Why then the disparity between the work of the students and the new architecture of the country?

In my opinion the following reasons might be cited (to an unfortunately high degree they might often contribute to the shaping of our own scene as well):

1. After six years of study in the architectural institute, a graduate is considered a full-fledged architect and is given responsibilities that are far beyond his experience and knowledge. Most thoughtful practitioners in the US believe that it takes several years of education and additional years of internship under qualified guidance to produce an architect capable of accepting the responsibility required by a major project (all Russian projects are enormous). It is obvious that the young Russian architect is not prepared for the task to which he is immediately exposed upon graduation even though he works under the direction of senior practitioners who, in their own postwar experience, have perhaps been more concerned with quantity than quality.
2. The removal of the architectural student from the diversity found on a university campus is, in my opinion, an educational misdemeanor. The products of architects who specialize have rarely been distinguished after their early efforts.
3. Although architects and engineers establish some contact with the rest of the world by professional journals, lectures and even visits to foreign countries, domestic propaganda tends to negate the value of this contact. I suspect that the history of Western trial and error in design and construction methods so far have gone largely unheeded.
4. The climate created by bureaucracy is not conducive to creative thought in Russia, or anywhere else for that matter.
5. The Russian obsession with quotas submerges any sense of quality. Only quantity is important and possible under the circumstances. This fact prevails not only during the design stages but carries over and becomes magnified during construction.
6. Certainly all architects must agree that creativity and quality construction can only flower with the blessings of an enlightened and understanding client. The Russian architects' client is the government of the USSR.

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**Mr. Russell**, who heads his own firm in Los Angeles, has taught at the University of Southern California and has been a visiting lecturer and critic in the US, in Mexico and in Europe. He has served twice as a member of the AIA International Relations Committee.



and recreation grounds are located between the apartment blocks.

We often read of the Communist housing shortage and hold it to be a glaring weakness in their system. Articles fail to note that whole cities were decimated during the last war and that thousands of men were lost during that interlude, and that no nation on earth is doing more about the housing shortage. Double occupancy is as completely repugnant to the Russians and people in the satellite countries as it is to us. Moreover, critics invariably fail to note that housing is being constructed at an unbelievable rate throughout the Soviet sphere of influence. Our own efforts to provide better housing for millions who live in depressingly crowded substandard housing seem puny by comparison.

Most metropolitan factories behind the Iron Curtain seem comparable to those in our older industrial districts—neither better nor worse—and plant maintenance standards appear to be about equal to those found in our run-of-the-mill installations. Decentralized industry, observed from a distance as we went by car, train or plane, seemed of a vastly higher order.

Progress behind the Iron Curtain in the use of greenbelts, satellite plants correlated to housing and inclusion of employee amenities suggests their awareness of the mistakes we, on the other hand, seem to be repeating as time goes on.

Much has been said of the inadequacy of Soviet building per se but criticism of the overall urban picture has been less publicized. Their streets fare better than ours. This is due in part to the following influences:

1. Building projects are usually so large that they often cover at least a block, thereby giving architectural cohesion and repose to the major elements of a street.
2. The appreciation of landscaping is everywhere apparent. Trees provide a unifying and concealing base for their close-at-hand architectural excesses.
3. Signs are used but they are not dominating features. There are reasons for this subordination: lack of competition, lack of much to offer in the way of consumer goods, yes; but I choose to believe that an abundance of civic pride and acknowledgement that the visual elements of a community belong to everybody also contribute to their refreshing scarcity.

4. As in most European cities, street patterns are the result of medieval needs. Consequently, squares, crescents and long-established curves impart ever-changing character in contrast to the monotony of the rectilinear pattern. Their contemporary planning has recognized the value of such relief in their use of these attractive design devices.

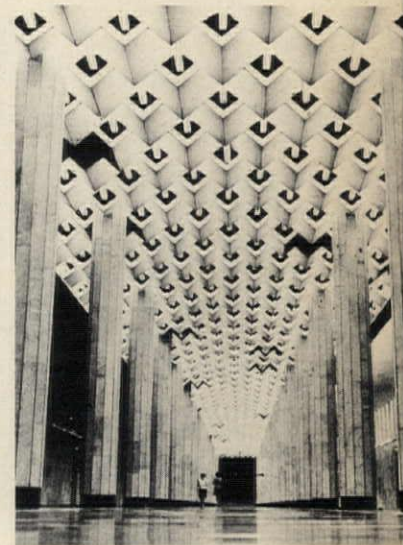
5. Monuments, however bad, add zest, interest and meaning to the urban scene.

6. To date, the motor car has not entirely hogged the thoroughfare, although the increase in traffic is alarming—and significant. Future bouts with freeway systems will be forestalled to some degree by the excellent transport systems that are collateral parts of the extension of most cities. Public transport has been developed to a commendable state.

7. Power poles with their wire-rats nests are happily absent. Underground distribution of electrical services generally prevails throughout Iron Curtain cities.

And as the street goes, so goes the city. Stimulated interest and pride must surely in the end be conducive to high quality production in many fields.

Two striking features of the Iron Curtain rural roadsides are the planting of trees and the pleasing absence of billboards. Trees have been planted along hundreds of miles of the road from Brest Litovsk to Moscow—not just one row on each side but two



The Zirmunai housing project in Vilnius, which won a state prize for its architects in 1968, has screens to shield drying laundry (left). The Baku subway system has recently opened a new station at Ulduz (right).

and in some places three! The species vary every few kilometers and further variety is gained by extensive reforested areas along the roadside.

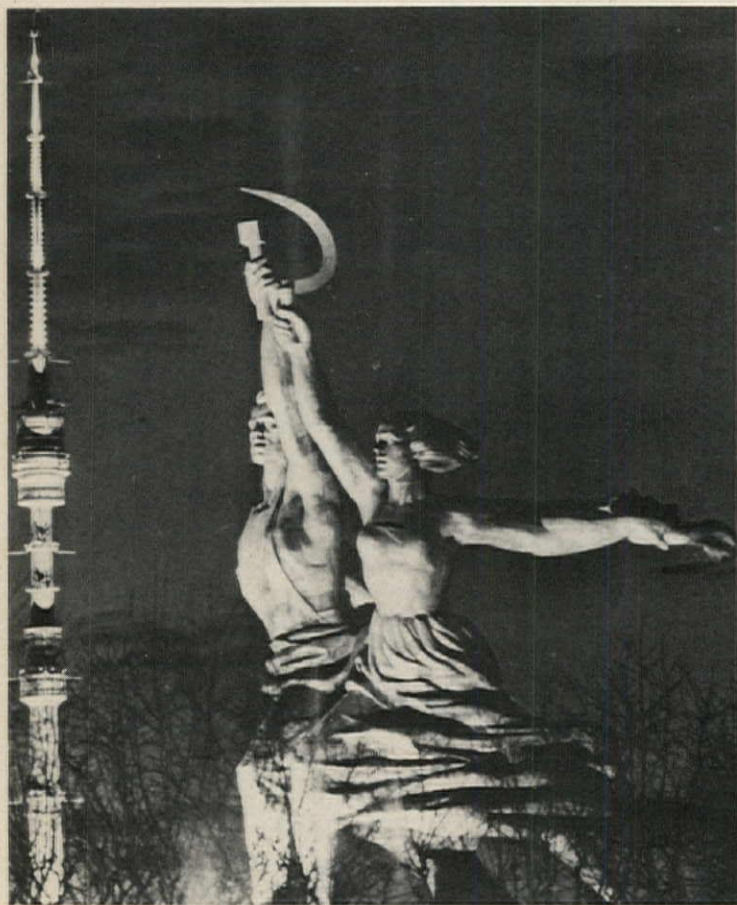
Not so magnificent are the huge standardized casts of Lenin or the monuments to culture often consisting of an heroic sized statue of a buxom wench in evening dress with a violin tucked under her chin, vigorously fiddling in the midst of nowhere. All are freshly painted with aluminum, and dreadfully ugly. This is typical of the state of the representational arts in the provinces, crude and realistic, but appreciated, no doubt, by the peasant and the visitor from primitive lands.

Russia's long and quite good main highways only go through major cities. Small towns and villages are bypassed and one misses the fun of exploring the intimate local scene. Now and then a few log houses clustered around a school and a rural party headquarters relieve the monotony of the drive, but the pastoral countryside is not generally interesting nor does it in any way suggest agricultural abundance. Large industrial installa-

tions are often located some distance from the highway in an otherwise primitive landscape; these suggest that an appreciable decentralization of industry has taken place.

There is less evidence of such a policy in other Iron Curtain countries, and one is generally struck by the well-tended beauties of delightful rural landscapes. None of the Communist countries is so far bothered with freeway problems but the growth of traffic between our three visits suggests that the day of reckoning is not far away. In Russia's central city areas handsome, clean and well-lit pedestrian underpasses are provided—and must be used—at all major intersections. They are not defaced by obscene witticisms and drawings by depraved kooks, nor are they paved with a chewing gum mosaic.

Future bouts with freeway systems will be forestalled to some degree by the excellent transport systems that are collateral parts of the extension of most cities. Public transport has been developed to a very commendable state and the ornate pomposity of the Moscow Metro stations has long been a source of amuse-



Worker and collective farm woman, by Vera Mukhina, stands in Moscow near the 537-meter high Ostankino TV tower designed by N. Nikitine.

ment to us. But the fact remains that the rapidly extending systems are now constructing stations that are simple, attractive and efficient. Their equipment is about 50 years ahead of our New York horrors and, from all current indications, a hundred years ahead of the one vaguely contemplated for Los Angeles. Bus systems have received less publicity than the subways, but vehicles throughout the Communist world are excellently designed, far reaching and clean, and they run on frequent schedules.

On one occasion we took the Danube Express from Bucharest to Kiev and its excellence made one wonder what happened to the good old days when trains were trains in the USA.

Until recently modern design was taboo in the physical plant of Communist schools and institutions of higher learning but all stops are now out, and some of the new institutions are

first rate. Commercial office buildings are not provided even for foreign traders. All negotiations take place in the vast bureaucratic treadmills that can usually be identified by the fancy curtains that bedeck their windows.

Architecturally important churches have been preserved and even extensively and skillfully restored by the government; this is in line with Russia's high regard for its historical heritage. Services are still held in other churches whose architectural distinction is on a lower level. The restoration and maintenance costs for these are paid for by their small but persistent parish members.

Most of the hotels have great ringing public spaces, designed in the pompous Stalinesque style. These are devoid of floor coverings and furniture except for a few straight chairs tastelessly placed and appearing as though they might be wired for use to exact the death penalty. Upper-floor halls sometimes run for a full block without relief and serve dingy rooms by the dozens.

For instance, the bleakness of Minsk's best hotel is an echo of the city's architectural character. Minsk's lack of feeling for human scale and poorly designed and constructed buildings could be due to incompetence on the part of designers and builders, but I suspect that much of its shortcomings must be attributed not only to the scarcities that confronted the architects within an area completely devastated during World War II but also to the hurry in which their plans had to be realized. Minsk, like Warsaw, was rebuilt practically from scratch but the Minsk cityscape suffers greatly by comparison to that of Warsaw. By the way, it was interesting to see the Minsk hotel's beauty parlor in full swing at 10 p.m. All of its facilities were in use by women undergoing the rigors of facials, permanent waves and other rehabilitative measures. Is this evidence of an impending social and political upheaval? How long will these women be content to tamp hot asphalt into place as members of regional road repair gangs?

The older hostelrys in the other "dependencies" and even in Russia often have a shabby elegance which affords a pleasant respite to the sterile cornyness of most postwar efforts. However, they are clean and one literally or figuratively never feels the presence of vermin in Iron Curtain accommodations.

Some resort hotels such as those on the Black Sea at Varna, Bulgaria, and Svete Stefan on the Dalmatian Coast are of a different stripe and one would be hard pressed to find better or more tasteful accommodations than those of the latter in the US. The sea water is clean, the air is clear and surrounding natural beauties have not been buried under signs.

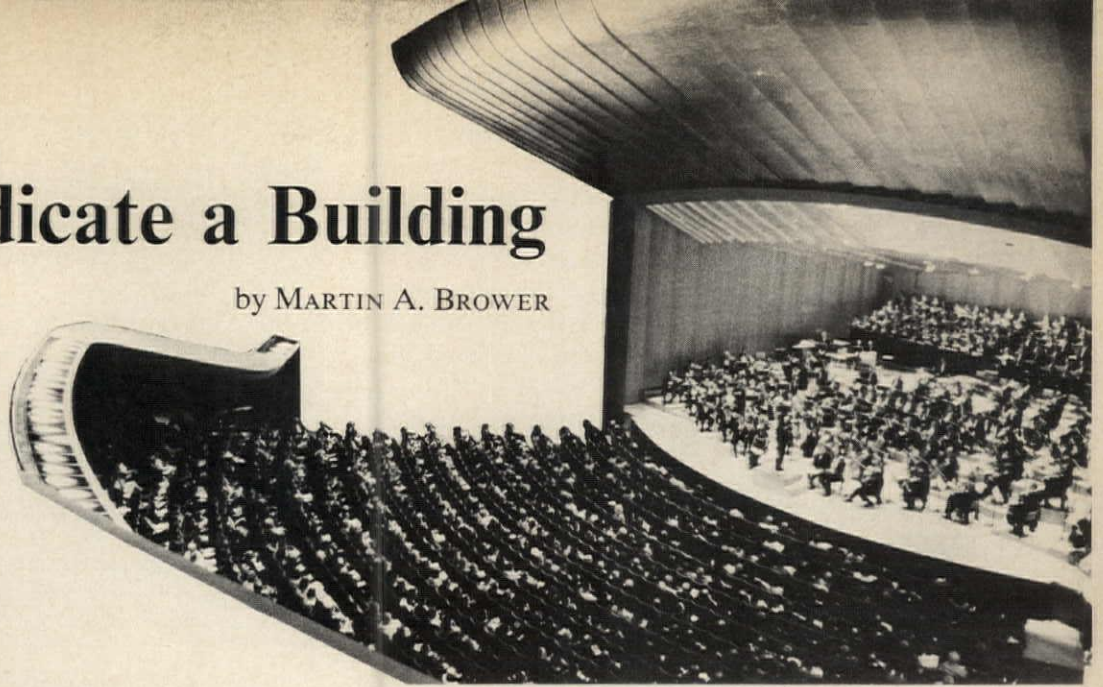
One could go on for hours about numerous facets of the Communist scene: the splendor of the Bolshoi Theater, the delight provided by one-ring circuses, the shabbiness of the nonetheless beautiful Prague, the refreshing scarcity of gas stations; about failing lintels, leaky bathrooms, grim accommodations, elevators which only take you up, etc., etc.

All of our three visits have been interesting and in many instances delightful and exciting. In the relatively short intervals between our visits, improvement in the Iron Curtain urban scene has been significant. An unbiased report on the progress of the American scene over a like period would, I'm afraid, be another kettle of fish.

In mentioning the frequent examples of ineptitude on the part of those who fashion Communist environment, one should also note and strongly underline the decline of craftsmanship and effort on the part of those who make up the vast majority of our own design and construction forces. Doubt and antagonism are often risked by expressing the feeling that their not-quite-so-bad-as-we-think and not-quite-so-good-as-they-think environment could change to be better-than-ours in a short time. □

# How to Dedicate a Building

by MARTIN A. BROWER



**Most clients become involved in only one, at the most a few, new building projects in their lifetimes. For the architect, of course, new buildings are his business and therefore the client will frequently call upon him for help in dedicating his new quarters.**

The moment the guests gave the final round of applause following the formal dedication of the Hartford National Bank in Hartford, Connecticut, the doors of the building were opened for tours. But instead of reciting just routine information about building spaces, well-trained and smartly uniformed guides also explained how the bank uses these spaces. By the completion of the tour, the guests were duly impressed by the excellence of the building and by the operations and services of the banking institution as well.

A building dedication can be one of the most useful means of bringing a completed project, as well as client and architect, to the public's attention. For the client, nothing is as illustrative of the organization's progress, stability, strength and concern for its employees and for its community as a well-conceived new building. The same is true for the architect. A well-executed project glowingly illustrates his firm's abilities to meet the needs of the client and the community.

It only makes good sense, then, for the architect to assist the client when it comes to dedicating a building rather than shying away from the responsibility. By providing this additional service, he also gets a chance to further his own public image.

The client wants to show off his building for numerous reasons, among them to illustrate:

- a management philosophy geared toward a functional, efficient, flexible and consolidated operation (especially attractive to stockholders)
- a desire to provide the best possible facilities for meeting, working with and serving customers, clients and citizens
- a concern for providing an attractive and healthy working environment for employees
- an interest in the immediate and long-term welfare of the community through a handsome new architectural environment and by the sizable financial investment.

A dedication is an excellent opportunity to invite the neighbors to meet the organization's officials. It also may signal the point in time when the mass media will present the building—and thereby the client and the architect—to a wide audience.

Finally, but perhaps primarily, is the leasing program, depending on the type of the building. During the dedication the project can be shown, quarters of tenants already occupying space can be pointed out, and the fact that the project has been com-

pleted can be publicized. Many prospective tenants wait until such time before signing a lease.

For the architect, a good way of obtaining new commissions is to expose prospective clients to a successful and successfully completed project. While this is best done in person, it can also result from publicity generated by a dedication. In addition, such exposure helps build the architect's stature in the community and may also help attract talented new employees as well as retaining his present staff.

Beyond the press, the client is generally interested in reaching present customers and/or clients; former and potential customers and/or clients; present and potential stockholders; present and potential employees; associates of the firm; suppliers of goods and services; civic and other leaders; governmental officials; industry groups, associations and competitors; financiers; people from allied industries; the general community; and potential tenants.

The architect could reach potential clients; existing and former clients; people who might be involved in the selection or recommendation of an architectural firm; building industry leaders; the general business community; the general civic and governmental community; present and potential employees; and the general public.

The client will frequently schedule the dedication when the building is done. "Didn't the contractor say that would be mid-October?" The architect knows that there can be many a delay in a construction project, and that even when the construction is essentially finished and the building is occupied, it is generally not ready to show off. Final cleaning, decoration and landscaping can lag, and the building does not look its best without these essentials. Once the arrangements have been made and invitations sent out, the dedication schedule is difficult—if not impossible—to change.

*Time.* There is no need to rush the dedication. It can occur even months after the building has been occupied. While the planning of a dedication should certainly be carefully done, the ceremony itself can usually be arranged in a short time.

*Duration.* The event can be as simple as the taking of a picture with or without a few words said to a few guests, or as complex as a full-day, full-week or full-month program of activities. The decision depends on the objectives and on the budget.

*Dignity.* The ceremony should reflect the client and the public he wishes to reach. Everyone is looking for something different, and while a happening such as a rock festival, a horse show or some other way-out function might be fine, being different just

for the sake of being different does not generally accomplish the objectives of the program. If the client is dignified, and most are, let dignity reign.

**Location.** The architect can frequently suggest the best location within the building. Weather permitting, an outdoor dedication on a plaza, front steps or other area, even the top deck of a parking structure, is beautiful. Indoors, if there is an auditorium of sufficient size this is obviously the best. If the lobby is not large enough, an unfinished but decorated floor works well. In one case, the unfurnished recovery room of a hospital was used.

**Equipment.** Depending on the location and the number of guests, a public address system and chairs for the audience should be on hand. Too much cannot be said for obtaining a quality public address system and an operator. An outdoor ceremony usually requires two microphones and two speakers.

**Audience.** Depending on the type and scope of the project, a selectively invited audience of several hundred might be on hand. The general public might also be invited to an outdoor dedication of a major private or a public building.

**Program.** The program itself generally includes remarks by the top official or officials of the client's firm and may be by the mayor, the governor or the president of the chamber of commerce—and by the architect.

Too frequently, the object of the dedication—the building—is forgotten except for a brief mention. There is no one better qualified than the architect to describe the structure and its design features. If he takes part in the planning of the dedication, it is easy for him to suggest this, especially before the program has been firmly scheduled.

Depending on the client, the community and the project, clergymen might be involved for an invocation and benediction and a band might be on hand to supply music. A high school, college or service band is frequently honored to perform.

A noted guest speaker has its pros and cons. If he is important, he will certainly draw a larger audience and press turnout. However, the resulting publicity for the building might be lost in reports of what the speaker said.

A suggested program would be to have the vice president in charge of the building (or city administrator, hospital administrator or major client contact, depending on the building) act as master of ceremonies; have the president welcome the guests and tell them about the company; have the architect describe the building; the president of the chamber of commerce tell of the importance of the project to the community; and let the mayor or other elected official wind it up (he will generally praise the company, the building and the city).

The program should obviously not be too long, the definition of too long varying, but a half-hour seems adequate. A good program in a comfortable auditorium might last an hour; if the audience stands, it should be limited to 15 or 20 minutes.

**Printed programs.** These help the guests follow the action, keep track of the procedures and remember who is who.

**Invitations.** These should go out about two weeks in advance. Night letter telegrams are effective although somewhat more costly than printed invitations.

**Photographer.** One should be retained to take pictures of the ceremony and special guests for mementos, for the president to send to guests as a follow-up gesture, and to service the press.

**Day and Time.** A weekday is best except perhaps for a public building. No one likes to give up part of Saturday. The morning is generally best for newspaper and television coverage.

**Gimmicks.** Although nothing more formal than saying "I dedicate this building . . ." is required, a gimmick can be used to



The Los Angeles Philharmonic Orchestra plays a stirring number to illustrate the acoustics of the Dorothy Chandler Pavilion of the Los Angeles Music Center on its dedication. The architect takes a bow from his seat in the beam of a spotlight (preceding page). To illustrate that the Pauley Pavilion, University of California at Los Angeles, is more than a basket ball arena, the dedication is held during commencement exercises. The architect, in academic robe, marches in with the honored guests (top). Dedication of the Equitable Life Insurance Company Building in Los Angeles takes place on an upper level plaza (center). To dedicate a branch of a bank with a western team, a stage coach brings the guests to the site (bottom). All projects by Welton Becket & Associates.

make a good photograph for the newspapers. Ribbon cutting has been overdone but something that ties in with the organization, its products or services can be used, or a sculpture or cornerstone can be unveiled. The time capsule has not been overdone in most parts of the country and is especially impressive if meaningful items are inserted.

*Gifts.* Everyone likes a gift and a memento of the occasion can be of lasting promotional value, especially if it ties in with the organization or the building. Gift houses can suggest various items to the client or can have such made, for instance, a likeness of the building.

*Tours.* Following the dedication many guests will want to—and all should be encouraged to—tour the building. Most new building complexes have sufficient interest so that a complete program of tours can be planned. A tour for employees and their families prior to the dedication gives this important group a feeling of being on the inside.

The tour following the dedication can be only a starter; others can continue through dedication week and for weeks after for the general public and for special groups.

*Receptions.* The dedication provides an opportunity for a simple reception or for a series of receptions. Many firms have found great success in having a week-long series of tours followed by cocktail and buffet receptions, with special guest lists for each evening. Another type of reception is a formal sit-down dinner with the guests limited to leading business, civic and governmental dignitaries. Caterers can work magic with unoccupied floors or other spaces.

*Special programs.* An even more ambitious dedication program is to use the building dedication to sponsor an educational program for a particular organization or for that organization's industry or profession. As an example, an insurance company might sponsor a week-long or month-long series of seminars on medicine, accident prevention, crime prevention, etc., or a firm whose product makes an important contribution to the cityscape might sponsor a program concentrating on urban improvement, planned development or city beautification. Seminars or a lecture series along any of these lines, especially with guest panelists or speakers, make excellent subject matter for the press—local, national or trade—and make for a truly memorable dedication.

*Press.* A new building is news in any city, especially if it is brought to the attention of the press. Depending on how important it is in its community, the project might make news both at the time of completion and at the time of dedication. A number of short pieces might also be possible: the rush to complete the building, the final interior touches, the landscaping and the move-in.

A good way to interest the press in the new structure is to give a press preview before the dedication. This can be done by inviting the press to tour the building with the architect, either as a group or individually. It is up to the architect and his client to make the tour interesting by pointing out how the building differs from other buildings or by indicating its special functions. Then, when an article is submitted at the time of dedication, the press will be more receptive.

The best way to obtain coverage of a project, regardless of its importance, is to have press materials prepared by a professional public relations person and to submit this to the news media. It is important for the architect to stay close to the preparation of client-prepared materials if he wishes to be included and

to have the project well described. He can do this by supplying the basic materials or even by handling the entire preparation, with professional help. A basic press kit for a building dedication should include:

1. An overall press release on the building, describing in news or feature style the program and the solution, the use of the building, its location, its size, its materials and its special features.
2. One or more good 8x10 black and white photographs.
3. A brief, basic fact sheet, listing the bare facts of owner, architect, size, materials, etc.
4. A concept piece written and bylined by the architect.
5. A brief background on the client and on the architectural firm.

For mailing outside of the immediate community, only the news release and a photograph with a caption will actually serve a purpose. The mailing list should include newspapers in nearby cities, building and construction periodicals locally, regionally and nationally, as well as local, regional and national trade publications concerned with the client's business. An article on a bank will reach more potential clients in a banking publication than it will in a general or construction publication. Public relations professionals maintain lists of these publications, or the local library might be able to help. The client will have a list of the publications in his field, although he might wish to service these himself.

A building worth publicizing is worth having photographed by a professional architectural photographer using a 4x5 camera. For architectural publications, the photographs should be submitted with the release, a concept statement and presentation plans. Television can be handled in the same manner as the newspapers. If the project is significant, the newsmen can be invited for advance TV photography, or a cameraman can be retained to shoot brief footage which can be submitted to the television newsroom with an accompanying script. Likewise, the dedication ceremony can be covered by a hired news photographer and the footage and a script delivered to the television stations. Specialized service of this type is available in some cities.

To gain press coverage of the ceremony itself, a brief memo to editors is normally sent in place of an invitation. This informs about when and where the event will take place and should be sent out a few days prior to it. A follow-up telephone call can be made the day before or the morning of the event. When the press representatives arrive, press materials should immediately be handed to each.

The press will generally be anxious to return to the office to prepare the material for use, and therefore will not be able to remain for refreshments. Press kits should be sent right away to press representatives who were unable to attend.

If the project is of major significance in the city, the local newspapers might do a special section or supplement on the project when it is dedicated. This is done when the newspaper believes that enough advertising might be developed to support the supplement. It might be done on the newspaper's own initiative or on the initiative of the client, especially if he will take a large ad. The architect will frequently be approached by the unknowing advertising solicitor to participate, but he cannot ethically do this, of course. However, both the client and the newspaper are usually pressed for copy to fill the news columns around the ads, and the architect can help here by supplying articles on the features of the project.

By offering his consultation services for the dedication well in advance, the architect can help his client plan a dedication which will put the frosting on the architectural cake, and at the same time give his own firm some positive exposure. □

**Mr. Brower** is director of public relations for Welton Becket & Associates, headquartered in Los Angeles and with offices in four other cities.



*Mirror Pool by George E. Kessler*



# NATURE AT PLAY

by E. F. CORWIN, AIA



"It should be entirely possible to design fountains that continue to provide satisfying civic adornment throughout the months of freezing weather," said John F. Fitchen III, AIA, in "Why Not Fountains in Winter?" (see AIA JOURNAL, Dec. '70.)

In Kansas City, we have taken advantage of the skills of Mother Nature as a sculptress by allowing her to use the water in the fountains during the winter to create such formations of ice as may be her pleasure.

This program was embarked upon six years ago when we turned our fountains on to herald the early coming of spring. Frank Vaydik had just arrived in Kansas City as the new director of the Park Department (now the Parks and Recreation Department) and had issued the order to turn the fountains on. To Vaydik's surprise and to the dismay of the staff, spring kept us waiting after all and instead a late freeze, moving swiftly in one night, covered the fountains with thick ice. But they still ran, water spewing forth from all the fountains that had been turned on.

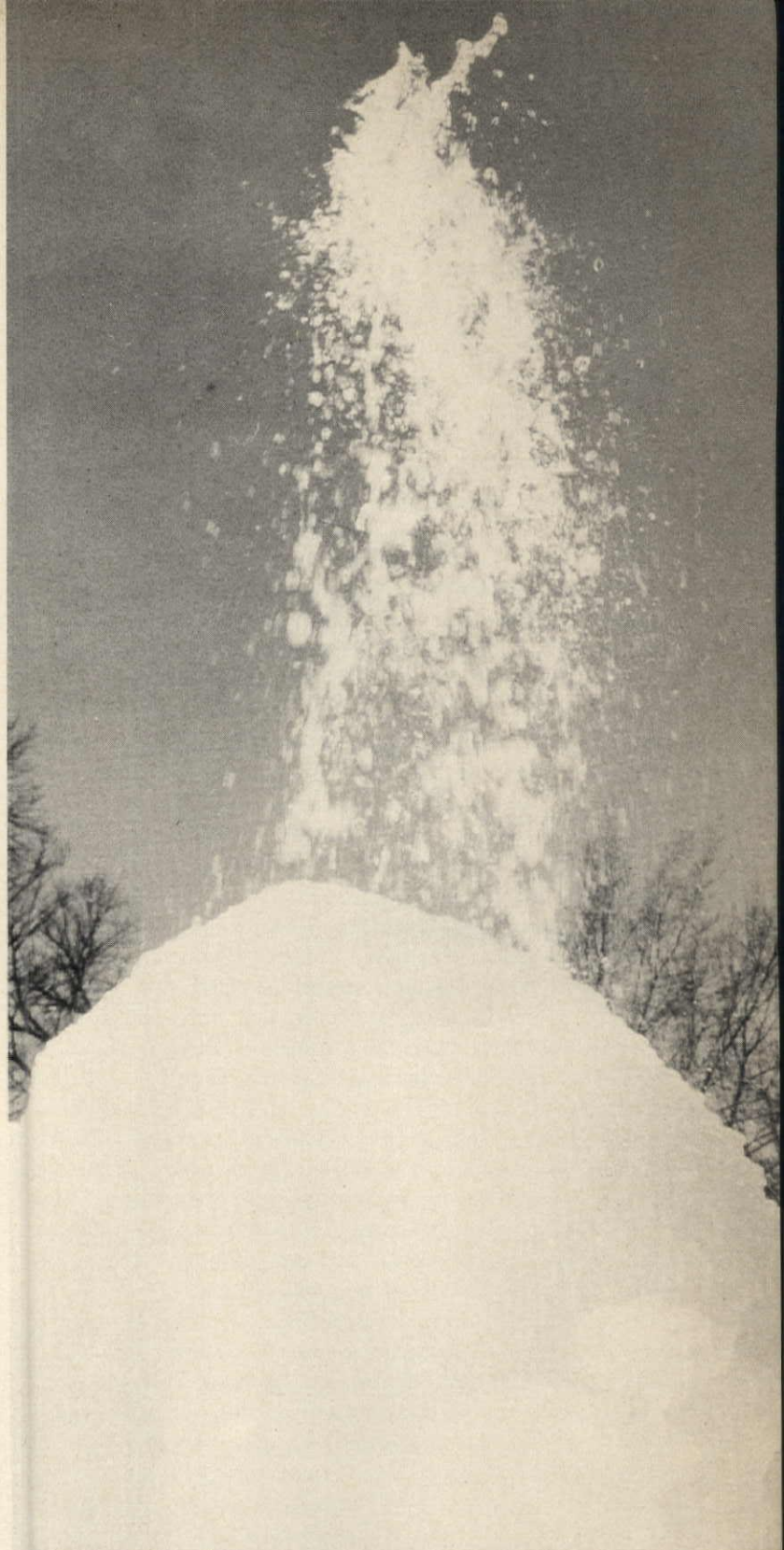
When the thaw occurred after a few days, the fountains were inspected and very little damage was found, none at all to the pieces of valuable sculpture in many of them. The plumbing had suffered some, but even in those cases there was no major damage.

It has been the department's policy since that first worrisome but fruitful experience to leave a few selected fountains on all year around. We still have a certain amount of damage but it is generally confined to the plumbing, mainly to the supports of the fountain equipment. We are learning to solve these problems which occur primarily as a result of the weight of the ice mass. This varies each winter due to changes in wind, thaws, the amount of sun the fountains receive at particular times of day and also an occasional bent spray nozzle.

During those months of the year when the water surface is not frozen, the fountains are used for activities such as sailing, casting and occasional "swimming," although children are discouraged from this latter activity. When the fountains are frozen, some can be used for skating but more than that, they provide a playground for climbing, sliding and other fun on the ice formations.

The ever-changing beauty provided by the ice is a source of pleasure and amazement for thousands of Kansas Citians every day. □

Mr. Corwin is with the Parks and Recreation Department in Kansas City, Missouri.



*Sailboat Pool by W. I. Ayres*



# HIGHRISE LIVING: *HOW SAFE?*

by VILMAR K. BOSE

**In a crisis, a tall building may well be compared to a coal mine when it comes to ease of evacuation. For instance, our usual methods of fire fighting—get the occupants out and the firemen in—is in every way obsolete. Here are some reflections on the problem; and some suggestions as well how to provide wholesome environments for living and working in our new giants.**

Recently a certain underfinanced government regulatory agency was characterized as "operating not only in low gear but with inadequate fuel and, in many respects, traveling down a bumpy side road, far outdistanced by the . . . industry zooming down the superhighway."

The highrise building industry can easily be read into this metaphoric statement, outpacing as it is the regulations needed to provide some fundamental human values for its occupants. Not only are our tall buildings proliferating almost everywhere across the continent; they are also going higher: 1,350 feet (World Trade Center); 1,450 feet (Sears Roebuck), 1,650 feet (proposed in Toronto).

Yet, we know that tall buildings—these architectural, socio/economic, technical inventions—embody a number of serious problems and that in dealing with them, we may still be chugging down bumpy side roads, often feeling that we cannot catch up.

Even excluding many complexities of the populated environment—megalopolis planning, esthetics and scale—we have sufficient complexities left in exploring the limited question of how to provide life support in our highrises. However, we cannot narrow down our concern merely to the demands on fire technology, no matter how important they are. Somewhere between the too-broad approach and the too-narrow, we are still asking "What?" and "Who?" What are our problems and our resources? Who is affected and who will act?

A year ago this writer put together a tentative commentary on highrise buildings and life safety for circulation within the Ellerbe Architects firm. The response from our key architectural people probably typifies enlightened reaction across the nation: a wholesome endorsement of the concern for highrise problems, but uncertainty as to what route to take. During this year we have not seen enough progress but there are areas of encouragement:

- Press coverage of fire reports has dramatized the need for better life support systems in high buildings, and many sectors of society have been motivated to help solve the problems.

- New technical studies have advanced our understanding of what we are talking about. Studies of smoke movement, evacuation and other aspects of the highrise by the National Research Council of Canada are notable examples of this sort of helpful inquiry.

- The construction, manufacturing and insurance industries have proposed some promising changes in methods and materials used in these structures and are doing valuable research.

- It is recognized that an interdisciplinary undertaking is imperative in conceiving answers to our needs. This was highlighted in the General Services Administration's panels on "Firesafety in High-Rise Buildings" last year.

- The need for political implementation of corrective measures is increasingly recognized. Projects such as the Chicago Commit-

tee on High Rise Buildings illustrate political involvement. And of course, the architectural and related professions are seeking solutions to the problems of highrise living—and surviving.

These heartening signs are nonetheless only a rudimentary beginning of what could be an important part of "creating the human environment." At worst, this could be just another abortion of concern and good intentions, for there *are* serious obstacles to the growth and maturity of our efforts. First, the hurdles of our prevailing social/personal values, priorities and motivations; second, our present chaotic ways of doing things. These impediments are reflected in all the comments that follow.

## What's a Highrise?

The definition of a highrise building arbitrarily given at the opening of the GSA fire-safety panels at the Airlie House—a workable definition because it is functional rather than quantitative—was this: A highrise is a building in which emergency evacuation is not practical and in which fire must be fought internally because of the height. Its usual characteristics are that parts of it are beyond reach of fire department aerial equipment; it poses a potential for significant stack effect; and it requires unreasonable evacuation time.

This definition shows up the fact that the archaic response to active hazards—get the occupants out and the firemen in—is obsolete in the highrise, at least as its application has been known in the past. It also pinpoints the shaftlike form of these buildings as a special feature with distinct implications for the lives of the occupants. Of course the highrise has other qualities which are important to take into the equation even though they are not peculiar to the tall building.

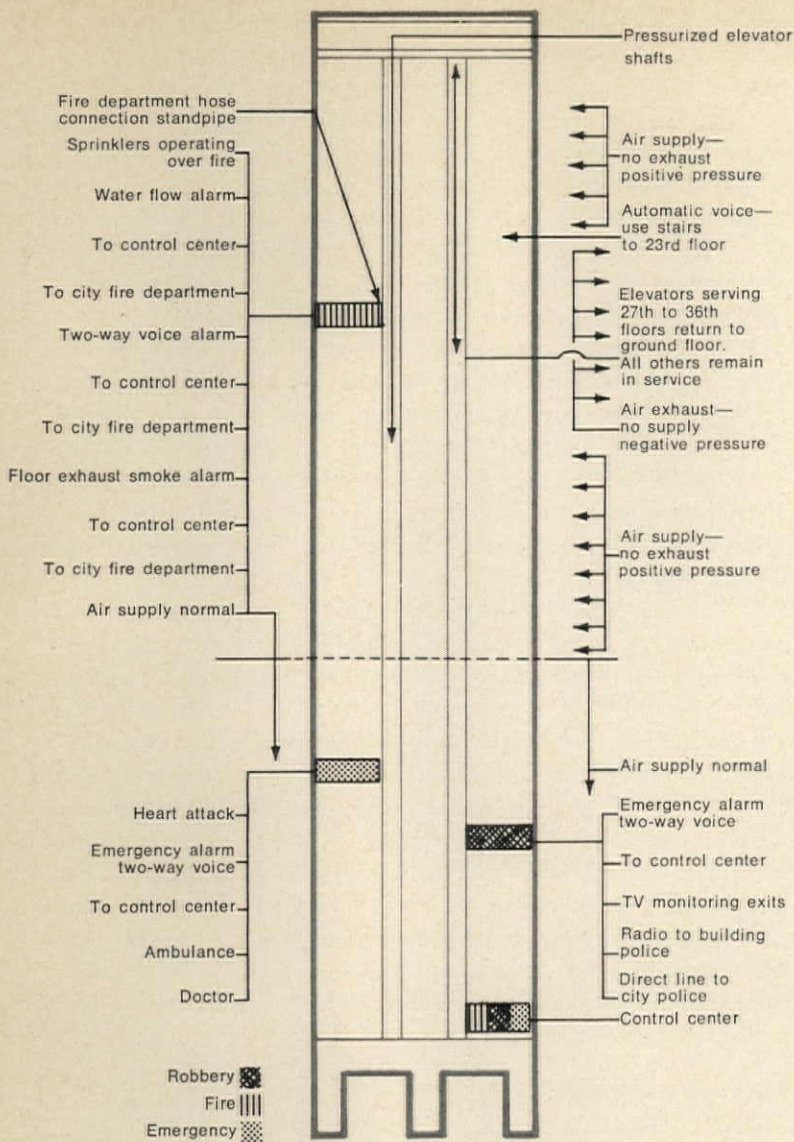
Predominantly highrise buildings are steel framed with a variety of systems, from well-known post and lintel forms to diagonal bracing, vertical trussing, bridge design, lattices and plates, concrete cores and the like. They are designed for load-bearing, horizontal separations, wind resistance, seismic shock and climatic changes. Yet we do not know enough about their structural reactions to the fires—small or large. These primary strength elements are nominally noncombustible and meet most current building code criteria. They may be damaged by intense heat and require fire protection, but we know that the applied coverings for fire protection are often misapplied in actual construction and further impaired after the building is in use.

These protective coverings are costly but frequently faulty. Sprayed-on materials have been attacked recently for (in field conditions) not achieving the desired results.

We don't attempt here to evaluate specific protective methods but rather to call attention to the end result deficiencies in the fire protection of steel. Both the steel and the fireproofing industries have responded with high priority programs intended to improve their materials and techniques. If they succeed, it will come down to the critical matters of design, construction and field supervision of fireproofing structural frames.

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Mr. Bose is life safety coordinator in the firm of Ellerbe Architects/Engineers/Planners, St. Paul.



An emergency communication system for a highrise building suggested by the Public Building Service, General Services Administration.

The exteriors, while in some buildings still heavy materials, are largely lightweight and glossy curtain walls which, especially when detailed with flimsy pretenses at exterior fire stopping, may counteract efforts to keep fires from spreading vertically.

We worry a lot about what goes into these high structures in the form of partitions, finishes, furnishings, work materials and even wearing apparel. The similarity between a fire-resistant structure and a furnace, cogently stated by a fire-fighter recently, is all the more evident when we stoke it with these portable fuels only to await ignition. Within a very loose scope, some of these imported fuels are publicly regulated for combustibility and flame-spread, but it is improbable that regulations can go very far and still leave buildings usable. Equally hard to regulate are the potential sources of ignition of these fuels.

Highrise occupants live between almost insurmountable vertical and horizontal barriers and their elevators are as important for their normal movement as automobiles are on the streets. In serious emergencies or catastrophies elevator systems in many existing installations have been of tragically little value, sometimes even instruments of fatalities. This appears to be attributable to the architectural design and the applications of control devices rather than to the state of the technology of elevators. The buildings' planners and the elevator industry both need to do intensive research in traffic and safety. The extreme dependency

on machine transportation, when footways are almost interminable, brings to mind an analogy between the highrise and a coal mine that is not too far fetched.

Highrises are not totally self-contained but many are "consumer communities" like a large school, a hospital, a ship or, for that matter, a jail. They provide heating, cooling, air, light, transportation and sanitation for their occupants and visitors. Often they offer such community services as food, entertainment and recreation, infirmaries, stores of all kinds, parking, etc., virtually everything that a town or neighborhood has except the freeways and what's left of nature. The occupants are in fact dependent upon their system of systems for their life support and well-being.

### A Highrise Riot?

Highrise tenants are now only latent communities, but in other segments of our society we have seen people welded together by serious common problems which are ignored too long by society. It is, after all, the highrise occupants who are directly affected by present hazards and it may well be necessary for them to riot. The word as used here is in its root meaning: to roar.

People who work or live in highrises spend a large part of their lives there. In industrial plants safety measures have been demanded for a long time by management, by government and by employees. This is stressed again in the intent of the Occupational Safety and Health Act of 1970. A roar of demands from highrise occupants is probably not what we expect but we had best be ready for the surprise.

To a significant extent any progress in improving highrise living conditions will depend on a more sensitive response by code and building officials. The chaotic crisis-to-crisis, go-no-go lines of public regulation can hardly be touched on here. Perhaps what we are looking for most is the elimination of the law and order mentality and its replacement with competent evaluation of systems designed to perform. We are hampered by accumulations of fragmentary requirements and prohibitions, increasingly costly and of dubious benefit. Often they are adopted without due study and sometimes, after owners have gone to great expense to comply with them, they are suddenly dropped as futile. To fulfill our highrise needs we must get rid of the dusty spiderwebs of codes spun from one panic to the next and be allowed to make rational choices among a variety of alternative systems.

It may sound superfluous to ask: "Aren't we all designing systems?" The term has become a cliché! If a system is an "arrangement of things so related as to form a whole," if it includes truly accomplishing the purpose of systems, we must re-examine many of them. It was not without reason that the commissioner of GSA's Public Buildings Service, Arthur F. Sampson, in orienting the Airlie House panels appealed for "a total safety system for the total building." Egress which can become inaccessible when it's needed or which doesn't acknowledge the physical limitations of people isn't a system. And, because we have many systems relating to life support, it is obvious that they must interact properly. We have got the systems idea, but the total system for the total building is yet to be fully comprehended.

### A Redirection of Research?

In all our work we are dependent upon technological research. The studies we can lay our hands on, however, are often too theoretical and do not go into practical applications; often they are not supported by regulatory bodies. To meet code requirements for fire resistance or endurance, we refer to tests and listings of specific materials and assemblies of materials, and are enjoined to make no interpolations. The tests are done under

conditions too detailed and restrictive to meet a variety of design criteria. Some perplex us in other ways. What can we do, for example, with a ceiling/roof assembly tested without thermal insulation?

The establishment of an effective national institute of building sciences is long overdue; we are decades behind some other countries in this respect. Such an agency, publicly financed yet with the independence of a quasi-public corporation, is needed to concentrate or interrelate research efforts. More knowledge of fire ignition, propagation and suppression, of the full characteristics of building materials and their potentials for generating obscuring smoke or toxic gases, and of the human physiology and psychology relating to reactions to environment, exposure to hazards and to mobility would provide just a beginning of what we need to know. All the research results should then be coordinated on a nationwide basis.

Can we reevaluate traditional life safety systems? We have already begun this much-needed reevaluation. We are having a new look at fire extinguishment, compartmentation, communications and the movement of people in highrises. And the high cost of construction has forced us to seek "trade-offs" which can hopefully cut redundancy without lessening life safety and, if possible, can greatly increase it.

Advocates of sprinkler systems stress the importance of suppressing fires at inception and are often willing to see most other protective systems traded off for complete sprinkler systems. Such trade-offs would presumably help pay for the sprinkler installations. There is an impressive record of performance to substantiate this fire suppression approach and many fire marshals support it. We understand that the owners of two major highrises now under construction have voluntarily decided on total sprinkler systems for their projects. But even its proponents admit that the present systems and standards were developed for industrial use and that innovations are necessary to fit them to life safety goals and to highrise buildings. We are watching with interest the thinking and research discussed by Richard M. Patton in "The Life Safety System" (*Fire Journal*, Jan. '71), a package system with less than conventional water demand and an automatic signal directly to the fire department. If this can be tested out and standards agreed upon, it could well result in both economy and effectiveness. Perhaps we need what could be called "automatic first aid systems." We unquestionably need sustained inventive work in this approach; besides, we need to ponder the question, "How far can we go with trade-offs before the risk is too high?" Can we afford to give up compartmentation of buildings and restrictions on combustibility and flame spread?

#### **How Much Compartmentation?**

Many floor spaces are honeycombed with smoke and fire partitions as one regulatory agency after another adds to the list of spaces to be contained. Excessive partitioning is costly and what's equally distressing is that much of it is not built to specifications and probably won't do the job of containing smoke or fire. Many get punched full of holes and leaks during the life of the building. Perhaps we should have fewer compartments, build them tighter and inspect them routinely—all easier to do if there are only a few essential ones. In highrise buildings we could rationalize compartmentation for these three purposes:

- to provide refuge for occupants who cannot exit speedily
- to make the building safe for fire fighters when automatic suppression methods fail or the fire fighting needs to be finished
- to confine a fire to one story only.

This seems to urge us to concentrate on vertical compart-

mentation. Horizontal separation will still be needed for areas of heavy combustible loading and unusually hazardous operations, which normally shouldn't be there anyway.

We do not agree with the view that occupants should be given unlimited latitude in what they bring in to a high building or that high combustible loading or flame spread rates should be tolerated. Admittedly, restriction of contents is difficult, the same as it is for the airlines. But is it essential that any and all materials developed be freely used with indifference to their inherent hazards? Reasonable controls are needed and can be enforced.

With or without automatic extinguishing systems we will need help from municipal fire companies. We must not be deluded by the term "automatic extinguishing" as we once were by the term "fireproof building." Occupants will have to be moved from the threatened part of the high building into a safe area; fire fighters must get to a safe area near the fire (often the floor below) and move into the evacuated area. Movements of both groups must be coordinated, each clear of the other.

The GSA panel report has suggested some plausible and practical ways to do this. These include getting occupants to designated floors of refuge, establishing the main entrance elevator lobby as a "beachhead" completely under the command of the fire department; placing elevators at the disposal of the fire companies. In addition, a voice communication signal system should direct the occupants and reassure them with a quick briefing on the nature and location of the fire.

It might be advisable to store fire fighting equipment near the elevators on many or all floors. This will all require the retraining of fire fighters, affording them close familiarity with the building. It will also necessitate that many architectural/engineering decisions be made in cooperation with owners and public fire prevention bureaus.

#### **Down with Highrises?**

Highrise buildings open many questions about the nature and behavior of people in these vertical settings. The movement of people via stairs to the ground level is known to be drawn-out exodus. But how many people might not make it at all? How many flights can people negotiate to find refuge? In the majority of highrise hospitals the answer is none. Studies of stair egress in high buildings show how slow it is even for normally ambulatory people and that such evacuation cannot be relied on usually.

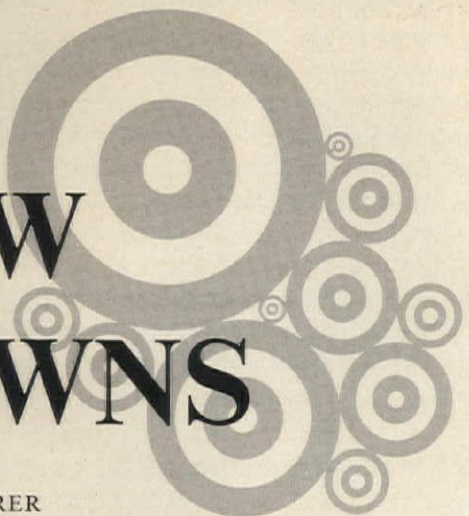
Is there available information about the typical range of mobility of occupants of highrise office buildings, apartments (many for the elderly) and hospitals? How many people have respiratory impairments, muscular problems, coronary and vascular diseases, poor vision and hearing? These degenerative diseases are not limited to the aged and retired; many working people suffer the same limitations.

There has recently been a renewed surge of adoptions of codes to promote barrier-free architecture. It would be relevant and important if the voluntary agencies seeking to foster the interests of the handicapped would give some special attention to those who live in our highrise environments.

It may be heresy to ask if highrise buildings are necessary. But are they? One glib answer is that we must continue to build them, but this does not satisfy some critical analysts. We hope debates over highrise buildings will be intensified.

If the highrise trend were soon to reach a point of diminishing returns, the problems and needs discussed here would still be with us until we come up with better alternatives. Meanwhile, at least another generation will occupy them and will deserve and probably demand the utmost of safety and well-being. □

# THOUGHTS ON NEW TOWNS



by NEIL MAURER

**Some 20 architects, developers, federal officials and educators gathered recently to speak and conduct workshops at the AIA-sponsored New Communities Conference, which was attended by some 350 persons. Here are some of the speakers' remarks.**

"New towns are not a universal savior—they aren't going to solve all the urban problems of the United States—but they will solve some of them." Summing up the feelings of many of the speakers at the New Communities Conference in Washington, D.C., was Benjamin H. Cunningham Jr., AIA, vice president and director of design for Jonathan Development Corporation, who also

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What we need to do is to begin, and make changes as we go along.

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maintained that new towns are critical to the future development of the country. He strongly urged architects to be directly involved in their design and planning.

He was a little impatient with the philosophy which asks us to "gnash our teeth and not do anything because we cannot solve all the problems before we start." Added Cunningham: "What we need to do is to begin, and make changes as we go along." Get your disciplines represented at the management level of companies which develop new towns, Cunningham told design professionals. "You cannot leave design and esthetics to businessmen."

Cunningham was among the participants who spoke and conducted workshops at the conference held last November. William L. Slayton, HON. AIA, executive vice president of The American Institute of Architects, explained that the conference aimed at pinpointing who is the client in the development of new communities and at urging the architect to play an expanded role in their development.

The AIA has been working hard in promoting legislation that will develop that client, Slayton said. "We are not just talking about Columbias but also about neighborhoods. The architect ought to be designing the community itself," he added.

The rumblings of a major thrust in the next decade of both public and private development of new towns, spurred by the apparent financial success of Columbia, Maryland, and the loan

and loan guarantee provisions of the 1970 Urban Growth and New Community Development Act recently released by the Department of Housing and Urban Development were the primary reasons behind the AIA's Urban Design Committee's decision to hold the conference. During the three days it lasted, participants examined the process of city building from numerous angles: as a solution to urban congestion and suburban formlessness; as a financial investment; as an incredibly complex design problem. They looked at new towns in town, out of town and at the edge of town. And they weighed the advantages and liabilities of federal assistance and private financing.

Following are excerpts from addresses presented to the entire conference as well as portions of the prepared papers discussed in small workshop sessions.

Samuel Jackson, General Assistant Secretary, HUD: "Quietly and with little fanfare, in the past several years we have reached a new stage of urban development in the United States. About a quarter of a century after the initiation of the postwar British new towns, we have finally launched our own program stamped with a unique American character. In the 1950s we graduated into better planned subdivisions, shopping centers and industrial parks. In the 1960s we introduced some pilot new communities sponsored by private enterprise without government support which were well planned, but did not reach the fullest range of Americans by race and income. In the 1970s we have launched a national program of fully balanced new communities throughout the US.

"Unfortunately, the visions of Henry Wright and Clarence Stein, the creators of Radburn, New Jersey, and other new towns in the 1920s and '30s, did not become the predominant vision of American society. Instead, we built Los Angeles. We watched New York spread across Long Island. The industry made great strides in home building but there was little attention to community building."

Carl Feiss, FAIA, professor of architecture and urban studies, University of Florida: (Referring to Young at Salt Lake City, Rouse at Columbia, Simon at Reston and others): "These have all been stimulating individuals but not part of a movement. Maybe when you add Irvine, Jonathan and the dozen or more large-scale community projects in various stages of development at the present time, you could say that there now is something that resembles a national movement in the direction of development of new town supplements to older urban areas, spin-offs into urbanizing regions. If it is a movement, it is as unplanned, as undirected and as unscheduled as all other forms of American

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We ought to point up the fact that the government still has no national urban growth policy.

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urbanization. In many instances, unfortunately, it is equally unprincipled. We have to think of development incentives and controls in a real estate world that have been traditionally more interested in incentives than in public services. Therefore, to face reality, since the basic industry in land has not regulated itself, it has been and will be in the public interest to require perpetual stronger public controls."

Alan M. Voorhees, president, Alan M. Voorhees & Associates, Inc.: "The first thing I would like to suggest in planning for new communities is doing away with transportation requirements in the classical sense and trying to develop a design so there is more walking. I know this is rather a subjective evaluation on

my part, but I do feel that you could have a more desirable residential community with increased walking patterns or if not walking, a greater use of the bicycle. I think these kinds of transportation fit in more with the desired amenities for residential areas. Therefore, I think it very important to try to reduce automobile traffic and even bus traffic to the extent possible, by proper design of the area. It is quite clear from the many interviews we have conducted in Reston that the social/recreation trips can be cut. The need for transportation facilities can be cut at least in half by conveniently linking together residential areas, social and cultural activities and recreational facilities such as swimming pools. . . . The planning of new towns must start with the pedestrian, and all other transportation elements must fit in with that framework."

James McKellar, urban designer, David Crane & Associates: "The most important piece of physical design that this country will undertake in the next 30 years is the creation of new residential living environments for between 75 and 100 million people, inside and beyond presently urbanized areas. Perhaps the greatest challenge in terms of solving the urban crisis will be to provide the appropriate context that will give new environments both value and meaning as part of a national urban growth policy. New communities in and of themselves will not provide solutions to the housing problem unless they are part of a larger solution to a whole host of interrelated issues which constitute the vast financial and social malaise which now engulfs our metropolitan areas. But even as a small piece of our response to the urban growth challenge, the concept of new communities does represent the first real opportunity for broad and vigorous public action in urban design and a more courageous attitude toward direct public intervention in the development process itself."

Lloyd Rodwin, head, and Lawrence Susskind, assistant professor of the Department of Urban Studies and Planning, Massachusetts Institute of Technology: "Finally, because the idea of new communities is becoming fashionable and national officials

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**If there is a new town movement, it is as unplanned, as undirected and as unscheduled as all other forms of American urbanization.**

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now intone many of the more euphonious phrases about what such communities are all about, we ought to point up the fact that the government still has no national urban growth policy. We applaud—mildly to be sure—the current draft regulations accompanying HUD's 1970 Urban Growth and New Community Development Act, for the regulations outline a host of sensible criteria that will be taken into account in selecting projects for governmental assistance. . . . But this facade of knowledgeable and comprehensive regulations is hardly adequate if the government has no sense of direction. Regulations in these circumstances are like the sky: They may cover everything and touch nothing. . . . What is needed to change this situation is an unrelenting focus on the relationships between the reorganization of our inner cities and the organization of growth in our outer areas; between the slowing down of growth in our largest metropolitan areas and the spurring of growth in a few key portions of our lagging regions."

Arthur H. Keyes Jr., FAIA, partner, Keyes, Lethbridge & Condon: "Almost all planned new communities built in the last 75 years have borrowed to some extent from the social and

marketing concepts of Ebenezer Howard's Garden City movement. . . . Other searchers for new forms of communities such as Le Corbusier did not recognize the full impact of the automobile and so failed to realize that the parklike surroundings for his tall structures would become vast parking lots. Frank Lloyd Wright in his plan for Broadacre City proposed an acre of ground for every family, thereby spreading people even farther apart than our present pattern of sprawl and multiplying the transportation and ecological problems. Linear cities such as Doxiadis' scheme Dynapolis, making the automobile highway the spine of urban development, and Jellicoe's Motopia, in which roads are on the roofs of a grid pattern of structures, are elaborations of what has already happened to a lesser degree to many of our American cities. Basically, these urban forms are all anticity concepts which result, first, from ignoring the problems of moving about

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**In the 1970s we have launched a national program of fully balanced new communities throughout the United States.**

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and then confusing the necessity of moving people and goods with the desire to move automobiles; and second, from assuming that because modern technology has put at our disposal the means of completely replacing direct human communication, this elimination is, therefore, desirable and inevitable."

Herbert M. Franklin, executive associate, the National Urban Coalition: "*Fortune* magazine, in a recent article on what it chose to call the new towns movement, listed a number of large corporations entering this form of real estate development. They enter it at a time when consumerism is in new vogue. If Westinghouse, Gulf Oil, Florida Gas, Chrysler, Ford, Sears Roebuck, Marshall Field, Aetna Life, Illinois Central and other large corporations are going to build the urban environment of tomorrow, will they be building for communities or for consumers?"

"Perhaps my message today under these circumstances is simply: The client is the community. But that may be too facile.

"Indeed, the word 'community' is itself overworked and somewhat misleading. I dare say most of the people attending this conference did not participate in the planning of the environment in which they find themselves living. . . . So at the outset I would like to recognize that there are natural and perhaps unavoidable tensions or conflicts between the client/developer and the community. There is no static resolution of these tensions and they will call for continuous adjustment. They reflect the familiar issues that enliven community development generally. How do we reconcile the private profit motive with social objectives? How do we reconcile regional perspectives with local interests? How do we balance the needs of long-term planning with those of democracy, and the need for rational urbanization with the legitimate expectations of stability and tradition? How do we mesh the lifestyles of the old-timers and the new arrivals?"

George Romney, Secretary of the Department of Housing and Urban Development: "You are going to see greater movement in this new community area by this Administration because it is committed to the new community approach."

The proceedings of the conference will be published by the AIA and are expected to be available in mid-1972. □

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Mr. Maurer is assistant director, Department of Public Relations, at AIA headquarters.



**Most professions have easy access to a central place of information where a wide range of services are also readily available. Why not such a facility for the design professions as well, to make them more effective?**

Design practice was once simple; it is now complex. Once there were relatively few factors to be considered in design; now there are many. Once the client had simple needs; now the institutional client has numerous and elaborate requirements. Once construction and construction funding were uncomplicated; now they require special and elaborate knowledge. Once design required few skills; now it requires many.

Wherever the designer now turns, he finds himself confronted with complexity upon complexity. Unfortunately, the typical practitioner confronts that complexity with the same skills and with the same institutional resources that he once used to confront the problems of a simpler time. These skills and resources are not adequate. If they are to deal with today's and tomorrow's problems, designers and the design professions need a comprehensive set of new resources.

Many of these new resources are already available. Development is underway in computer-aided design, factor analysis, programming techniques, automated specifications, gaming, simulation methods and in many techniques unheard of 10 or 20 years ago. Unfortunately, the development of such techniques produces a high overhead cost. It is indeed the exceptional practitioner who has acquired many of these new skills. The large design firm suffers under their cost when it must; the small or medium-sized firm usually does without.

The situation is serious. Because the usual design practitioner is without access to tools that could make his entire work more effective, he has seen his influence on the environment diminish. He has often become precious in his interests, turning his highest creative energies to irrelevant form-making. He might better have applied those energies and that creativity where they could have done the greatest good: to his own design institutions.

Let us face the fact that we are in a professional crisis. Indeed we have been in a

## An Institution for the Design Professions

by JOHN W. WADE, AIA

developing crisis state for many years, but we have hidden that fact from our awareness. Slowly, however, recognition has come that the design professions have exercised less influence, have become trivial and have come to exist as luxuries. We have seen the advent of the package dealer, able to provide services beyond the skill of the practitioner. We have seen a large group of design-school graduates go elsewhere than into practice in an effort to achieve greater influence. We have seen many practitioners accept imposed standards rather than set high standards for others.

Let us face the fact that in this quiet crisis professional design practice must change or finally cease to have any substantial influence.

### The Necessity

Having recognized that a need exists for new techniques and resources, we are still a long way from making design practice effective. We must find some way to make those techniques and resources available to all design practitioners. If individual practitioners cannot afford to develop their resources, it is possible that a service institution could develop those resources and make them available on a shared basis to the profession.

We all know of institutions which make possible a sharing and a distributive use of

expensive or only intermittently needed but essential resources. A library is such an institution; it provides for the communal ownership of many books and documents, any one of which is available for use by individual community members when the occasion requires. More pertinently, a hospital is another, providing for medical practitioners a range of services, information sources and facilities that make modern medical practice possible. Try to imagine where the medical practitioner and profession would be without the hospital and its resources.

Better still, try to imagine how the design professions have got by without such an equivalent institution. Better even than that, say exactly how well the design professions have accomplished their work without these resources. If you answered, "Very badly, indeed!" you would be exactly right.

When the realization comes that practitioners in the several design professions are very poorly served by any institution—whether a central information source, paraprofessional services, expensive and essential equipment, consultants, or interns—there is little wonder that these professions have often been ineffective.

It is time we undertook the development of a hospital-like institution to serve the desperate needs of the design professions!

In proposing the development of a new service institution, I do so with full awareness that such an institution can bring an enormous acceleration of change in design education, in design practice and in design effectiveness. Such an increased rate of change is very desirable. It would produce an "up" or "out" effect; practitioners able to adapt would have their efforts amplified, those unable to would have their influence reduced.

### The Components

Let us describe what such a service institution for the design professions might contain. I have already suggested possibilities by naming some of the things that the design professions do not have. Let us state them positively and in some detail. Several components of the service institution might be:

*A specialist, or consulting, staff:* A first essential requirement for the improvement of practice is access to persons holding spe-

cial knowledge and possessing special skills in the following areas: the several design disciplines, the engineering fields, the earth sciences, the social sciences, the life sciences, computer programming and information retrieval.

**An information center:** Access to information and recorded data in each of the above mentioned consulting areas is essential. In addition to general information resources, there would need to be data on user requirements, a library of computer programs, specific programs for automated contract documents production, product data and evaluations of designed products.

**Various research groups:** In addition to raw data accumulation, there will need to be data analysis. Continuing studies will need to be undertaken in the following areas: design theory, visual communication processes, man/environment relations, building technologies, systems development and computer-aided design. There will also need to be special task groups developed from time to time.

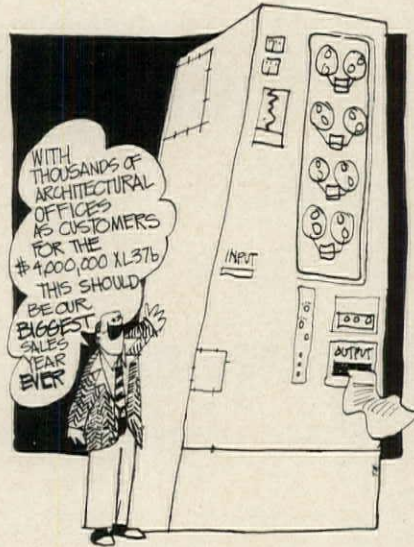
**Equipment and facilities:** The full range of equipment and facilities that will be required is difficult to estimate. It might include, but not be limited to: computer facilities with graphic input/output, a gaming laboratory, presentation and visual communication studios, product-testing equipment, environmental and perceptual simulation laboratories and publication facilities.

**A service staff:** There will need to be operating staff members to assist design practitioners in the use of the institution's facilities. Special services that might be provided are: contract documents production, community design services and extension services for the continuing education of design practitioners.

**An intern program:** An important part of the institution's program would be the use of recent design graduates in an intern program. Graduate students could assist in research. Post-graduate interns could assist in each of the service categories described above. Throughout their experience, interns could be under observation for responsible behavior qualifying them for licensing. Interns would acquire an intimate knowledge of the broad range of services and resources in the institution.

**The Scope**

The purpose of the service institution and of its components will be to accumulate information in usable form, to discover new facts through research, to teach, and to provide service to practitioners and the public, all in such a way that these several activities reinforce each other. Where today professional education, apprenticeship, licensing, practice and continuing professional education are all disconnected and unrelated, the development of such a service institution as I propose could bring these several parts into a single integrated whole. Students, interns, teachers, practitioners, consultants and researchers would have the service institution as a focal point and unifying agent in their professional lives and careers.



By comparing such a service institution to a hospital, I have implied that it would exist at the local or at the regional scale. That would be necessary in order for practitioners to have easy access to its services. At the same time, many of the resources of such a service institution would depend upon conformance with national (possibly international) standards. Many of its resources would depend on information that was nationally distributed. For those reasons a service institution for the design professions could function best as a local or regional center that was tied by communication links to other centers and to a national information system. I am proposing the development of a first service center at the regional scale which could become a model for the development of other similar centers and the beginning point for a national information system.

**The Benefits**

If I have suggested the need for a new service institution and if I have suggested what that institution might contain, I have not said how it can help to overcome the severe problems that exist in the design professions. I will state six major problems in this field; after each I will describe how that problem can be reduced by the development of the proposed service institution:

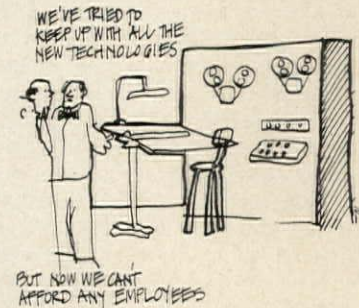
**1. The inappropriate subdivisions of the design fields:** Among the several professions there have been numerous jurisdictional dis-

putes. The architect has been concerned with designing buildings for human habitation. The engineer has been concerned with structures, the landscape architect with site planning, and the planner with abstract considerations of city layout. Each has often failed to consider factors which the other professions emphasized when every factor has been important.

**Problem reduction:** All professionals need better information and access to good equipment. By supplying those needs, a service institution would begin to bridge the gap between professions. An adequate consulting staff would provide insight into the contribution that each profession can make. The proposed research groups could develop a continuing dialogue with practitioners. Interns being educated in the service institution would receive an exposure to all of the professions and their problems.

**2. Nonpertinent educational processes:** Engineers have been educated to be concerned primarily with *how*. By contrast, architects learned to worry about *why* and *what* but were taught a value system that based choice upon contemporary appearance and function (or more often upon the appearance of function). Architectural education has emphasized generalist knowledge and verbal/visual relationships but these emphases have often prevented an equally valid emphasis upon specialization. There has also been a failure to select students by motivation and maturity, to specify performance requirements for graduates from professional schools, and to define the minimal body of fact and technique requisite for practice.

**Problem reduction:** Undoubtedly design education can gain by the development of a science and research orientation among faculties of design schools. By associating a school with the kind of service and research institution that I have described, science-based decision methods can be more easily taught. Since a part of the research activity that I have described would be in developing bodies of basic fact and essential technique in decisions, better definition of minimal



student performance could be achieved. The very existence of such an institution would impart to its student participants a high sense of professionalism and a real awareness of the complexity in design decision. Entrance upon study within such an institution would require a high level of motivation by the student.

**3. Inadequate licensing procedures:** Exami-

**Mr. Wade** is dean of the School of Architecture, University of Wisconsin-Milwaukee. The illustrations are by Tim McGinty.





nations for licensing have often had so little to do with professional practice that the typical candidate has conducted his life in two separate channels, one connected with practice and one with his examinations. There are current efforts to revise licensing examinations but until there is recognition of the essential difference between testing for com-



petence and evaluating for responsibility (the urgent inclination to use competence), those revisions will not improve licensing procedures.

**Problem reduction:** Measuring competence does little to protect public health, safety, or welfare. Responsibility is a more appropriate measure, but this cannot be tested, it can only be observed. By the development of an intern program within the proposed institution, the licensure candidate could be observed for an extended period under a controlled practice condition. He could be observed in the use of his own competence and in efforts to secure competence from others. By such observation could we insure adequate licensing.

**4. Failures in recording, evaluating and communicating:** The design professions have not been able to achieve a very high degree of standardization in their work; it is typical of much design practice *not* to develop or record a tested vocabulary of relationships that can be applied to many projects. The design professions are at a stage comparable to that of 19th century medicine when a student learned what he could as an apprentice, discovered what he could by experience and told no one what he had learned. Such a system was unsuccessful in medical practice and was changed; it is also unsuccessful in design practice.

**Problem reduction:** By the establishment of an information center within the proposed institution, the design professions could have adequate data on environmental conditions, individual and institutional behavior and user requirements. There could be adequate information on materials, products, techniques and processes. There could be a library of design problems, their solutions and evaluations of solution success. If this data

were analyzed and made accessible to designers, many of the failures that we have noted could be overcome. If a publication program circularized current results and if design manuals which described the best solutions to standard problems were published, then adequate communication within the professions might be achieved.

**5. Inefficiencies in the design process:** Although design and invention processes by their nature are not highly ordered procedures, they do have definable parts that are capable of organization and improvement. Inefficiencies have been caused by lack of information about a particular problem type, the lack of careful goal statements, the lack of organized review of already accomplished solutions, failure of orderly procedure, unfamiliarity with available systems, products or materials, and tedious and costly methods of visual communication.

**Problem reduction:** Many inefficiencies would be overcome by the data collection process. Others would be overcome as design theory was developed. Research into computer-aided design could make effective programs available. The development of standard component vocabularies for construction could lead to automated production of contract documents. Finally, a research group could undertake the simplification of visual representation and make accessible the best available equipment for visual simulation.

**6. Irrationality in materials and methods:** Because the entire construction process consists of the interaction of many independent insti-

attempt to influence companies, regulatory agencies, clients and designers toward a broader cooperation.

By all these methods would the different parts of the proposed institution begin to overcome the difficulties in professional practice. This new institution could by its very existence bring about extraordinary change in design education, in design practice, in the designed environment and thereby in the lives of us all.

### The Initiation

The School of Architecture at the University of Wisconsin-Milwaukee has begun to work toward the development of such an institution. The school will be joined and supported in this effort by the College of Applied Science and Engineering and by other appropriate departments of the university.

We have begun to see three necessary directions of thrust: 1) planning the institutional structure and determining its relationship to other existing institutions; 2) beginning to offer services to practitioners on a limited basis in order to test the market for service and the ability of such an institution to offer services, and 3) beginning the basic research and compilation of information that can begin to make the institution's services effective.

We have received encouragement with regard to a planning grant; we have hopes of an initial capitalization to permit the offer of services; we have begun to develop a group of proposals for research and compilation of information that will make such services



### TONIGHT ON CHANNEL 12

THE PRESTIGE OF THE MEDICAL PROFESSION IS PARTLY DEPENDENT ON THE INSTITUTIONAL SUPPORT THAT IT HAS!

tutions, there are many contradictions and antagonisms. Disjunctions occur within a total process that should be highly coordinated. Major difficulties are the lack of fit between various construction components, the lack of performance data for components, inequalities in building codes, arbitrariness in zoning laws, complexities in labor jurisdictions, and the inability to control quantity, quality, cost and scheduling, simultaneously.

**Problem reduction:** A beginning could be made in achieving better cooperation among the several independent institutions. The proposed institution could assist in the coordination of manufactured components; it could



### TONIGHT ON CHANNEL 4

THE RELATIVE LACK OF PRESTIGE OF THE DESIGN PROFESSIONS IS PARTLY DEPENDENT ON THE INSTITUTIONAL SUPPORT THEY DON'T HAVE!

effective. We hope that within a short period of time we can have a modest service institution in operation.

Clearly, substantial funding will be required. Unfortunately, it is not so clear whether the design professions can commit support to the development of the information system and the service centers that this paper proposes. It is my fervent hope that they can, and that our efforts at Milwaukee can be the beginning of a larger effort that will re-establish the strong effectiveness of those professions. Within our troubled environments the effectiveness of these professions is badly needed. □



# 'ARCHITECTURE 1980'

**The fall conference of the Great Lake Region of the Association of Student Chapters of The American Institute of Architects took place at Kent State University, Kent, Ohio. Report and photographs are by Neil Maurer, assistant director of the Department of Public Relations at AIA headquarters.**

Most of the students at Kent State "instant construction site" were baffled. In the space of four hours during the "Architecture 1980" conference, their Commons was transformed into a panorama of geodesic domes, tensegrity structures and a huge undulating plastic "pillow."

Students going to and from classes came to inspect the domes of cardboard boxes, yard sticks and beer cans, the quonset huts of plastic and cardboard, a silk tent and the enormous plastic bag, held up with nothing but air, which appeared out of the trucks and jeeps of the students attending the conference. Nearly 200 of them had come from 10 of the 13 schools in the region to hear Buckminster Fuller speak and to participate in an instant environment competition, the point of which was to house the most number of people using the least weight.

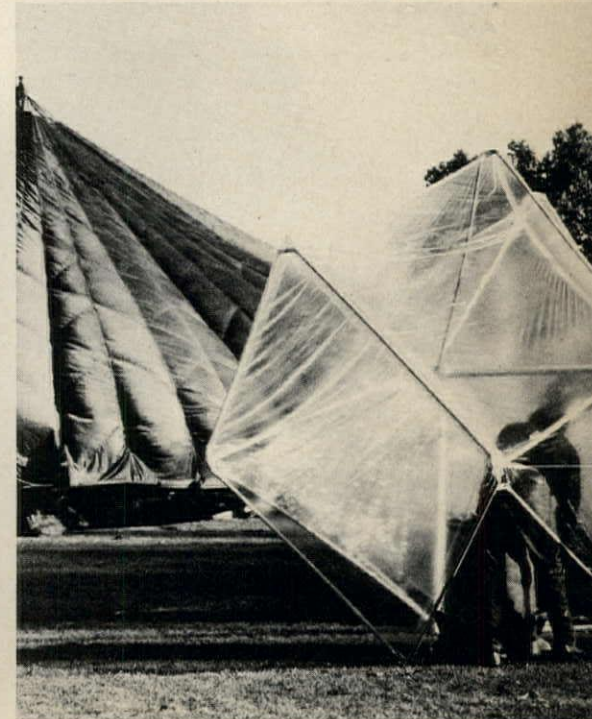
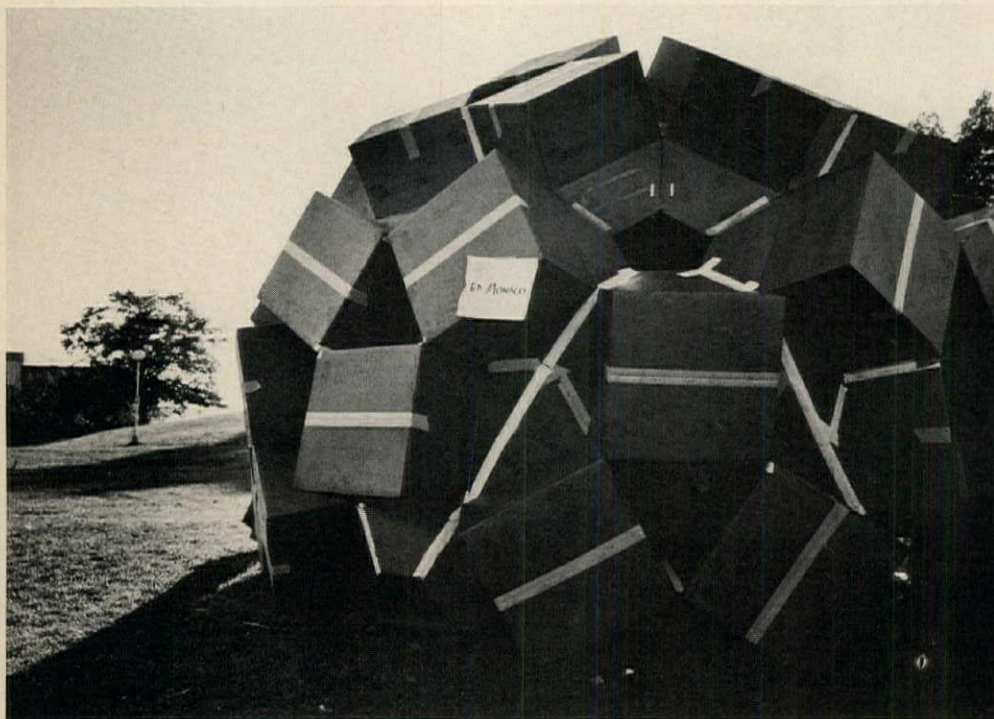
Fuller lectured, reflected and exhorted nearly all day Thursday on architecture, in-

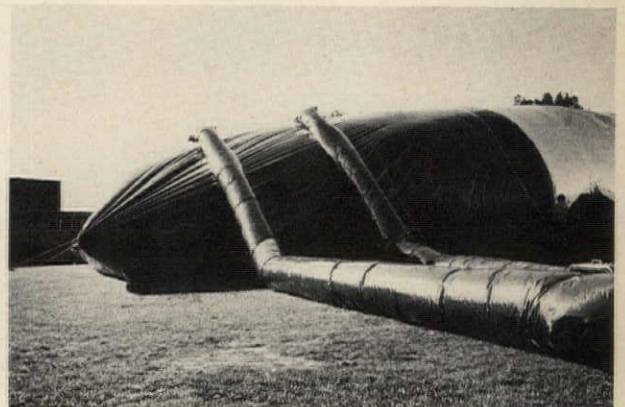
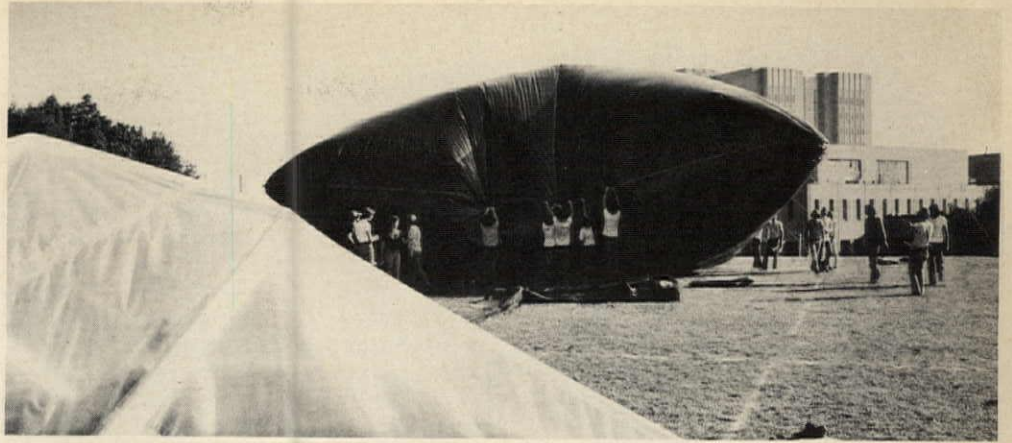
vention and the plight of the unplanned world to a changing group of 150 students. Outside, where the shootings took place in May 1970, other students constructed off-springs of his geodesic domes on the lawn.

Two prizes of \$100 each were awarded: one to Ed Monaco, a student at Kent State, the other to Ohio State University students. Monaco's entry was a geodesic dome which used cardboard boxes as prefabricated elements. He cut the flaps on the tops of the boxes at angles and taped the boxes together to create a dome. The result was a honey-comb effect which had plenty of shelf space on the inside. It was one of Fuller's favorites.

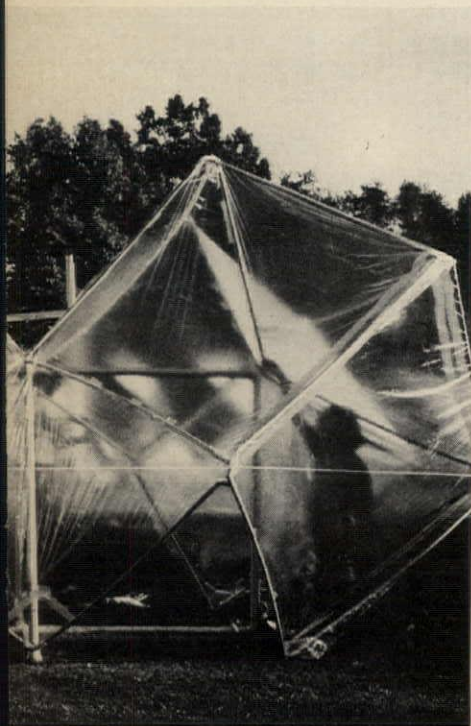
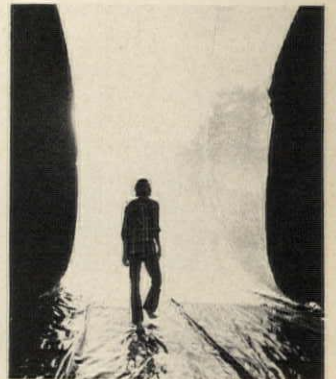
The Ohio State students' entry attracted the most attention. Their inflatable plastic bag—dubbed a pillow—was 80 feet long, 50 feet wide and 20 feet high. Fully inflated it swayed and billowed like something alive. A 12-foot-wide band of mylar taped in the center allowed light to enter. After being inflated by two window fans run by a portable gasoline generator, it opened to the public. A stream of students and faculty—leaving their shoes at the door—flowed in and out.

The two-day conference program included speakers Dahlen K. Ritchey, FAIA; William Mouton, professor of architecture at Tulane University; and Byron W. Ireland, AIA. □





Buckminster Fuller (left) provides the students with a daylong glimpse of his nonstop mind. Ed Monaco's honeycomb dome of cardboard (below left) wins him a \$100 prize. A seethrough instant shelter (below center) leaves doubt in the minds of a few faculty wives. An accordion-like Quonset hut (below right) unfolds. Ohio State's prize-winning structure, (right), an inflatable "pillow," attracts streams of visitors.





# A CASE STUDY and an ASSESSMENT

**The AIA/ACSA 1971 Teachers' Seminar and the first annual Environmental Educators' Conference happened simultaneously November 11-13 in Key Biscayne, Florida. ACSA Executive Secretary David Clarke reports his view.**

**The Teachers' Seminar.** The case study selected for the seminar was Northwest 62nd Street, now Martin Luther King Boulevard. Lying partly in the city of Miami and partly in Dade County, it was the scene of violent riots in 1968. It is also the following things: a paradigm constellation of urban and racial problems, a linear ghetto, a Model Cities area, a place called "Germ City," a bastion of absentee ownership—and a place on its way up, not out.

Dean Robert G. Anderson and Assistant Professor William R. Mitchell, both of the Division of Architecture, University of North Carolina at Charlotte, handled the case study arrangements as ex-faculty of the University of Miami and as the planning committee for the Teachers' Seminar.

Representing the case study were Bernard Dyer, a black leader formerly of Harlem, Professor Michael Gallis and M. Athalia Range, a black leader from the community. Together these three constitute the Martin Luther King Boulevard Development Corporation, which developed in 1969 out of Professor Gallis' Urban Workshop at the University of Miami and Dyer's Liberty City Community Council, which he directed. Mrs. Range, a rising star now in the governor's cabinet, is chairwoman of the corporation's board, which consists of community members, agency people and ex-Liberty City Community Council members.

The idea of the case study was to get some people—persons who deal in day-to-day realities—to lay bare the process by which they make decisions, including design decisions. This testimony would then be a kickoff point from which to examine a variety of alternative methodologies. Because this was never made very clear to Gallis and Dyer, the conferees spent a day and a half looking at a product rather than a process. Looking at a product produces the inevitable "crit session," and sure enough, the tired questions arose: "Why is this building high instead of low?" "Why aren't your graphics better?" etc. The crit session also produced (as they always do) a certain amount of defensiveness, felt as tension, which effectively paralyzed investigations into design methods. Getting someone to reveal an essentially discreet, often interiorized, process requires candidness at the least and often real intimacy. The public and often political atmosphere of the conference made this difficult.

The second morning and part of the after-

noon were spent listening to, and questioning, guest speakers related to the project. We were sadly overbooked and everyone showed up. The situation was relieved greatly by limiting comments to 10 minutes, then allowing questions from the floor. We were visited in turn by the editor of the *Miami Herald*, the president of Miami-Dade Junior College, a vice president of GAC Properties (a development firm), the director of the Miami Chamber of Commerce, two bankers and the respective mayors of Miami and Dade County. Topping it all off was a luncheon address by Congressman Claude Pepper and a letter—by courier—from Governor Reubin Askew.

Little of this advanced our goals vis-à-vis understanding how decisions were made but it did give participants a view of the intensely political nature of urban and public design and how people of these titles apparently never see a fabric, only the threads that are useful to them. But we learned this by example—seeing it happen—rather than from a more economical and simple explication from the case study people. Several news articles were generated by the conference and even three minutes on the 6 o'clock TV news. The releases, in some cases prepared by the staff of the guest speakers, showed no understanding of why, in fact, we had come together.

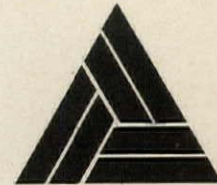
In short, the conference planners had come to Miami with the undisguised motive of "using" the case study as a departure point. Instead, they "used" us. But it wasn't intentional and in many quarters there were good feelings about it. One conferee remarked that it was probably the first time a Teachers' Seminar had had a real-world impact. And it *did* have an impact: Questioning the mayors brought out promises that had been evaded before; Congressman Pepper promised help through the bicentennial mechanism; the governor pledged support; and there were even furtive phone calls from regional Department of Housing and Urban Development offices and other agencies. Ultimately, the conference passed a resolution supporting the Gallis/Dyer plan for Martin Luther King Boulevard.

**Environmental Educators' Conference.** The principal organizer of EEC was Dean Charles Burchard, FAIA, of Virginia Polytechnic Institute as past president of the Association of Collegiate Schools of Architecture. Harry Porter of the University of Virginia represented the National Council of Instructors in Landscape Architecture while Carl Goldschmidt represented the Association of Collegiate Schools of Planning. Gary Robinette of the American Society of Landscape Architects Foundation contributed heavily in time and effort.

The notion was to compare, through learn-by-doing workshops, several approaches to



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solving problems. Hence "methodologists" Gar Day Ding and John W. Dickey, faculty from VPI, ran the systems analysis workshop; Augustus Baxter and Hugh M. Zimmers, AIA, community development center activists from Philadelphia, ran the advocacy workshop; Charles H. Burnette, AIA, director of the Philadelphia Chapter AIA, ran a workshop in role-gaming/brainstorm; and Raymond Studer, director of the Division of Man-Environment Relations at Pennsylvania State University, ran the workshop on behavior-contingent research. The "control" methodology was labeled Phenomenological Design and represented the traditional intuitive approach. It consisted of a group of University of Florida students led by Professor Frank Merritt, literally *en charrette* for two days in an upstairs room.

The mandate to the methodologists was not necessarily to come up with solutions—although the students did—but to use the case study material in a workshop situation to find the capabilities of their methodology.

It was generally felt that the parallel alignment of these techniques was misleading, that some were less methodological than others, that some would never lead to solutions at all but were only ways of structuring information, that some didn't even structure information but merely provided it or made it visible. An unlikely marriage occurred and an ad hoc methodology surfaced.

The systems analysis workshop found that it really did not have enough structured information to come to grips with the case study. Systems analysis was the closest thing to a methodology that we had, but being

# of STRATEGIES

"high tech," it was way down the road of the design process and could only come into action after information had become highly ordered. Role-playing, on the other hand, was a technique for ordering information and could begin at the messiest of stages. Out of this came role-definitions, jurisdictions, areas of expertise, potential conflicts and a Gestalt feeling for the problem as a whole. Although this group came up with a list of 29 part solutions, it did not get beyond that to a systematic strategy.

The result was that Ding and Burnette ended up in a corner thinking of ways in which they could work more closely together. Almost a definition of synergy, the most interpersonal and the most high-tech approaches finally discovered that they needed each other: The one, because it couldn't move without ordered information; the other, because it couldn't go past it.

Advocacy, the implicit methodology of the case study itself, met with some difficulties in its presentation. Zimmers began by stating that it wasn't a methodology so much as a re-ordering of priorities and values, and if the process came to be called a methodology, it was only as a consequence of a more important decision: to give power to people. The objections were that power often doesn't get to the people but only to the establishment community leaders (simply a different kind of client) who by and large permit the designers to do business as usual, and that advocacy doesn't guarantee a better environment, only one that's new and approved.

Behavior-contingent research offered a way of extracting general knowledge from specific cases that may in turn be used in a whole range of design processes. Although it is not a methodology itself, it has methodological problems in the ways in which it develops useful information. The real problem, though, seems to be getting a critical mass of well-defined information together so that it covers enough ground and situations to be useful to the designer.

A maverick workshop, under the low-profile leadership of Charles Rusch of the University of California at Los Angeles, investigated environmental education as a methodology. The members' report and the manifesto that accompanied it ended up as a high-profile element of the conference. Their definition: "Environmental education is educational activity which concentrates on direct involvement with objects, activities and people in the environment. The child is taken out of his classroom and put in direct contact with the environmental systems which surround him. Environmental education is the activity of increasing one's awareness and sensitivity toward the comprehensive environment: social, political, cultural and physi-

cal." The conference as a whole was frankly impressed with the down-to-earth quality of this presentation.

Two other components helped make this part of the conference come together: the "outgroup" and the National Science Foundation Research fellows.

Duties of the outgroup were to "witness" the events and then "testify" as a panel, giving their reactions to the proceedings through the special lens of the area of expertise. The panel consisted of Bernard Kaplan of the Heinz Werner Institute of Psychology, Clark University; Jerome Rothenburg of the Department of Economics, Massachusetts Institute of Technology; Thomas Thomson, editor of the *Design Methods Group Newsletter*; and Wilbur R. Thompson from the Department of Economics, Wayne State University. Ralph J. Warburton, AIA, from HUD was slated for the outgroup but was called away before it convened. John A. Kadlec, an ecologist from the School of Natural Resources at the University of Michigan, canceled at the last minute due to illness. A report in this space of the outgroup's contribution would be impossible and is better served by another medium. Suffice to say that the freshness of their comments (and here I single out Thompson and Kaplan) were indispensable in preserving sanity by bounding discussion with reality.

The NSF research fellows, six from the field of planning, eight from landscaping and 14 under the loose-knit banner of ACSA, were asked to act as resource people wherever they could be helpful. They were hand-picked for their expertise in the areas bounded by the conference and it was well worth the effort. The problems were so common that it was impossible to separate contributors by discipline. Their ubiquitous energy was felt throughout and it's difficult to imagine what the conference would have been without them.

One of the most apt summaries of the conference came from the manager of the Hotel Key Biscayne. He had seen many groups come and go, seduced halfway through by the sea and the sun, he remarked, but this was the hardest-working conference he had ever hosted.

The Teachers' Seminar is supported by an annual grant from The American Institute of Architects and by drafts from participating schools. The EEC was supported in part by a grant from NSF. It was recorded in its entirety on video tape. As soon as possible edited versions will be circulated among the schools and the general public upon request. Another postconference activity is a continuing examination between the participants for areas of further exploration and research generated by the conference. □

## Extending Scientific Method in Architecture

by EDWARD FRANK

**A method of learning, of working that would open fresh vistas for future and present architects and provide new creative opportunities.**

The increasing commitment of scientific resources for the orderly development of our urban environment will require architects to integrate their education and practice with those of their peers in the sciences. This collaboration will be aided by the substantial body of scientific knowledge and procedure already existing in architecture, mainly in its structural and mechanical components. Other areas of architecture have not been developed scientifically to a comparable extent, primarily because the profession has traditionally relied on the input of the sciences to expand its scientific base.

This attitude will clearly diminish the potential role architects could have in urban development. In order to keep pace with the sciences as these turn their attention to urban problems, architects must seize the initiative to extend scientific procedures beyond the profession's present boundaries.

Since all sciences have evolved out of the rudimentary concepts and ordinary facts of everyday experience, it would not only be pointless but also self-defeating to discard the knowledge that has been accumulated throughout the history of architecture. In pursuit of the scientific ideals of universality, system, explicitness and accuracy, much of this knowledge will be reorganized and often superseded, but like all sciences, architecture will always retain some original content.

The fundamental purpose of scientific method is to formulate the laws that govern the behavior of physical phenomena. These laws are ideally stated in terms of equations, such as the familiar  $f=P/A$ . Scientific laws are distinguished by advancing beyond description to explain the behavior of some natural event and, uniquely, by predicting accurately what will occur under certain conditions. Using scientific method, architects are able to predict, for example, that a specific WF *must* support a given load.

But outside of structural and mechanical problems, architects can at best conjecture that, for instance, the projected plan configuration of a housing development or college may have certain consequences for a city.

With their reputation for employing empirical methods based on previous experience, architects often find themselves in the unwelcome position of having to specialize in one building type, or conversely of "designing the wheel" all over again if given a different type of project. More important, forecasts and judgments relying on empirical method appear excessively timid and vague in contrast with the daring and precision offered by the scientific method. Continued reliance on this



approach is being revealed as clearly inadequate in an era of rapid change.

In their attempts to cope with this situation, architects have been turning to computer technology and systems analysis. The computer, of course, is one of the most recent and dramatic byproducts of scientific method, but it has been amply demonstrated that it does not have the capability to organize problems, nor will it at the service of traditional approaches produce significantly more reliable knowledge. As for systems analysis, it differs from science in that it is an ad hoc approach that strives to discern the better choice from a set of alternatives while scientific method attempts to establish the links between the properties or operations of natural events. It is sufficient for systems analysis to offer an evaluation of a problem, without requiring that it provide a thorough understanding of its fundamental causes. Scientific method, by steadily building a more reliable body of theory, attains to ever greater depth of understanding and range of application.

Theories have often played an important part in architecture. Sometimes they sum up "ideas in the air"; at other times they reorganize a problem in a new way, as with Kahn's formulation of servant and serviced spaces, or they present utopian visions, as with the Archigram group's proposals.

Fertile and useful as these and other theories have been to architects, none of them has lent itself to the method of science, for just as the amassing of facts without a theoretical framework will not in itself further knowledge and lead to explanatory laws, so theories that are not submitted to the verification of factual evidence remain in the realm of speculation. And the theories that have been influential in architecture to date generally fall in this category. They are seldom carried beyond interesting initial concepts; their assertions are generally unsubstantiated by organized knowledge; their statements are apt to take the form of axioms, rather than of contingent propositions open to test.

A more serious shortcoming of most of these theories is that they do not speak to existing urban problems. They do little to promote our understanding of current urban processes; they do not hazard modest explanations to illuminate pressing architectural problems, nor do they indicate what facts should be sought to test their interpretations; they do not penetrate beneath the seemingly chaotic activity in modern cities to discover the underlying connections that link them in a coherent system. Clearly, the theoretical understanding supporting architects' designs of the structural components of a building, and the consequent confidence,

**Mr. Frank** is a practicing architect and faculty member of Parsons School of Design in New York City. He was appointed a Guggenheim Fellow to write a book on science, technology and urbanization, of which this article is an excerpt.

economy and accuracy of their decisions, does not yet extend to other phases of design.

The often harmful ramifications of well-intentioned design and planning decisions is sufficient evidence that without organizing existing knowledge with the aim of submitting it to scientific method, without searching for the laws that govern urban processes, as they do every other physical phenomenon, and without educating our manpower to the method of science, most design decisions will continue to be of indeterminate value.

The belief that architecture is too complex a field and concerns itself with too many interrelated elements of diverse order to yield to the method of science is groundless. There is no chaos; there is only ignorance and lack of appropriate method. Every emerging science is faced with the bewildering complexity of natural phenomena, from which it extracts only those problems and facts relevant to its study. With time, the method will define the field.

The recent passing of Gropius, Mies and Neutra underscores the fact that the sources for the design theories which have guided modern architecture are diminishing and that the design capital based upon these theories is rapidly being depleted. It is all the more imperative, then, that a concerted effort to extend scientific methodology throughout the practice of architecture be initiated.

The best places to launch a comprehensive program extending scientific procedures are the schools of architecture. At first, these could offer courses in the fundamentals of scientific method, drawing upon the classic theories and experiments of physics. Students should also be encouraged to take courses in the rapidly expanding field of the history of science. With this background they could then undertake simple experiments in the application of scientific method. Unlike most existing science courses, stress should be more on instilling the habits of scientific procedure until they become instinctive.

Field work could be devoted to the study of various simple urban places, even as ubiquitous as street intersections, noting the cycle of activities in relation to physical settings, classifying them, formulating theories to account for their spatial and behavioral patterns, setting forth hypotheses which attempt to link these in some rational system, and finally devising experiments to test these conjectures.

Much work remains to be done in analyzing and making more explicit current notions and categories of urban functions and architectural types. For instance, what is the relation of support facilities to housing? What are the laws that govern these relations? What are their spatial configurations? Communities or neighborhoods provide ready sources of theoretical material that might prove to be useful as starting points in an ongoing scientific educational program.

There should also be investigations into what concepts, theories, principles and laws from other fields may be transferable to architecture. One approach that may prove particularly fruitful is suggested by the recent marked shift in interest from the physical to the life sciences. This trend recognizes that the most urgent problems at present and in

the future will be essentially biological in nature, and the viewpoints, modes of thought and values of the life sciences are more applicable to them than those of the physical sciences. It is conceivable that those problems of urbanization and architecture that have proved intractable to functional theory—itsself derived from the physical sciences—may submit to an approach that is based on biological theories.

Another line of research might apply scientific method to the study of preindustrial cities, for these are relatively simple urban systems and the circumstances which shaped them can be traced out more easily than in the more complex, rapidly changing modern metropolises. A comparative analysis of those cities at various periods in their history might offer much useful knowledge about the relation between the size, distribution and configuration of their functional areas. Such knowledge in turn might furnish insights and fruitful research approaches to modern cities. If the record of other sciences is any guide, an ongoing research program based on scientific method should, at some future date, result in the discovery of universal laws connecting generic elements of a city that would be applicable, with modification, at least to certain urban sectors and, eventually, to a city or region as a whole.

While no one would claim that strict adherence to scientific methodology will guarantee great architecture, it does assure a path out of the present situation, in which architects increasingly confront greater responsibilities with a paucity of verifiable theory and proven design methods, and it does offer architects release from their dependence on the vagaries of personal taste, passing fashion, or an occasional masterpiece.

In fact, the spread of scientific method beyond the structural and mechanical fields to other aspects of architecture and to urban design will broaden considerably the opportunities for the play of the imagination. The choice facing architects is not, as some would have it, between the supposedly free and untrammelled exercise of their imagination and the constraints and rigidity of scientific method, but between an approach that relies on past experience, inspiration and diminishing formal resources and one that depends on scientific method to create the rational foundations for flights of the imagination. Sheer fantasy would never have designed and built the Brooklyn Bridge.

The history of structural engineering these past 100 years may be read as a prelude to the creative explosion which will be generated by scientific method once it permeates the rest of architecture. Maillart, Weidlinger and Nervi are nonetheless imaginative for working within the discipline of science, and the power and beauty of their works are evidence of the creative opportunities awaiting architects who use the method of science.

A comprehensive educational program based upon the methodology of science, sustained for several college generations, could be expected to lead to similar results in other areas of architecture, would bring it within the mainstream of scientific development and would ensure architecture its rightful position among the emerging urban sciences. □

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# Proposals on Housing for the Elderly

The 25 recommendations that follow are the result of the work of the housing section at the White House Conference on Aging.

1. A fixed proportion of all government funds—federal, state and local—allocated to housing and related services, shall be earmarked for housing for the elderly, with a minimum production of 120,000 units per year.
2. Eligibility for the benefits of publicly assisted low and moderate income housing and related services shall be based on economic, social and health needs. Recipients having income above an established minimum level shall pay for benefits on a sliding scale related to their income.
3. The federal government shall ensure that state, regional and local governments and private nonprofit groups produce suitable housing for the elderly on the basis of documented need. The federal government shall encourage production through the uniform application and use of appropriate incentives.
4. A variety of living arrangements shall be made available to meet changing needs of the elderly. Such arrangements shall include residentially oriented settings for those who need different levels of assistance in daily living. The range shall include long-term care facilities for the sick; facilities with limited medical, food and homemaker services; congregate housing with food and personal services; and housing for independent living with recreational and activity programs.
5. Supportive services are essential in the total community and in congregate housing. Emphasis shall be given to providing more congregate housing for the elderly which shall include the services needed by residents and provide outreach services to the elderly living in adjacent neighborhoods when needed, to help older people remain in their own homes.
6. The state or federal government shall provide mechanisms to make possible local property tax relief for the elderly homeowner and renter.
7. Every effort shall be made to eliminate red tape and procedural delay in the production of housing for the elderly.
8. Particular attention shall be given to the needs of all minority groups and the hard-core poor elderly. At least 25 percent of the elderly housing shall be for the hard-core poor elderly, those with income at the poverty level or less per year.
9. All federal agencies dealing with housing

for the elderly shall be required to establish multidisciplinary teams to formulate guidelines for architectural standards based on the needs of the elderly. The multidisciplinary teams shall also have authority to review and approve innovative proposals.

10. Minority nonprofit groups shall be encouraged and assisted in developing housing for the elderly.

11. When housing units for the elderly are eliminated for any reason, adequate replacement units must be available and relocation programs provided before such persons are displaced.

12. Congress should revise the definition of a family in the National Housing Act to include single persons 55 and over.

13. The federal government shall encourage the preservation of neighborhoods of special character through rehabilitation and selective replacement of substandard dwellings with new ones, with full provision for the elderly of the area to remain in their familiar environment.

14. Housing funds now impounded by the Administration should be released and the highly effective Section 202 of the Housing Act with its special guidelines related to space, design, construction and particularly favorable financing restored.

New section 202 projects should be established by recirculating monies now being sent to the United States Treasury from mortgage payments and Section 202 conversions to Section 236 or like programs. Such conversions of current Section 202 should be encouraged by establishing incentives.

The senior housing loan Section 202 administrative component of the Department of Housing and Urban Development should have management audit responsibility for all Section 202 projects and all Section 236 elderly projects.

15. The rent supplement program shall be increased in dollars and eligibility.

16. Financial incentives shall be available to families providing housing and related care to their own homes, or in appropriate accommodations, for their elderly relatives.

17. The federal government shall provide financial incentives to state and local governments to encourage property tax exemption of voluntary, nonprofit-sponsored elderly housing projects.

18. The inability of the elderly to financially maintain their homes because of high maintenance costs and increasing taxes resulted

in the recommendation that interest-free, nonamortized loans be made available, the amount of the loan to be related to income, with repayment either upon the death of the borrower or the transfer of the property. As an additional element of national policy, it is proposed that ways or mechanisms be researched to enable older homeowners to voluntarily utilize the equities in their homes to increase their discretionary income while remaining in their own homes.

19. Congressional action shall be taken to establish within HUD an Office of Assistant Secretary of Housing for Elderly. This office shall have statutory authority and adequate funding to provide overall direction toward the implementation of a national policy and the production of housing for the elderly.

20. Executive action shall be taken to create an executive officer on aging within the Office of the President.

21. Congressional action shall be taken to create a special committee on aging in the House of Representatives.

22. The Congress shall enact legislation to safeguard the elderly property owner or purchaser from unscrupulous real estate developers and/or promoters.

23. The Congress shall enact legislation providing special funds for adequate housing and supportive programs to meet the unique needs of rural elderly Americans including those on Indian reservations.

24. Standards for physical and environmental security should be developed and applied as an integral and basic element of all housing projects serving the elderly.

25. Competent service to the elderly in housing requires sound research widely disseminated and utilized, covering many aspects of their living arrangements. Such research shall be undertaken to cover the health, physical, psychological and social aspects of environment in urban and rural areas; to delineate the needs of elderly over 80 years of age; to determine the needs of transient elderly; to establish the importance of selecting appropriate locations; and to provide safe and adequate construction. Particular attention is directed to the consequences to vulnerable older people of improper sales methods and inadequate housing arrangements. There also shall be undertaken a well-conceived and well-financed program of training for professional and semiprofessional staff to develop efficient and competent management in developments for the elderly. □



Presbyterian Home of Bradenton, Florida: C. Randolph Wedding & Associates, architects.



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# PROFESSIONAL CONSTRUCTION MANAGEMENT AND PROJECT ADMINISTRATION

by William Foxhall

Who is a construction manager? "He" should be a professional working for a fee — whether an architect, an engineer, or other person thoroughly experienced in construction.

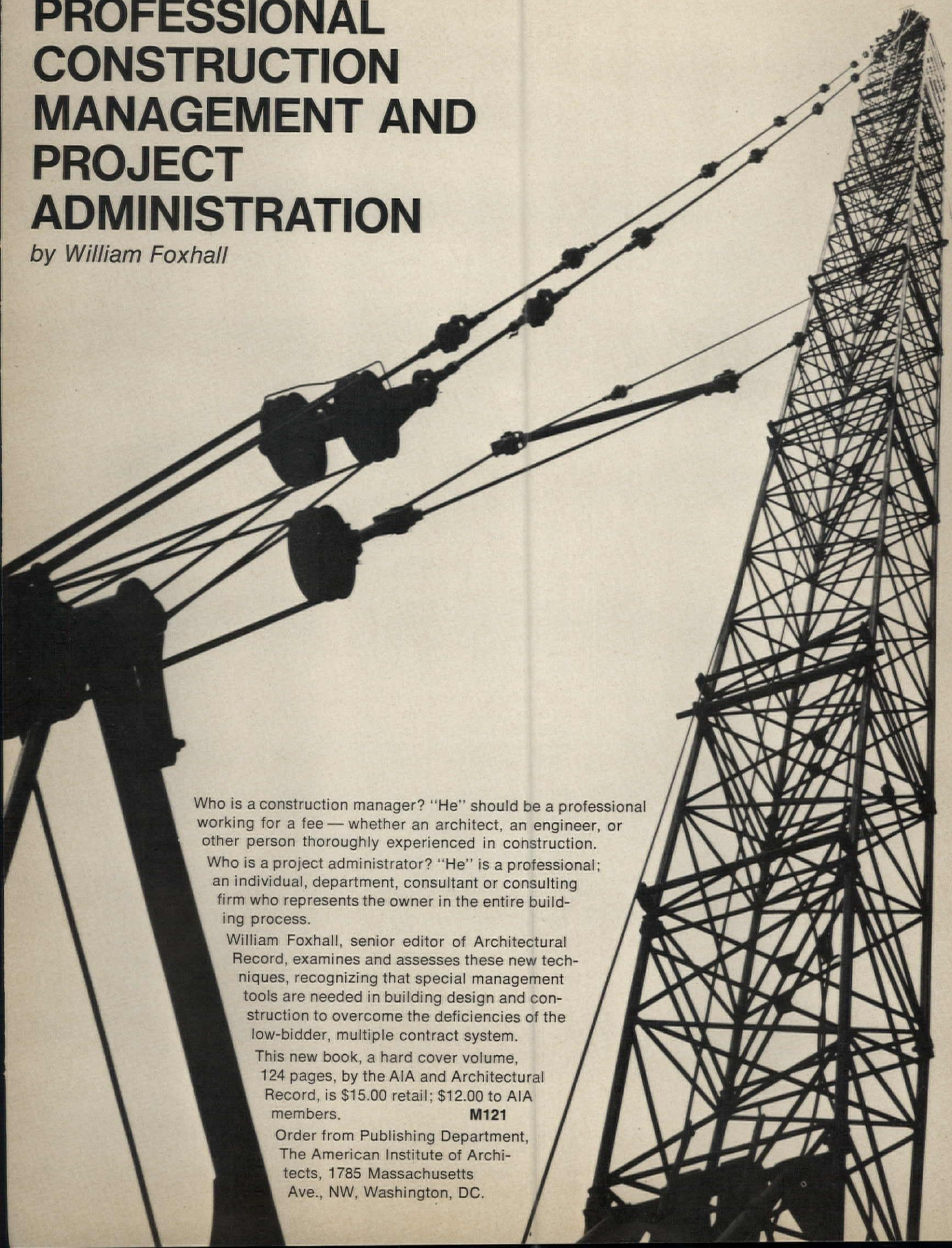
Who is a project administrator? "He" is a professional; an individual, department, consultant or consulting firm who represents the owner in the entire building process.

William Foxhall, senior editor of *Architectural Record*, examines and assesses these new techniques, recognizing that special management tools are needed in building design and construction to overcome the deficiencies of the low-bidder, multiple contract system.

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# Industrialization and the Architect

The second international Industrialized Building Exposition and Congress held in Louisville, Kentucky, in November, stimulated Robert Allan Class, AIA, director of the Institute's Technical Programs, to urge the architect to adapt his practice to meet the potentialities of change caused by the industrialized building process.

After 100 years the Industrial Revolution has reached the building industry. Department of Housing and Urban Development Secretary George Romney predicts that by 1980 two-thirds to four-fifths of the housing produced in this country will be industrialized housing, either in the form of complete modules or large size panelized components. This prediction was reaffirmed by him at the second Industrialized Building Exposition and Congress (INBEX/71) held in Louisville in early November. It was apparent to the more than 13,000 attendees that the use of industrialized building systems is assuming a greater role, not only in residential but in nonresidential building as well.

Where does the architect fit into all this? More than 10 percent of the 156 INBEX speakers at 34 seminar sessions were design professionals, principally architects. Their concerns ranged from creativity to the team approach, to restrictions of building codes, to designing for human needs, to cost considerations, to manufacturers' responsibilities to the specifier, to design potentials, to professional management and the systems approach. The common thread that ran through most of the seminars was teamwork: the need for the coordinated effort of many disciplines to make the new industrialization processes work.

James Luckman, AIA, emphasized that the team should be structured before planning starts and that continuous coordination among members of the team is essential for the result of enhanced design and better buildings. He said that the most effective industrialized system is a process rather than a product, or software rather than hardware. Philip J. Meathe, FAIA, and Charles Thomsen, AIA, pointed out that teamwork, overlapping of schedules and coordinated job control are keys to successful building processes. Nelson W. Aldrich, FAIA, called for combining human participation and industrial capabilities in order to achieve a systems analysis strategy. While Gerald G. Weisbach, AIA, advocated the systems approach to the industrialized process, he cautioned that it

should not be oversold as a cure-all. In calling for increased creativity in commercial and institutional uses of new structural components, Clovis B. Heimsath, AIA, indicated that the architect becomes truly creative when he affirms repetition. He said that the architect could free his talents for creative action in the building process by the use of manufactured components, thus permitting him to concentrate on his real role, the interface between systems and their effect on people.

At a conference of executives of building products manufacturers, Robert F. Hastings, FAIA, then president of The American Institute of Architects, predicted that "systems" will replace "products" in the thinking of progressive manufacturers and that producers will become problem-solvers. With the rapid growth and complexity of the inventory of building products, and the growing demand for better control of the quality, cost and time of building, the ability of the architect to make rational decisions in the traditional manner is diminishing. As the architect is applying more of his talents and energies to management processes, programming, design and systems coordination, he will be looking increasingly to the manufacturer for improved technology to respond to performance specifications.



Stacking space modules for a five-story motel.



Studying Puerto Rican system with hoisting mechanism for interlocking peripheral modules.

The devastation of World War II spurred the rapid development of industrialized building systems in Europe in the '40s as a rational means of providing large quantities of shelter in a short time. Lacking the immediacy of raw necessity, the process in the United States has been more evolutionary. With the growing realization that we cannot afford the high costs of extended construction time and handcrafted methods, the concepts of the management systems approach and industrialized building systems are emerging as solutions to our time-honored (or dishonored)

methods. Every architect, whether he be management, design or technically oriented, has an important role to play.

There are many paths which the architect can follow in his entry into the field of the new industrialized building process. They may include:

- Design of factory-built modules or large-scale components.
- Entry into the marketplace as a producer or developer.
- Programming of user requirements equated to human needs, cooperative with other disciplines, to guide development of acceptable industrialized products.
- Development of in-house and on-site systematic processes to complement sophisticated industrialized building processes.
- Activity in the public arena to reduce barriers and improve the climate of acceptability of industrialized processes and products.

Architectural critic Wolf Von Eckardt, Hon. AIA, authored an article on mobile homes which appeared in the *Washington Post* the day before the INBEX show opened. He referred to a report prepared by the Frank Lloyd Wright Foundation which indicated that there is only one way to improve the looks of mobile home parks and that is to improve the looks of mobile homes. Since beauty is more than skin deep, the quality of the design should reflect a better quality of construction, equipment, planning and siting. Whether or not related to this report, it is interesting to note that a major prefabricator which has produced over 400,000 housing units in 30 years has engaged the foundation to upgrade the quality of its product. This is a good sign and may well point the way to increased participation of the architectural profession in the design of standardized modules and mobiles.

Not all modular producers, however, have reached this stage of enlightenment. One manufacturer is quoted as saying, "At the current state of technology, we're still locked into the basic box; esthetics will have to come later." Judging from the appearance of some of the prefabs on display at INBEX, other manufacturers are suffering from this same syndrome. A few mumble that they have "architects" on their staffs, but it's hard to believe. There are indications, however, that a select group of producers understands the tenet that good design and good quality produce good profits.

Some of the exhibitors at INBEX have indicated that currently they do not consider the architectural profession as part of their market. They are more interested in reaching builders and developers. This is particularly true of manufacturers of modules that are apparently designed only for housing applications and in which the producers do not recognize potential applications in other areas of use of highway-size boxes. Other producers of housing modules believe that it is to their economic advantage to erect and market all of their production within their own development company, thus giving the greatest potential for a predictable flow through the production facilities.

The rush to embrace the industrialized building process is slow. While the chairman of one of the nation's largest homebuilding

firms is optimistic about a healthy housing economy, he has stated that someday—perhaps in five to ten years—their company will be producing “boxes” in plants. Presently, however, these are more costly than on-site building in most cities.

In a recent presentation to security analysts, the chairman of one of the country's largest manufacturers of diversified building products said, “For economic reasons, industrialized building seems to be inevitable, but this concept is still very much in its infancy. We like the long-term outlook for mass produced space enclosures . . . but we doubt that the technology has yet been adequately developed to the point where it would assure long-range economic success. Furthermore, factory-built housing faces many big hurdles before it wins full acceptance from the unions, local governments and the public at large. A lot of costly pioneering remains to be done. Accordingly, we are proceeding cautiously and intend to take full advantage of developments as significant progress is made in the industry.”

Despite these expressions of caution, more and more industrialized building systems are being introduced to the American market. Although not yet commonplace, off-the-shelf large-scale components are appearing in greater numbers. The initial impetus of projects such as School Construction Systems Development, University Residential Building System and Operation Breakthrough has given rise to new approaches to the processes of design and construction, spurring the devel-

opment of new technology and products responsive to the new approaches.

Some design professionals are concentrating on the improvement of their in-house management processes while others are also involving themselves in the marketplace. Carl Koch, FAIA, has been recognized over the years for the development and marketing of well-designed factory-built structures and components. Other architects, including small firms, are designing and producing large-scale building components.

At least two of the exhibitors at INBEX—one from Switzerland, the other from Puerto Rico—are companies which are headed by architects and/or engineers and are primarily interested in the design professional as a major client. Their products and systems offer sufficient choices to permit flexibility of design. One of these companies offers an interrelated system of concrete wall and floor panels without mechanical and electrical work in the panels. Another offers a systematic rather than a standardized system which can utilize concrete, steel or composite materials almost interchangeably, being more of a process than a product.

A new entry into the market is a modular building system intended for many types of commercial and institutional projects and all classes of construction except single-family single-story dwellings. Its engineer president describes the basic unit as a structural steel frame made into a “cube” in 1-foot increments and completely factory fabricated of noncombustible materials into a finished

“space module.” The units are designed structurally to permit stacking to a considerable height. Companion prefabricated mechanical/electrical distribution systems combined with the basic space modules form a completely factory-built building system. The limitless possibilities of application and comparative freedom of design in utilizing these new systems should appeal to architects.

An innovative feature of the Louisville show was the *INBEX Daily*, a newspaper for every day that the exposition was in full swing. One issue stated, “An industrialized system is not a building, therefore the services of architects and their consultants will not be minimized. All systems present a certain degree of modularity which, in most cases, is not absolutely restrictive. The design of a building through the use of an industrialized system will still call for great creativity on the part of the architect. In addition, the full understanding of an industrialized concept will permit the architect to reallocate his time from architectural drudgery to wider creativity.”

The advent of the industrialized building process holds high hope for increased participation by the architect. The great and rapid changes occurring in the process of procuring buildings, of which industrialization is only one, present a challenge to the profession. The progressive architect is facing up to the realities of change, is identifying the forces producing these changes and is adapting his practice to be most responsive to the demands of change. □

# D

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the conference focus on original research in the social and behavioral sciences with direct relevance to environmental design, planning and management. Titles of the papers range in topic from "User Need Studies" and "A Computerized Model for Store Planning," to "Unit Theory Design of Hospitals."

A complete listing of the papers and additional information about them may be obtained from Don Conway, AIA, director of Research Programs, AIA Headquarters, 1785 Massachusetts Ave. N.W., Washington, D.C. 20036.

### Steel Buildings Proclaimed as Winners, Jury Commends Imaginative Designs

Jurors of the 12th annual competition for steel-framed buildings sponsored by the American Institute of Steel Construction observed that the entries were of especially outstanding quality. Many of them "clearly reflected extensive research by the architect to fully identify and satisfy the needs of the owners." They found steel increasingly used in residential buildings and were "gratified that numerous attractive buildings . . . could be mass produced . . . for maximum economic benefit to society."

The jury included John P. Eberhard, AIA; James H. Finch, FAIA; Dahlen K. Ritchey, FAIA; Edward J. Teal, a member of the American Society of Consulting Engineers; and AIA President Max O. Urbahn, FAIA.

The 15 winners and their architects are: Pierce Apartments, Gilroy, Calif.: Dukor Associates; Municipal Building, Tempe, Ariz.; Michael & Kemper Goodwin Ltd.; US Steel Building, Pittsburgh: Harrison & Abramovitz & Abbe; Coliseum, Richmond, Va.: Ben R.



Richmond Coliseum is "handsome design."

Johns Jr., AIA, and Vincent G. Kling & Partners; Northway 10 Executive Park, Elnora, N.Y.: Robert F. Lavery; Alza Corp. Laboratory and Office Building, Palo Alto, Calif.: McCue Boone Tomsick; Parker Hannifin Headquarters and Manufacturing Facility, Irvine, Calif.: Albert C. Martin & Associates; Sears Roebuck & Co. Pacific Coast Administrative Offices, Alhambra, Calif.: Albert C. Martin & Associates; Malcolm X. College, Chicago: C. F. Murphy Associates; Burlington Corporate Headquarters, Greensboro, N.C.: Odell Associates Inc.; Service Group, Old Westbury, Long Island, N.Y.: James Stewart Polshek & Associates; Rapid Transit Stations, Dan Ryan and Kennedy Expressways, Chicago: Skidmore, Owings & Merrill; John Hancock Center, Chicago: Skidmore, Owings & Merrill; Paradise Steam Electric Generating Station Unit 3, near Drakesboro, Ky.: Tennessee Valley Authority; Superbay Maintenance Facilities, San Francisco International Airport and Los Angeles International Airport: Conklin & Rossant.

### Social Role and Responsibility of A/Es Cited at Federal Agency Conference

Architects and engineers have been urged to bridge the gaps between professionals and the people in poor communities. The urging was done by Samuel C. Jackson, Assistant Secretary for Community Planning and Management, Department of Housing and Urban Development, as he spoke before the second A/E Conference on Federal Agency Construction Programs.

Jackson said that the country is approaching the construction of nearly 2 million residential housing units a year, but in spite of our "technologically advanced society," we have built far too few dwellings of decency." He cautioned the audience that "we must be sure that we build what people need and prefer and not merely build more of what we have inherited from the values, the technologies and the prejudices of the past."

The late November conference drew over 500 A/Es to the Chase-Park Plaza Hotel in St. Louis to learn the latest developments in construction programs administered by more than 10 different federal agencies represented. The conference was jointly sponsored by the AIA, Consulting Engineers Council/USA and the National Society of Professional Engineers-Professional Engineers in Private Practice.

Underscoring Jackson's remarks was Eugene A. Gullledge, Commissioner, Federal Housing Authority, who said that the A/Es' role and responsibility in shaping the future image of the country is indisputable. While the deteriorating Pruitt-Igoe housing project in St. Louis was a bitter experience, he commented, it would be fortunate if it were an isolated example.

"If we look around us, we will find disheartening statistics of public housing projects that had been designed to resemble the fortresses of social ostracism that they have become. The challenge before you is to help us correct past mistakes," Gullledge added.

During the two-day conference, attendees were brought up to date on the specific changes in policies and procedures of many federal and federally assisted construction programs. Some highlights:

- Arthur F. Sampson, Commissioner, Public Buildings Service, General Services Administration, reported on the progress of value engineering, construction management, systems building and project manager programs. "We warned earlier that inflationary contracts wouldn't be awarded," he said. "We have exercised this authority in Philadelphia where, when the fourth phase of a courthouse and federal office building complex came in \$12 million over estimates, the award was deferred."

- L. G. Schweickart, Deputy Assistant Administrator for Construction, Veterans Administration, pointed out that his agency conducts a \$100 million hospital program annually and encouraged all A/Es to file with the VA in order to be considered for any of its projects. He reported changes in contracts between professionals and the VA which stipulate 6 percent fees for working drawings and specifications, a deferral limit of one year (not two as in previous contracts) until initia-

### Institute's Headquarters Building Gaining in Prominence, Now up to Second Floor



The new headquarters building has the framing up for pouring of concrete on the second floor, and installation of HVAC and security systems has started. The view is from New York Avenue with the Octagon to the left. The seven-story structure will be ready for occupancy in early 1973.

tion of construction and use of the critical path method for control during construction.

• Rear Admiral D. G. Iselin, Deputy Commander for Planning, Naval Facilities Engineering Command, predicted that the Navy will invest some \$800 million in new family housing in the 1970s and said it had \$102 million recently approved for new housing this year.

• Major General M. R. Reilly, Deputy Director of Civil Engineering, US Air Force, commented that use of two-step procurement of A/E services was a powerful instrument for obtaining cost effective construction for certain types of work in its nearly \$500 million annual construction. In the first step, he explained, proposals are asked for without price and evaluated for technical adequacy. In the second step, all proposers found technically acceptable are asked to bid their technical proposal, and the work is awarded to the lowest qualified bidder.

### Kansas City Architect, Humanitarian, Community and Professional Leader

A one-time member of the AIA's Board of Directors, Angus McCallum, FAIA, of Kansas City served his profession and his community in a number of ways, bringing to task his articulateness and his freedom from fear of carping criticism. A past president of the Kansas City Chapter AIA, he also was a member of the building code committee of the Kansas City Chamber of Commerce; the advisory committee for Kansas State University's College of Architecture; the Mayor's Municipal Services Commission; and the technical advisory committee of the Metropolitan Planning Commission. He was a director of the Human Resources Corporation.

McCallum died on November 30 at the age of 60. Founder of Angus McCallum & Associates in 1961, he was formerly partner in the firm of Kivett & Myers & McCallum. He was the architect of many buildings in his hometown, including the Rehabilitation Institute, the Center for Disturbed Children, Western Missouri Mental Health Center and the library of Rockhurst College.

He liked to speak before student bodies to recruit young people into the profession he served well. Evidence of his concern for his fellowman was shown in the work he did as head of a committee to find housing and jobs for Cuban refugees.

### Newslines

■ **The State of Vermont** was awarded the Damon Woods Memorial Award which is given annually by the Industrial Designers Society of America to organizations and individuals who have contributed to the improvement of the environment. Vermont was praised for its billboard removal legislation, signage program and land control use and development.

■ **Future earthquakes** and the problem of designing structures to withstand failure is dealt with in a pamphlet, "Prediction of Earthquake Effects." It may be obtained free from Computer Sciences Corporation, 9841 Airport Blvd., Los Angeles, Calif. 90045.

■ **Gordon Johnston, AIA**, architect in Tacoma, Wash., was recently re-elected mayor of that city. Two years ago, he won by 440 votes. This time he won by 6,482 with 59 percent of the votes cast.

■ **Two new model codes** for voluntary adoption by local governments are available from Building Officials and Code Administrators International, Inc., 1313 E. 60th St., Chicago, Ill. 60637. They are: *One- and Two-Family Dwelling Code* (\$7) and *Basic Mechanical Code* (\$8).

■ **A data bank on systems building** has been established by Building Systems Information Clearinghouse/Educational Facilities Laboratories, Inc., 3000 Sand Hill Rd., Menlo Park, Calif. 94025. Architects are asked to send in information on projects involving use of building systems.

■ **A new quarterly journal** on the urban individual and his milieu will begin publication soon. Called *Urban Life and Culture*, it will be edited by John Lofland. Subscriptions are offered at \$10 a year from Sage Publications, 275 S. Beverly Drive, Beverly Hills, Calif.

■ **Producers' Council, Inc.**, has been presented with a citation for distinguished service to the construction industry over 50 years by the AIA. Institute President Max O. Urbahn, FAIA, made the presentation at the council's recent golden anniversary meeting.

■ **A new organization** of land developers and builders of industrial and office parks, the National Association of Industrial Parks, has been organized. E. G. Johnson is executive vice president with headquarters in American City Building, Columbia, Md. 21043.

■ **A technical guide**, "Product Use Manual" gives information on choosing the right lumber for light framing and estimating needed quantities of siding and paneling. It is offered without charge by Western Wood Products Association, Yeon Building, Portland, Ore., 97204.

■ **Operation Breakthrough** is now entering the volume production stage, said HUD Secretary George Romney recently. He predicts that by July a total of about 25,000 units will be processed for development in the competitive market.

### Deaths

KURT GROSS  
*San Jose, Calif.*

HERMAN CHARLES LIGHT, FAIA  
*Los Angeles*

JOHN S. ROEL  
*San Diego, Calif.*

ROBERT M. SCHEID JR.  
*Trenton, N.J.*

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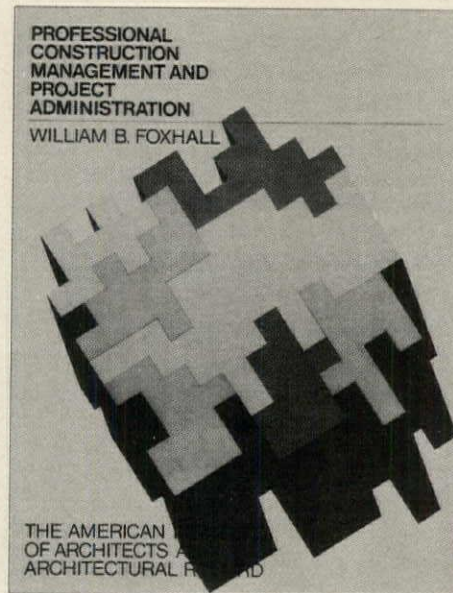
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**Professional Construction Management and Project Administration.** William B. Foxhall. New York: McGraw-Hill. Co-sponsored by The American Institute of Architects and *Architectural Record*, 1971. 124 pp. \$12 members, \$15 nonmembers.

The supervision versus observation debate of a decade ago should have alerted the architectural profession to the fact that the English language is peculiarly susceptible to alternative interpretations which can confuse issues. And if this has been forgotten, the meteoric rise of the word "systems" in the last several years should remind us that, like self-sticking labels, some titles can be slapped on anything and will adhere. Construction management is subject to the same obfuscation. Contractors claim to be doing it already; many large A/E firms make similar assertions. This book takes some firm steps toward definitions which can help clarify the situation.

The book espouses the fundamental principle that the construction manager is a professional. He doesn't draw; he doesn't build; he isn't a broker. He doesn't look for his profit from the escalation of costs over budget nor from sharp trading in the marketplace. He is an all-knowing professional paid for professional services; he has the in-house competence to understand design and to evaluate materials, plus an intimate knowledge of purchasing techniques and contract administration. He has a direct relationship with the owner. He performs his services in conjunction with the architect and contractor, complementing and coordinating their efforts in the owner's best interest from the first moments of design through delivery of the completed project.

As alluded to above, the first thing that Foxhall does is to separate the related areas and define their function. The architect continues as the "visible and historic professional." The contractor is the "responsible entrepreneur" who has "conventionally had the ultimate responsibility for delivery of the building at a quoted price." The construction manager is charged with the application of "knowledge of construction techniques, conditions and costs to the three phases of decision, design and delivery of a project. First, as construction consultant he clarifies the time and cost consequences of decision and design options as they occur. Second, as construction manager he enters, still as a professional, into construction scheduling, prepurchasing of critical materials, advising on the method of obtaining contractors and awarding contracts, and coordination and direction of all construction activities." Foxhall arbitrarily defines another category for our lexicon of members of the construction team: the project administrator. "He is the client's voice, agent and purse string. He rings the starting bell when a project exists as a



serious intent. He makes or expedites the owner's decisions at key points as the project develops."

After defining the team members and reciting their respective roles, Foxhall expands into the specific discussion of the construction manager, emphasizing the extent of his services, the basis for his compensation, the contract for his services. It is an interesting and enthusiastic exposition that occasionally has a tendency to be rather pretentious or unrelated to the facts of life, i.e., his statements about the owner being responsible for resolving construction related conflicts during the building process or his remarks to the general effect that charitable attitudes, understanding and integrity are the hallmarks of professionalism in the construction industry. To be sure, these not exact quotations are taken out of context, but similar inferences are scattered throughout the book.

The knowledgeable reader can cull them out as he reads, however, and in general these statements don't really blemish Foxhall's overall portrait of the CM. It is most probable that this book will serve as an educational experience for the seasoned practitioner who can relate the subject to present practice. It would appear that it will not serve too well as a textbook for the student or the neophyte practitioner because of the continually recurring discrepancies with the rules of the building game as it is currently played and its lack of clearly defined contractual relationships.

Perhaps the portions of the book which will have the greatest value to the reader who is interested in pursuing the subject further in his own practice are those which deal with the contractual details of construction management service and suggested methods of compensation. Although a contract form is not presented, the basic elements are dis-

cussed. These should serve as an excellent form of alert for the person who is drafting a contract or reviewing one presented for signature.

The most significant criticism in this area, however, is the fact that Foxhall leans almost entirely on the proposed General Services Administration Contract for Construction Management Services. Since this reflects the usual policies of the GSA and other federal agencies, in many instances it is contradictory to AIA documents and goes far beyond what should seemingly be required of a CM. The knowing professional will certainly note the problem areas and be wary of them. It would have been more practical for the reader if the author had sought to edit the government suggested terms to conform to the parameters of practice espoused by the AIA in its present documents program.

There is a short discussion on the potential basis for establishing value of compensation for the CM. This will be most helpful as a starting point in determining the worth of a relatively unknown area of service. Needless to say, the most obvious method is a professional fee plus costs. The author makes an important point that the total cost of such services should be dependent upon the extent of the services to be required and not on the completed value of the project.

In connection with all this, Foxhall does attempt to establish a dollar cutoff point below which a CM is not justifiable. He accepts the GSA figure of \$5 million as a logical point. If this be a fact of life, then the average firm doesn't need to be too concerned—yet. But as inflation drives costs ever higher and as even small jobs become multimillion dollar projects, today's small architectural firm may very well be faced tomorrow with either working with or furnishing construction management services.

Despite its inconsistencies, Foxhall's book is a good overview of construction management. In addition to its usefulness to architects and engineers, it should be of more than passing interest to contractors since they have been, to date, the major group concerned with the subject. How the author evaluates the contractor as construction manager is of considerable importance in the development of his thesis.

This will not be the last book written on the subject, and it may well see editorial changes in subsequent editions. However, at a time when everybody seems to be talking and only a few listening, it does offer a reasonably good "short course" for the man who feels left out and wants to join the conversation.

BERNARD B. ROTHSCHILD, FAIA

**City Signs and Lights: A Policy Study.** Boston: Signs/Lights/Boston, a project of Ashley/Myer/Smith, 1971. 272 pp. No price given.

This book is an exhaustive report based on a project of Ashley/Myer/Smith, an architectural and planning firm, acting as consultants to the Boston Redevelopment Authority. The project was carried out under an Urban Beautification demonstration grant from the Department of Housing and Urban Development.

The report is the result of a two-year study

of conditions of signing and lighting in Boston. With ample funds to develop prototype designs and demonstration experiments, the recommendations will be useful to any city with problems similar to Boston's.

I find it fascinating to read of an experimental re-signing of traffic signs for a section of a city with the results documented in facts and opinions. The study distinguishes between information systems for people in cars and people on foot which, at times, is difficult. The conclusions, however, are for the reader to accept or reject as he sees fit.

One rather exciting aspect of the demonstration was an imaginative experimental information kiosk built as a full-scale working model and located at a major street junction to test a set of ideas for permanent centers. This need is more uniquely Bostonian than perhaps in other cities, but the public's reaction to it seemed universal. Other sections of the book concern themselves with public lighting and private signs and lighting, with evaluative studies, demonstrations and tests.

Although the book is a highly technical report on a subject seldom treated technically, it is instructive reading for any design-oriented person. It is of inestimable value to those few individuals who work in such a public vein.

ALAN LIDDLE, FAIA

**Industrialized Building: A Bibliography.** Washington, D.C.: National Housing Center Library, 1971. 55 pp. \$5.

Industrialized building, a topic of keen interest to today's architect, is the subject of this bibliography. It includes books published between 1965 and 1971 and a selected list of periodical articles which appeared in journals between 1968 and 1971.

**Cherry Creek Gothic: Victorian Architecture in Denver.** Sandra Dallas. Norman: University of Oklahoma Press, 1971. 292 pp. \$7.95.

Back in the early days of Denver, rich miners and other entrepreneurs had both money and imagination. They fancied an architecture that was lavish and had no reverence for purity of style. They built Greek Revivals with mansard roofs, Gothic castles with Italian tops and trimmed and fenced it all in with lacey cast iron. The lavish stores, hotels, homes, gambling houses and brothels that were built had their own distinct style, however, which became known as Cherry Creek Gothic, so called because of the creek that ran through the area. This is an entertaining account of that gaudy Victorian architecture.

**Building Accounts of King Henry III.** Edited by H. M. Colvin. Oxford, England: Clarendon Press, 1971. 472 pp. No price given.

King Henry III (1216-1272) was a patron of architecture. Here are his building accounts, among the earliest records of their kind in western Europe. The structures under consideration are Dover Castle, Westminster Abbey and the great hall of Winchester Castle. What was paid to mason Robert of Whitfield for seven days work at Dover, what four cartloads of thatching straw cost for Winchester and what the wage was for carpenters at Westminster—all are revealed. If you are interested in the study of names,

you will be fascinated by Martin Redhead, William the smith, Geoffrey son of the watchman, William of Bridge, Agnes the lime-burner and Thomas of Eye. Serious medieval scholars will welcome the insights into one of the facets of history.

**Campus Planning in an Urban Area: A Master Plan for Rensselaer Polytechnic Institute.** Doxiadis Associates, Inc. New York: Praeger, 1971. 110 pp. \$17.50.

Doxiadis Associates, Inc., here applies its well-known theory of ekistics, or the science of human settlements, to urban campus planning. The present situation at Rensselaer Polytechnic Institute in Troy, New York, is assessed and proposals are made for change. The final section contains the proposed master plan and its perspective.

Planners of campuses will be interested in the manner in which the firm proposes a master plan for a midcity institution to accommodate the requirements of the university as well as to "achieve congenial relationships" with the communities of Troy, Schenectady and Albany.

**Water: The Use of Water in Landscape Architecture.** Susan and Geoffrey Jellicoe. New York: St. Martin's Press, 1971. 137 pp. \$12.50.

Water, the authors declare, shapes the land and molds our lives. This is an account of water landscapes of the past, present and future. The greater part of the book is given over to some 30 examples of water landscapes which range from the fountains at Hadrian's Villa to a sea city projected for the year 2,000. There are many black and white photographs.

**Hausmann: Paris Transformed.** Howard Saalman. New York: George Braziller, 1971. 128 pp. \$5.95.

Baron Georges-Eugène Haussmann's 19th century plan for the rebuilding of Paris has had a tremendous influence on city planning ever since. How well did it meet the needs of its time? Saalman considers this question and reassesses Haussmann's contributions. A good part of the book is illustrative, including views, plans and engravings. The volume is part of the series "Planning and Cities" whose general editor is George R. Collins.

**Lost America: From the Atlantic to the Mississippi.** Edited by Constance M. Greiff. Princeton, N.J.: Pyne Press, 1971. 244 pp. \$17.95.

This is the unfortunate story of America's disappearing architectural heritage. The book contains photographs and drawings of notable buildings which no longer exist. Courthouses, churches, residences, banks, office buildings, railroad stations, inns, parks and opera houses—all are included.

According to the editor, some of the buildings were destroyed by fire and other natural causes. Others have fallen before parking lots, highways and other evidences of "progress." Many have disappeared because, in the words of the editor, "We have been trading our heritage for a mass of asphalt." She admits that this is a sad book and says that it is meant to be. □

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# letters

## Getting There Is Half the Fun (Cont'd)

Out of the wilderness I take up pen once again to convey my unallayed pleasure at Comment and Opinion for September. How welcome, how overdue these words and the message: "Let's get back to architecture." I propose to one and all a rousing chorus of agreement with, and approbation for, the stand thus expressed firm and clear.

One far from minor favor is requested. Succeeding sentences in the last paragraph mention "more attention to practice-oriented programs" and "designing a building that is . . . esthetically pleasing to the user." Could the AIA consider—would it dare to venture—activities that seriously concerned themselves with the elusive but indispensable esthetic element which distinguishes the best of creative design? Could the AIA JOURNAL help to shepherd us back to architecture as a vocation that demands our best efforts on all three of Vitruvius' accounts? Is this not what, taken all in all, the next last sentence of the editorial really says? LANDIS GORES, AIA  
New Canaan, Conn.

## More About Prisons

Bess Balchen's article entitled "Prisons: The Changing Outside View of the Inside" in September was an extremely interesting one, and I am sure we can all agree that it is very germane to the times. Those of us who have been working in this field for a good many years feel that the surface has just been scratched.

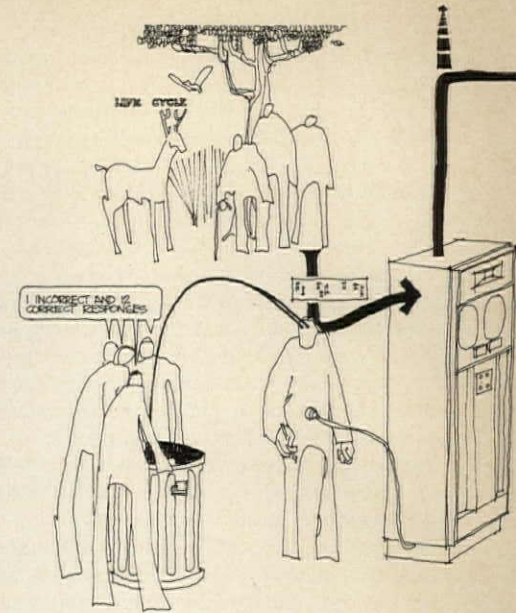
When one looks at the total amount of

funds available for correctional facilities from the Law Enforcement Assistance Administration in the next 10 years, it might well behoove the AIA to concentrate on such facilities as one of its major educational programs. Nationally, there hasn't been too much new work done when one looks at the total scope of the problem. Generally, architects know very little about design in this area, understanding, of course, that design applies not only to the physical facility but to a philosophy for the housing and treatment of our errant fellows.

The most interesting thing about the whole problem—at least to us—is that everybody in the big state institutions must first have gone through the local county level. What is being done at the local level, and I believe that LEAA would back this up, may be the most important consideration of all. Of the 3,000-plus counties in the United States, one would find that the large majority of them have old, rundown facilities. Some were built in WPA days, and others date back to the early 1900s. The local Bastille was the place where you locked them up, and any idea of treatment programs was nonexistent. For the most part, by the time a person has gone through several county jails and eventually is graduated to the state system, he's pretty hard to help.

JOHN W. MCGOUGH, AIA  
Spokane, Wash.

ED. NOTE: Our readers will be happy to learn that the AIA is setting up a 1972 Task Force on Correctional Architecture. Its tentative charge is to investigate, in consultation with federal, state and local correctional systems, psychologists and architects, what the design implications are and what is the proper role of the Institute in developing new directions in this area.



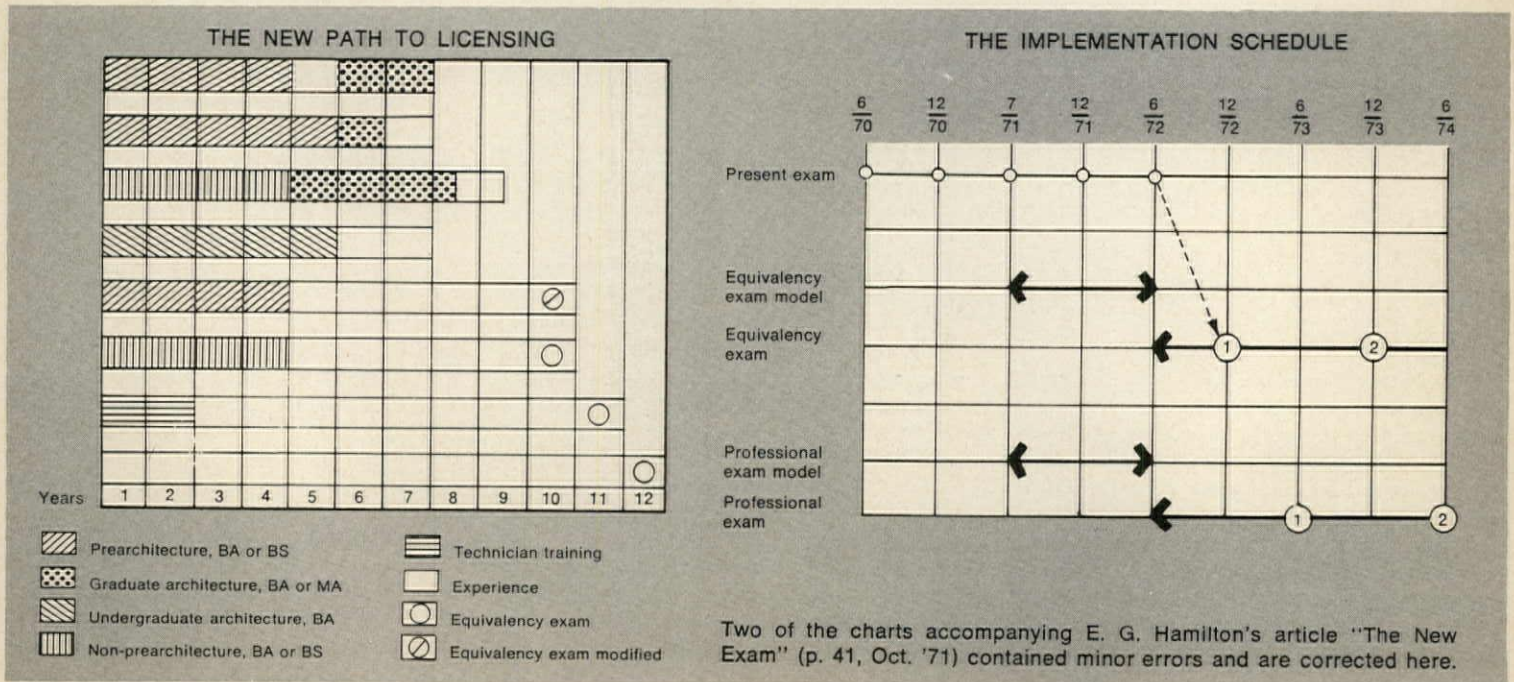
## Toward a Wistful Nod

I am writing in response to the article in the October issue by E.C. Hamilton, FAIA, on "The New Exam."

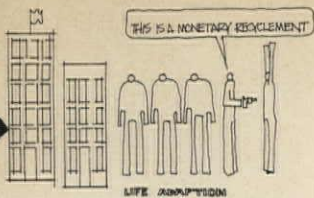
I practice architecture at the scale of a man walking, as do most fellow architects with whom I am acquainted. And so it has been with the greater artists whom I have studied. Also it appears likely that many of these practices will continue at that scale in the future.

The presentation of the new examination concerns me. By extension, architectural education excludes this scale to the extent that one feels that form-making with the finest of its considerations is too small a part of some greater concern.

When vast teams operating with facile "market analysis, political and economic analysis and programmatic facts" reach their full effect, I wonder who will make the inevitable intuitive leap, pick up his pen and draw, thereby evoking all the wonder, uniqueness and depth that is mankind's diminishing justification for living in the face of grand







collection and analysis of data, not to mention "contractual relationships."

I understand that we are to rely on our schools to generate and evaluate the architect's ability to elicit the essence of the creative act and that testing procedures cannot begin to be machine-graded with that type of sensitivity—at least not yet. But if we have been inadequate to the task of form-making at our small scale in the past, as the face of America would indicate, is it prudent to believe that the schools have overcome this self-consciousness sufficiently for us to move on to efficient teams of "strategic synthesists," having ceased to develop that man whose logos seem to reflect all these things because he is a man and, more, an artist in architecture?

All this is further suggested by the analytical charts and graphs which supplement the article and which, at second glance, don't seem to make sense.

Please expose this appeal so that it will receive at least a wistful nod from those engaged in this critical and paradoxical environmental/techno coalition at the expense of humanism.

JOHN ARMSTRONG, AIA  
PETE KOMMERS  
DON McLAUGHLIN JR.  
Sausalito, Calif.

## Remembering MacKaye

I was much interested in the October issue in its various references to Benton MacKaye and his work in regional planning because I knew him quite well years ago. I heard about him when my parents lived in Washington, Connecticut, and I would like to cite a contribution MacKaye made to our community there.

Perhaps the greatest physical change in our country during the past years is the growth of the paved road and the explosion in the car population. When I was a boy, my family had no car, nor did most of our friends. Even when my brother and I were at Yale we occasionally had to take a trolley car from New Haven to Woodbury in order to reach home, and we thought nothing of walking the last nine miles, even late at night.

These nine miles were over a dirt road that was almost impassable by car in winter. We often wished that the state would pave this section in order to make travel easier. Eventually the road was paved, but this was years after we had finished college. The unexpected result was a flood of traffic through the Washington Green.

For some years a plan had been made to build another road up the Shepaug Valley from the direction of New York. When the people in Washington saw how the new road to New Haven had affected the local traffic, they were appalled. Those who had wanted the new highway to New York changed their minds. But the new road was already on the

state construction schedule and might be started at any time.

At this point (about 1921) the local Garden Club lent a hand and retained the services of MacKaye, already a well-known regional planner. As the October JOURNAL pointed out, he is now famous as the "Father of the Appalachian Trail." He spent some time in our region studying alternative solutions to the proposed road and wrote a report that was kept on file at the Gunn Memorial Library.

I remember this report began something like this: "There are two Connecticut; one consists of alluvial plains like those around Hartford and New Haven. These can be used for agriculture and truck gardening. The other Connecticut is the high, rocky country like that around Washington. This land can be used only to produce milk and apples. But its greatest wealth is in its scenery. Nothing should be done that will spoil this natural asset."

The rest of the report was a sort of preview of the road of the future: the parkway. Instead of bringing the new road up the Shepaug Valley, which would ruin its natural beauty, MacKaye suggested that the new highway should follow the crest of the hills where views could be had and where it would keep away from the towns.

The report met with such acclaim that the proposed road was taken off the state schedule and has never been built.

WALDRON FAULKNER, FAIA  
Washington, D.C.

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## events

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- Jan. 13-15:** Grassroots Conference West  
Arizona Biltmore Hotel, Phoenix, Ariz.
- Jan. 17-19:** Grassroots Conference Central,  
Royal Orleans Hotel, New Orleans
- Jan. 27-29:** Iowa Chapter Convention,  
Johnny and Kay's Hyatt House, Des  
Moines
- Feb. 25-26:** South Carolina Chapter Winter  
Meeting, Mills Hyatt House, Charleston
- Mar. 15-17:** Michigan Society of Architects  
Convention, Detroit Hilton Hotel, Detroit

### National

- Jan. 23-28:** National Association of Home  
Builders Convention, Astrohall, Houston
- Jan. 24-27:** Architect-Researchers/Environmental  
Design Research Association Conference,  
University of California, Los Angeles
- Jan. 26-30:** Society of Architectural Historians  
Annual Meeting, San Francisco Hilton Hotel,  
San Francisco
- Feb. 9-11:** National Woodwork Manufacturers  
Association Annual Meeting, Westgate  
Plaza Hotel, San Diego, Calif.
- Feb. 14-15:** Managing for Profits in Construction  
Seminars, Hotel Commodore, New York City
- Feb. 17-18:** Annual Industrialized Housing  
Producers/Suppliers Conference, Marriott  
Motor Hotel, Chicago
- Mar. 6-10:** American Concrete Institute  
Convention, Statler Hilton Hotel, Dallas
- Apr. 27-28:** Annual Conference on Religious  
Architecture, Regency Hyatt House, Atlanta
- May 7-10:** AIA National Convention and  
Exposition, Albert Thomas Convention Center,  
Houston (Mexican portion, May 12-13,  
Mexico City)

### International

- Jan. 24-27:** International Air-Conditioning,  
Heating, Refrigeration Exposition, The  
Rivergate, New Orleans

### Competitions

- Mar. 20:** Registrations due, main activity  
center, Bay of Tangier holiday resort. Contact:  
S.N.A. Baie de Tanger, 24 Rue La-Fayette,  
Tangier, Morocco

### Awards Programs

- Jan. 31:** Entries due, Plywood Design  
Awards. Contact: American Plywood Association,  
1119 A St., Tacoma, Wash. 98401.
- Feb. 15:** Entries due, R.S. Reynolds Memorial  
Award for Distinguished Architecture with  
Significant Use of Aluminum. Contact: AIA  
Headquarters, 1785 Massachusetts Ave. N.W.,  
Washington, D.C. 20036.

### Tours

- Apr. 6-28:** Architecture and Garden Tour of  
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AIA, 285 S. Los Robles Ave., Pasadena,  
Calif. 91101. □

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