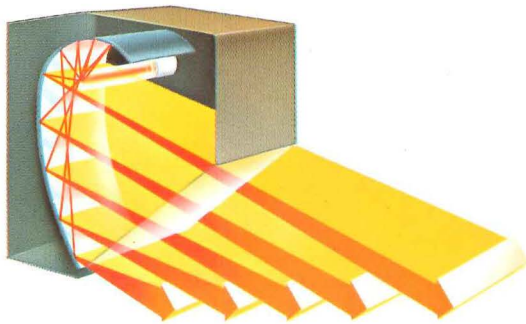


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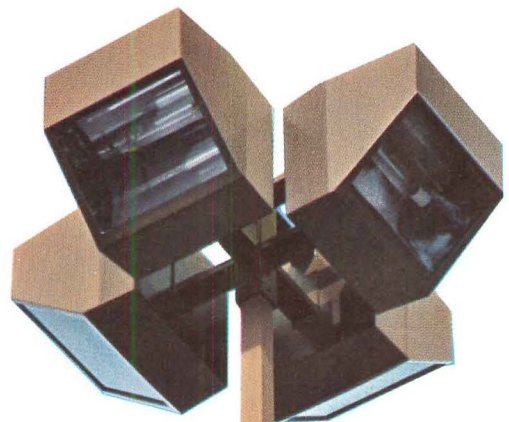
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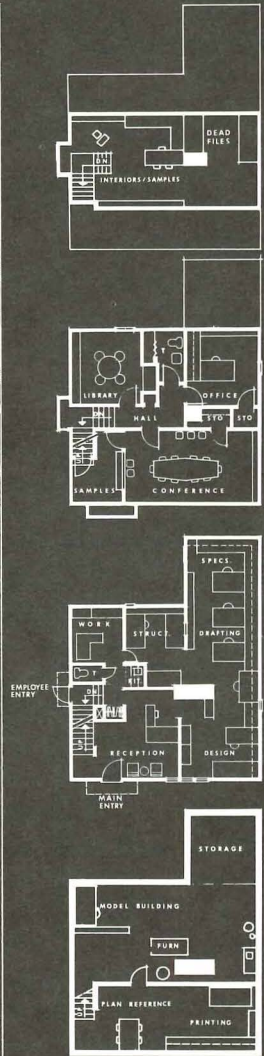


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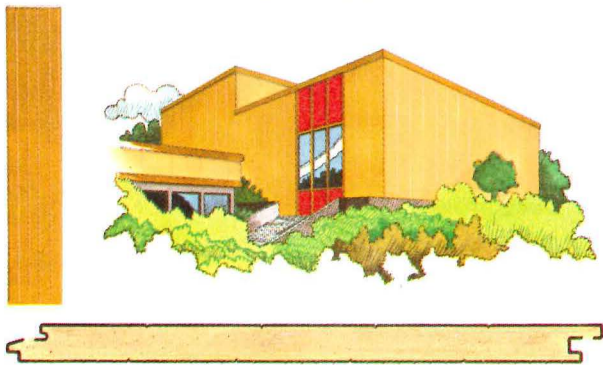
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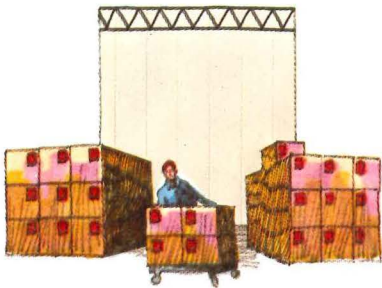
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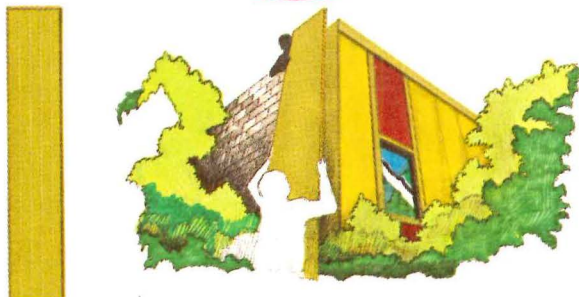


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The 1975 Convention: Larger Than Expected, Focused on Economics

"You must have thought it very odd that in a convention of beavers a squirrel should give the keynote address," said scientist Heinz Von Foerster in opening the 1975 AIA convention in Atlanta. "This ridiculous animal is doing nothing but making noises sitting on top of those very trees that you put to use by building your superbly engineered dams and your fabulous lodges."

His audience obviously was delighted by the "noises." The "beavers" had come to Atlanta in surprising profusion—a total attendance of 4,210 including 1,509 AIA members—considering the economic times. And they were obviously eager for information to help them deal with the current crisis.



Sculptured crystal eagle, by artist Hans Frabel, given by Atlanta chapter to AIA.

Fully 1,200 signed up for briefings by federal officials on how to get government contracts. In the "marketplace of new ideas," an increasingly important element of the convention, those sessions dealing with marketing and other means of economic improvement drew overflow crowds.

The convention's most important piece of business, the election of officers, produced the following winners: As first vice president and president-elect, John M. McGinty, AIA, of Houston; as vice presidents, Elmer E. Botsai, FAIA, of San Francisco; Carl L. Bradley, FAIA, of Fort Wayne, Ind.; Robert L. Wilson, AIA, Stamford, Conn.; as treasurer, for a two-year term, Charles E. Schwing, AIA, of Baton Rouge, La.; Hilliard T. Smith, FAIA, of Lake Worth, Fla., is in the first of his two years as secretary.

The college of fellows, which invested 62 new members in Atlanta, elected William J. Bachman, FAIA, of Hammond, Ind., as chancellor.

Other convention highlights included the city itself, explored in a wide-ranging series of host chapter tours. Atlanta's Mayor Maynard Jackson, speaking at the opening session, asked the attendees to leave the city their ideas. "Here in Atlanta we use ideas," he said, and the tours bore out his words.

The convention's two largest social events were held outdoors: The customarily huge Dodge party, in the streets of Underground Atlanta, and the even larger host chapter "Festival of the 13th Colony," in the plaza of the Colony Square complex and the Atlanta Memorial Arts Center.

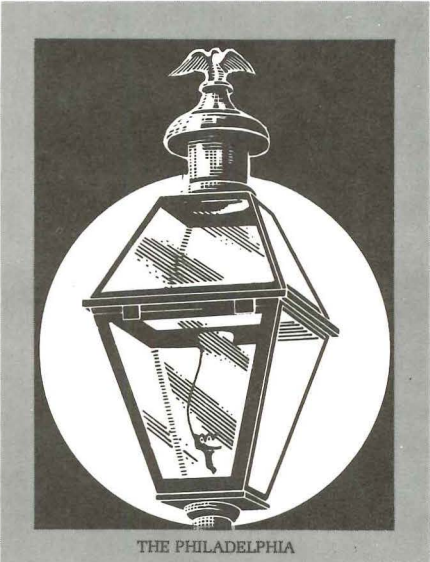
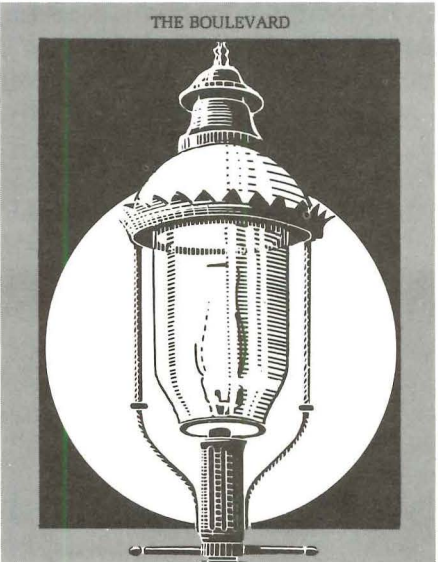
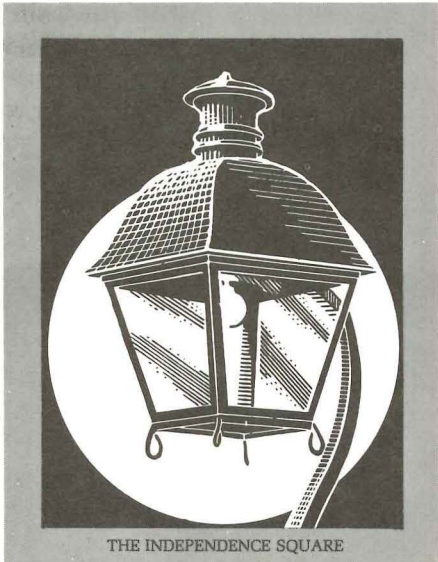
Ed. Note: *The above is the first of four installments of the Journal's convention coverage. The second, on the following page, is a summary of the theme sessions by the architecture critic of the Chicago Tribune. We chose to reprint it because, first, it is an excellent account of what went on and, second, given the nature of the theme, it seemed particularly appropriate to present an outside view.*

Subsequent issues will contain a detailed summary of convention actions on resolutions and bylaw changes and results of the testing of the fit between architects' perceptions of a series of spaces in Atlanta and those of users and other laymen.



First Vice President McGinty (top) and keynote Von Foerster speak to delegates continued on page

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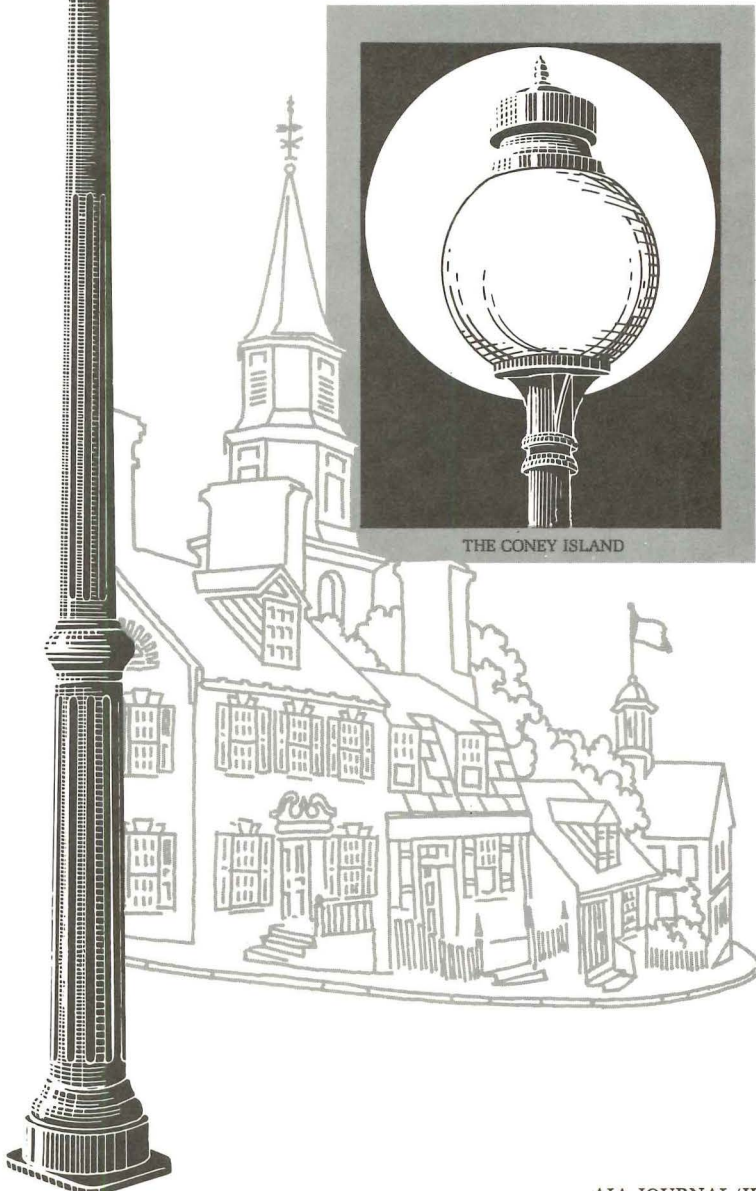
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People and Buildings: Atlanta Convention's Professional Program

By Paul Gapp, architecture critic of the *Chicago Tribune*; reprinted with his permission courtesy of the *Tribune*.

The difficult marriage between architects and behavioral scientists has finally been consummated and is slowly beginning to give us better buildings in which to live, work and play.

This happy trend was given fresh impetus last week when The American Institute of Architects [AIA] held its annual convention here.

Workshop sessions focused on precise methods of finding out what people really want in the enclosed spaces and in the cities they inhabit. None of the 1,500 architects who attended was naive enough to believe that this scientific input will suddenly kill off the brutalistic and boring design we are getting as a result of swollen corporate egos and schlock developers.

But some of the case histories recited prove that behaviorists can help humanize structures which too often please everyone except the people who must inhabit them.

In Oxford, N.Y., for example, state officials hired Edward Ostrander, a behavioral scientist from Cornell University, to collaborate with architect James Groom on the design of a new nursing home.

Ostrander spent 10 weeks in the home that was to be replaced, questioning residents about every detail of their daily lives, from their bathing and eating habits to their most intimate needs, dislikes and idiosyncracies.

He held 26 conferences with Groom, who chose to travel around the home in a wheelchair as he joined the spirit of meticulous inquiry. The architect found himself deluged by Ostrander's data ["That guy did everything except count the dandelions on the lawn."] and the two spent considerable time arguing.

What resulted, however, was a design which springs from deeply felt user needs, not standard blueprints or intuitive reasoning.

Groom gave the oldsters porches fronting on miniature activity malls which yield pleasure akin to that offered by hobnobbing on an old time village square, or strolling through a shopping center.

Acting on the scientist's findings, the architect decided against private bathrooms [the elderly didn't mind sharing them] but came up with ingenious floor plans which give each resident a strong feeling of privacy, self-identity and "turf." Even in single rooms shared by

husbands and wives, there is a careful delineation of spaces which each spouse can call his own.

Another research project—this one in Alaska—brought together U.S. Army architects and social psychologists from the Environmental Research and Development Foundation of Kansas City, Mo.

Their job was to find out how to improve housing for military personnel and their dependents in isolated, often snow-bound, areas.

After lengthy study, they learned that simple changes in building layouts and materials could improve everything from the sexual lives of married couples to military morale and the efficiency of base commanders.

Behavioral science also can have a profound effect on city planning, as Milwaukee officials discovered after they got a federal grant to obtain new kinds of academic research inputs.

The process was described by Herbert Heavenrich, Milwaukee's planning director, and Amos Rapoport, professor of anthropology and architecture [an exquisitely rare cross-discipline] at the University of Wisconsin in Milwaukee.

When planners turn away from their coldly impersonal charts and maps to find out how people think and act, they are likely to abandon widely-accepted simplistic thinking and orthodoxy, the two agreed.

Among their tentative observations:

- Trying to keep cars out of the central city by improving mass transit may be totally unrealistic and self-defeating in an auto-dominated cultural milieu.
- Spending millions on "anticrime" high-intensity street lighting may be a vast waste of money, because crime rate decreases can turn out to be temporary.
- Planners decide what high density is by looking at color codes on city population maps. Ordinary people decide what it is by what they see, hear and smell; by the amount of jostling they encounter, and whether otherwise busy areas go dead during some periods of the day.
- Traditional planning concepts of what a "neighborhood" is have become totally irrelevant. New studies show that people consider the area of 75 to 150 acres in their immediate vicinity as their neighborhood, regardless of what it looks like, or what happens to be there.
- City leaders with a "suburban mindset" tend to impose their value systems on urbanites when they decide what parks ought to be. Many haughtily regard parks as "people pastures."

All of this has huge implications for zoning and other forms of policy making. Rapoport said the job of assembling and disseminating behavioral science data among city planners and administrators is staggering. "Because there is so much of it, and it is growing at an exponential rate."

Clearly, however, Milwaukee appear to be in the forefront of a revolutionary new kind of city planning.

The convention keynote speaker and intellectual stimulator-at-large was Hei Von Foerster, a professor emeritus at the University of Illinois whose specialty is the physics of perception.

"You do not perceive that you do not perceive," Von Foerster told the architect.

"You must ask yourselves, 'How do I think about the way others think about the way I think?'"

Von Foerster's pedagogical exhortations were not always easily understood but beneath his highly cerebral view of humane design there was almost a kind of poetry.

Essentially, he was saying that architects must break out of their mental straitjackets—technological, esthetic and imitative. They must grow new sets of eyes.

Only a small fraction of the nation's 40,000 architects heard all of this, of course.

But among those who did, there seemed to be an intensity of interest and reaction which went beyond the ordinary, fleeting stimulation of a well-planned gathering of professionals.

After listening to one particularly exciting workshop on behaviorism, Richard M. Bennett, a veteran big league Chicago architect, turned to a companion and said:

"All of this is the future of architecture. I'm convinced of that. For years, we have been teaching architecture students about nothing but buildings.

"Now we've absolutely got to start teaching them about people."

Recent Congressional Testimony by AIA

Representatives of AIA have appeared before a number of Congressional committees recently. Among the legislative proposals on which testimony has been given:

- Public Buildings Cooperative Use Act of 1975 (S 865). Robert A. Burley, an AIA board member, testified before a Senate subcommittee that the Institute gives "strong and enthusiastic support" to the proposed legislation. Not only does the bill require the government to preserve public buildings of "historic or architectural significance" where feasible, but it also encourages public access to and the stimulation of "public pedestrian traffic around, into and through public buildings complementing and supplementing commercial, cultural, educational and recreational resources in the neighborhood of public buildings." Moreover, the bill stipulates that encouragement be given to the use of public buildings outside regular federal working hours.

continued on page

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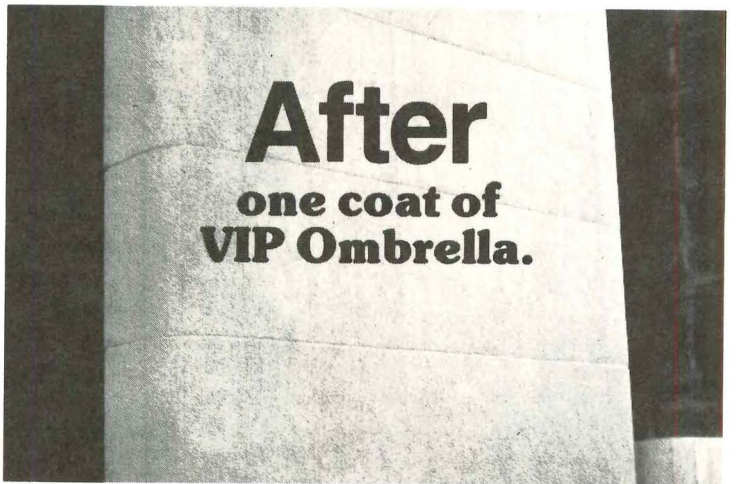
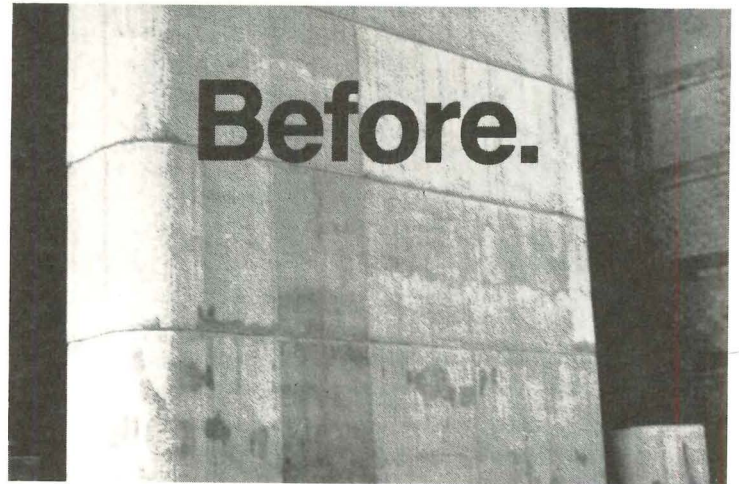
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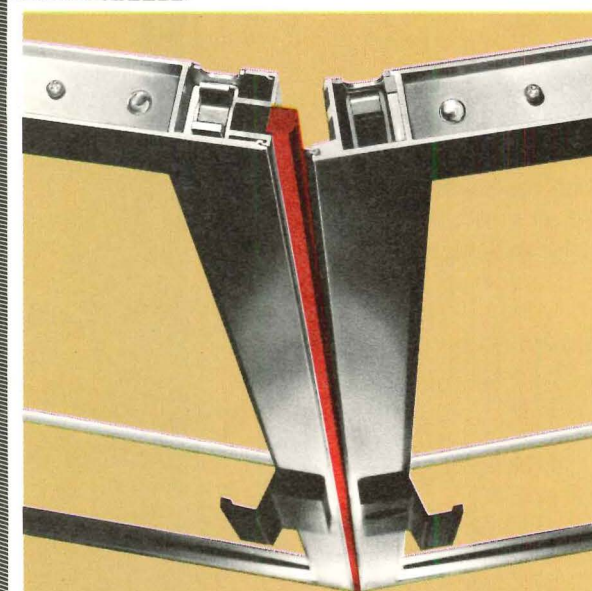


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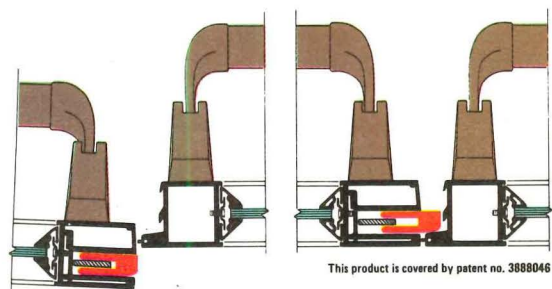


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LIBRARY



Burley praised the adaptation of public buildings to "function as integral parts of the urban environment." He said that government buildings traditionally have been "giant monolithic monuments which shelter the bureaucracy and effectively prevent a vital and necessary interaction between government and the people." The proposed act, he said, "encourages an increased dialogue between people and government."

Burley said that the legislation, which was also supported by spokesmen for the Public Buildings Service, the National Endowment for the Arts and the New York Landmarks Preservation Commission, in the short-term may not appear to benefit architects who could profit by commissions for new federal office projects. But, he said, "We should all recognize that America has produced many great architects, planners and builders. Together they have produced city fabrics that are often sound and reusable, although often misunderstood and unappreciated. Federal government demonstrations that these cultural and physical resources can be wisely utilized will play a major role in the revitalization of our society."

• National Resource Lands Management Act (S 507). Robert B. Riley, AIA, a member of the Institute's regional development and natural resources committee, told a Senate subcommittee that AIA views this legislation as a "much-needed first step" toward sound management and planning of public lands administered by the Bureau of Land Management. The legislation establishes a comprehensive policy for the management of federally owned resource lands which constitute one-fifth of all the land in the U.S.

Riley said that the proposed legislation would give the bureau the basic statutory powers needed to administer its lands and enforce its regulations. He said, however, that AIA considers the legislation incomplete in some respects. Although it requires a review of lands classifiable as wilderness, the bill allows 15 years for completion of the review. During this period, said Riley, many of these lands could be "irretrievably damaged."

Riley said also that the bill does not address adequately the environmental problems caused by the Mining Act of 1872, and he called for new legislation that would require environmental controls, reclamation and balanced review of use priorities, instead of automatic priority for mining.

• Funds for historic preservation in 1976. John F. Hartray, AIA, chairman of the Institute commission on environment and design, made a statement on behalf of AIA before the Senate committee on appropriations, in which he said that AIA supports "full funding of the historic pres-

ervation programs administered by the National Park Service under authority of the National Historic Preservation Act of 1966." He said that AIA also recommends an expansion of the Historic American Buildings Survey.

"As the cost of building materials continues to escalate . . . and as the nation becomes increasingly preoccupied with the current economic recession and scarce energy supplies, historic preservation is recognized as an energy-conservative, labor-intensive method of adapting historic properties for contemporary use," Hartray said. "Federal funding makes possible effective state preservation programs and provides incentives to developers, investors and planners."

He said that the National Park Service estimates that states will request \$186.5 million in matching grants and that AIA is disappointed that the Administration's fiscal 1976 budget request of \$20 million for the grants-in-aid program does not equal the \$24.4 million authorized. "Even this funding level . . . will not nearly approach the matching funds the states themselves are able to provide," Hartray said.

• Funds for design and planning assistance in 1976. Charles H. Kahn, AIA, chairman of the Institute committee on community development, told a House subcommittee that AIA supports an appropriation of \$15 million to enable the Community Services Administration to "provide financial aid to community-based organizations furnishing design and planning assistance to communities and individuals in urban and rural poverty areas."

Before the establishment of community design centers, those in poverty areas "rarely had access to services accepted as commonplace" by more affluent segments of the society, said Kahn. He called the establishment of an "independently funded design and planning assistance entity" crucial to the realization of development objectives of the communities served. CDCs, he said, also contain an "educational component" in that they make the communities aware of the "character and potential of the services offered by the centers."

Kahn described CDCs as "chronically underfunded," saying that they have no alternative but federal funding. "Even when revenue-sharing funds are available," he said, "local governments do not always recognize professional design and planning services to low-income groups within their boundaries." CDCs, he said, are the "only source of professional design and planning expertise which is responsible, at the grass roots level, to the communities they serve." Kahn said that the projected value of voluntary professional services during a fiscal year is \$45 million. The appropriation of \$15 million would provide basic operating and overhead expenses for 145 CDCs.

Theater Wired to Aid The Hard of Hearing

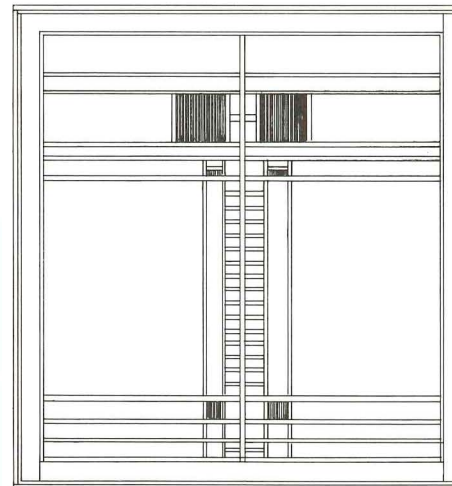
Those who are hard of hearing are now enjoying performances at Philadelphia's Walnut Street Theatre. This is made possible by the installation of an "audio loop"—a wire strung around the perimeter of the theater and energized with the amplified sound from the stage. The sound from the stage, picked up by the amplifier, is fed into the loop and then radiated out to be picked up by a tele-coil in a hearing aid.

The wearer of the hearing aid can listen without such distractions from the audience as coughing and program-rustling. He simply sets his hearing aid dial on "T" for telephonic induction coil and is able to hear even better than a person with normal hearing. The only equipment needed is the loop wire, an amplifier and mike.

The idea was introduced to the Walnut Street Theatre by Dr. Michael Weiner, a local dentist and member of the Philadelphia Hearing Society. He learned about the audio loop system and its use in classrooms in schools for the deaf. With this simple installation, the hard of hearing can now enjoy the theater, opera and concerts.

Wright Windows Stolen From Rochester House

A house in Rochester, N.Y., designed by Frank Lloyd Wright, was burglarized recently. Four leaded glass window panels and frames were stolen from the detached garage. The panels, the same design as the windows in the house, have been called "abstract paintings executed in leaded



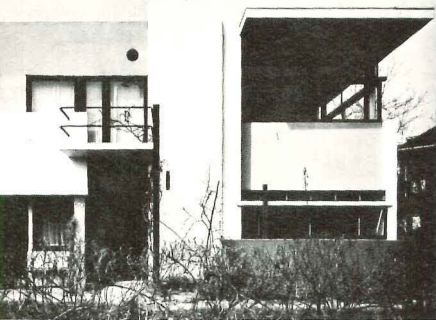
glass." The panels are approximately 30x48 inches in dimension. The large shaded squares are in "opal" glass; small squares are amber tinted.

The house, completed in 1908, was built for Edward Everett Boynton. It is a designated city landmark and is regarded by architectural critics as one of the most architecturally significant structures in the metropolitan Rochester area.

The house, on East Boulevard, is presently owned by Mr. and Mrs. Louis M. Clark Jr., who have offered a "substantial" reward to anyone giving information leading to the recovery of the stolen window panes. Anyone with information may contact the Clarks at 16 E. Boulevard, Chester, N.Y. 14610 or the Rochester Police Department at (716) 232-7070, ext. 308. The case number is 371976.

Funds Sought To Save Rietveld-Schröder House

The Rietveld-Schröder house in Utrecht, Holland, celebrated its 50th anniversary in 1974. Designed by Gerrit Thomas Rietveld, in close collaboration with the interior designer Tr. Schröder-Schröder, the house is discussed in nearly every study of 20th century architecture. It is important



in the annals of modern architecture because of the experimental nature of its spatial relationships. Major characteristics of this architect's work are his three-dimensional handling of space, the cubistic forms of his architecture, his use of primary colors and his consistent pioneering of new materials and methods.

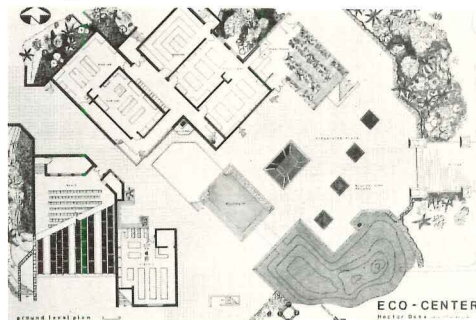
The house, one of Rietveld's most famous designs, was in a bad state of repair when it was purchased a year ago by the Rietveld-Schröder Huis Foundation. Nearly \$100,000 has been collected through gifts from architects and architectural organizations and from government subsidies and donations by foundations and individuals who want to preserve the pioneering work of modern architecture.

Still lacking, however, are funds to finance paying for the purchase of the house and for restoration and maintenance. It is estimated that an additional \$50,000 is necessary. The foundation calls upon architects in all parts of the world to help restore the house to its "former glory." José Luis Sert, FAIA, of Cambridge, Mass., and Alvar Aalto of Helsinki, Finland, are among the architects who have endorsed the efforts of the foundation. Contributions, or request for additional information, may be sent to H. Isaac, chairman, Rietveld-Schröder Huis Foundation, Robert Schumannstraat 19, Utrecht, the Netherlands.

Students Win Awards For Research Centers

Hector Ossa of Pratt Institute has won first prize of \$1,000 in the 13th annual student design competition sponsored by InterRoyal Corp. A second prize of \$500 went to Forest R. Knowles of Auburn University, and a third prize of \$250 to Rohinton Homi Shroff of Illinois Institute of Technology. Honorable mentions were earned by R. Stanley Jacobson of the University of Oklahoma and by Felton Lamb of the University of Arkansas.

The entrants were to design a complete ecological research center to be the focal



point of a university complex. In the hypothetical situation, a problem of siting included a traditional bridge, spanning a dry river bed, which was located dead center in the middle of a three-square-mile parcel of land allocated for the center. Both functional requirements and esthetics were taken into consideration in the judging. The panel of judges for this year's program were New York City architects and designers Richard Roth Jr., AIA; Hans Krieks and Jim Morgan.

Reynolds Student Award Given Tennessee Team

A team of six University of Tennessee at Knoxville students is winner of this year's Reynold's aluminum prize for architectural students. The team won the \$5,000 prize for its design of portable dome-like structures which were constructed on the university's agricultural campus as an outdoor classroom and plant storage space. The awards jury called the design "extraordinarily sophisticated."

Two \$1,000 honorable mention prizes were awarded to Robert J. Dunay and Jay E. Stoeckel of Virginia Polytechnic Institute and State University for the design of a portable forest modulator, and to Stefan J. Cypel, Vernon David Croft and Steve Oubre of the University of Southwestern Louisiana for the design of a floating aluminum production plant.

The top winning design used ordinary aluminum screen wire as a material for overhanging roofs, membrane walls and other applications of tensile surfaces. The aluminum screen, which was coated with liquid plastic to form a surface membrane,

provides a lightweight and durable material. Within the membranes, the aluminum reflects 70 percent of the infrared light, providing cool interiors in summer and warm ones in winter through the use of infrared heating.

A multipurpose pavilion, a prototype of the "domes" that the students built on the university campus, is planned for erection in Managua, Nicaragua, which was all but leveled by an earthquake. Joseph Kersavage, a Tennessee University faculty member and authority on architecture for seismic areas, says that the screen wire process "is advantageous for earthquake areas because the forces acting on a building during a quake are directly proportional to its weight."

The jury for this year's awards program consisted of Ambrose Richardson, FAIA, chairman; Arthur H. Silvers, AIA, and Daniel Sze, architectural student at Howard University.

Competition for Stadia Adaptation

The Philadelphia chapter/AIA and the 41st International Eucharistic Congress are co-sponsoring an architectural competition to make the Veterans and the John F. Kennedy Stadiums in Philadelphia suitable for liturgical worship. The design will incorporate platforms, altars, audiovisual and lighting systems and movement pat-



terns for celebration of masses. The competition is being conducted in anticipation of a major assembly of world Catholics and other Christians at the IEC in Philadelphia in August 1976.

All registered architects in the U.S. are invited to participate, although architects not practicing within the jurisdiction of the Philadelphia chapter/AIA must associate with a Philadelphia firm to compete.

The winning design will receive an award of \$5,000; second and third places will be given \$2,000 and \$1,000.

Veterans Stadium seats 66,000 people in a seven-tiered octad. JFK, encompassing an area of 61.5 acres, is 2,350 feet long and 1,450 feet wide. The stage design for this stadium should accommodate up to 300,000 viewers in the stadium and the surrounding parking areas.

The program for the competition will be available on Aug. 1, although those who

continued on page 56



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Of Liability, Litigation And Insurance

It couldn't have happened at a worse time. Smack in the middle of an economic crisis the principal carrier of architects' professional liability insurance announces increases in premiums averaging 77 percent for the first \$100,000 of coverage and 106 percent for amounts over \$900,000.

The outcry was immediate and blame was cast variously at the carrier, Continental Casualty (CNA); AIA and, in particular, its insurance committee; the Victor O. Schinnerer brokerage firm which administers the liability program for AIA nationally; unscrupulous attorneys, and nearly everyone else in sight.

In truth, the liability crunch is the product of complicated forces and circumstances that extend well beyond the boundaries of the architectural profession, as evidenced by recent headlines about striking doctors. And it is hard to find a certifiable villain in the picture.

The outcry, however, has been heard clearly by the AIA board, which has devoted large portions of its last two meetings to discussion of the problem and review of the liability program. Out of the most recent, the preconvention meeting in

Atlanta, has come a task force which will examine not just the program but the entire situation, including the rise in the number of suits and severity of judgments against architects and means of reducing the profession's vulnerability to such actions.

Out of the board discussions, which had a kind of guarded tension about them, these seem some of the questions that the task force is sure to address (as the insurance committee already has, painstakingly and sometimes painfully):

- Are there other carriers than CNA which might offer lower premiums? So far the insurance committee hasn't been able to find any that it felt capable of handling a national program, but it is continuing the search.
- Should there be a single national program, or should AIA endorse a variety of regional carriers around the country, and let the competition of the marketplace do its work on the level of premiums?

One such carrier is Design Professionals Insurance, which covers some 200 architects in California and Colorado and is expanding into Washington and Oregon. Since entering the field in 1971, the firm has raised its rates only once, a 35 percent increase this year. But it is admittedly choosy about whom it insures.

Schinnerer representatives argued to the board that only a national program could generate the kind of information, and the profits, necessary to support the loss prevention activities (such as seminars) that it now conducts for AIA at a

cost to the company of some \$350,000 per year.

- Should AIA itself get into the liability insurance business? The committee has not ruled out this possibility, but self insurance would require a large amount of capital and substantial annual budget items for administration and such ancillary activities as the loss prevention program.
- What about carrying insurance on individual projects instead of across the board and including the premium in the architect's compensation? Project insurance is available but CNA requires that a firm carry an underlying policy of professional liability insurance.

Passing the premium on to the client becomes more feasible with the spread of cost-based compensation methods. But, of course, there are clients who will stand still for it and clients who won't.

The root cause of all of this anguish is starkly simple: Like other professionals, architects are being sued more, held liable more, and jury awards are becoming more frequent and more expensive. When this happens, premium hikes follow as night follows day. Says James Stevens a Schinnerer vice president, "What we're doing now is trying to get enough here to pay claims over there. And the claims have escalated in value."

One factor pushing them up is inflation. Most claims—a Schinnerer official estimates between 70 and 75 percent—involve design and/or construction error. (While third party bodily injury claims have resulted in some large and widely publicized awards, these account for less than a quarter of the total number of claims paid out.) And as time passes in litigation the cost of correcting error rises inexorably. A piece of work that cost \$100,000 two years ago could cost \$140,000 or even \$200,000 to redo today.

Why the increase in the number of court actions and awards? There is no reason to believe that architects are committing more errors than they used to. (Indeed, Schinnerer's Stevens points out, in 1974 there was \$134 billion in construction and only \$37.8 million in successful claims against design professionals.)

Rather, the reason seems to be what one observer called "the rush to litigate"

in an increasingly consumer-conscious age. "This is the most legalistic society that man has ever known," says George White, FAIA, Architect of the Capitol, who is also a lawyer, an engineer and a member and former chairman of the Institute's insurance committee.

"The question of the liability of the professional is being hit hard," White says, "but society expects a higher level of professional competence than ever before. You can't expect perfection, but we tend to."

The question, to White, goes beyond rate increases or even insurance as such. "It is a question of legal liability for professional practice. The question which needs to be answered is, 'What should society expect of the architect?'"

In search of an answer, and a solution to the liability crisis, White comes up with a challenging list of "maybes"—"Maybe the licensing procedures are inappropriate. Maybe we need more policing of the profession in a more stringent way. Maybe the education of architects needs to be changed to accommodate a higher degree of specialization.

"Maybe everybody who is an architect shouldn't be an architect."

"The problem is in the management of firms," says Arthur Kornblut, AIA, former Institute professional practice administrator now in practice of law and specializing in liability. "Firms let themselves get snookered into positions where they are accountable for things they shouldn't be accountable for."

Says Kornblut, "A lot can be avoided by common sense and good practice." But he acknowledges that "it's a very complex problem and finding solutions isn't easy."

And he adds, "It's a little like squeezing a water bed. You push a little here and it pops up over there."

White is certain of one thing: "Time is running out for reasoned solutions. If we don't act now we'll be in a situation of crisis management. The whole problem calls for a concerted effort—a careful, objective study. We must use an industry-wide approach and take it to the legislators, bar associations, labor—everybody connected with this. We're not going to solve it by leaving anybody out." *Donald Canty and Beth Dunlop*

Interiors as Architecture— And as a Market

"Unless a building is efficient, pleasant and comfortable for the occupants, it doesn't work no matter how well it may look to the person walking around it." So saying, Louis Beal of Interior Space Design, an offshoot of the architectural firm of Perkins & Will, argues that architecture cannot legitimately be separated from interior design. A major reason, then, for architects to venture into interior design is to maintain control over their buildings, "to make sure that a contemporary building isn't filled with Queen Anne furniture," says David Dibner, FAIA, of Newark. Another reason, of course, is the hope of developing new business at a time of low building activity.

During the boom years of the '60s, architects withdrew more and more from interior work, partly because of increased specialization, partly because abundant commissions impelled architects to relinquish their grip on projects sooner and leave their completion to an ever-growing list of specialists. But with the boom yielding to recession many architects are taking a new look at the interiors market.

Interiors work is affected by the same forces as have hit the building industry in general. With construction sharply down, interior design commissions on new buildings have dipped accordingly. And reports of interior designers forsaking the field for the upholstery business and related trades are not uncommon.

On the other hand, there is work waiting to be done if architects can overcome their preoccupation with design of new buildings. For new construction, even in the best of times, only adds a tiny fraction to the nation's stock of buildings. And uses and users of existing buildings are continually changing, which means that there is a constant market for remodeling, redecorating and replanning existing space.

Moreover, architects who do interiors work, on either new or existing buildings, generally report it to be more profitable than building design. And there is some evidence of new and expanded interiors markets beginning to open.

One such source of business is adaptive use of old buildings, going beyond remodeling to a complete change in function.

The adaptive use market is expanding dramatically. One reason is the rise in sentiment for preserving historically or architecturally significant buildings—or, in many cases, simply the old and familiar.

Perhaps a more significant reason is the savings in energy, money, and sometimes scarce materials that can result in adapting an existing building instead of starting from scratch.

A brand new market is opening up as a result of the recent decision by the General Services Administration to award separate interior design contracts on its buildings for the first time. (GSA's new budget contains \$440 million just for repair and alterations of the office buildings it owns.) "I see a tremendous market for architects in space planning and interior design," comments Kent Slepicka, who heads GSA's new special programs office.

GSA will announce its interior projects in the *Commerce Business Daily*, and proposals sent in reply will be judged by how well the respondent understands the project and the problems it poses, how well it can organize to undertake the work, how solid are the qualifications of the people who will do the work and how economically it proposes to complete the project.

Says Slepicka, "We are not concerned with what you call yourselves, but only with what you can do and that you do it well." He mentions that, potentially at least, architects have a number of advantages in competing for interior design commissions. "If you're trained to see the big picture as architects are," says Slepicka, "you're more likely to be able to fit the components into it." He adds that the architect is more accustomed to assuming a position of leadership and to coordinating his work with that of others involved in the project than the typical interior designer is. On the whole, the profession continues to enjoy more credibility than interior design.

"The real task," says Slepicka, "is for architects to realize that they have these advantages and to capitalize on them." They must gear up for the effort, and Slepicka points up the danger that by failing to do so adequately, architects might let this opportunity slip through their fingers in much the same fashion as they relin-

quished their grip on value engineering and construction management.

When compared to other aspects of architecture, interiors work frequently provides an ongoing source of business. Once completed, a building's shell is not likely to need further attention from an architect unless, of course, he did a questionable job to begin with. But interiors constantly need refurbishing, and if the original designer's work was satisfactory, he will, in all likelihood, be called again when executive offices are due for remodeling or a branch office needs sprucing up.

Some architects have obtained continuing maintenance contracts on their interior work and are called on almost every time a waste basket needs to be replaced.

One way of offering such a service has been developed by Robert Levison, FAIA, of Clearwater, Fla., whose firm provides one or two free "check ups" at pre-established intervals after completion of the project. These visits can serve to further cement relations with the client and as an opportunity to discuss possible future projects. They also provide the architectural firm with a basis for developing a fee for continuing maintenance visits for another year or more.

Says Levison: "Like every market you'll go into, if you haven't got the expertise and you don't want to learn it, stay away from it—you can do nothing but be clumsy. But I feel that architects for a good number of years have been giving too much away."

Virtually everyone involved in interiors cautions that few, if any, architects can hope just to walk into actual space planning and interior design and succeed unless armed with special training and/or experience. "That would be like asking a vet to do heart surgery," says George Nelson, FAIA, of New York. Norman De Haan, AIA, president of the American Society of Interior Designers, adds that many architects think they can still approach interior work as though nothing had changed since the days when Herman Miller's and Knoll International's furniture was routinely used everywhere. He finds it ironic that architects who otherwise bristle at using predesigned building components are willing to do precisely

that when it comes to interior work.

There are several levels of interior design, and architects' comfort and capabilities to deal with them vary with each. The most basic level is the creation and shaping of spaces, which is the very stuff of architecture.

Next comes the planning and arrangement of spaces. This, too, is a normal part of the architectural process, but space planning has come to be all but dominated by others, especially in the office building field.

In fact, the nonarchitect space planners, some of them huge firms, are making further inroads into architecture by "designing from the inside out" before the architect begins his work. A notable example is the Sears Tower in Chicago, where some interiors were planned by SLS/Environmentics, the biggest firm in the field, before Skidmore, Owings & Merrill had completed the building's design.

A third level of interior design is the provision of mechanical and electrical services and other fixed elements, which also is clearly and traditionally within the architect's purview. The largest problems and questions occur at the fourth level—the selection and provision of furnishings and other movable and decorative objects. Here the architect has another set of competitors: established interior design firms, interior decorators and manufacturers who offer free design services.

Here he also requires a wealth of special knowledge which he may find far from second nature. He must know the properties of various fibers, their colorfastness, durability, various bonding methods, the advantages of certain weaves over others. He must be familiar with methods of laying carpet; the workability and stitching qualities of draperies; cleaning methods for different materials; the working parts of different types of furniture, and choices in components or systems of furniture. Of the thousands of new items put on the market each year, few have lasting quality or are worth remembering, but the interior designer must know basic information and available sources for obtaining furniture and equipment.

Venturing into interior design also re-

quires accepting certain attitudes and confronting problems that either do not exist, or exist to a much less troublesome extent, in other architectural work.

In the realm of attitudes, for instance one must deal with the fact that although the exterior of a building, once completed is generally fixed almost forever, its interior is something that people not only work and live *in*, but work *on*. In order effectively plan interior spaces, changed patterns of use must be anticipated, which allow for alterations in company policy and personnel preferences. Observes Norman De Haan, "Our work is cast not in concrete, but in cotton."

Many architects still have a strong resentment against what they consider to be a quasi-profession, as is evidenced by the fact that among the 79 architectural schools accredited in 1974-75, only six offered programs in interior design: Auburn University, University of Florida, Kansas State University, Louisiana State University, University of Oregon and Rhode Island School of Design.

For the most part, such prejudices are no longer deserved. Interior designers are taking steps toward achieving increased professionalism, as evidenced by the formation of a newly integrated professional society, the American Society of Interior Designers, which emerged from a consolidation of the former American Interior Decorators and the National Society of Interior Designers. The new society is for the first time accrediting educational institutions which offer interior design degrees and is working toward the licensing of interior designers.

A continuing problem of interior design work is the absence of standard practices and procedures. In an attempt to rectify this situation and to further professionalize interior design, AIA and ASID recently established a joint commission whose purpose is "to provide a forum among those who furnish interior design services and products in order to foster excellence in interior environment." Among the stated immediate goals of the commission are to develop standard contract documents which will have the approval and endorsement of the several organizations involved in the field; to exchange inform-

need for special training, knowledge and commitment.

n and establish a definition of roles and responsibilities of the various segments of the industry, and to establish professional standards and practices.

Prevailing mythology has it that interior designers make a profit of some 20 percent and more. In truth, however, the majority of well-organized, established firms report profits of between 10 and 15 percent.

Many architectural firms with limited resources and/or experience find that their interior work is a financial drain. Usually this is because they either give the service away free just to prevent their buildings "from being ruined by some perchangers"; or they underestimate costs; or they don't know how to deal effectively with interior clients.

Says Louis Beal, "You should be able to make 10 percent on all projects." He adds that calculating costs on a time basis is usually preferable to a fixed fee, since you can't lose money this way and don't have to wait for payment until completion of the project.

"Generally speaking, if the scope of the job can be clearly defined," says Warren Platner, FAIA, of New Haven, Conn., "we charge a percentage. If the scope is somewhat nebulous, we charge for time and materials."

The problems and frustrations involved in obtaining equipment and furniture and dealing with the furniture industry are legion: Notice comes without warning—no opportunity for recourse—that deliveries will be delayed 10 weeks and prices raised 10 percent. Period.

However, Platner contends that the barriers to obtaining supplies for interiors are no higher than those encountered in other types of design work. "The folly," says Platner, "is in allowing years for the completion of the outside, but expecting the furnishings to be integrated in weeks. Interior work is not given sufficient time importance."

In almost all cases, furnishings and equipment are obtained through an interior contractor who is responsible, at least in principle, for deliveries and should be obligated by contract to provide substitute materials on schedule if deliveries are delayed. In reality, however, the de-

signer must oversee the contractor at almost every step. Goods are ordered in the client's, not the architect's, name, but come to the designer to be reviewed and to be authorized for payment.

Problems often begin with writing specifications, which is not at all the relatively straight-forward matter it is in other aspects of architectural work. There is, for example, no central, comprehensive source book for interior design equipment comparable to Sweet's catalog for building supplies. Contract documents for interiors are only now in the works. And when it comes to pots for plants and other special items, specifications writing becomes extremely difficult, if not impossible. Nonetheless, advises an experienced interior designer in the employ of an architectural firm, "Specifications should, where possible, be written with the same thoroughness as for other architectural work and the designer must at every step have the full support of the client in insisting they be met."

When it comes to certain accessories—oriental rugs, fishnet, antique lamps—the designer may have no option but to make purchases outright, which he cannot do except in his own name without forsaking the discount allowed him as a professional. He will then resell, which can raise a host of problems. The architect will have to establish a separate organization to buy and resell. Legal questions may also develop over such matters as responsibility for warranties so long as there is no buying and reselling.

"Some architects seem to forsake professional standards and procedures when it comes to interior work," says William Ensign, FAIA, of Washington, D.C. He advises that the best way to cope with the problems of obtaining the right materials on schedule is to "practice your interiors as you would your architecture." This includes not making unrealistic promises to clients.

Clients can pose a special problem for practitioners of interior design. "It is something everyone thinks he can do," says Platner. "The architect's contribution is, therefore, not valued as much as in other technical areas where the client knows he doesn't know anything." As a

consequence, the client is often less willing to take the advice of experts, and more easily swayed by his wife, his neighbor, his tennis partner. "In straight architectural work, the client won't argue as much, waste so much of your time, frustrate you so much," says Platner.

Problems with clients often begin with their being reluctant to actually pay the architectural firm an additional fee for doing the interiors of buildings they construct. Some clients regard the work as being the rightful purview of someone else, often a decorator or a furniture manufacturer.

The interior decorator is a being much maligned by interior designers and architects alike, mainly because anybody can become a decorator and numerous nobodies and untalented busybodies have chosen to do so. Then, too, decorators generally charge a percentage of the furniture specified, which is considered a most undecorous procedure by nondecorators.

Furniture manufacturers who offer "free design services" are another source of competition. In reality, of course, such services cost the client dearly in the form of commissions earned by the "free" decorators and designers they employ, and by eliminating the opportunity of obtaining competitive bids for furniture. Moreover, the client often runs into unexpected costs because the decorators employed by furniture manufacturers are almost always at a loss when it comes to moving a wall or an electrical outlet, which means expensive outside help must often be called in.

It becomes a task of the designer to educate the client to the fact that only the professional who is independent of manufacturers can be counted upon to be guided by the client's best interests and to specify equipment that is appropriate rather than just expensive.

The key to keeping the problems inherent in interior design work from becoming unmanageable is in making a serious commitment to it. To embark upon it with an attitude that it is a lesser art, or a form of "powder puffery," is a sure prelude to disaster. "If you have a prejudice against it, it's not going to work," says Ensign. "You must believe in it on principle." *Andrea O. Dean*

Interiors as An Integral Part of Practice



Dining common at the Institute for Advanced Studies, Princeton, N.J.

Occupying a maze of offices in a converted Philadelphia mansion, Geddes, Brecher, Qualls & Cunningham exemplifies the medium-sized firm which considers interior an integral part of the practice of architecture.

There never was a time in the firm's 22-year history when it did not include interior design among its services. Its attitude toward interior work is characterized in a statement by Robert Geddes, FAIA, who is also dean of the Princeton School of Architecture: "A planned milieu should recognize that it serves a purpose in human communications, that it creates expectations, guides, behavior, disappointments or satisfies." Bob Geddes was a pioneer among architects in recognizing the value of working with behavioral scientists and exploring user needs. Such a concern leads naturally to involvement in interior design.

Associate Roland Gallimore, AIA, a tall, silver-haired man with a patrician appearance and a genial, deliberate manner, heads GBQC's interior design and graphics "department" of four persons.

It is a department mainly in name, since its members, all architects, wear several hats. For a number of reasons the firm does not employ interior designers unless they are also trained in architecture. GBQC does not actively solicit independent interior work and does not always have enough work to keep its interiors people busy. They must, therefore, be able to take on a variety of architectural tasks. Moreover, Gallimore's team is involved from the very inception of architectural projects, and must be able to fully understand them. His experience is that "interior design schools fail to teach even primary drafting skills."

As a founder and past president of the Interior Design Council—an organization established in the Philadelphia/Wilmington area five years ago to set ethical and professional standards for interior design—Gallimore has as one of his main objectives the raising of interior design school standards.

In his opinion, the special skills and attitudes required by those working in interiors are primarily in the area of business—knowing the furniture business and how to deal with its frustrations—rather

in design itself. He points out that, historically, interior and furniture design have been spin-offs from architecture, and that some of the most renowned architects have also been the most respected designers of interiors and furniture, citing Le Corbusier, Aalto, Mies, Breuer. GBQC's approach and attitude toward such problems of interior design, as dealing with clients and with the furniture industry, are consistent with the firm's general concept of interior work as an integral component of the overall architectural process.

Recognizing that clients are most reluctant to negotiate a separate fee for interior work, GBQC at the start determines one comprehensive fee which includes interior design.

"The problem of delays in deliveries is something everyone has to live with," says Gallimore. If the involvement of the interior design group starts early, orders can be placed with such delays in mind. "We permit 12 to 18 weeks for deliveries." He regards himself as being fortunate in having established a good working relationship with a reputable interior contractor who takes full responsibility for storing and installing furniture and equipment, filing claims for damages incurred during shipment and so forth. Headed by an architect, the interior contracting firm took the name, G-4, from the World War II Army supply corps.

In talking about his design approach to interiors, Gallimore draws a distinction between the typically more emotional, romantic approach of the decorator and the more cerebral, classicist view of the architect. "If an architectural element troubles you, change it," is how he characterizes the decorator's attitude. By contrast, the architect's approach—and that of Gallimore specifically—is to recognize certain rules of the road. "For example, we work with structural grids that are sacrosanct." He adds that he actively enjoys the challenge of working within pre-existing restrictions.

A substantial portion of GBQC's recent interior design work has consisted of remodeling already existing spaces, which in itself imposes considerable limitations. In Gallimore's opinion, the market for re-



The Plexiglas centerpiece of the JG showroom, above, and reception area, below.

modeling work will continue to expand, and principally those firms that can offer a broad range of services will profit from it.

GBQC's distinctively architectural approach is readily evident in its design of the JG Furniture Co. in New York City and the dining common of the Institute for Advanced Studies in Princeton.

GBQC has quite ingeniously incorporated both open space and enclosed space concepts in its design for this furniture showroom and office area. Without cutting the space up with partitions, GBQC has divided it into functionally discrete display areas, plus private offices. This was accomplished by placing a square cube of bronze Plexiglas, near the center of the showroom, with walls canted approximately 90 degrees to the building walls.

The cube, which conceals four irregularly spaced columns, contains the administrative offices, salesmen's stations and a conference room. Jutting into the surrounding showroom space, its four corners divide the showroom into quadrants.

Because it is highly reflective, the central cube further serves to make the showroom area appear larger than it actually is. Also deceptive is the shape of the cube itself. Although it appears fully enclosed, it actually has openings, recesses and doorways. It is given a continuous rectangular outline, however, by the color of its carpet, which is darker than that in the surrounding showroom.

A reception area at the showroom's entrance, also clad in bronze Plexiglas, repeats and prepares the eye for the larger, freestanding core area.

On three sides of the showroom there were large windows framing dramatic views of the city. In order to prevent these cityscapes from distracting attention from the furniture displays, without eliminating them altogether, GBQC covered the windows with a wool scrim stretched over aluminum frames. The result is to soften sharp detail and produce a mural-like effect.

In many ways, the dining hall common of the Institute for Advanced Studies in Princeton serves as a summation of the firm's approach to interior design. The common is part of a \$4 million dollar project completed by GBQC for the Institute



Above, GBQC used a curved stairwell to bring light below-grade in the new AIA Philadelphia chapter office; curved walls provide continuous display space. The firm designed and furnished the dining area of the Philadelphia Museum of Art, below to serve as a gallery for the display of the decorative arts of the Bauhaus.

in 1972. While the independent interior design firm of Semanko-Bobrowicz served as consultants and assumed responsibility for production aspects of the project, GBQC exercised overall design control.

The Princeton complex, like most of GBQC's completed projects, belongs in the tradition of the international style of architecture. Perhaps its most striking aspect is the continuity of design—from the shell, through the configuration of interior spaces, to the choice of furnishings.

Among the overall requirements of the Institute of Advanced Studies was that the buildings provide the privacy and solitude needed for independent study, together with opportunities for socializing. The

two-story, glass-walled dining hall provides the major socializing space. It consists of a "coffee balcony" and a lounge below. Both areas are subtly divided into relatively open, active spaces, on the one hand, and more nearly closed and intimate ones, on the other.

About GBQC's work at the institute, Ada Louise Huxtable wrote: "The result is an extremely thoughtful exercise in solving functional needs with a maximum of taste and sensibility, a modicum of homage to some great architectural innovators of our time, and a thorough understanding of all those relationships of space, scale and personal response that make a structure work." A.O.D.

Organizing to Get and Execute Interiors Work

Without interiors work," says Irving Schwartz, AIA, "I don't think we'd be in business, especially since the large architectural firms are now competing for small projects."

Schwartz's four-man firm, IDS, of Champaign-Urbana, Ill., is one of several surveyed by the JOURNAL which have found significant markets in interior design. The object of the survey was to determine how such firms organize for interior work.

While he would like to see architects more deeply involved in this area of design, Schwartz worries that "those who just go into it without experience or training will give the profession a bad name."

Before starting his own firm, Schwartz was for 15 years in charge of interiors for Richardson, Severns, Scheeler, Greene Associates of Champaign-Urbana. When he began, there were no available interior contractors. Therefore, furniture could be obtained only if it was bought from the firm and resold, for which purpose a legally separate organization had to be established.

The name, IDS, was invented on the spur of the moment during a telephone call, when one of the principals said casually to a prospective interior design customer, "We can have our affiliate, IDS, do the job." When Schwartz (Irving D.), who was to head up the new organization registered surprise, he was told, "Your department, your initials. It can also stand for Interior Design Services."

When forming his own firm in 1972, Schwartz kept only the acronym, except when dealing with a few furniture manufacturers to whom his firm will always be Interior Design Services.

Today, when IDS buys directly from manufacturers, it makes purchases in the name of the client, obviating any need to sell. IDS asks for a standard service fee for handling purchases. Its design fee is computed on a time basis.

IDS' methods of operations are governed in large part by its location. The main disadvantage of being outside a large metropolitan area, Schwartz says, is the inordinate amount of time and money needed for travel. Keeping abreast of new products and ordering furniture

and equipment requires frequent trips to Chicago.

Another small (nine-person) firm which relies heavily on interiors work is Clarence Krusinski & Associates of Chicago. In 1967, when he first set up shop (in the basement of his home), Clarence Krusinski, AIA, was 27 years old and in search of work that was in demand and would bring in revenue. He decided upon office building tenant work, "because the projects were of shorter duration and required less office overhead than does building design."

He began by doing small remodeling jobs for owners of older buildings, and before long received a commission to plan the interior of a new building, "after a large New York firm had blown the job." To this day, he still receives commissions from this corporation, and Krusinski says that "sound planning concepts and construction procedures are a major selling tool in this clients' lease program."

During the first years, says Krusinski, "we shied away from going beyond space planning. The furniture business was such a flaky area." He soon felt compelled, however, to involve himself in all aspects of interior design, if only to support his architectural work.

In preparation for entering interior design, he surveyed the market and visited major interior contractors. Next, he went looking for someone to direct his program.

After interviewing both architects and interior designers, he decided that "an architect would probably duplicate our own abilities, and that an interior designer was more likely to lend a new approach and fresh perception to the work." This decision led, as it almost invariably will, to the development within the firm of an interior design department—in fact if not in name.

Krusinski underscores the importance of establishing good rapport with clients and of accepting the way they operate. "There comes a time," he says, "when the client says, 'you're right, but I'm going to do it my way.' And you can't counter by telling him that his business is going to go to hell if he uses the rocking chairs he wants instead of the chairs you feel are right. It's not like saying that if the con-

crete isn't right, the building will fall down."

Like most architects who do interior design work, Krusinski's fees for it are calculated on a time basis. "If the client doesn't value your time, he doesn't value your talent," he says.

Warren Platner, FAIA, of New Haven, Conn., came to national prominence when he developed and headed the interior design department of the Eero Saarinen office and its successor firm, Roche/Dinkeloo. His own 30-person firm is heavily, but by no means exclusively, involved in interiors.

"We don't believe in specialization," Platner says. The design staff is comprised entirely of architects, since "everybody who works here must be able to work on everything."

Yet Platner believes that architects who do interior design require specialized training. He laments the fact that "architectural schools have no curriculae in interiors. They graduate people who have no familiarity with the subject."

Platner takes the problems of interior design in stride, regarding them as challenges inherent in a mission, rather than as a cross to be borne. "You have to believe in it," he says, "accepting the fact that it's very difficult, that there is a greater mass of detailed work to be mastered and handled than in other aspects of architectural work."

He points out that it is considerably more difficult to maintain control over an interior project than, for example, over construction work. "Every client thinks he knows something about it, and makes his own judgment," he says. As a consequence, it becomes difficult to maintain a consistent style.

Jova, Daniels, Busby, a 40-person Atlanta firm, has pursued the more typical course of developing an in-house interior design department.

"Even on our earliest jobs—back when we opened our office in 1966—we tried to make sure interior design was given the same careful consideration as other aspects of our projects," says Stanley Daniels, AIA. "We tended to attract clients who were in sympathy with this approach and we began getting separate interior design commissions early on."

As soon as the firm could afford it, a

single interior designer was hired "just as an expediter, to handle the nitty gritty work of ordering." In time, however, she became an integral part of the design effort, and today Jova, Daniels, Busby employs eight interior designers.

They were made a separate department more for marketing than management reasons. The existence of such a department, the firm hoped, would underscore its commitment to interior design work.

In practice, however, design is not compartmentalized. Says Daniels, "We find that persons with different interests tend to have a stimulating effect on each other's work."

While Jova, Daniels, Busby does not undertake continuing maintenance on a contractual basis, informally it performs follow-up work for several clients who routinely call every time equipment needs replacing. The same clients also provide a substantial portion of new interiors commissions.

Recently, this firm has actively sought separate space planning commissions from developers. "Leasing agents find it easier to sell space if they can show a professional layout," says Daniels. He points out that small projects are often unprofitable, since fees are calculated by the square foot, but they must be undertaken or the firm will not be on the scene when larger, profitable jobs come up. Daniels adds that "in order to assure the developer that we are providing service without beating our own drum," his firm makes no direct effort to sell interior design as part of its space planning projects.

Daniels believes that interior designers add a positive dimension to the overall work of the office. He says that when the suggestion was made, not long ago, to move the interiors' staff to other offices, the architects vetoed the idea, preferring to remain slightly crowded.

Such mutual respect between architects and interior designers is, unfortunately, not always the rule. All too often, interior designers working for architectural firms are looked down upon as second class citizens by the architectural staff.

This was the case at Vincent G. Kling & Partners of Philadelphia, where the interiors department was regarded by many

of the architects as a "powder puff" operation. Kling, however, did not share this view, and attempted to revitalize the department by appointing a strong and respected architect as its director. The action was announced in a memo to all staff, reading in part:

"We must eliminate the break in sequence which tends to exist between building design and interior design. They are one and the same process, with certain people more endowed in one area than in the other.

"Understanding the people problems in our building designs starts with the earliest examination of the requirements which form the program, the concept of the spaces, their functions, their human touches. . . . We want the interior staff to amalgamate with the architectural team in these early stages and stay with the process until the design is frozen. . . ."

Increasingly, the tendency has been for interior design departments to spin off from the parent firm. Principally, this is because such departments must be able to obtain independent commissions from other architectural firms in order to make a profit. Says Louis Beal, executive vice president of Interior Space Design: "Architectural firms are just not willing to plough their profits into a competitor." As a consequence, many interior design departments have taken a different name from their parent firm, created a separate image for themselves and even moved into their own quarters.

The emergence of Interior Space Design as a totally independent firm happened slowly, by stages, as is typical of the process. Formerly a department of Perkins & Will, ISD was incorporated as a subsidiary as early as 1960. In 1972, its principals bought their independence. With offices in Chicago, New York, Boston and Houston, and with a staff of 130, ISD is today the country's second largest space planning and interior design office.

In an effort to skip the growing pains of starting an in-house capability, some firms have acquired already established interior design companies as subsidiaries. John Carl Warnecke of San Francisco five years ago purchased the interior design firm of Eleanor LeMare Associates.

One obvious advantage to such an arrangement is that the new subsidiary brings with it the business contacts and experience it has built up over the years.

The establishment of a subsidiary by the firm of Ballinger & Associates of Philadelphia has a different history. The company had hired a designer to start an in-house department in the mid-'60s, only to discover, presently, that it could not generate enough business to be able to afford such a department. The solution adopted by the firm—a very successful one in this instance—was to set the designer up in business for himself.

Today, the resulting subsidiary, Environments, Inc., has a staff of eight, and some 80 percent of its business is completely independent of Ballinger. Environments permits Ballinger to buy good interior design services without having to maintain an in-house department, and has led to new architectural commissions.

An alternative to acquiring or developing such a subsidiary is to enter into a regular joint venture arrangement with a respected interior design firm. The Grad Partnership of Newark, N.J., chose this course after trying unsuccessfully to establish an in-house department. Partner David Dibner, FAIA, says that "we couldn't attract the best interior designer because they didn't want to be a part of a large architectural firm, and we couldn't establish sufficient rapport between the architects and the interiors people." The Grad Partnership began joint venturing with Kenneth Walker's interior design firm of New York in the late '60s. By 1971, the two were working together so regularly that the composite was commonly known as Walker/Grad.

If the advantages of such an arrangement are clear, the benefits of "doing it yourself" are perhaps even more compelling. They are summed up in the word "control." Says Vincent Kling: "We've always had an interior design division. To my mind, there is no such thing as interior architecture and exterior architecture—they're one and the same thing. What happens inside determines what happens outside, and if you don't have this in mind while you're designing a building, you can get some pretty brittle results." *A.O.D.*

Competition on an Island New Town: The Context

East of some of the most prestigious addresses in New York is Manhattan's "other island," as it is called in advertising to potential residents. It is Roosevelt Island, now the New York State Urban Development Corp.'s half-finished new community, which, like UDC itself, faces an uncertain future. For half a century, the sliver of land in the East River had the somewhat inauspicious name of Welfare Island, and for more than a century its uses—for hospitals, prisoners, lepers, lunatics, the insane—were even less auspicious.

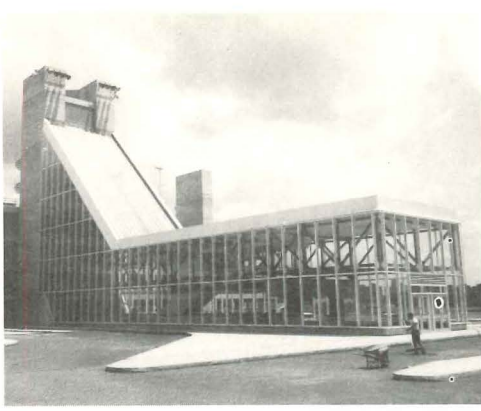
All that changed rapidly when UDC took over the development of the island in 1969. Renamed (there is an FDR memorial by Louis Kahn at the island's southern tip), it was transformed in five years from one of the worst addresses in town to what could be one of the best. It had a master plan by Philip Johnson, financing by Jose Luis Sert, John Johanson and Ashram Bhavnani, trees, parks and a riverside promenade, and a prohibition against dogs and cars.

It also has an 8.8 acre housing site vacant and waiting. Last fall UDC announced a design competition for 1,000 units for this site. By the time the competition was under way, it had become pretty clear that UDC might not be in a position to build that housing for some time. Despite that, 268 architects submitted designs.

To understand this competition, said Joseph Wasserman, AIA, who was a juror, "one has to look at it from a variety of points of view and ask, 'why a competition?'" Often, he said, a client has a competition because he is looking for a breakthrough, for new ideas, for a solution which is really different. "But this is a little tiny piece of ground, not out in the desert but on an island which already has a strong design concept. A brand new breakthrough wouldn't have been appropriate for the land."

Another frequent reason for a competition, said Wasserman, is that the client doesn't really know what he wants. But this client knows a lot about what it wants to do, and a smart client can direct a smart architect to do a smart design." A client hemmed in by politics might hold





a competition also, he said, but this, too, is not the case with UDC, which has a history of choosing architects on merit (*see* Feb. JOURNAL).

"The only reason for a competition was that (former president) Ed Logue knew that his days at UDC were numbered and knew that what he'd done was extremely important to housing.

"This competition was a device to publicize among the professionals of this country the issues, objectives and methodology of UDC and to get literally thousands of architects thinking about these things on this kind of scale."

It is possible that thousands did. The complex, comprehensive program was purchased by more than 700 architects, and was used in architectural schools across the country as a design problem.

In the end, four of the 268 actual entries were chosen as winners, a deviation from the original plan of selecting eight semifinalists and then a winner. But by the time the competition was judged in late April, UDC had plunged into a financial crisis of no mean proportion, and there was no assurance that the winning design would be built, leaving no need to narrow the entries to one.

The near-collapse and partial salvation of UDC occurred this winter. First, New York investment houses balked at the agency's willingness to keep on spending without immediate return on its investment. Then in February, when it looked as if UDC couldn't pay off the interest due on past bond issues, Gov. Hugh Carey asked for the resignation of Logue, and appointed New York builder Richard Ravitch as UDC's chairman. (Ravitch, incidentally, in 1972 had quit as construction supervisor for Roosevelt Island.) By spring, Carey and UDC had hammered out a deal with the state legislature for emergency funds and negotiated a credit agreement with the banks to finish the housing UDC had begun.

Today at least a third of the staff of the once-bustling agency is gone. UDC's housing management responsibilities are being transferred to the state Department of Housing and Community Renewal. A commission is examining UDC, and at some point bigger decisions will be made

about the future shape and powers of the super renewal agency.

The tribulations of UDC, however, failed to diminish the importance of the Roosevelt Island competition in the eyes of jurors, sponsors or participants. In eight years of existence, UDC, under the aegis of Logue, had developed an intricate method of balancing out good design with social goals such as privacy, sense of community and security. This effort has gained a good deal of recognition, but, even though UDC has built \$1 billion worth of housing, relatively few architects have done the work. The competition gave practitioners across the country a chance to grapple with UDC's stringent and demanding standards.

"This competition was a way to make housing a legitimate problem for the talent of the thinking architect. Competitions no longer deal with just a city hall, a museum or a park," said Theodore Leibman, UDC's former chief of architecture. "We wanted to challenge the architect to no longer design to space standards only but to address housing issues, and we asked that those housing issues explain the scheme. We were challenging the architect to restore the identity of the single unit within the aggregate housing form."

The competition program carefully laid out both design and housing objectives, calling for detailed attention to the issues of community, child supervision, security, maintenance, livability and responsiveness to context. "This was the most remarkable thing about the competition," said Franklin Becker, a Cornell University social psychologist who was a juror. "UDC has for a long time been concerned with livability, but because this was an explicit part of the program the entries dealt with the issues more than in any other competition."

Said Donn Logan, AIA, of the ELS Design Group in Berkeley, Calif., one of the winners: "Because of UDC there's been a whole new focus on urban housing, and this competition should represent the state of the art."

The four winners may indeed represent the state of the art, but only in a narrowly defined way. Because the site and the island are quite particular and special in

their demands, the winning designs are perhaps more accurately characterized as four very good solutions to a very complicated problem.

The 1,000-unit development had to fit in with the overall design scheme for the island, done originally by Philip Johnson, FAIA, and John Burgee, AIA, in 1969 and modified over the years by UDC. Likewise the designs had to fit in with some assertive neighbors. The 8.8 acres are surrounded by the East River (and beyond it Manhattan) to the west, Octagon Park to the north, the motorgate parking garage (where all residents' cars will be harbored) to the east, and the almost-finished Sert and Johansen-Bhavani housing to the south.

"This housing isn't just good, it's very good," said Wasserman. "Sert's is among the best in the nation." By the end of May, Island House, Johansen and Bhavnani's middle income apartment building, had 20 residents and 25 percent of the apartments had been committed.

In part, the future outlook for Roosevelt Island is dependent on the marketing of these first 2,100 units. But to a greater measure, the island's future hinges on the future of UDC and the development climate in New York. The first apartments had 100 percent UDC mortgages; it is unlikely that a similar package will exist in the near future.

"The first and most critical issue facing us is 'can we successfully market what we've built?'" said Robert Litke, executive vice president of the Roosevelt Island Development Corp., the UDC subsidiary formed to carry out the plan. "Even if UDC hadn't had a financial crisis, we would not have gone ahead until we had a firm handle on the marketing. But right now we are totally unable to say that there will or won't be any more. We just haven't got an answer," said Litke.

Said Joseph Fiocca, a UDC attorney: "I don't think Roosevelt Island can be looked at in isolation. The ultimate question is 'who is going to finance housing i

Above left, the pedestrian exit from the motorgate, and right, the electric minibus. Opposite page, Main Street looking north. The photographs are by Don Stickles.







ew York State?" Right now there is not acceptable solution."

The Roosevelt Island Development Corp. by itself has no powers to borrow money but has been dependent on UDC and issues. And although \$180 million has already been spent and at least seven-eighths of the public improvements have been completed, that alone isn't a guarantee that the island will be finished. More of a guarantee is the 99-year lease with the city which requires UDC to carry out the plan within two years of the completion of the subway link to Manhattan.

That, however, is not expected to be finished until 1981 or 1982, which gives the city almost nine years to find a solution.

"The questions about our future are unanswerable," said Litke. "We just do not know at this point what the future development will be beyond what is there now. No financial mechanism today affords us the opportunity to assume that the island will develop further."

Aside from the public improvements, an investment which Litke admits "cannot be sustained by 2,000 units," there are questions about the need for amenities and public facilities for the island if fewer than 2,000 people live there.

"The plan is dependent on 5,000 units as its essential character and intention," said Liebman.

As conceived, Roosevelt Island was to be a highly sophisticated new community, with 5,000 apartments, a mix of incomes and age groups, its own mini-school system, shops, offices, playgrounds, child care facilities and almost every other thinkable amenity. It was—and still will be—a pedestrian community with a cable car from the island to Manhattan, the subway someday and its own minibus system.

To its critics, Roosevelt Island is a paragon example of much of what they believe to be wrong with UDC—the corporation's willingness to jump into grandiose ventures and its lust for architectural excellence, all at a steep cost to the public

and to UDC itself. "That's garbage," responds lawyer Fiocca to the architecture charge. "The most we ever spent on good architecture was 5 percent, and 5 percent spread out over the life of a 40-year mortgage is really minimal."

Mostly the island is getting high marks from professional observers. Many prefer the Sert housing for its refinement and architectural detail. The Johansen-Bhavnani housing is more often criticized, but some think it is underrated and praise in particular the upper income building and the design of the swimming pools and the day care center.

To Leibman, the most exciting part of the island is Main Street, which cuts a swath down its center. "If there's one thing that's the most brilliant to me in the scheme and works well, it is the character of Main Street," he said. The street draws much of its life from the interaction of the Sert housing with the Johansen-Bhavnani housing. Sert's has a consistent line with arcades; across the street the Johansen-Bhavnani buildings jut in and out, in Leibman's words "playing games with the angled street." It is, he said, "very European—an active, urban street."

Eliminating cars and saving trees are two other important goals. The former might only work in New York, a city predominated by highrises and high densities. A New Yorker (especially a Manhattanite) who has a car usually has to park it in a garage blocks away or leave it on the street, only to have to move it every other day for street cleaning. This means a new town cum parking garage is a blessing, whereas in other places a carless new community would most likely flop if residents didn't have instant access to their cars.

The trees are an incredible attraction in greenery-starved New York. The special effort to save as many trees as possible is paying off as a lure to potential residents, and even now on weekends New Yorkers wend their way across the Queensborough Bridge and the Roosevelt Island Bridge to the island to picnic or stroll.

"It's absolutely gorgeous," said Litke, almost poignantly. "The 20 families there seem to be happy. The school is colorful

and exciting and has four happy little kids. There's a promenade and trees and an almost-finished courtyard, and Blackwell Park is really a gem."

It is possible, although not immediately likely, that some of the Roosevelt Island plan could be finished in the future by private developers using private financing. But a private developer would probably be less inclined to build mixed income housing without incentives, and those incentives just aren't there right now. UDC is committed in its lease with the city to a definite income mix—25 percent upper income, 20 percent middle income, 45 percent low and moderate income and 10 percent elderly.

In the almost-completed housing this was accomplished in four distinct apartment complexes, but the competition program aimed at an even higher—and more difficult—social goal, that of integrating all income levels in one development.

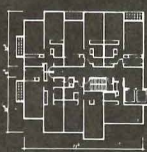
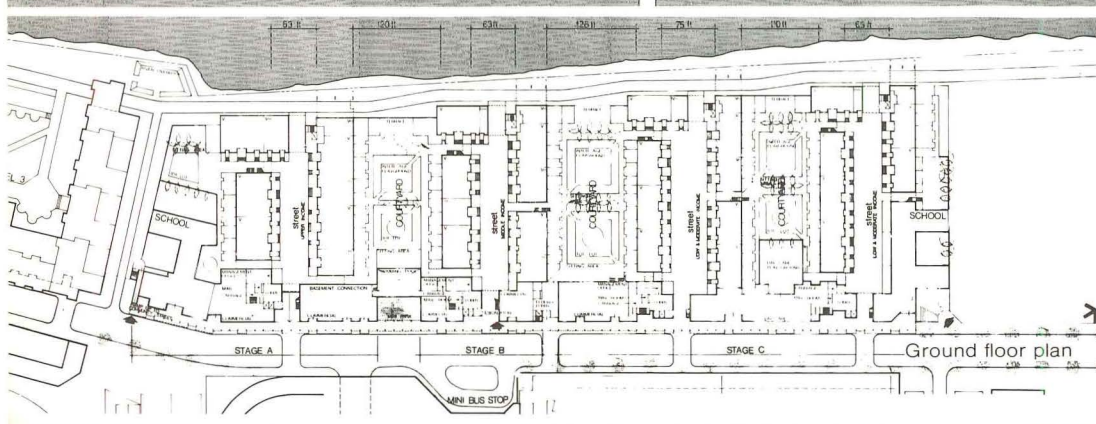
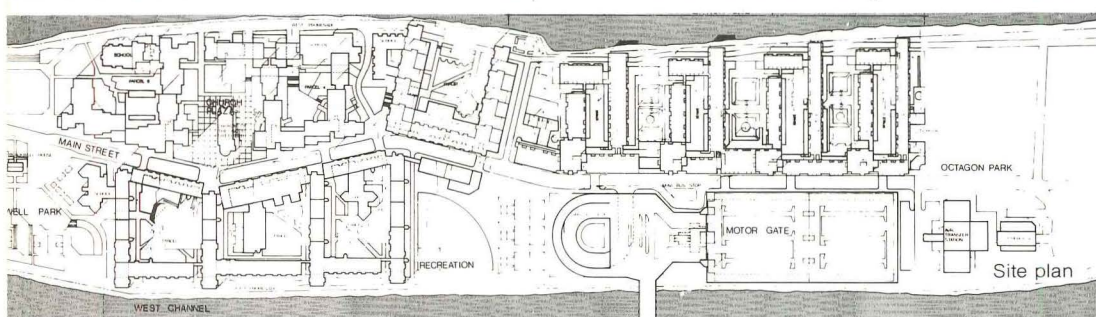
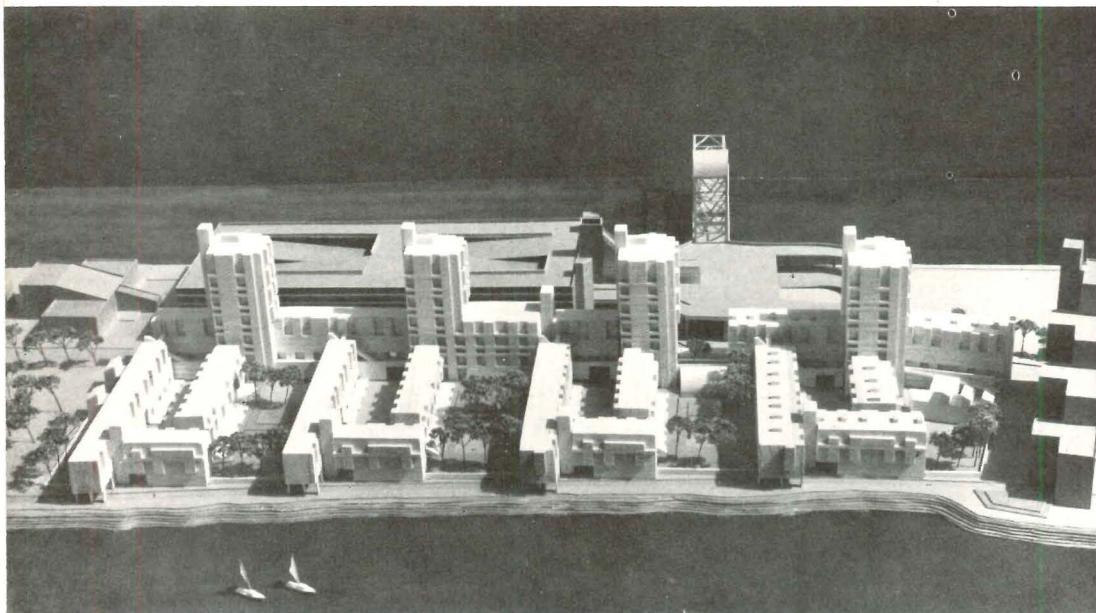
"One of the great issues in housing today is how to mix incomes," said Leibman. "On Roosevelt Island there will only be 5,000 families. The kids will go to the same schools so there won't be a stigma to being poor, so why not put people in the same building? The mix is rather radical and not one that the average marketing person would endorse, however."

Mixing incomes was just one of the big issues the participants in the competition had to deal with. With Becker, the Cornell social psychologist, on the jury to ensure housing issues were solved, the entries were analysed not only for their aesthetic merit but also for their ability to provide such things as privacy, territoriality, control over immediate environment, ambience, heterogeneity—in general for creative solutions to the perplexing problems of providing good, livable housing.

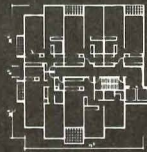
Besides Becker, Wasserman and Sert (ironically, four of the winners had either studied under or worked for Sert), the other jurors were: Paul Rudolph, FAIA; Alexander Cooper, AIA, a member of the New York City Planning Commission; Sharon Ryder, an editor of *Progressive Architecture*, and Frederick P. Rose, a New York City builder. The entries they premiated are shown on the following pages. *Beth Dunlop*

bove left, a courtyard at Island House, and right, the walkway from Blackwell Park. Opposite top, the Sert housing. Bottom, the Johansen and Bhavnani housing.

Competition on an Island New Town: 2. The Winners



Low-moderate income



Middle income



Upper income

Kyu Sung Woo. "Incredibly worked out beautifully scaled, a delicious piece of architecture," said juror Joseph Wasserman, AIA. Perhaps less stylized or dramatic than the others, Woo's entry instead concentrated on providing detailed solutions to the housing issues laid out in the competition program. For example, he provided a choice of entry to all family units by designing an "access gallery" between the second and third floors as an alternative to the elevator. Throughout his scheme, Woo, who is a senior urban designer in the New York City office of midtown planning, stresses choices and options for the residents.

Woo's design calls for four highrise towers linked by lower units along Main Street and likewise linked to four clusters of family housing. On the Main Street side the design calls for a second community street, a half story above the shops with the access gallery above that. Entry from Main Street could be by a ramp, an escalator or an elevator.

The family units frame smaller community streets. Woo designed these streets to be 63 feet wide, typical of a Manhattan brownstone street, and the apartments surrounding them are approximately the same height and scale as New York townhouses. The back sides of the family units enclose play areas which are cut off from the river by a retaining wall. Woo alternated the play spaces and the street spaces to achieve contrast. And although most of the units are visually open to the river, access is guarded by a management office at the end of each community street.

In Woo's scheme, the towers are designated as "mobility units," smaller apartments for single people or childless couples, with the advantage of a better river view. The lower rise buildings in the middle along the street are for the elderly put there because that location is closest to the minibus stop. The rest, largely the townhouse-style sections, is for families. And here again, Woo emphasized choice. Families would have the option of a flat or a duplex apartment with two or three bedrooms or a four-bedroom duplex.

"He really did grapple with the issues," said Wasserman. "It's a marvelously workmanlike scheme."

Robert Amico and Robert Brandon.

This scheme is consciously the closest in design to the Sert housing next door. It descends to the waterfront and provides larger open spaces and unobstructed views of the river. Amico and Brandon, who teach at the University of Illinois in Champaign-Urbana, set the west side of the complex back from Main Street, kept the setbacks and added arcades to offset the impact of the parking garage across the street.

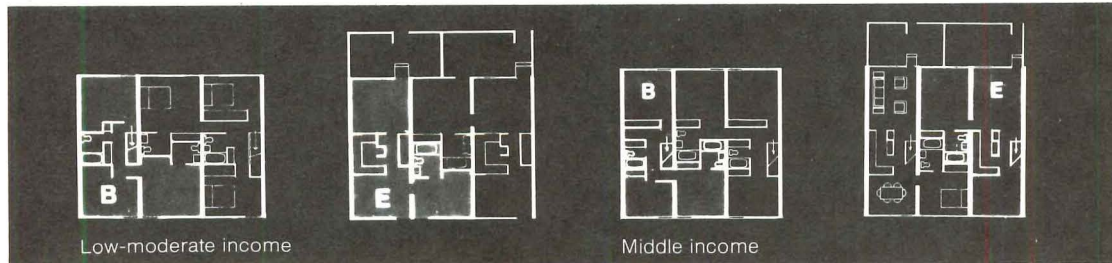
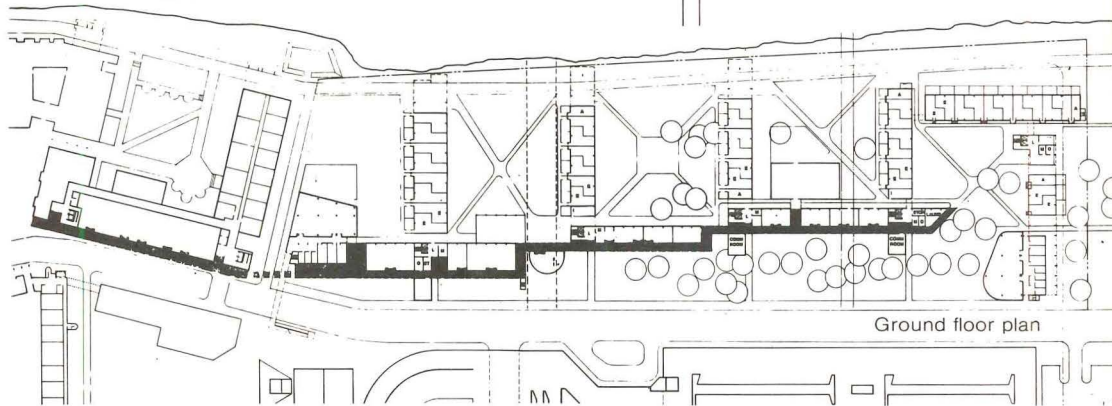
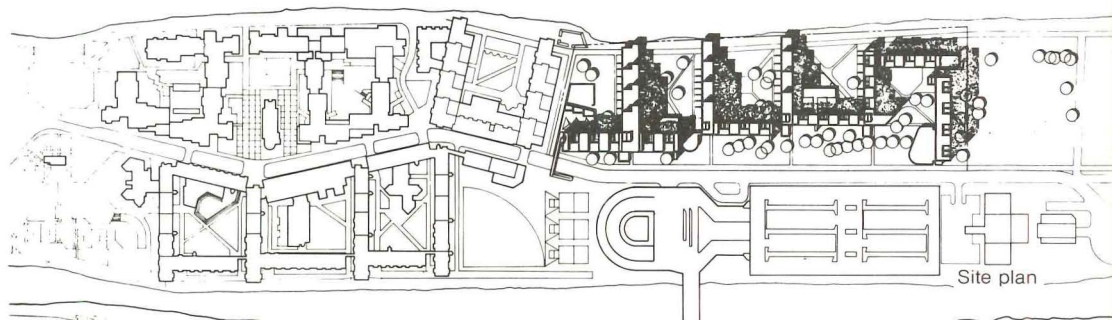
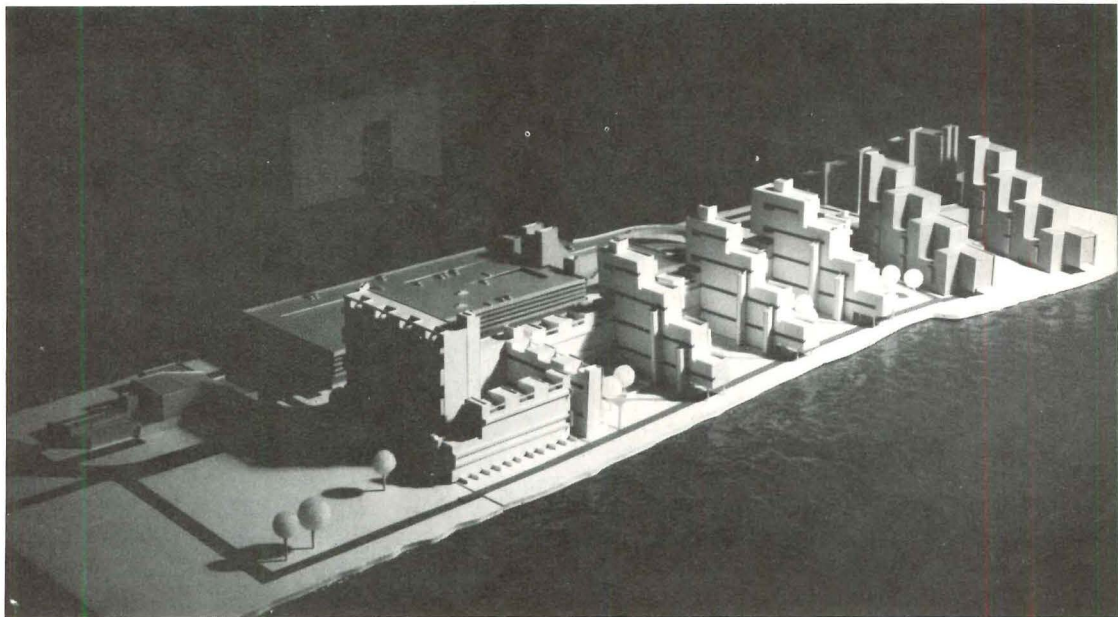
"They were very respectful of all the existing conditions, particularly the edges," said Wasserman. "What they did was to take a Sert-ified scheme and modify it. It is just a good scheme and not a bombastic one."

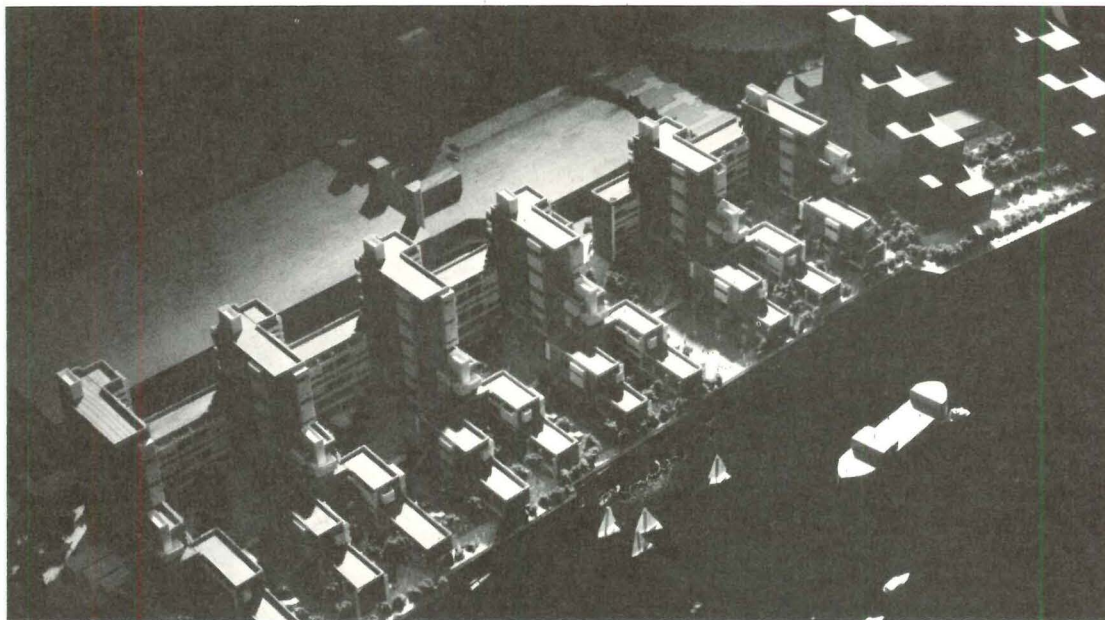
The Amico-Brandon design picks up the rhythm of Sert's housing without imitating it. "Perhaps that's simple-minded," said Brandon, "but what Sert was so strong, it was almost impossible to deny it."

The design provides for three 21-story towers which descend to the waterfront, and uses the stepping-stone rooftops as terraces. Along the street side the three larger structures are connected by 11-story buildings.

At the north end of the site, the scheme calls for a slab tower overlooking Octagon Park. "The slab makes the statement that here, this is the end of the residential development of the island," said Brandon. Almost all of the larger family units open onto rooftop terraces or are at ground level. The design provides five open space areas for play and adult recreation.

Amico and Brandon used a skip-stop elevator system in which stops are on every fifth floor. On the stop floor are elevators for the elderly and the handicapped. Two floors up or down are the entrances to family units, almost all of which are duplexes. The family units generally have a living room, kitchen and a flexible dining room/family room on the entry level and bedrooms either above or below. The apartments are designed so that parents can supervise their children from the kitchen, which has a visual link with the living room, dining room and terrace and yard area.





Sam Davis and the ELS Design Group.

This design breaks the site up in a series of smaller, more intimate spaces with apartments opening up onto 15 different courtyards and play areas. "What we were trying to do was break down the grain of the island—the other developments have big chunks of open space," said Donn Logan, AIA. This design was started by Sam Davis, AIA, who teaches at the University of California at Berkeley. Midway through, Davis was joined by ELS, a firm which was begun in 1967 as the result of winning a competition for the Broome County Cultural Center in Binghamton, N.Y.

The Davis/ELS design calls for six connected highrises along the street, each dropping in height with the tallest (21 stories) at the north end and the shortest (13 stories) at the south. Each of the highrises connects to lowrises which reach out toward the water like 10 fingers.

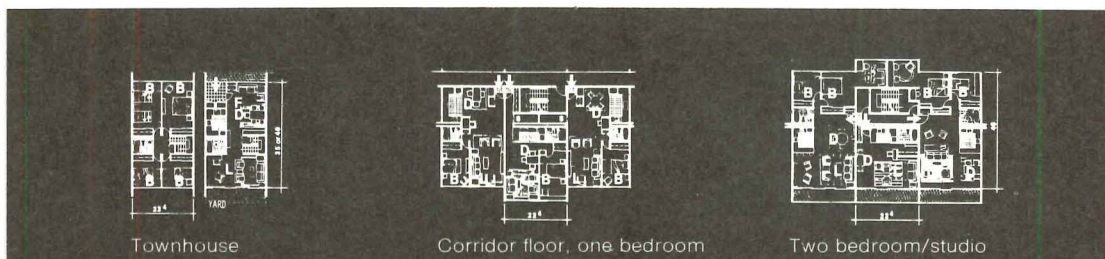
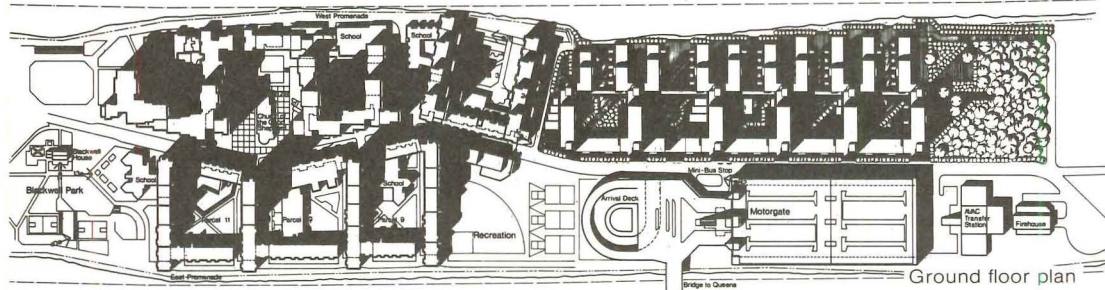
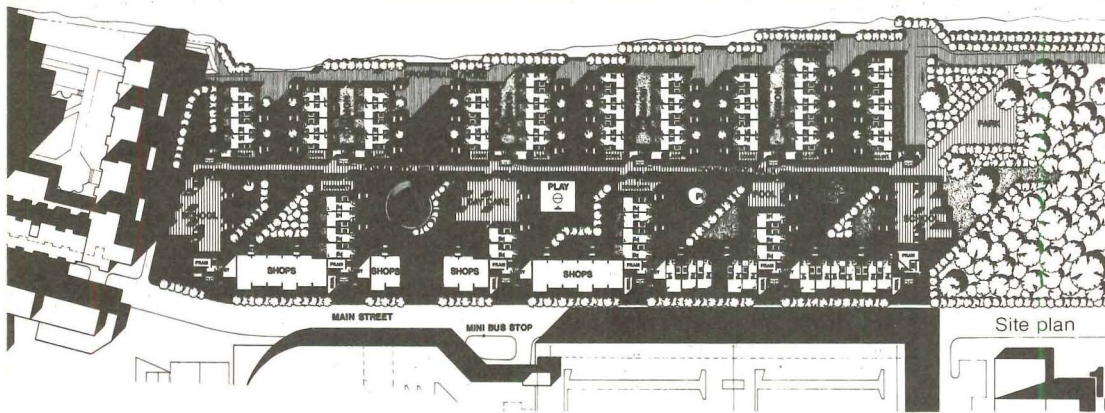
Eight of the 10 fingers are paired so they open into private commons areas with public open spaces in between the pairs. The highrises and the medium height buildings connecting them on the Main Street side open onto other bigger public play areas. "There's a hierarchy of spaces," said Logan. "The smaller the building, the smaller the public space."

In addition, Davis and ELS provided a second street. This community walkway through the middle of the site, and all the indoor public areas—community rooms, laundries—are along the new street.

By clustering the apartments, Logan said, it was possible to open up "a variety of social possibilities," creating neighborhoods with shared views. This design did not designate actual layouts for lower, middle and upper income apartments, but used a flexible unit, which could be added to or subtracted from.

Almost every unit has a balcony or terrace, however. The scheme uses an even third-floor, skip-stop elevator system with smaller apartments on the stop floors and larger apartments one story up or down.

"This is a well worked-out scheme," said Wasserman. "It stresses the housing issues and is more intimately scaled, with the more public series of spaces and the more private courtyards."



Stern and Haggmann. The most controversial of the four winners, this scheme turns its back on Main Street and focuses on a new pedestrian way cutting through the middle of the site. The entry by the New York City firm of Robert A. M. Stern, AIA, and John S. Haggmann, AIA, also put highrises at the river's edge, deviating not only from the other winning schemes but from the Sert housing next door.

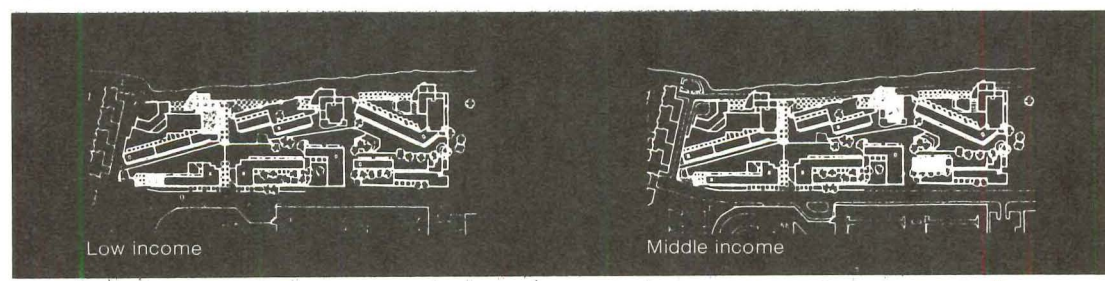
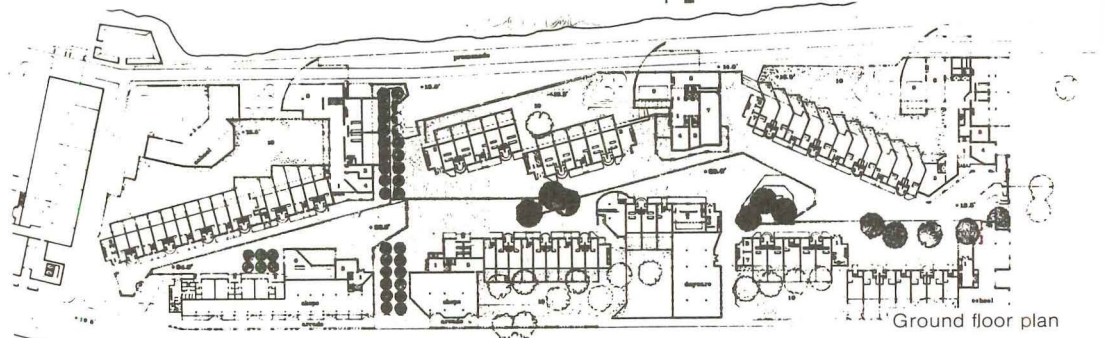
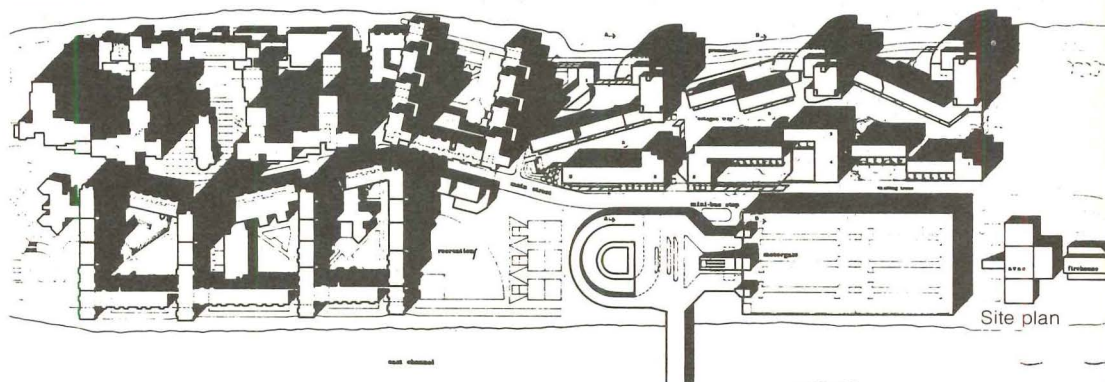
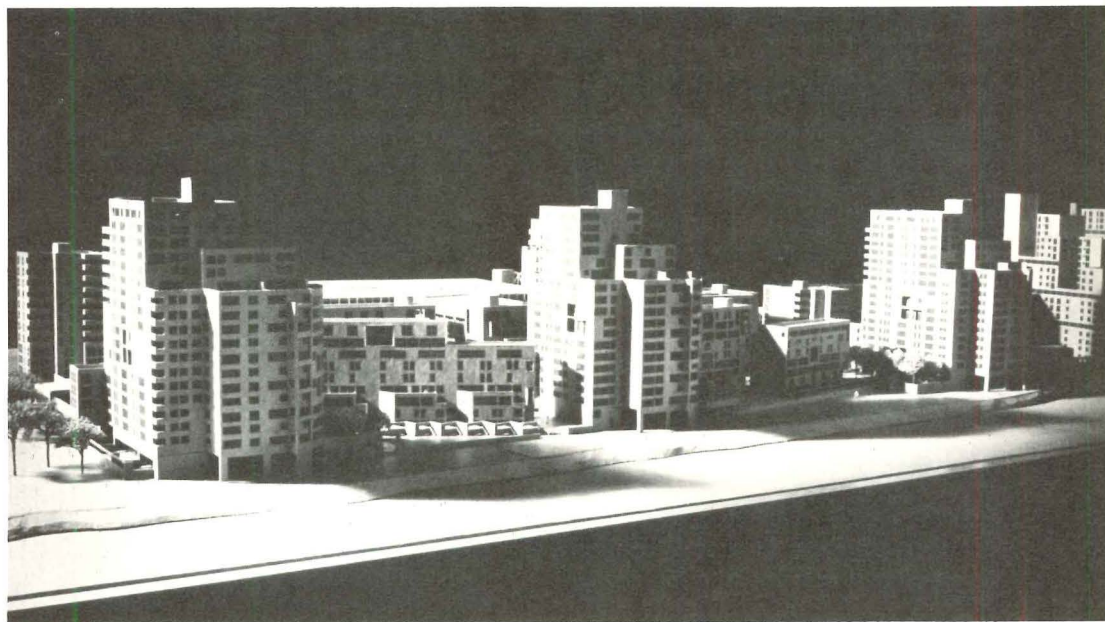
"I think we were bored with the more conservative approach," said Wasserman. "This was a bit of devil's advocacy." Noting that the design is "not totally plausible," Wasserman said "it is very New Yorky and appealing. It has the same rhythm as the others, and there are relationships that are recalled."

The scheme calls for three highrises which step down slightly—two three-story tops—toward the waterfront. The southwestern corner, which faces downriver, curves to provide the best possible views. By putting the tallest buildings next to the river, Stern and Haggmann reasoned that they minimized the bulk of the buildings and kept the interior open spaces relatively free of shadows. The remaining units, some abutting the high-rises along the river and some across the new walkway, are in buildings of varying heights, most of them six or eight stories.

All of the units are reached through the new street, which Stern and Haggmann called Octagon Way. The design calls for distinct arcaded shops along Main Street, but emphasizes that it is a public street, while Octagon Way is semiprivate. Open spaces are created by the placement of the buildings which jut in and out of the pedestrian street, and many of the apartments have either balconies or rooftop terrace space.

Stern and Haggmann put most of the larger family units at ground level or just above it to give families yard areas or gardens. In the family units, many of which are duplexes, the living, dining and cooking areas look out on the yards to ease supervision of children.

To achieve security, Stern and Haggmann limited access to Octagon Way, and provided electronically-locked gates for the six entryways. *B.D.*



Future Shock Hits the American Courthouse: Opportunities and Parameters for Design

C. Theodore Larson, FAIA

As symbols of the American dream of equal justice for every citizen, our courthouses leave a great deal to be desired. For the most part, the judicial process and the courtroom in which it is conducted are still pretty much the same as they were 200 years ago. It has become increasingly clear, however, that both the American courthouse—and the judicial system it is intended to serve—are overdue for change.

An indication of the need for change can be seen in the results of a survey of New Hampshire courthouses made by a statewide Court Accreditation Commission. This five-member commission is headed by the Hon. John W. King, a Superior Court Justice and former three-term governor, and includes two other jurists, a practicing lawyer and a newspaper publisher.

Court accreditation is based on the quality and adequacy of the physical facilities, the competency of court personnel and the availability of accommodations for the public as well as the bar and bench. The commission established three ratings of quality: 1) accredited-excellent, which means the courthouse is completely adequate for the needs of justice although there may be areas of desired improvement; 2) accredited-satisfactory, which means the courthouse has substantial deficiencies but is generally acceptable; 3) not accredited, indicating that the courthouse failed to meet minimum standards and should not be used in its present condition.

On this basis, including district, municipal, superior and probate courts, the commission found 17 New Hampshire courthouses worthy of the top bracket, with another 40 qualifying for the middle category. A total of 30 courthouses flunked.

If the New Hampshire findings can be taken as an index of conditions nationwide, then a third of all the courthouses in this country are, by fairly conventional standards, obsolete and unworthy of being used in the judicial process. If higher standards of judicial performance are set, the rebuilding task becomes still more

staggering. It is a truly enormous and challenging market that awaits the attention of building designers.

Moreover, if the current business recession deepens, it is quite likely that the federal government, and even some state governments, will make large sums available for local public works and new courthouses undoubtedly will become prime targets for easing unemployment in the construction field. One such bill has been introduced in the House of Representatives already, known as the Local Public Works Capital Development and Investment Act, which would provide \$5 billion in grants to state and local governments.

The New Hampshire commission viewed courthouses more narrowly than some others now do. A proper judicial atmosphere and decorum, the commission said, can be obtained only in a single-purpose courthouse. "A courthouse should not be a combination welfare-recipient warehouse, or an administrative center for a county of local government, or a combination police station and courthouse." In many cases, this is what the courthouse has become.

The typical American courthouse is likely to be a brick or stone building, four or five stories high, with a pitched slate roof and an ornate (and frequently non-functioning) clock tower. Dirty and smelly, poorly ventilated and ill-lighted, it is literally bursting at the seams under the pressure of judicial business. For lack of an adequate system of interior traffic segregation, the building occupants—judges, lawyers, litigants, jury members, witnesses, police, bondsmen, welfare officials, news reporters and other assorted functionaries and hangers-on—mill around in varying degrees of uncertainty and emotional stress. Inefficient and obsolete, the traditional courthouse can no longer be said to project an acceptable image of justice within the community.

The American courthouse has steadily grown in size over the years. In the colonial period, it was only the courtroom itself; the judges and clerks had their offices in nearby buildings. Prominently located in the town square, it was an inevitable target for the addition of porticos, cupolas and other architectural em-

bellishments. Two-story courthouses became popular with the nation's expansion westward, permitting more architectural monumentality along with the inclusion of county or municipal offices and separate rooms for the judge, jury and court personnel. In the present century, the introduction of elevators has enabled the courthouse to soar skywards and become increasingly elegant and complex.

Recent years have also seen a proliferation of specialized courts—grand jury courts, appellate courts, small claims courts, children's courts, divorce courts, family relations courts, mental health proceedings, wills and estates, bankrupt courts, traffic courts—each one of which involves a legal procedure that calls for a quite different physical environment than the general trial courtroom. To combine these various judicial services within a single structure complicates the courthouse routine and consequently its planning and design.

Traditionally, it has been the practice for every judge to be assigned a particular courtroom for personal use. This courtroom, located conveniently near the judge's own chambers, has tended to become an extension of the judge's professional ego. Judges, naturally enough, are loath to give this up, despite the urgings of court administrators who see economic advantages in having any courtroom use rotationally by any judge.

If all the courtrooms are in continuous use, however, it is difficult to predict just when a particular one will become available. Unless each judge has a courtroom standing by for immediate personal use—so the judges argue—then any efforts at plea-bargaining or at settling cases out of court (which usually take place in the judge's own chambers) will have very little clout. Paradoxically, it is the threat of actually going to trial (an increasingly expensive piece of business) that makes an idle but readily available courtroom the ultimate weapon for speeding up the judicial process.

Just imagine, however, what this territorial imperative implies for the courthouse of the future. A city or county with a population large enough to need 50-plus trial judges would have to provide 50-plus

Mr. Larson is professor emeritus of architecture at the University of Michigan.





separate courtrooms. If all these courtrooms and an equal number of judge's chambers were put into a single building along with all the ancillary services associated with the judicial process, the result would be a megastructure dwarfing everything else on the horizon.

The need for change, however, extends beyond just the shape and size of the courthouse into the courtroom itself, with solutions perhaps more readily available. A dozen years ago, in Salem, Ore., the Hon. William S. Fort, a jurist with a strong bent toward the humane administration of justice, began pattering with the design of his courtroom. He was unhappy with the furniture arrangement—a bulky bench for himself up high, symmetrically flanked by boxes for the witness and the court clerk on a slightly lower level, and out in front, on a still lower level, a jury box along one wall and boxes for the court reporter and bailiff along the opposite wall, the space in between filled with tables for the contending attorneys and their clients and the rest of the rectangular room behind a low railing being taken up with benches for spectators. This traditional grouping, he had discovered, kept the participants in a trial, including himself, from properly seeing and hearing everything that was going on.

By making some furniture mockups and juggling them around, Judge Fort was able to determine that a circular arrangement was more desirable. Better sight-lines were obtained, and auditory conditions were improved. Best of all, the open space in the center created an arena in which opposing attorneys had greater freedom of action, and provided for a more convenient transfer of documents and displays of exhibits. In effect, the business end of the courtroom had been turned into a theater-in-the-round.

Judge Fort's prototype quickly gained architectural recognition. Most new courthouses now use the circular arrangement, usually modified somewhat to fit within the rectangular grid pattern established by a particular building's structural system.

Judge Fort has gone on to probe into other aspects of courthouse planning and design. He persuaded the American Bar Association to set up, with himself as

chairman, a special judicial facilities investigative committee representing the bar and bench nationally. Overtures were made to The American Institute of Architects. Soon there appeared a counterpart task force of architects, all drawn from the Chicago area because of proximity to ABA headquarters, with Walter H. Sobel, FAIA, as chairman. After several separate meetings, the two professional groups decided to merge, thereby forming a single unit, the ABA-AIA Joint Committee for the Study of Courtrooms and Court Facilities.

In January 1968, the joint committee received a study grant of \$197,000 from the Ford Foundation. A research contract was given to the University of Michigan and an interdisciplinary team of investigators went to work. The result is an impressive clothbound volume of 320 double-column pages, published in June 1972 by the University's Institute of Continuing Legal Education under the title, *The American Courthouse: Planning and Design for the Judicial Process*.

The Michigan researchers make a strong case for keeping the different flows of traffic within a courthouse separate and distinct. Judges, who have become gun-shy from an increasing number of courtroom shootouts, like this recommendation. Not only do they want their benches to be bullet-proof shelters into which they can quickly duck, they also insist on maximum security throughout the courthouse.

The question of courthouse security presents complex planning and design problems. Armed barricades and defendants brought into court under heavy guard are hardly conducive to an image of calm, evenhanded justice. Through a proper separation of traffic routes and the use of unobtrusive protection devices (microwave or ultrasonic intrusion alarms, low light-level television cameras with closed-circuit systems and automatic monitors, and other sophisticated hardware), it is possible to have adequate courtroom security and at the same time a humane and unabrasive environment.

In many communities the local jail has become closely attached to, if not an actual part of, the local courthouse. The

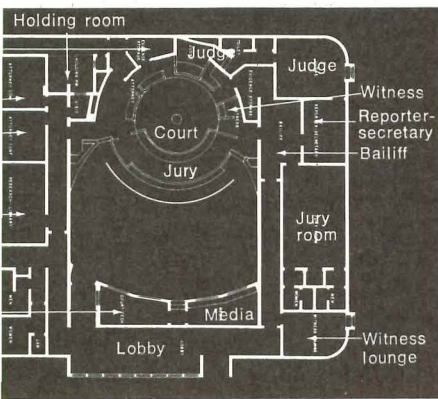
This page, left, Judge Fort's theater-in-the-round courtroom in Portland. Center, a courtroom in the Marin County Courthouse, based on the Fort prototype and used by Aaron G. Green, FAIA, in completing the Frank Lloyd Wright building. Above, a hearing in the "Courtroom of the Future" at the McGeorge School of Law in Sacramento, Calif. Opposite, left, floor plan of the "Courtroom of the Future," with the circular arrangement, a concealed pressroom with one-way glass and spaces for wide use of new videotape technologies. Center, an attorney combines old and new technologies, using tac board, chalk board and x-ray viewers. Right, a court technician records videotape and eight track audio tape of a courtroom scene.

ABA-AIA joint committee takes the position that detention facilities should be completely divorced from the judicial facilities since the desired environments are not at all compatible. The farther apart, so much the better, even if this spells more work for the county sheriffs and other local gendarmes. Nevertheless, there is a functional relationship between the two sets of facilities which cannot be ignored.

There is a growing belief that the judicial process must be concerned as much with the prevention of crime and social misconduct as with its correction and punishment. Howard James, journalist and author of *Crisis in the Courtroom*, has been visiting courthouses all around the country gathering material for another book, soon to be published, on juvenile delinquents. He contends that the typical American courthouse, far from being revered as a temple of justice, is looked upon by most citizens as a place of fear and pain, something to be avoided at all cost.

If the administration of justice is to have a meaningful impact on crime and delinquency, James argues, then the American courthouse must take a radically new form. Instead of being a "hurting" place, it must be made into a "helping" place.

The behavior of social misfits, the pre-conditioned "losers," cannot be changed, James says, simply by processing the criminal delinquent through a traditional



...rtroom in narrow legalistic fashion. The use of punitive sanctions should be a resort. Rather, efforts must be made to the courts to provide help before it is too late. The American courthouse, he concludes, can help bring about such social change by becoming more closely linked to the community agencies that deliver personalized help and care. The new freedom in architectural planning and design afforded by the advances in communications technology means that facilities which provide such services do not need to be physically linked to courthouses. They can be spread out as a network of interacting units which can be instantly united audiovisually if desired. New technologies not only provide a choice of where supportive services can be located, however; they also could, when used in the courtroom itself, change dramatically the design of even the most single-purpose courthouse. Videotape makes it possible for a court to see as well as hear witnesses who cannot come to the hearing or trial because of illness or some other reason. If the hearing is done in a setting where the witness is fully at ease, a more accurate portrayal of emotions and attitudes is likely to be had than in the tension-filled atmosphere of a courtroom. Such personal consideration, it is generally agreed, is particularly important in deciding cases involving rape or divorce and child custody. Attorneys for both sides must agree on the use of videotape, and all that is said or shown—irrelevancies, digressions, mistakes, corrections, whatever—has to be recorded. The taped testimony is then shown to the judge or jury just as would any written testimony. If the judge rules that a particular portion should not be heard by the jury, it can be erased from the tape readily enough, but current practice seems to be simply to turn off the sound track and to allow the visual image to remain on the screen. Despite the many manifest advantages of videotape, there is opposition to its use. In Vermont, for instance, a case involving drunken driving was tried under the sponsorship of the National Center for Alternative Courts and, for the first time in the

U.S., a jury watched on video everything except the attorneys making their opening remarks and summations and the judge's charge. The jury's verdict of guilty has been appealed on the grounds that the right of a defendant in a criminal trial to confront an accuser in person was violated by the use of video. The constitutional right of personal confrontation in a court trial can be assured by applying more technology. When the courtroom is hooked up with a closed-circuit or cable TV system, it becomes possible for instant two-way exchanges to be conducted between the court and a witness who is far away. By projecting an image on a videoscreen, the witness can be seen by the defendant and everyone else in the courtroom—and if the courtroom happens to be fitted with its own TV cameras, then the witness in turn will be able to see the defendant and hear everything that may be said. Widespread use of videotape and TV in court hearings and trials appears inevitable. Since 1971 such use has been doubling every year, according to the *Detroit Legal News*. In Michigan, the Supreme Court has already ruled that videotape can be used in taking depositions from witnesses. Similar action in other states can be anticipated. A "Courtroom of the Future" has been constructed in Sacramento, Calif., by the McGeorge School of Law's Center for Legal Advocacy and Research. This experimental unit makes extensive use of closed-circuit TV and related video equipment—a pedestal for televised evidence, a large built-in viewing screen and a video technician's room. A circular trial area is carpeted to absorb sound. Jurors sit behind a large semicircular desk with their backs to the audience, whose seating is also circular. An adjoining press room has one-way glass. Another isolation room with audiovisual communication equipment allows unruly defendants to be locked up and yet take part in court proceedings. All other security elements—remotely-controlled courtroom locks and screening devices to detect firearms—are monitored from the video technician's room. And court trial can be videotaped or televised for public broadcast.

All elements of the American courthouse are being affected by the new communications technologies. The U.S. court system is a voracious consumer and prolific producer of data. As the flow of information multiplies, each courthouse tends to become a vast repository of data. Just to cope with the increasing flood of documents and records—and now videotapes must be included—is a special planning problem in itself. Fortunately, the advances in video telecommunication and electronic data processing are also opening up new potentials in architectural planning and design. No longer do the various elements that constitute the American courthouse have to be grouped together and housed under the same roof or even placed on the same site. The facilities for different judicial activities can now be developed separately and located wherever they will be most serviceable to the community at large. Not only does the emerging American courthouse offer an enormous new building market, it also presents a host of new design challenges. Why, for instance, should the jury box be retained in the courtroom when the jurors can see and hear the entire trial to better advantage on videoscreens within the privacy of their own deliberation room? And, if the jury box is thus transformed into a separate video-viewing environment, what happens then to the courtroom itself—does it now take on the look of a movie production studio? Indeed, just how can the "electronic courtroom," in its clutter-prone development as an instrument for speedier and more effective administration of justice, acquire also the dignity usually associated with the law? The answers to such questions must come from the two professions—law and architecture—working together experimentally in a variety of communities, in a professional display of creative imagination and good critical assessment. If the courts are to catch up with their ever-mounting caseloads, already months and even years behind in most American communities, the innovations in judicial procedure and in environmental design will have to come quickly and in great profusion. □

Maps That Trace Cities' Footprints

Alan Melting

In the process of planning and design, an essential ingredient is information, either for the purpose of analysis or simply to understand the problem better. A great deal of statistical information exists about cities, but very seldom are these numbers put into a presentation that correlates them with the spatial environment (the *Urban Atlas* by Passonneau and Wurman is one of the rare examples).

The following drawings are an attempt to present real information about the spatial relationships within and among cities that can be directly useful to design professionals whose way of looking and conceptualizing is visual. Thirty-six cities have been done to date displaying the attributes of building form, public space, public transit, landscaped space and water edge, and landmark forms and spaces. All are spatially accurate and, except for landmark forms and spaces, are "objective," i.e., there is agreement on what and where is a building, a public transit route or the water's edge.

These attributes most clearly give us information about the quantity and qualities of public open space, a significant indicator of the quality of life within a city. By overlaying or comparing at similar scales and matching with the images in our minds, we can begin to understand the importance of the continuity of public space, the relationship between public space and water edge, building form as a container of space or object within space, the range of public transit choices, and dozens of other correlations. These comparisons also give us further help in understanding larger issues of human settlement and dominant spatial patterns such as linear, circumferential, multinucleated or spread, as well as the historical development of the city.

Mr. Melting, an architect and city planner, has worked with Charles Blessing in Detroit and more recently with the New York State Urban Development Corp. and architectural and planning firms. These drawings represent only a few he has done of cities, begun while a fellow at the American Academy in Rome and continued with a grant from the National Endowment for the Arts. A book is in progress.

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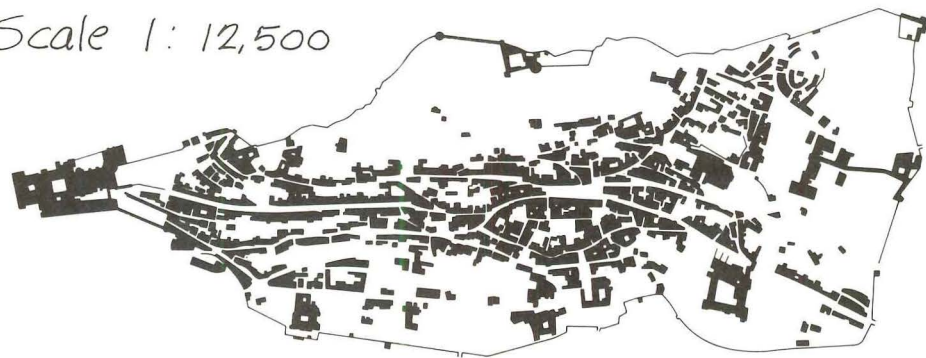
And there is a final motive to the work: to present the city from a new point of view. In searching for order or structure at one scale, we find imperfections which inevitably lead to understanding a new kind of structure at a larger scale. The more we understand and feel about the city, the more we can make it fill our needs.

Assisi

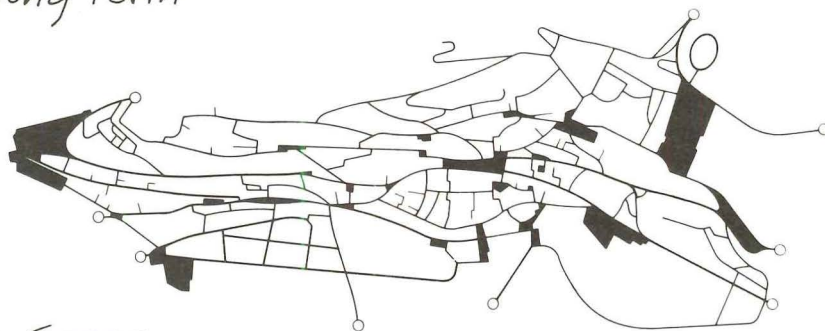
Located on a spur of Mount Subasio 1,300 feet above the Tiber River Valley, Assisi is the prototypical hill town. Anchored on the west by the rock-like form of the monastery and church of St. Francis, the

main street moves east parallel to the hillside to the main square, originally the forum when it was a Roman settlement and containing a Roman temple "built-in" to the continuous frontage of the square. Outlines of an amphitheater from the same period can be seen farther up the hill. This is one medieval city in which it is practically impossible to get lost. With its almost singularly linear pathway system interrupted at points by major buildings and public spaces, with successive terraces moving up the hills providing over view, an encircling city wall defining edge and the crowning castle at the top, it is one of the most comprehensible of cities.

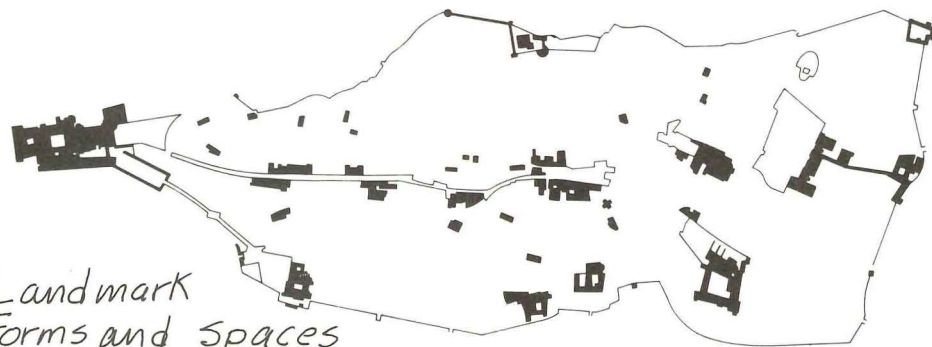
Scale 1: 12,500



Building Form



Public Space



Landmark
Forms and Spaces

Building Form Scale 1: 35,000
 Others 1: 94,500

Vienna

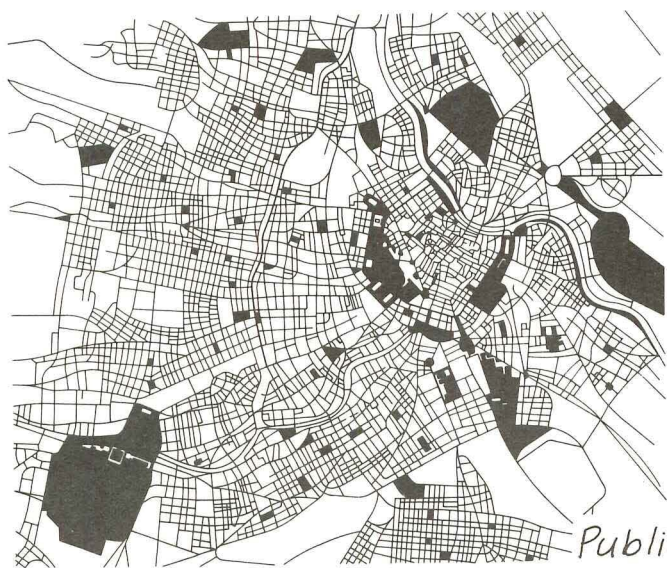
The most unique physical feature of Vienna is the Ringstrasse, a 187-foot-wide boulevard encircling three sides of the Innere Stadt or inner city. Once the site of massive city walls which were pulled down between 1858 and 1865, this boulevard and adjoining public parks tie together the major monumental buildings of the former empire and palaces of the aristocracy now housing government and commercial enterprises. The open space of the Ringstrasse contrasts sharply with the dense built-up form of the inner city with its winding medieval street pattern focusing

on St. Stephens Cathedral. Within the core, the public space is tightly defined by the containing buildings. Later baroque and 19th century buildings lying within the Ringstrasse show the shift in spatial concepts as they become formally designed objects within space. Joining the inner core to the Ring is the "megastructure" form of the Hofburg, the former imperial castle-palace built over six centuries by the Hapsburgs.

In spite of its contrary use, the form of the Ringstrasse seems to be the prototype for the urban freeway pattern encircling the contemporary American downtown and spinning off radials into the suburbs.



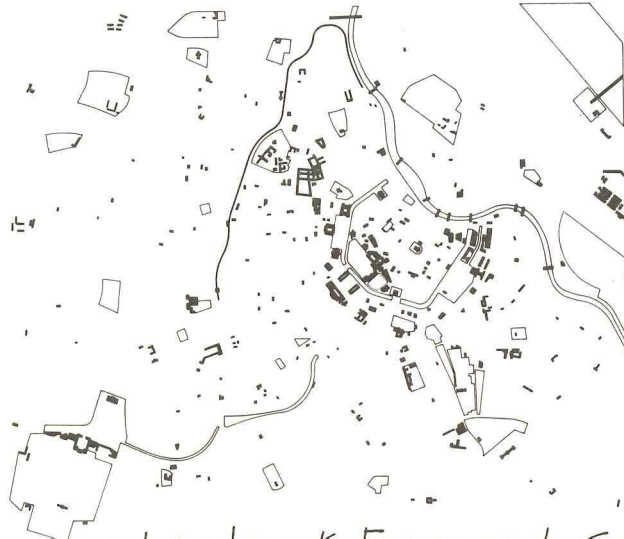
Building Form



Public Space



Public Transit: streetcar



Landmark Forms and Spaces

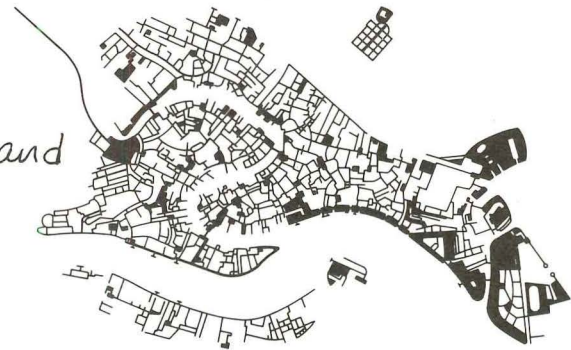
Venice

While Venice is not unique as an island city, it is by far the best known and makes the most of its setting and freedom from the automobile. Consisting of over 100 separate islands and connected to the mainland by a two and a half-mile causeway, its main "avenue" is the Grand Canal, a reverse "S" curved waterway two miles long. The pattern of public space can be separated out by land and water since so much moving about is done on the water. As a result, public transit routes, which are confined to the water, take on the free and graceful patterns shown, anchored only by the stops. As overlapping networks, land and water provide an intricate but absolute separation of traffic. Yet, unlike the freeway and the local street, they coexist side by side.

The maze of open space, whether land- or water-based, can quickly become confusing to any but the most familiar. The Grand Canal is not helpful in orientation because it twists and turns. Venice does have, however, an almost continuously accessible water edge on the lagoon, and it is from this edge that panoramic views of portions of the city are available.



Building Form



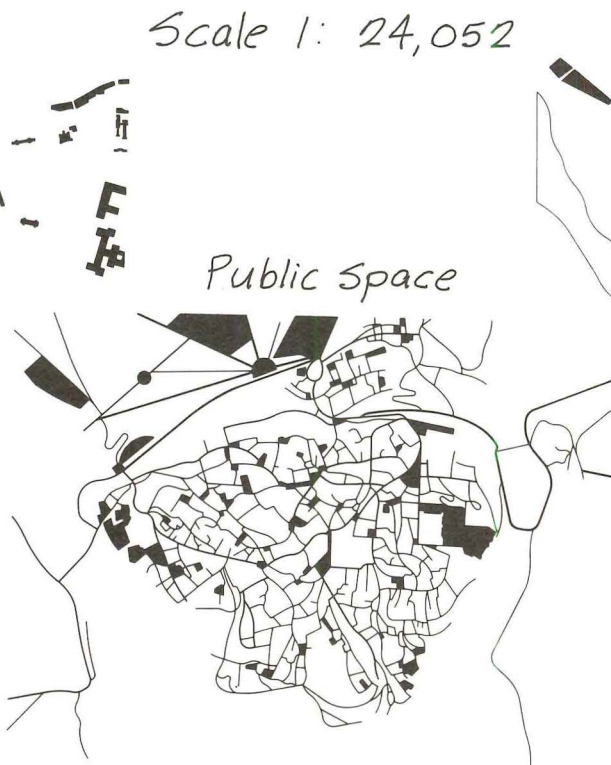
Public Space/Land

Scale 1: 40,382

Scale 1: 24,052



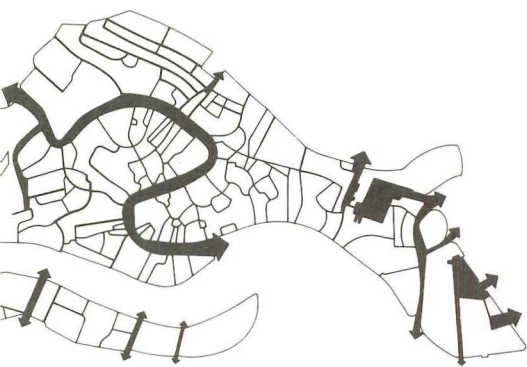
Building Form



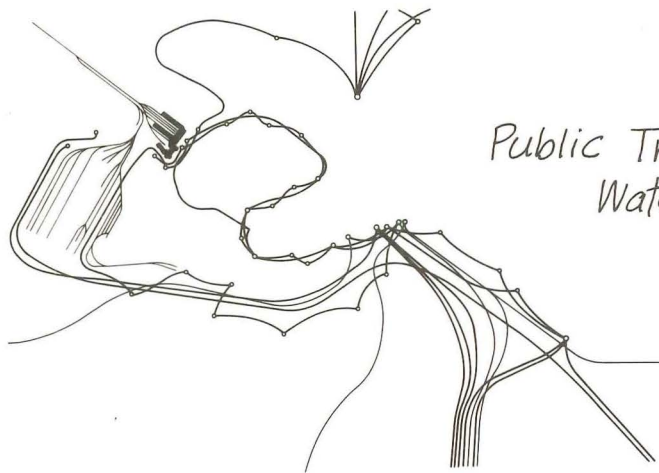
Public Space



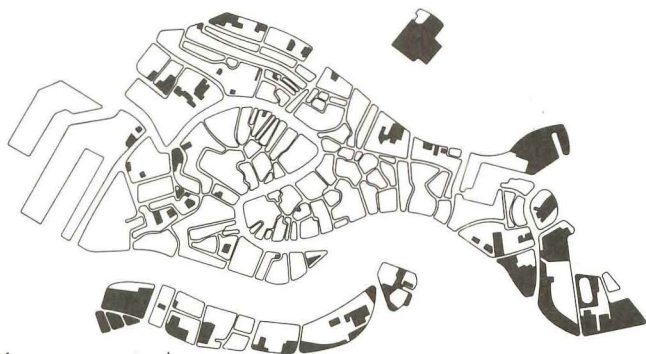
Landscaped Space and Water Edge



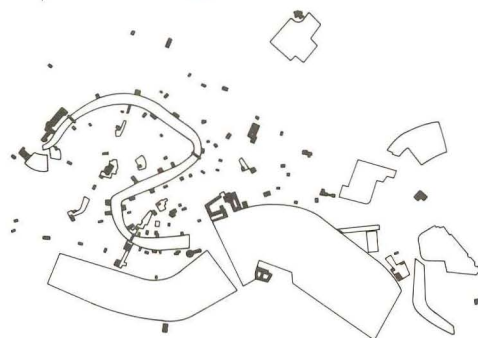
Public Space / Water



*Public Transit /
Water / Rail*



Urban Edge and Landscaped Space



Landmark Forms and Spaces

*Landmark Forms
and Spaces*



Toledo

Toledo is built on a rugged height above the Tagus River which circles it on three sides, and the city itself is only accessible from the plains lying to the north. It is purely medieval in its pattern of narrow winding streets of steep gradients. There are two major public squares in the old city, the Zocodover or Civic Square connecting to the Alcazar or Citadel to the south, and the Plaza del Ayuntamiento, site of the great cathedral and architectural centerpiece of the town, connected via the Comercio to the Zocodover.

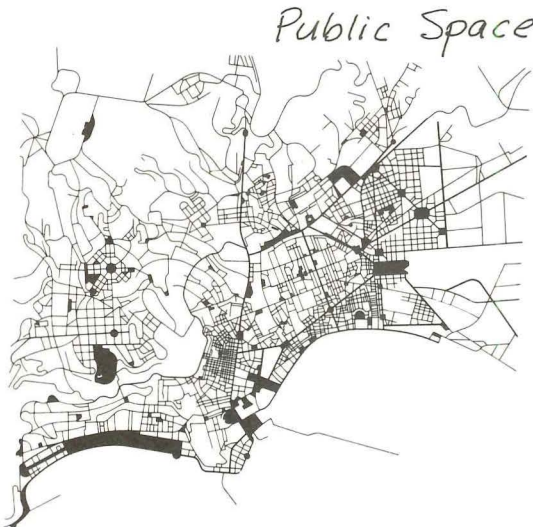
The great space of the river and ravine encircling much of the city is unrecognized

from within and the spatial pattern of Toledo disintegrates around its edges. The form of the town is totally wrapped-up within itself, the strongest influence of its medieval heritage. Similarly, as in most public space developments dating back to medieval times, landscape development in the form of growing, living things is almost totally absent. Although there appear to be frequent opportunities in the spatial pattern for small "parks," the spaces are almost invariably hard surfaced, resulting in a dramatic visual distinction between the human settlement and the surrounding countryside.

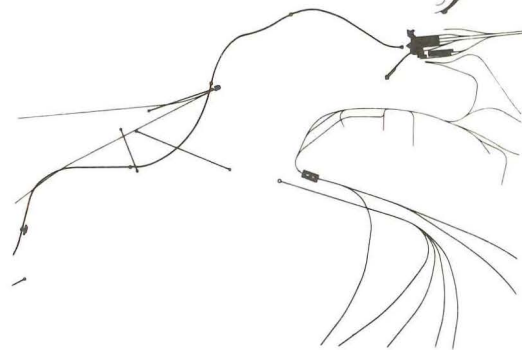
Scale 1: 85,250 Naples



Building Form



Public Space



Public Transit
subway, rail,
funicular, ferry

Landscaped Space
and Water Edge



Landmark Forms
and Spaces

Naples stretches for five miles along the bay and continues inland up the slopes beyond. The different ages of city building are apparent in the open space pattern: the medieval city with its Roman gridiron antecedents, the more haphazard, purely medieval city paralleling the bay, and the later baroque development of the suburbs. Through all this involved texture run several wide boulevards created in 1884 after a cholera epidemic to "clear the congestion of the slums." The hillside topography is indicated by the general fragmentation of architectural form and looseness of defined public space.

Hillside and harbor create a range of demands on public transit: a subway, a funicular connecting hilltop to harbor, ship terminals and a bus system. Surface traffic is reputed to move more slowly in Naples than anywhere else in Italy and the discontinuities of the street system, with the exceptions of a few major boulevards, and the difficult topography make this distinction possible. Visual and physical access to the harbor is well provided on the west by the Riviera de Chiara, a boulevard and municipal park. Moving east, the harbor becomes occupied by industrial concern which, as in many water cities, have usurped the water edge. □



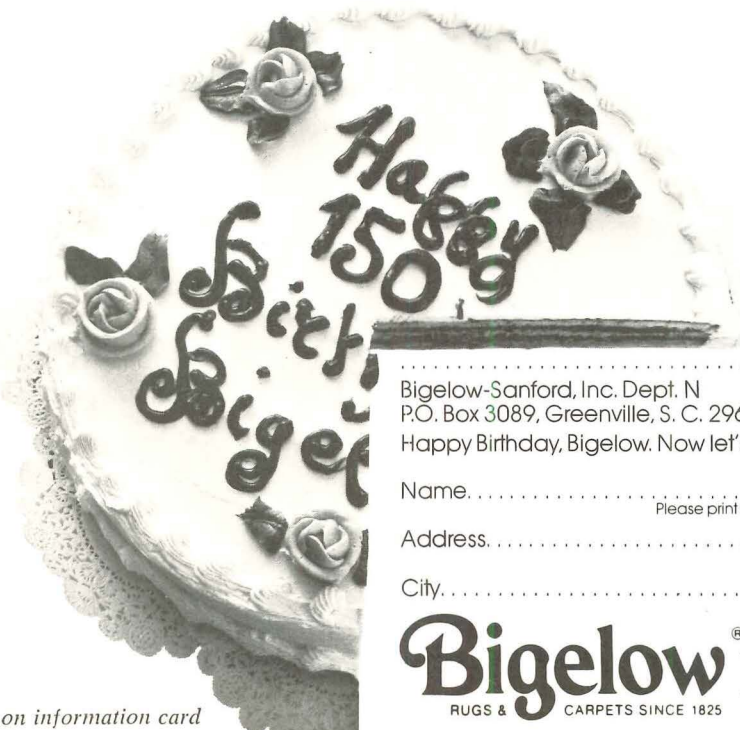
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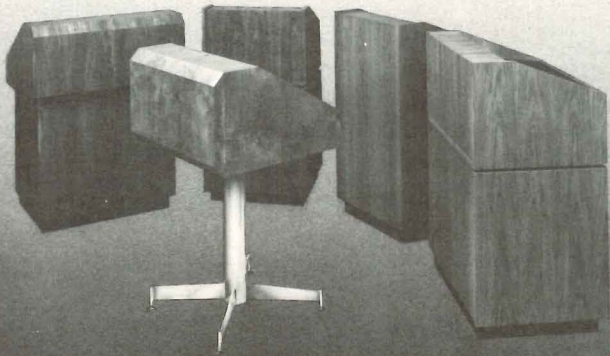
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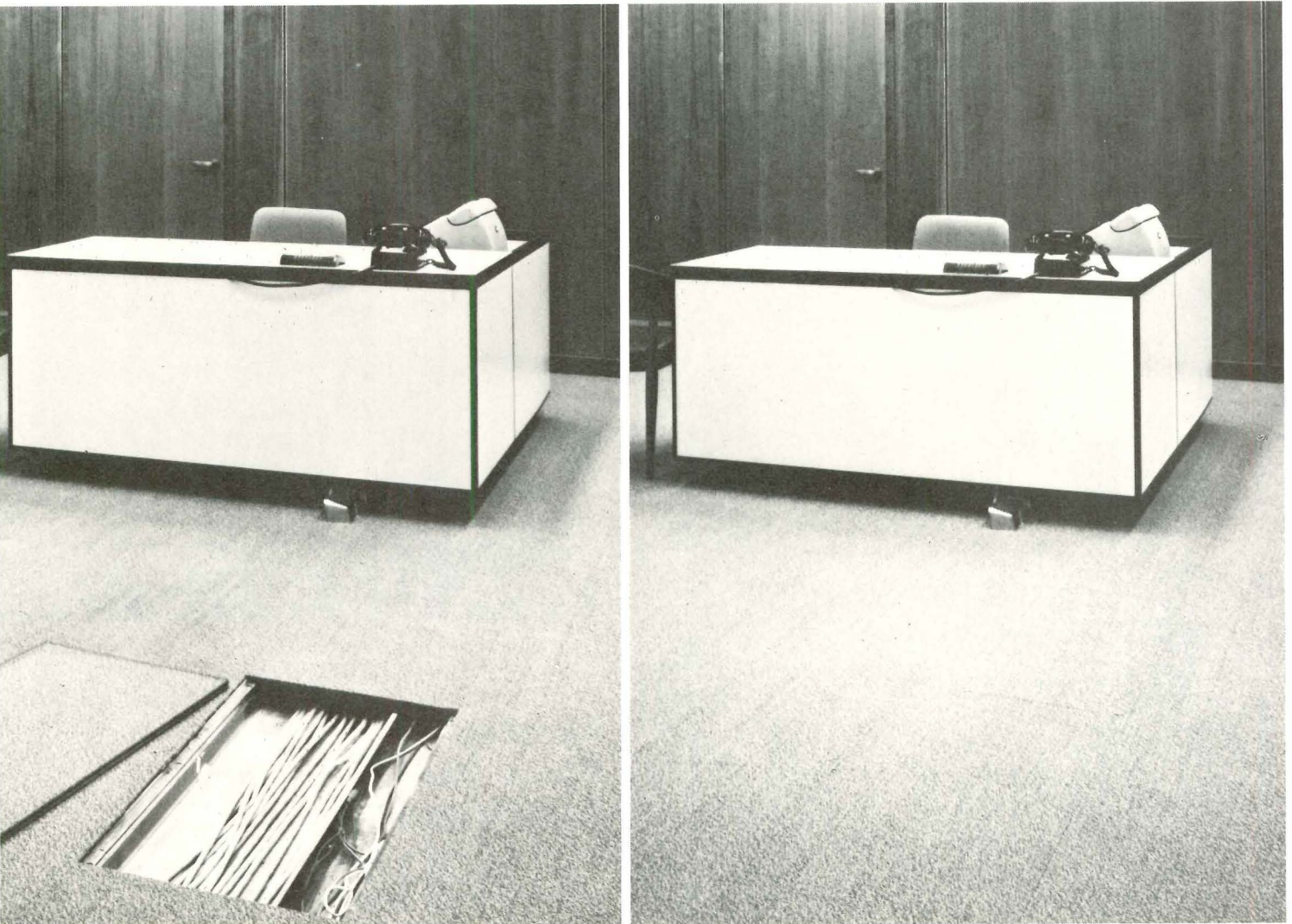
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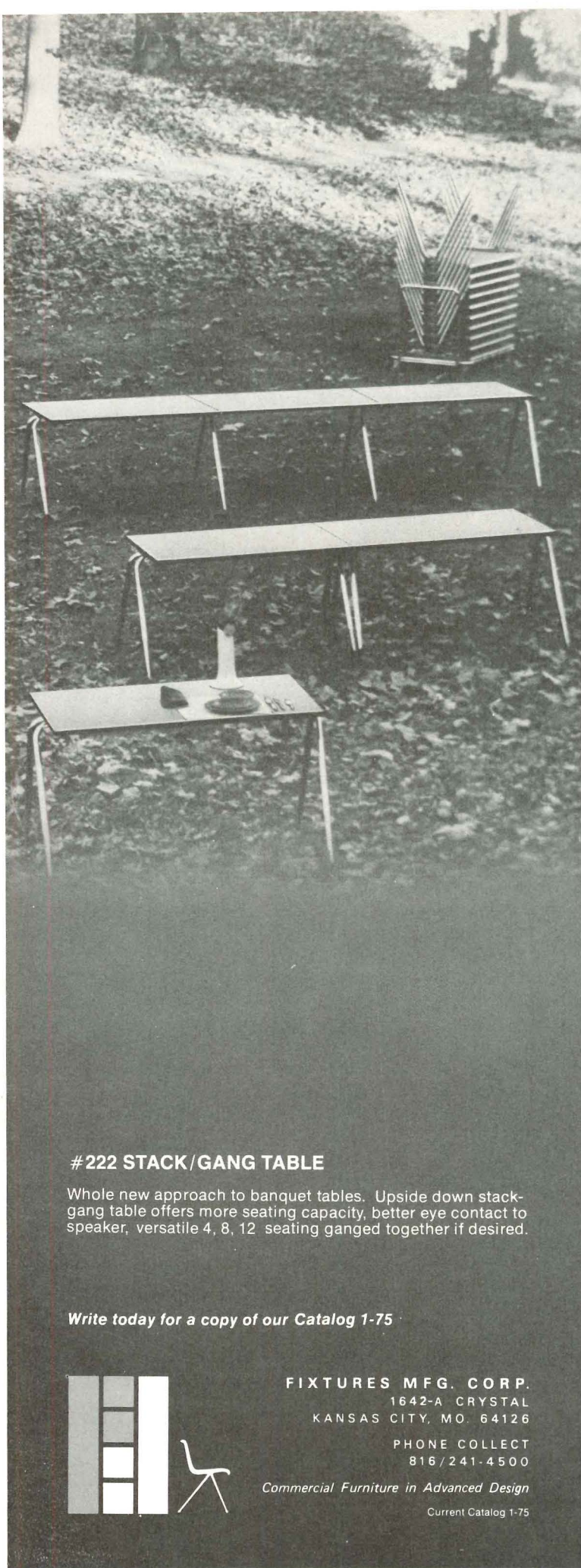
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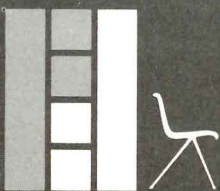
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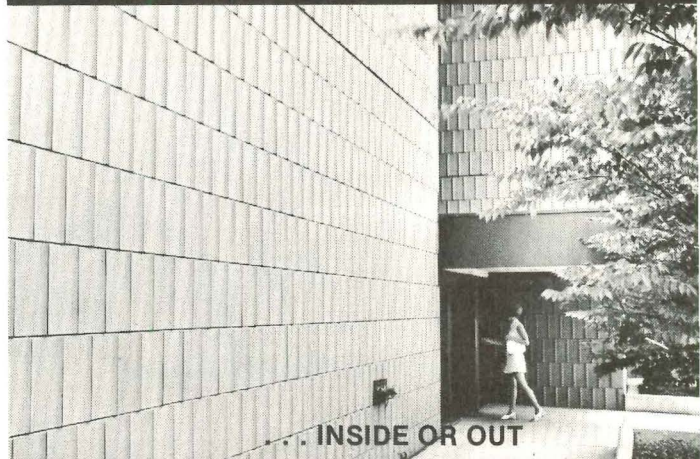


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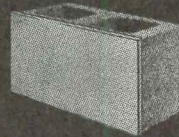


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EVENTS

July 28-Aug. 1: Workshop on Fire Safety Design for Buildings. (Other workshops—Aug. 4-6: Design for Security in Buildings; Aug. 6-8: Building Design for Noise Control.) University of Wisconsin, Madison, Wis.

July 31-Aug. 2: Economic Benefits of Preserving Old Buildings Conference, Olympic Hotel, Seattle. Contact: M.S. Leventhal, National Trust for Historic Preservation, 740-748 Jackson Place N.W., Washington, D.C. 20006.

Aug. 7-9: Michigan Society of Architects mid-summer conference, Mackinac Island, Mich.

Aug. 10-15: Value Analysis Workshop, Washington, D.C. (Other workshops on Sept. 14-19 in Atlanta and on Oct. 5-10 in Dallas.) Contact: American Consulting Engineers Council, Suite 713, 1155 15 St. N.W., Washington, D.C. 20005.

Aug. 13-14: Cutting Production Costs Laboratory, Sunnydale, Calif. (Also on Aug. 27-28.) Contact: Continuing Education, AIA Headquarters (202) 785-7354.

Aug. 21-23: Planning and Legal Issues of Growth Management Workshop, Hyatt Regency, San Francisco. (Other workshops on Sept. 18-20, Philadelphia Sheraton, Philadelphia, and on Oct. 2-4, Leam-

ington Hotel, Minneapolis.) Contact: American Institute of Planners Foundation, 1776 Massachusetts Ave. N.W., Washington, D.C. 20036.

Aug. 26-30: Seminar on Architecture and Urban Planning in Finland, Valkoinen sali, Helsinki, Finland. Contact: Mrs. Ritva Salo, Secretary, Association of Finnish Architects, Unioninkatu 30 A, 00100 Helsinki 10, Finland.

Aug. 30: Postmark deadline, entries, The Highway and Its Environment awards program. Contact: Department of Transportation, Federal Highway Administration, Office of Engineering, Highway Design Division, Washington, D.C. 20590.

Aug. 31: Postmark deadline, entries, Energy Conservation awards program. Contact: Owens-Corning Fiberglas Corp., Fiberglas Tower, Toledo, Ohio 43659.

Sept. 1: Postmark deadline, abstracts, call for papers, International Symposium on Lower-Cost Housing Problems, to be held in Atlanta on May 24-28, 1976. Contact: Dr. Parvis Rad, Department of Civil Engineering, Clemson University, Clemson, S.C. 29631.

Sept. 8-11: Information Systems Exposition, New York Coliseum, New York, N.Y. Contact: Banner & Greif, Ltd., 369 Lexington Ave., New York, N.Y. 10017.

Sept. 14-19: International Symposium on Environmental Monitoring, Frontier Hotel, Las Vegas. Contact: U.S. Environmental Protection Agency, Office of Pub-

lic Affairs, National Environmental Research Center, P.O. Box 15027, Las Vegas, Nev. 89114.

Sept. 15-17: National Conference on Noise Control Engineering, National Bureau of Standards, Gaithersburg, Md. Contact: Institute of Noise Control Engineering, P.O. Box 3206, Arlington Branch, Poughkeepsie, N.Y. 12603.

Sept. 16-19: Course on Noise and Vibration Control of Mechanical and Electric Equipment in Buildings, Chicago. (Other courses on Sept. 30-Oct. 3 in Santa Monica, Calif., and on Oct. 21-24 in Cambridge, Mass.) Contact: Bolt Beranek & Newman, Inc., 50 Moulton St., Cambridge, Mass. 02138.

Sept. 18-21: New Jersey Society of Architects annual convention, Hyatt House, Cherry Hill, N.J.

Deaths

Cyrus Kendell Allen, San Bernardino, Calif.

Louis H. Asbury Sr., Charlotte, N.C.

Peter Copeland, New York, N.Y.

Ralph M. Crosby, Laguna Hills, Calif.

Ralph J. D'Agostino, Encino, Calif.

Arthur Deam, FAIA, De Land, Fla.

Frank P. Gates, Jackson, Miss.

Irving G. Hamilton, San Francisco

William C. Jarrett, Long Beach, Calif.

Frederick C. King, Syracuse

Joseph Lau, Essex, Conn.

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Albert G. Nault, Worcester, Mass.
August A. Neuner, Albuquerque, N.M.
Abhash V. Paranjpe, Chevy Chase, Md.
Levon Seron, Joliet, Ill.
Mark L. Wilson, Winter Park, Fla.
Roy C. Wilson, Santa Paula, Calif.

George K. Scrymgeour, AIA: Right-hand man to the noted architect Albert Kahn who founded the Detroit firm of Albert Kahn Associates, George K. Scrymgeour has in charge of the firm's work with the automotive industry during his employment at AKA. He became associated with the firm in 1911 and worked there for 47 years, until his retirement in 1961. He spent two years in Russia for the Kahn firm, undertaking the design of some 570 plants erected throughout the Soviet Union. In the execution of these commissions, he trained more than 1,500 young Russians in everything from drafting to the design of industrial facilities.

Scrymgeour, who died on May 11 at the age of 89, was born and educated in Scotland. He migrated to Canada in 1906, and the next year he moved to the U.S., where he became associated with D.H. Burnham's firm in Chicago. He worked for a while in Cincinnati as chief draftsman for the Allyn Co., before joining Albert Kahn. Two years prior to his death, Kahn admitted 25 persons to partnership in his firm to assure its perpetuity. At that time, Scrymgeour was made an associate,

and in 1945, he was elevated to vice president. In addition to his work on industrial structures, he also was involved in the design of early University of Michigan structures.

Newslines

Fotis N. Karousatos, Hon. AIA, executive director of the Florida Association/AIA, has been appointed to the newly formed University of Florida Council of Advisors. The 20-member council will advise those involved with policy planning and decision making for the university.

National historic civil engineering landmarks are highlighted in a 24-minute audiovisual program now available from the American Society of Civil Engineers (345 E. 47 St., New York, N.Y. 10017). The presentation consists of 140 35mm slides, a cassette tape of music and narration plus a written script covering 40 landmarks. The show may be rented for preview at \$25, which may be applied toward the purchase price of \$95.

Lewis Davis, FAIA, and Samuel Brody, FAIA, principals in the New York City firm of Davis, Brody & Associates, winner of the 1975 AIA firm award, have been awarded the Arnold W. Brunner memorial prize in architecture by the National Institute of Arts and Letters "for their success-

ful efforts to improve low-income housing."

Robert B. Marquis, FAIA, principal of the San Francisco firm of Marquis Associates, has been given the Albert John Evers environmental award by the Northern California chapter/AIA. He was cited for his "consistency and dedication to a sensitive humanistic response to the needs of the city dweller, particularly those with limited income."

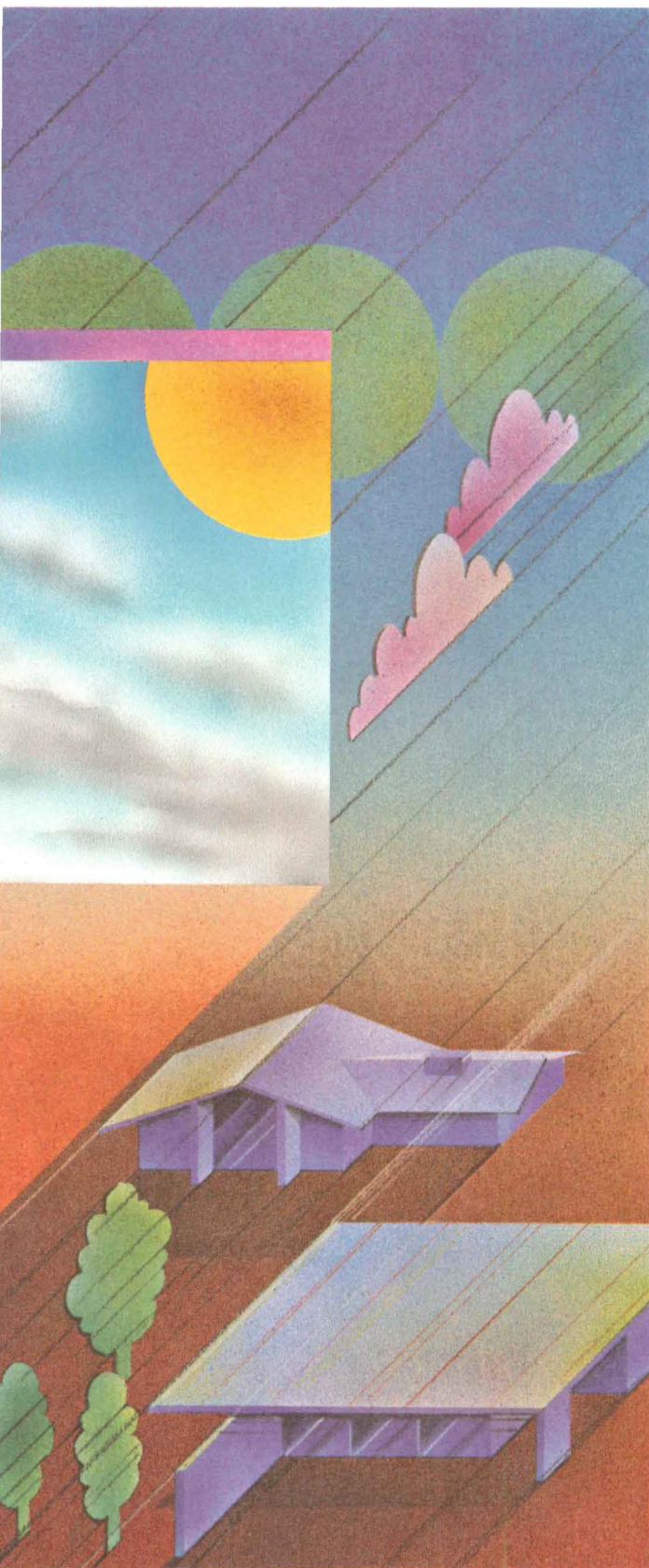
May was proclaimed as "architectural awareness" month by Mayor Kyle Testerman of Knoxville, Tenn. The mayor's proclamation acknowledges the "major influence that architecture has on the quality of the physical environment," calling for "increased public awareness of the need for architectural excellence." The proclamation was presented to officials of the East Tennessee chapter/AIA at city hall ceremonies.

Preston H. Thomas, an architectural student of the class of '75 at Cornell University who was killed in an automobile accident last year, has been memorialized by his parents with the establishment of a \$250,000 lecture series at Cornell. Their generosity, says Dean Kermit C. Parsons, AIA, will make this one of the "most prestigious architecture lecture series in the country." □

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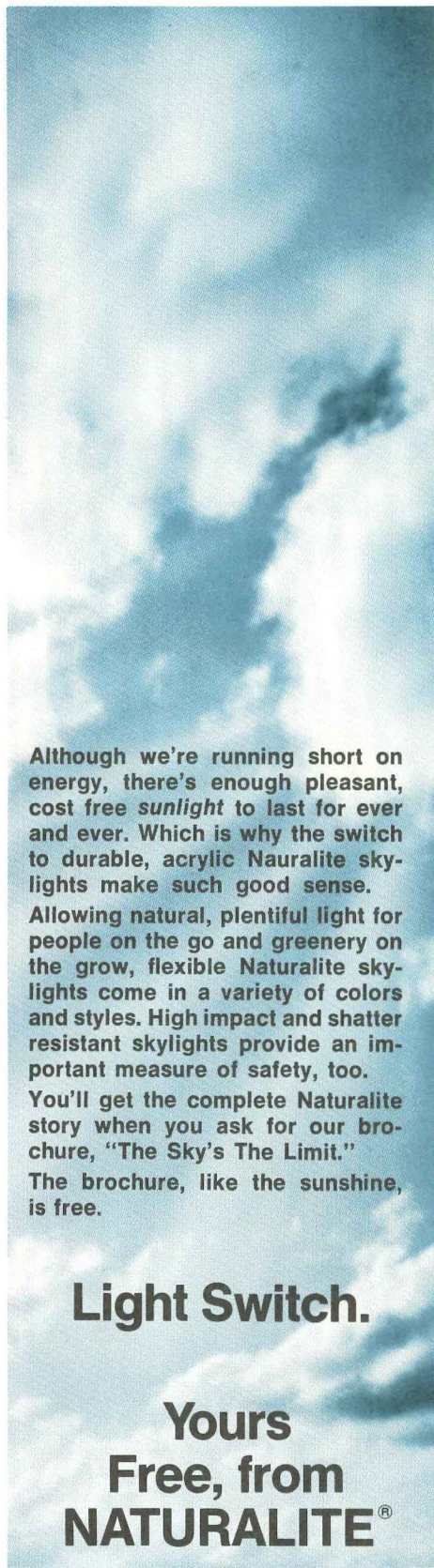
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A7

Going On from page 15

wish to enter the competition may pre-register now by sending in a fee of \$25 per entry. Checks should be made payable to the 41st International Eucharistic Congress. Deadline for entries is Oct. 1.

For further information, write or telephone Mario Romanach, AIA, Competition Adviser, Philadelphia Chapter/AIA, 117 S. 17th St., Philadelphia, Pa. 19103; (205) 569-3186.

In the photograph, the JFK Stadium is seen at upper left and the Veterans at extreme right. The stadium in the center is the Spectrum.

All in the Family

The year 1939 was an important milestone in the life of George H. Wittenberg, Little Rock architect. The newly created Arkansas State Board of Architects, of which he was the first president, issued to him its certificate of registration No. 1. Also in that year, his first grandson George H. Wittenberg III was born. Now, 36 years later, the board has issued this grandson its certificate No. 1,000.

George H. Wittenberg III is associated with the firm of Wittenberg, Delony & Davidson, Inc., which was established by his grandfather and Lawson L. Delony, AIA, over 50 years ago as Wittenberg & Delony. The firm's name was changed in 1946 when Julian B. Davidson, AIA, became a partner. The elder Wittenberg died in 1955.

There is no George Wittenberg IV, but George Wittenberg III has two daughters. He says, "The increasing emergence of women in architecture would indicate that the prospects of yet another historic milestone architectural registration for the Wittenbergs is, by no means, inconceivable."

Secretaries' Handbook

A new publication titled "The Architectural Secretaries Handbook" was displayed at the recent Atlanta convention of the Architectural Secretaries Association. The manual, designed as a daily reference source for secretaries in architectural firms, is useful as well in the training of nontechnical employees and temporarily hired personnel.

For ease of revision and incorporation of new information, the manual is in a three-ring binder. It is divided into five sections: ASA; Secretary/Office; Secretary/Project; Reference Materials, and Glossaries. Sections 2 and 3 will require user input in order to document procedures carried out in a specific office.

The handbook has been endorsed by the AIA committee on office practice and is available for \$10 from Gail Jee, Rockrise Odermatt Mountjoy Amis, 405 Sansome St., San Francisco, Calif. 94111.



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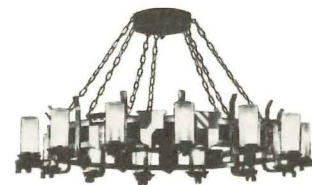
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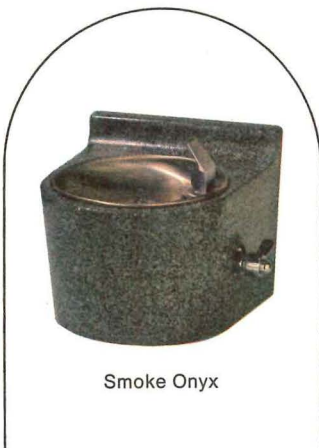
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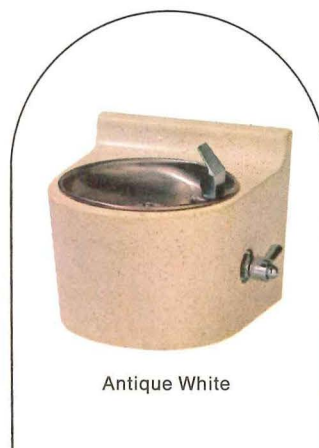
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GOVERNMENTS — FEDERAL / STATE / LOCAL / FOREIGN

Renovations to Rockville Police Station, Rockville, Maryland, <i>Daniel R. Hanson, AIA</i>	\$ 38,000
Crofton Area Library, Crofton, Maryland, <i>Arthur M. Love, Jr., AIA</i>	200,000
Joseph Willard Health Center, City of Fairfax, Virginia, <i>Salditt, Lipp & Helbing, AIA</i>	300,000
Fairfax City Property & Maintenance Yard, Fairfax City, Va., <i>Dewberry, Nealon & Davis, AIA</i>	300,000
East Potomac Bath House, Washington, D.C., <i>Clark T. Harmon, AIA</i>	300,000
Fire Training Facility, Fairfax County, Virginia, <i>Barkley-Pierce, AIA</i>	310,000
Seven Corners Fire Station, Fairfax County, Virginia, <i>Kohler-Daniels, AIA</i>	336,000
U.S. Postal Facility, Hillsborough, North Carolina, <i>Holloway-Reeves, AIA</i>	368,000
St. Mary's County Development Center, Hollywood, Md., <i>Chapman Development Co., McLeod Ferrara, Ensign, AIA</i>	400,000
Baltimore County Animal Shelter, Timonium, Maryland, <i>Salditt, Lipp & Helbing, AIA</i>	400,000
Montgomery County Animal Shelter, Rockville, Maryland, <i>Bagley, Soule, Lee, AIA</i>	460,000
Bauer Drive Recreation Facilities, Montgomery County, Maryland, <i>Duane & Duane, AIA</i>	600,000
Langdon Park Recreation Center, Washington, D.C., <i>H. L. Walker, Architect</i>	880,000
Overnight Facilities, Canaan Valley State Park, West Virginia, <i>Rudy Assoc. Corp., L.D. Schmidt & Son, AIA</i>	1,000,000
Wheaton Community Center, Wheaton, Maryland, <i>Cohen, Haft, Holtz, Kerxton & Karabekir, AIA</i>	1,000,000
Maintenance Facility & Property Yard, Fairfax County Water Authority, Fairfax Co., Va., <i>Mintz & Easter, AIA</i>	1,500,000
Public Health Center, Lynchburg, Virginia, <i>Clark, Nexsen & Owen, AIA</i>	2,000,000
Chancery of Ghana, Washington, D.C., <i>Brown & Wright, AIA</i>	2,280,000
U.S. Post Offices at Fairfax, Sterling & Vienna, Virginia, <i>Fry & Welch, AIA</i>	2,677,000
Housing, Gym, Federal Reformatory, Petersburg, Virginia, <i>Marcellus Wright, Cox, Cilimberg & Ladd, AIA</i>	3,045,000
Indiana State Library Addition, Indianapolis, Indiana, <i>Burkart, Shropshire, Boots & Reid, AIA</i>	3,600,000
Montgomery County Detention Center, Addns. & Alts., Rockville, Md., <i>Warren Sargent/Curtis & Davis, AIA</i>	3,800,000
Fairfax County Adult Detention Facility, Fairfax City, Virginia, <i>Davis & Smith, AIA</i>	3,936,000
Library of Congress-Madison Memorial Bldg.-Phase IV-Interiors, Washington, D.C., <i>DeWitt, Poor & Shelton, AIA</i>	4,000,000
State Office Building #5, Baltimore, Maryland, <i>Gaudreau, Inc., AIA</i>	16,000,000
Metro Project Section AO-13, Washington, D.C., <i>Frank J. Sullivan/Buchart-Dalton, Arch./Engrs.</i>	18,000,000
Moderately Priced Prototype Dwelling Units, Montgomery County, Maryland, Office of Housing, <i>Robert Schwinn, AIA</i>	NFP
Washington Suburban Sanitary Commission, Lyttonsville Service Center, Silver Spring, Md., <i>Bucher-Meyers, AIA</i>	NFP
Embassy of the State of Qatar, Residence, Washington, D.C., <i>Smith Development Corp., M. Al-Hariri, Architect</i>	NFP
Washington Metro. Area Transit Auth. Rockville Rte., Washington, D.C., <i>Vespe Constr. Co., Harry Weese & Assoc./DeLeuw-Cather</i>	NFP
Dulles International Airport Air Mail Facility, Chantilly, Virginia, <i>Lee-Thorp, Engineers</i>	NFP
Congress Hts., Brookland Post Office Stations, Washington, D.C., <i>Lee-Thorp, Engineers</i>	NFP
Laurens St. Metro Sta., Balto., Md., <i>Daniel Mann Johnson Mendenhall/Kaiser Engrs./Nelson-Salabes/Sulton & Campbell, AIA</i>	NFP

ARMED FORCES

USN Research Laboratory-Paint Exterior of Various Buildings, Washington, D.C., <i>Edmund W. Dreyfuss, AIA</i>	37,300
USN Test Instrumentation Facility/RDT&E Bldg. #101, St. Inigoes, Maryland, <i>Lorenzi, Dodds & Gunnill, AIA</i>	88,000
USMC HQ — Henderson Hall — Paint Exterior of Bldgs., Arlington, Va., <i>Horowitz-Seigel, AIA</i>	90,000
U.S. Army Family Housing, Vint Hill Farms, Virginia, <i>Chapman & Miller, AIA</i>	90,400
USN Ground Maintenance Facility, Patuxent River, Maryland, <i>Victor Smolen, AIA</i>	195,700
USN Alterations to Barracks #72, Anacostia Naval Air Sta., Washington, D.C., <i>Mitchell-Ross-Worthy, AIA</i>	354,000
U.S. Army General Storehouse, Fort Lee, Virginia, <i>Marcellus Wright, Cox, Cilimberg & Ladd, AIA</i>	500,000
USN Automotive/Ceramic Shop, Patuxent River, Md., <i>Kimbrell Elec. Co., Professional Engrs.</i>	500,000
U.S. Army Repairs to 17 Buildings, Ft. McNair, Washington D.C., <i>Horowitz-Seigel, AIA</i>	674,000
U.S. Army E.M. Barracks, Fort Belvoir, Virginia, <i>McGaughan & Johnson, AIA</i>	760,000
U.S. Army Property & Fiscal Officer's Office & Warehouse, Washington, D.C., <i>Chapman & Miller, AIA</i>	1,285,000
USAF Consolidated Base Personnel Office, Andrews AFB, Camp Springs, Maryland, <i>Chapman & Miller, AIA</i>	1,954,000
U.S. Army Band Training Center, Ft. Meyer, Virginia, <i>Fry & Welch, AIA</i>	2,200,000
USMC BEQ 2001 & 2003, Quantico, Virginia, <i>Sargent & Associates, AIA</i>	3,318,000
USN Dispensary/Dental Clinic, NAS Oceana, Virginia Beach, Va., <i>Vosbeck, Vosbeck, Kendrick & Redinger, AIA</i>	3,713,000
USN Alterations & Additions to Miscellaneous Bldgs., Patuxent River, Md., <i>Chapman & Miller, AIA</i>	NFP
U.S. Army Aircraft Supply Parts Building, Ft. Meyer, Virginia, <i>Fry & Welch, AIA</i>	NFP
USN Air Test Facility-Runway Grooving, Lakehurst, New Jersey, <i>Federal Aviation Agency</i>	NFP

APARTMENTS / TOWNHOUSES / HOTELS / MOTELS / RESIDENCES

Town Apartments, Washington, D.C. John Gerstenfeld, <i>Patterson & Worland, AIA</i>	32 units
Marriott Hotel Additions & Alterations, Saddle Brook, New Jersey, <i>Marriott Corporation</i>	39 units
Kent Terrace Apartments, La Plata, Maryland, <i>InterDesign/Peter Hotz, AIA</i>	64 units
Quality Inn Motel, E. Greenwich Township, N.J., Interstate Traveller Servs., <i>Wm. Quinter, AIA</i>	166 units
Harambee Hotel, Washington, D.C., <i>Sulton & Campbell, AIA</i>	169 units
Holiday Inn, Alexandria, Va., Figgatt Drywall Co., <i>Vosbeck Kendrick Redinger, AIA</i>	230 units
Montrose House High Rise Apts., Rockville, Md., <i>Vespe Construction Co., Cohen Haft Holtz Kerxton Karabekir, AIA</i>	250 units
Marriott Hotel, New Jersey Turnpike, Ridgefield, New Jersey, <i>Marriott Corporation</i>	298 units
Brentwood Village Apartments, Washington, D.C., Whitecliff Corp., <i>Zubkus, Zemaitis, AIA</i>	300 units
Bramble Wood Estates, Richmond, Va., Virginia Housing Development Authority, <i>Samuel Paul, AIA</i>	340 units
Residence for Mr. Anclé C. Tester, Kenwood, Maryland	NFP
Bannister Apts., Chas. County, Md., Hurlley Brothers Masonry, <i>Collins-Kronstadt-Leahy-Hogan-Collins, AIA</i>	NFP
Windermere Columbia Homes, Montg. Co., Md., A. H. Masonry, <i>Cohen Haft Holtz Kerxton Karabekir, AIA</i>	NFP
Residence for Mr. & Mrs. Francis Cash, McLean, Virginia, <i>Jean L. Bouquet, AIA</i>	NFP
Residence for Dr. John D. Herbert, Reston, Virginia, <i>Robert Abrash, Philip Eddy, Architects</i>	NFP
Residence for Francis B. Dukes, Hillsboro, Virginia	NFP
McCormick Apts. Alterations, Washington, D.C., Dupree Assoc., <i>Faulkner, Stenhouse, Fryer & Faulkner, AIA</i>	NFP

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MAY WE ASSIST YOU AND YOUR CLIENTS DURING THE NEXT SIX MONTHS?

EDUCATIONAL FACILITIES

Highland Co. High School Vocational Lab. Addn., Highland Co., Va., <i>David C. Smith/Patrick M. Lathrop, AIA</i>	\$ 80,000
Ballaudet College Renovation Projects 1975, Washington, D.C., <i>Strang, Childers & Downham, AIA</i>	250,000
Virginia Military Institute, Addition to Moody Hall, Lexington, Va., <i>Clark, Nexsen & Owen, AIA</i>	260,000
Maintenance & Warehouse Building, Norfolk, Virginia, Old Dominion University, <i>Pentecost, Wade, McLellon, AIA</i>	750,000
Anderson School Addition, Bethesda, Maryland, <i>David N. Yerkes, AIA</i>	800,000
Wheaton Woods Elementary School, Wheaton, Maryland, <i>Duane & Duane, AIA</i>	1,400,000
Old Dominion University, Student Union Addition, Norfolk, Virginia, <i>McGaughy, Marshall & McMillan, AIA</i>	1,412,000
Lumbarton Oaks Research Library, Washington, D.C., Harvard University, <i>Hugh Newell Jacobsen, FAIA</i>	1,500,000
Replacement for Elementary School 261, Baltimore, Maryland, <i>Fry & Welch, AIA</i>	1,980,000
Herwood Elementary School, Sandy Spring, Maryland, <i>Fry & Welch, AIA</i>	2,000,000
Indian Head Elementary School, Indian Head, Maryland, <i>Mark Beck, AIA</i>	2,100,000
Wilson High School Aquatic Facility, Washington, D.C., <i>Perkins & Will, AIA</i>	7,000,000
Marriester Charles Carroll Elementary School #34, Baltimore, Maryland, <i>Ianniello & Hofmann, AIA</i>	2,403,000
Terraset Elementary School, Reston, Virginia, <i>Davis, Smith & Carter, AIA</i>	2,530,000
Pennsylvania Avenue Elementary School, Cumberland, Maryland, <i>Delta International, Arch. & Engrs.</i>	2,700,000
Mardella High School, Addition & Renovations, Mardella Springs, Maryland, <i>Meyers, D'Aleo & Todd, AIA</i>	3,200,000
Friendly High School Addition, Friendly, Maryland, <i>Shaw & Chrichton, AIA</i>	3,250,000
William & Mary College, New Law School, Williamsburg, Virginia, <i>Wright, Jones & Wilkerson, AIA</i>	4,325,000
Poolesville Junior/Senior High School, Poolesville, Maryland, <i>Eugene A. Delmar, FAIA</i>	4,467,000
Curryville Elementary School, Washington, D.C., <i>Gray, West & Wilson, Architects</i>	4,500,000
Owen Brown/Dasher Green Elem. School, Columbia, Md., Bowman Masonry Co., <i>Walton, Madden, Cooper, AIA</i>	5,000,000
University of Maryland Physical Education Bldg., College Park, Bowman Masonry Co., <i>Robt. Sippel, Arch.</i>	6,200,000
Owings Mill High School, Owings Mill, Maryland, <i>Wheeler, Bonn, Shockey, Taylor, AIA</i>	6,400,000
Howard University Medical & Dental School Media Center, Washington, D.C., <i>Sulton & Campbell, AIA</i>	7,000,000
Donner Tract High School, Manassas, Va., Pr. William Co. School Board, <i>Pentecost, Wade & McLellon, AIA</i>	9,100,000
Howard University Master Plan, Washington, D.C., <i>Perkins & Will, AIA</i>	NFP
Uniform Serv. Health Sciences, Bethesda, Md., Vespe Constr. Co., <i>Ellerbe/Dalton, Dalton, Little, Newport, AIA</i>	NFP
Masonry Flashing for Library Hdqtrs. Bldg., Annapolis, Md., Bowman Masonry Co., <i>Gaudreau, Inc., AIA</i>	NFP

MEDICAL FACILITIES

National Institutes of Health Renovations to Building 30, Bethesda, Md., <i>Bagley, Soulé, Lee, AIA</i>	75,000
St. Joseph's Hospital Coronary Care Addition, Tampa, Florida, <i>Harvard & Jolly, AIA</i>	350,000
Funham Army Hospital, Carlisle Barracks, Pennsylvania, <i>Henry Adams, Engrs.</i>	800,000
Woodbine Nursing Home, Alexandria, Virginia, <i>Salditt, Lipp & Helbing, AIA</i>	1,200,000
Greater S.E. Community Hospital Addns. & Alts., Phs. II, Washington, D.C., <i>Davis, Smith & Carter, AIA</i>	1,250,000
Gracewood State School & Hospital, Gracewood, Georgia, <i>Elmer L. Perry, Jr., AIA</i>	1,800,000
Witham Memorial Hospital Addition, Lebanon, Indiana, <i>Burkart, Shropshire, Boots & Reid, AIA</i>	2,800,000
St. Mary's Hospital Shell Space Addn./Intensive Care Unit, Richmond, Va., <i>Davis, Smith & Carter, AIA</i>	3,400,000
DeWitt Army Hosp.-Mech-Elec., Ft. Belvoir, Va., <i>Henry Adams, Engrs./Richter-Cornbrooks-Matthai-Hopkins, AIA</i>	4,150,000
Huntington Memorial Hospital Addition, Huntington, Indiana, <i>Burkart, Shropshire, Boots & Reid, AIA</i>	4,200,000
Richmond Nursing Home, Richmond, Virginia, <i>Marcellus Wright, Cox, Cilimberg & Ladd, AIA</i>	8,000,000
Univ. of Tennessee Veterinary School, Knoxville, <i>McCarty Bullock Holsaple/Barber & McMurry/Lindsay & Maples, AIA</i>	14,000,000
The Greater Laurel Hospital, Laurel, Md. Vespe Constr. Co., <i>Dalton, Dalton, Little & Newport, AIA</i>	16,000,000
St. Luke's Hospital, Electrical Change Orders, Cleveland, Ohio, <i>Ellerbe Architects</i>	NFP

MISCELLANEOUS—COMMERCIAL / INDUSTRIAL / INSTITUTIONAL

Toy Rogers Restaurant, Philadelphia, Pennsylvania, <i>Marriott Corporation</i>	110,000
Trenco Office Building, Alexandria, Virginia, Capt. Russell S. Crenshaw, Jr., <i>Michael & Michael, AIA</i>	150,000
Mechanics & Farmers Bank, Raleigh, North Carolina, <i>Gantt/Huberman, AIA</i>	150,000
Big Boy Restaurant, Fairfax, Virginia, <i>Marriott Corporation</i>	290,000
Flagship Restaurant Parking Garage, Washington, D.C., <i>Perkins & Will, AIA</i>	300,000
United Virginia Bank of Charlottesville, Charlottesville, Virginia, <i>M. Jack Rinehart, Jr., Architect</i>	490,000
Chineas Dinner House, Washington, D.C., <i>Marriott Corporation</i>	700,000
Sursum Corda Community Center, Washington, D.C., Sursum Corda, Inc., <i>Fry & Welch, AIA</i>	1,200,000
Reston Indoor Sports Complex, Reston, Virginia, Long & Foster, <i>Oxman-Stewart, AIA</i>	1,400,000
Skridge Center Office & Warehouse, Merrifield, Va., Henry A. Long, <i>Frank C. Montague, AIA</i>	1,500,000
Heratton Motor Hotel Office Addition, Silver Spring, Md., Daniel M. Ross, Esq., <i>Victor Smolen, AIA</i>	2,000,000
National Zoo Beaver Valley Exhibits, Washington, D.C., <i>Faulkner, Fryer & Vanderpool, AIA</i>	5,000,000
Regional Institute for Children & Adolescents, Rockville, Maryland, <i>Bacharach Associates, AIA</i>	6,266,000
Office Building, 1616 N. Fort Meyer Drive, Arlington, Va., Robert E. Morrison, Inc., <i>Robert Calhoun Smith, AIA</i>	NFP
Dupont Circle Office Building-8th Floor Plumbing, Washington, D.C., Carnegie Endowment, <i>ICON Architects</i>	NFP
Office Building, 1120-19th St., N.W., Washington, D.C., Robt. T. Foley, Co., <i>Leo Gordon Johnson, AIA</i>	NFP
Munson Hill Office Building, Bailey's Crossroads, Virginia, Murray Weinberg, <i>Harvey L. Gordon, AIA</i>	NFP
Heratton Inn Conference Complex Phases I & II, Reston, Va., Daniel M. Ross, Esq., <i>T. Y. Lin, Engrs.</i>	NFP
Woodmoor Shopping Center, Silver Spring, Md., <i>Friedlander-Misler-Friedlander-Kerman-Sloan, Attys.</i>	NFP
Allegheny-IBM Branch Office Bldg., Pittsburgh, Pa., Vespe Constr. Co., <i>Mies Van Der Rohe, FAIA</i>	NFP

CHURCHES

Sixth Church of Christ, Scientist, Addns. & Alts., Washington, D.C., <i>Faulkner & Faulkner, AIA</i>	300,000
Ascension Lutheran Church, Towson, Maryland, <i>Neumayer & Foulz, AIA</i>	500,000
Pennsylvania Avenue AME Zion Church, Baltimore, Maryland, <i>Sulton & Campbell, AIA</i>	900,000

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BOOKS

Energy Conservation in Buildings: Techniques for Economical Design. C.W. Griffin. Washington, D.C.: Construction Specifications Institute, 1974. 183 pp. \$20.

There has been a growing awareness of the extent to which buildings overuse energy. Moreover, out of the necessity for cutting down fuel consumption, the major areas of waste have been identified. The information has been reported in the architectural and technical press, starting with a trickle of news in '71 and '72 and now mounting to a flood. Griffin has taken a good deal of this information, added a number of perceptive insights into the entire process and produced a valuable handbook and checklist. Thanks should go to the Construction Specifications Institute for commissioning the book.

Griffin's background as a former editor of *Engineering News-Record* has served him well. He has gone to the various sources and has done a good job of culling, regrouping and summarizing. In 158 pages plus an appendix on life-cycle costing, there is a subject-by-subject examination of the building items that offer opportunities for reductions in energy use—heating, cooling, thermal insulation, thermal energy storage, glass-walled buildings, control systems and such. Where principles or design standards can be extracted, they appear at the ends of chapters as sharp admonitions: "Insulate all pipes and ducts." "Avoid over sizing of air conditioning equipment." "Investigate heat recovery from exhaust air for volumes greater than 2,000 cfm." "Use local task lighting, not general illumination for the most demanding visual tasks to be performed in an occupied space." Griffin sounds like a good teacher talking to his class or a sergeant to his troops. The instructions are crisp and worth heeding.

The somewhat embarrassing position of having to correct conditions of our own doing has led the author into occasionally caustic observations that usefully deflate some of the hot air from overblown descriptions of buildings that were circulated these past 20 years. "In the care-free, pre-energy-crisis days, there was little incentive to tackle the complex problem of accurate energy-conserving mechanical design." Or: "As will be dis-

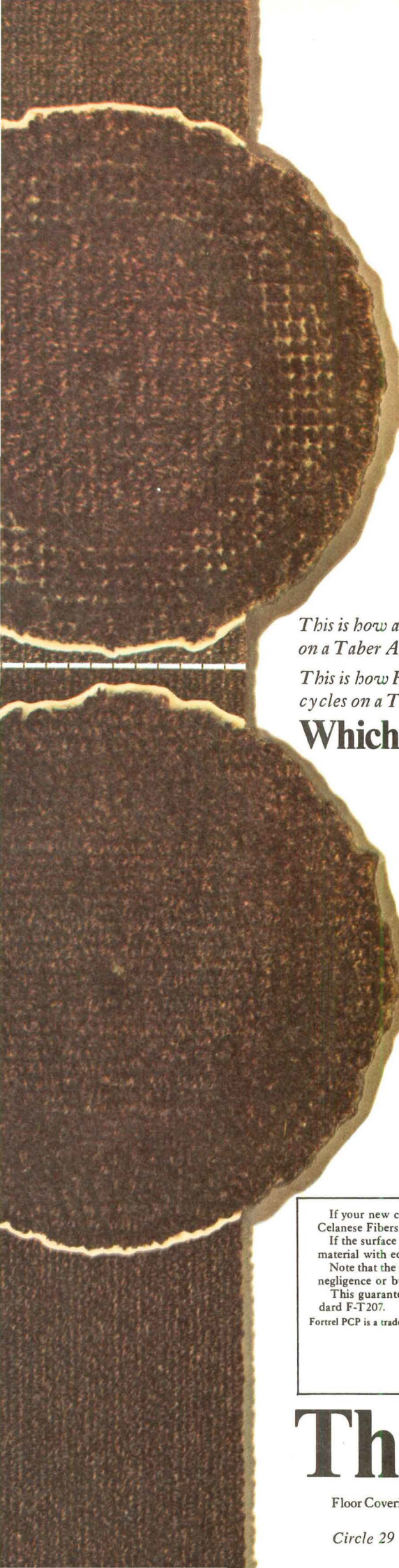
cussed later in greater detail, excessive general lighting standards add energy in result to energy injury."

One of the difficulties of a book made up principally of quotes from assorted sources is that all of the sources do not seem to be equally good. In the case of energy use, we are not merely talking about figures that must be correct for their own sake. Incorrect figures lead to incorrect analyses and to incorrect strategies for coping with the problem. In order to take most advantage of Griffin's book, these misleading statistics and attitudes should be pointed out.

Griffin uses the figure of 20 percent of the nation's total energy in the heating, ventilating and airconditioning of buildings, noting that this is over 60 percent of the energy consumed in buildings, and is more than 10 times as much energy as is consumed in lighting, the next largest user. This would suggest that less than 2 percent of national energy is used in lighting. This figure should probably be multiplied by three to approach its true importance. And in our characteristic large interior area commercial buildings, there are many examples where lighting represents more energy use than all other uses combined. In two large office buildings we have recently examined in detail, lighting represented 50 percent and 60 percent of total energy use. Heating, ventilating and airconditioning combined represented about 35 percent and 28 percent with the balance in vertical circulation, hot water and miscellaneous electrical use for office machines—computers, etc.

A few pages later, the book states that "electric fan energy accounts for up to 4 percent of a building's total electric consumption." (Still farther on, Griffin says: "According to the National Bureau of Standards, lighting and other electrical uses account for 10 percent of the energy consumed in buildings.") These figures lead into several chapters dealing with the improvement of the performance of HVAC systems as the major opportunity for energy reduction.

The General Services Administration in its successful efforts to achieve an immediate cutback in energy use in government buildings, attacked excessive light-



This is how acrylic looks before and after 1,800 cycles on a Taber Abrader.

This is how Fortrel PCP looks before and after 1,800 cycles on a Taber Abrader.

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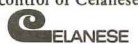
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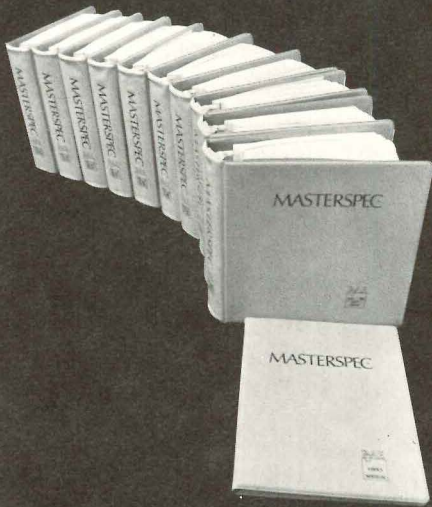
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levels and instituted a lighting program based on 50, 30 and 10 footcandles.

The search for applicable directives and formulas also has the built-in danger of oversimplification. The characteristic of building design and analysis that becomes most apparent is the complexity and interrelatedness of systems. While general principles are applicable, each building has its own requirements that often contradict the generalizations we are used to. When are central systems more efficient? When are raised air-conditioning temperatures inefficient?

These are details, however, that diminish but don't destroy the usefulness of the book. It certainly should not be criticized for what it didn't attempt to do, and yet I wish that the unique and basic contribution of the architect could have been given greater stress—that is, the underlying design concept of a structure more sympathetically related to its environment and less dependent on the 24-hours-a-day performance of mechanical systems.

Where Griffin sees the two major approaches to energy conservation as "1) through administrative policies" and "2) through technical innovations and improvements," I see the principal avenue as being through basic reexamination of design attitudes. *Richard G. Stein, FAIA*

Houses, Villas and Palaces in the Roman World. A.G. McKay. Ithaca, N.Y.: Cornell University Press, 1975. 288 pp. \$19.95.

The Romans—those remarkable architects and builders—erected townhouses, highrise apartments, villas and palaces and decorated them lavishly, embellishing them with beautiful gardens. This book, by a Canadian scholar, traces Roman domestic architecture from the time of the Etruscans to the days of the mighty Empire when Rome's influence was felt all over the known world. Against this background, the reader comes to learn much about the Romans and their lifestyle. And when the Empire finally collapsed, "radiant heating, abundant water supplies, shadowy arcades, garden courts with spacious pools and fountains, dining and reception halls resplendent with mosaics and wall paintings, were the outward and comfortable symbols of civilization amid a disintegrating world."

The Pedestrian Revolution: Streets Without Cars. Simon Breines and William J. Dean. New York: Random House, 1974. 152 pp. \$3.95.

This book is gratifying for a number of reasons. First, it is the result of research that originated with a New York chapter/AIA's Arnold W. Brunner Scholarship award, given in 1947 to Simon Breines, FAIA. Second, it indicates that the pedestrian may be coming into his own. When Breines and the late John P. Dean, professor of sociology at Cornell University,

collaborated in 1949 on a draft manuscript about planning for pedestrians, there was little interest on the part of publishers. But now, happily, this lack of interest is changing into concern. (Incidentally, it was Elisabeth Coit, FAIA, "who kept the idea of the book alive all these years with her encouragement, research and criticism," say the authors.)

The third reason for gratification is the book itself—it is an excellent and timely study of how to give new life to cities and suburbs by giving space back to the pedestrian. The authors—an architect and a lawyer—make some provocative proposals for the use of footpower, which is a resource still in abundance.

As Breines and Dean point out, streets comprise a third of the total land in cities. The major portion of this space is set aside for the polluting automobile. One way to recapture urban open spaces for people is to create new uses for existing street spaces. Here are given such proposals as widened sidewalks, park streets and islands for walkers in downtown business areas.

Entirely new walking areas can be planned as well, and these the authors call "pedestrian districts." Among the examples presented are through-block walkways; underground streets; districts where both work and residence are within walking distance; the design of community civic centers in vehicle-free public open spaces, where citizens can meet and, finally, a system of "urban strollways."

Another way to attack the automobile is through the use of bicycles and other "mini-vehicles" as means of urban transportation. Breines and Dean present a number of ingenious proposals for noiseless, nonpolluting and maneuverable vehicles that are faster than walking but still harmless to the walker.

Like all groups who want to change society, pedestrians and bike riders need to organize, say the authors. They need to develop a bill of rights and to try to gain political support. Breines and Dean have drawn up a bill of rights for pedestrians, which might become the manifesto of the "pedestrian revolution." Among its tenets: "The city shall not harm the pedestrian. The streets belong to all the people, and shall not be usurped for the passage and storage of motor vehicles. . . . The sounds of human voices shall replace vehicular noise on city streets. . . . Urban man shall have the right to experience trees, plants and flowers along city streets."

The Big House. Charles N. Aronson. Arcade, N.Y.: The author, 1974. 288 pp. \$20.

Aronson says that after 50 years of living a man knows the kind of house he wants to live in for the rest of his life. He figured that he had the money to build

the kind of house that he wanted and he started out to make his dream a reality. This is a chatty, personal account of designing and building what Aronson calls the "Big House" in Arcade, N.Y. He goes through every step involved, from witching the well to the first formal dinner held at the home. He even gives the menu and describes china and place mats. Don't get the idea that this is a simple cottage. It is a large place, with indoor swimming pool, bowling alley, putting course and pool hall. It has 20 rooms and 11 bathrooms. He says that he hopes architectural students will read his book and "see that there is more to architecture than wood, paint, mortar and stone." The book may be ordered from Aronson, RR1, Hundred Acres, Arcade, N.Y. 14009.

LETTERS

Book on Airports: Having read the review by Clarence and Hanan A. Kivett in the April issue, I feel compelled to clarify certain points which were, in my belief, misrepresentations of the content, purpose and technical aspects of my book *The Airport*.

First, to critique this book as if it were a planning guide evidences a misunderstanding of my intent. The purpose was to produce a concise survey in *one* document of the most current thinking and expression in airport architecture and planning and the principles upon which terminal planning is based.

Second, notwithstanding the publicity which the reviewers allude (and of which I am unaware), at no point is the "seasoned professional" led to believe that he or she will find a publication that will fill the vacuum" which has existed for the past 15 years on the subject. If my intent had been to attempt to provide a sophisticated textbook, such as that of Professor Bronjeff, I would have surely titled it accordingly.

Third, the Kivetts are correct in surmising that recent and future Federal Aviation Administration publications on airport planning provide a more analytic framework for conceptual evaluation. Having participated in the preparation of these volumes, I can vouch for the high calibre of the products as well as the team of professionals who produced them. Neither study, however, provides the "seasoned professional" with new planning principles beyond those which he should already have, nor will they provide a critical review of the various concepts. The risk of subjective criticism properly belongs to each and every reader, with conceptual judgments arising from particular needs and demands of specific situations.

Fourth, it is correct that extraordinarily long lead times are required for a publi-

cation like *The Airport*. The illustrations are at best representative of what was available before the publisher's cut-off date. The examples cited for the Kansas City International reinforces this point in that the 1969 data, including photos of models and renderings, were supplied (and gratefully received) by Kivett & Myers as late as 1972. Details notwithstanding, the principles and conceptual ideas illustrated in each example hold true, I believe. Certainly, in my introduction to the book, the reader is made aware of the importance of the element of change and growth in airport planning.

In summary, if as the reviewers have said, a "void" has existed in this subject for a good many years and if *The Airport* is an introduction, I think that's an acceptably good place to start.

E.G. Blankenship
Architect
New York City

The Aia Family: Ed. Note: *The letter below was received by L. J. Kruger, AIA, of Topeka, Kans.*

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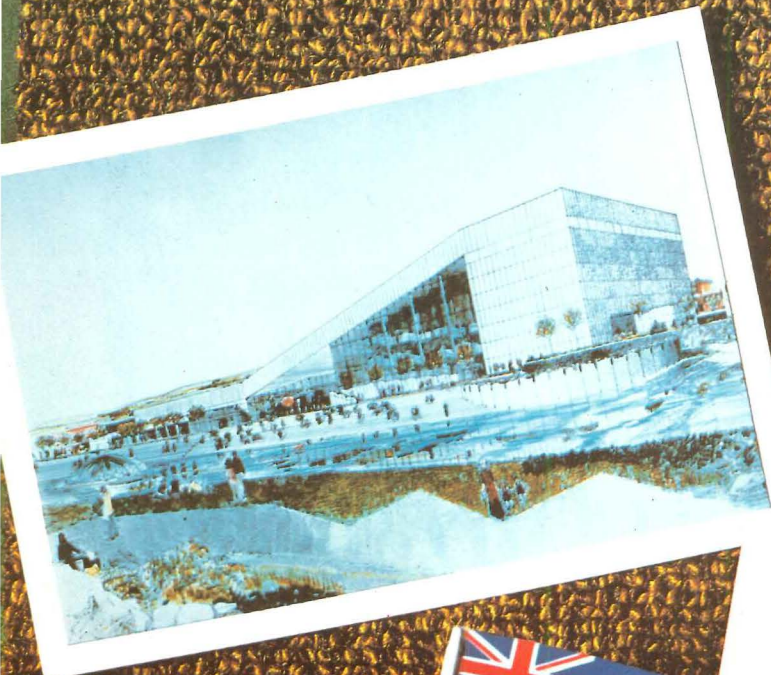


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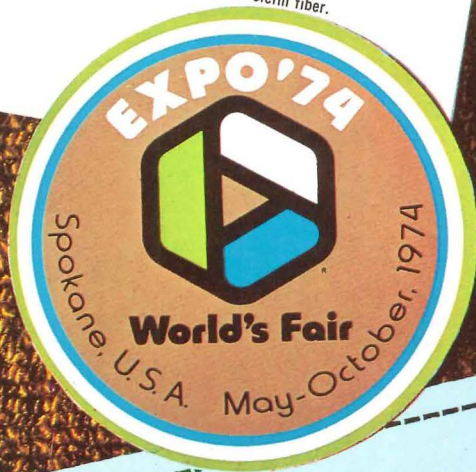
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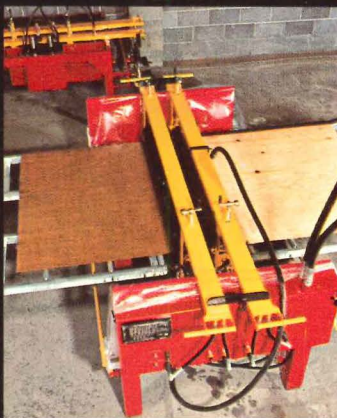
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