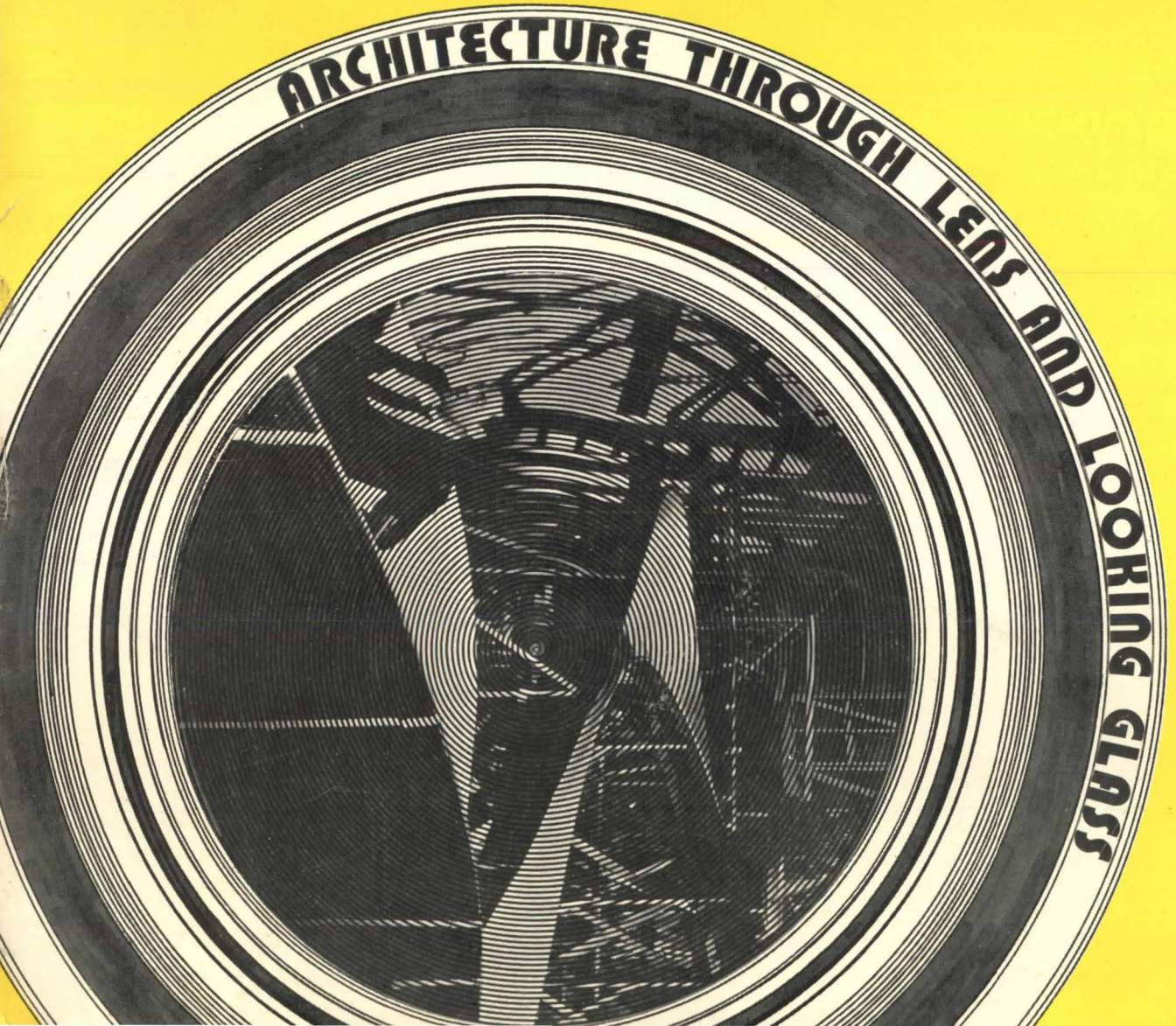
AIA JOURNAL



American Society of Interior Designers

wishes to congratulate the American Institute of Interior Designers and the National Society of Interior Designers on their most recent merger. But, we do not want you to use our name. Yes, you read the last statement correctly, your eyes are not deceiving you. We consider it an honor that you would want to use our name, The American Society of Interior Designers. The answer is NO! We, nor the name, are for sale.

At the NSID convention in Honolulu on the 28th of May, 1973, 6 copies were presented to your leaders of a statement showing that a member, who is now on our Board of Directors, registered our name as far away as Hawaii with the State of Hawaii, in April 1971. President Warren Arnett of NSID and President Bernard Vinick of AID each received a copy, in addition to several other distinguished representatives of both trade associations, as witnessed by three additional members of our Board of Directors. We recall very vividly how two of your members were horrified, not so much that we were founded in 1965, but that our charter then did not allow fags (male individuals that have sexual identity problems) to join ASID as members. We know of an additional five specific occasions that your leadership has been notified of our existence. Yes, we the American Society of Interior Designers do exist, and are opposed to you, with all your numbers and dollars, using our name.

American Society of Interior Designers and ASID are both registered with the United States Patent Office and the Library of Congress in Washington, D.C. You have until January 31, 1975 to disband the use of our name and the letters, ASID, in any of your stationery, letterheads, envelopes, business cards, memos, pamphlets, brochures, flyers, programs, advertising, telephone directories, yellow pages, information operators, trade publications, newsletters, directories, or any talk shows on radio or television having to do with your members or any newspaper articles across the country in which your members or affiliates are featured. This includes the inactives as well as the actives or participants of both your organizations.

Ninety-three percent of our entire active membership agreed to each member being assessed a minimum of five hundred dollars to retain legal counsel in seven major cities. Also, to help defray the costs of the national advertising in these trade publications, so the masses will know that you have misused our name without written or oral permission or consent from any former executive or member of our former as well as present Board of Directors or Board of Trustees, of our ten and a half year old organization.

For your information, our regional representatives will be working closely with legal counsel in their respective areas where the following attorneys have been hired on a retainer basis or soon will be:

Chicago . . . . . Donald Ashworth, Attorney . . . . . Mary and Robert Reed, ASID
Los Angeles . . . . . David Wilkensen, Attorney . . . . . Connie Christensen, ASID
Robert Fahl, ASID
Miami . . . . . Gary Terry, Attorney . . . . . A. Goss, ASID
New York . . . . . Jay McBain, Attorney . . . . . Vasa Ponder, ASID
Dr. Kent Ponder, ASID
Salt Lake City . . . . . Daniel Stewart, Attorney . . . . . Joyce McKay, ASID
San Francisco . . . . . Honorable, Melvin M. Belli, Attorney . . . . . Elizebeth Parson, ASID
John Conner, ASID
Washington, D.C. . . . . Honorable, Edward Bennett Williams, Attorney . . . . .
Joseph Molnar, ASID
Robt. Taylor, ASID

The New York City firm knows of your financial status and are most desirous to sue AID and NSID individually and collectively for two and one-half million dollars whereas four of the other attorneys suggest a million dollar law suit would suffice to dissuade you in the improper use of ASID. We as a group are already prepared to take action . . . NOW!

Any and all communique in regards to this most serious matter should be addressed to the attention of the Most Honorable Melvin M. Belli at 722 Montgomery Street in San Francisco, California 94111.

We hope you do not take it personal, but our entire membership, which totals less than 650, under no circumstance has any desire to become part of your new merger, whatever you might be calling yourselves.

Thank you for your attention,

ASID

Board of Directors, 1970-1975
American Society of Interior Designers

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AIA JOURNAL

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AIA Installs Marshall, de Moll, Other New Officers and Directors

In ceremonies held in Washington, D.C., on Dec. 6, William Marshall Jr., FAIA, of Norfolk, Va., was installed as the 1975 president of the AIA (*see* p. 21). He succeeds Archibald C. Rogers, FAIA, of Baltimore.

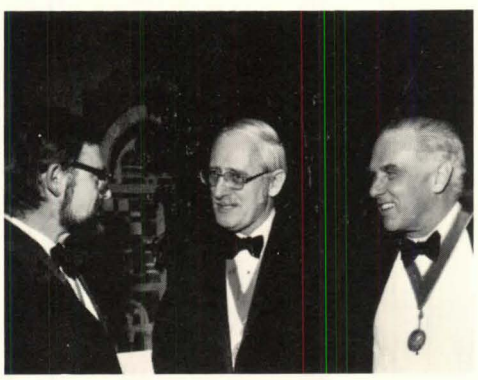
Five other officers were installed as well, including Louis de Moll, FAIA, of Philadelphia, as first vice president and president-elect, and three vice presidents: Elmer E. Botsai, FAIA, of San Francisco; Carl L. Bradley, FAIA, of Fort Wayne, Ind.; and John M. McGinty, AIA, of Houston.

Eleven new regional directors took office: James B. Baker, AIA, New York City; Robert A. Burley, AIA, Waitsfield, Vt.; Jerome M. Cooper, AIA, Atlanta; A. P. DiBenedetto, AIA, Portland, Ore.; William R. Jarratt, AIA, Detroit; Robert B. Marquis, FAIA, San Francisco; William R. Peery, AIA, South Charleston, W. Va.; Herbert R. Savage, AIA, Miami; Adolph R. Scrimenti, FAIA, Somerville, N.J.; Joseph F. Thomas, FAIA, Pasadena, Calif.; and Zeno L. Yeates, AIA, Memphis.

Board Receives Reports on Economic Turbulence, Acts On a Variety of Concerns

At its annual meeting in Washington, D.C., on Dec. 4-6, the AIA board of directors was in accord on one point in the reports from the various regions: There is general pessimism regarding the toll exacted by inflation and recession on design firms. Nonetheless, there is some feeling of optimism that things will improve. One director's description of his region's economic climate is typical: "Storm warnings indicate turbulent conditions . . . but no tornado watches are contemplated. The period of uncertain conditions is expected to carry well into '75, with intermittent bright spots a possibility." The advice is for the architect "to take adequate tax shelter and hang on through the bleak period."

The directors also agree, for the most part, on the state of the health of AIA components. One gave his report in the form of a medical bulletin, reporting: "In general, vital life signs are stable, with some fluctuations in the vascular tract caused by member apathy. Remedial therapy is expected to show positive results. . . . although a long convalescence may be expected. The ailing chapters could be rehabilitated over this period by a new miracle drug, the Component Development System, buffered with the Component Assistance Teams."



President-elect de Moll, President Marshall, outgoing President Rogers.

In other efforts to help bring health to the profession, the board acted on a number of matters. Among them:

- Resolved that the policy on retained percentages be changed to read: "Retainages should be required in an amount sufficient to protect adequately the interests of all components concerned with the proper construction of the work, but as the work progresses satisfactorily should be reduced as rapidly as possible, consistent with the continued protection of all affected interests." The Institute, to this end, "endorses the policy of retaining a maximum of 10 percent of the certified contract price until 50 percent of the work has been completed, at which time no further amounts would be retained, if the architect is satisfied with the performance of the contractor."

The commission on professional practice reported to the board that it had studied recommendations from the American Subcontractors Association on retention, and it suggested that AIA policy be amended as stated until the documents board can make evaluations and coordinate its efforts with the Associated General Contractors of America, which expects to complete a study early in 1975.

- Expressed its gratitude to the President and Congress and others who have worked for the authorization of the National Institute of Building Sciences, and established a task force on building sciences for 1975 to aid in the development and initial organization of NIBS.
- Approved the final draft of document A201/CM, "Construction Management Edition of the General Conditions of the Contract for Construction," directing that it be published and distributed immediately. Other documents in the construction management field have been prepared, forming "an integrated package of four contractual documents, which represents a breakthrough in the construction industry and reaffirms the AIA's position of leadership in the field of construction management."
- Approved revisions of two chapters in the *Architect's Handbook of Professional Practice*. The revised chapters, which have received intensive review in a number of drafts by the documents board and by legal and insurance counsel, reflect changes in the profession and the introduction of new AIA documents. Chapter 5, formerly titled "Selection of the Architect" has become "The Architect and Client." Chapter 10, previously called "The Architect and His Consultants" is titled "Interprofessional Agreements" in its new form.
- Approved the new AIA document, "Guidelines for Services/Compensation Management" (*see* Dec. '74, p. 8).
- Decided to continue AIA policy regarding direct inquiries to the Institute for names of architects for specific projects. Such requests for recommendations for domestic projects will continue to be referred to component organizations. For international projects, where it appears that architects from many countries will be considered for a project, the board resolved to solicit a specific recommendation

from the commissions on Institute and component affairs and on professional practice.

The board also heard and approved a number of significant reports, including the following:

1. Design/build: In early 1973, the AIA design/build task force was formed (Herbert E. Duncan Jr., FAIA, chairman) to study this relatively new concept of competitive bidding by full service teams. For months, the task force has worked to identify owner interest in the process, the effect of bidding without adherence to the AIA code for competitions and the actual results of completed design/build projects.

The task force concluded that "better ways can be found to provide an owner with proper performance in regard to cost and time and that the architect should retain a control position. . . ." However, the design/build/bid process can be administered in an equitable manner, and "it is quite probable that our marketing future will involve more of this type of architect selection." The task force urges AIA "to address in some manner the obvious conflicts between design/build/bid concepts and existing standards of ethical conduct and professional liability."

The key to the issue, says the report, may lie in understanding that in the process the owner is client up to the point of issuing design/build documents or a purchase requisition for bids. "After that point, he becomes a customer," who is prepared to shop on the open market for what he wants. "So long as the owner remains a client, receptive to professional advice, it is proper that an architect should render professional services for him, and the relationship should be productive."

The report warns that an architect "cannot go around selling building products and still be given immunity in the courts regarding implied warranties for those products, be covered by professional errors and omissions insurance for business performed under a sales contract, or receive the same respect from society as other professionals do. . . . In selling a building product directly to a customer in return for a profit, or even a share of the profits, an architect can place himself in an unresolvable conflict of interest."

The report says that the application of the process has been most successful when user, architect and contractor are all involved in the decision-making process and when "the initial cost has not been overemphasized to the detriment of operational planning and longer term cost-benefit values." Chances for success are affected usually by marketing factors not under the architect's control. "On the basis of cost for marketing architectural services, design/build/bid generally offers a poor return for the dollar invested."

The task force recommends several actions by the AIA to clarify the architect's role relative to design/build: 1) provide workable terms and definitions for use in the construction industry; 2) provide documents for owner and architect to assist in the design/build/bid process; 3) develop programs to assist the architect in being knowledgeable and effective in controlling time and cost; 4) insist that design/build/bid competitions be conducted on a limited invitational basis, with some compensation given all participants; 5) insist that such competitions be based upon adequate program information and that basis for selection be clearly defined in advance; 6) review the ethical standards in regard to the architect's involvement in the construction process and the provision of "free sketches"; 8) encourage schools of architecture to more strongly emphasize overall project management; 9) promote alternative methods, such as construction management, negotiated selection of constructor, cost-plus construction contracts, etc., in order to provide the benefits of design/build/bid without its disadvantages; 10) determine the differences between client/professional and customer/producer relationships.

In conclusion, the task force says that whether or not the AIA "condemns or endorses design/build/bid, it is important that the architectural profession be given the tools to deal effectively with the deficiencies" of the design/bid/build sequence, "most noticeably in the areas of time and cost."

2. Nonprofit housing: A two-year study has been completed by the nonprofit housing subcommittee, and the board authorized the use of its report "in all possible ways to encourage nonprofit housing sponsorship, including its use in educating the legislative and administrative branches of federal and state governments about the importance and potentialities of nonprofit sponsorship, and in strengthening the growth and organization of nonprofit sponsors themselves, to enable them to better avail themselves of such government assistance as is already authorized or may become available in the future."

On the basis of a survey and the experience of subcommittee members, the report finds that nonprofit sponsorship, particularly of housing for the elderly, "has been singularly successful." The report says that the elimination of profit is insufficient in itself to reduce the cost of housing substantially, but "there are inherent qualities" that are of value. Among them are "a built-in commitment for long-range management, an unselfish orientation toward service, a sensitivity to social needs, attachment to the local community, elimination (in some measure, at least) of political and bureaucratic problems and a willingness to accept and often successfully accomplish an economic mix within the projects."

The report calls for measures to strengthen nonprofit sponsorship, such as "greater availability of seed money, a steadier and more adequate flow of permanent financing, better consulting service, much more *rapid processing of applications*, development of the management profession and a broadening of programs to include direct loans for family projects and residential care types of housing." Nonprofit sponsors should strive for "sound composition of their boards, careful site selection and good management policies. In conclusion, the report finds nonprofit sponsorship a "vast resource in the nation."

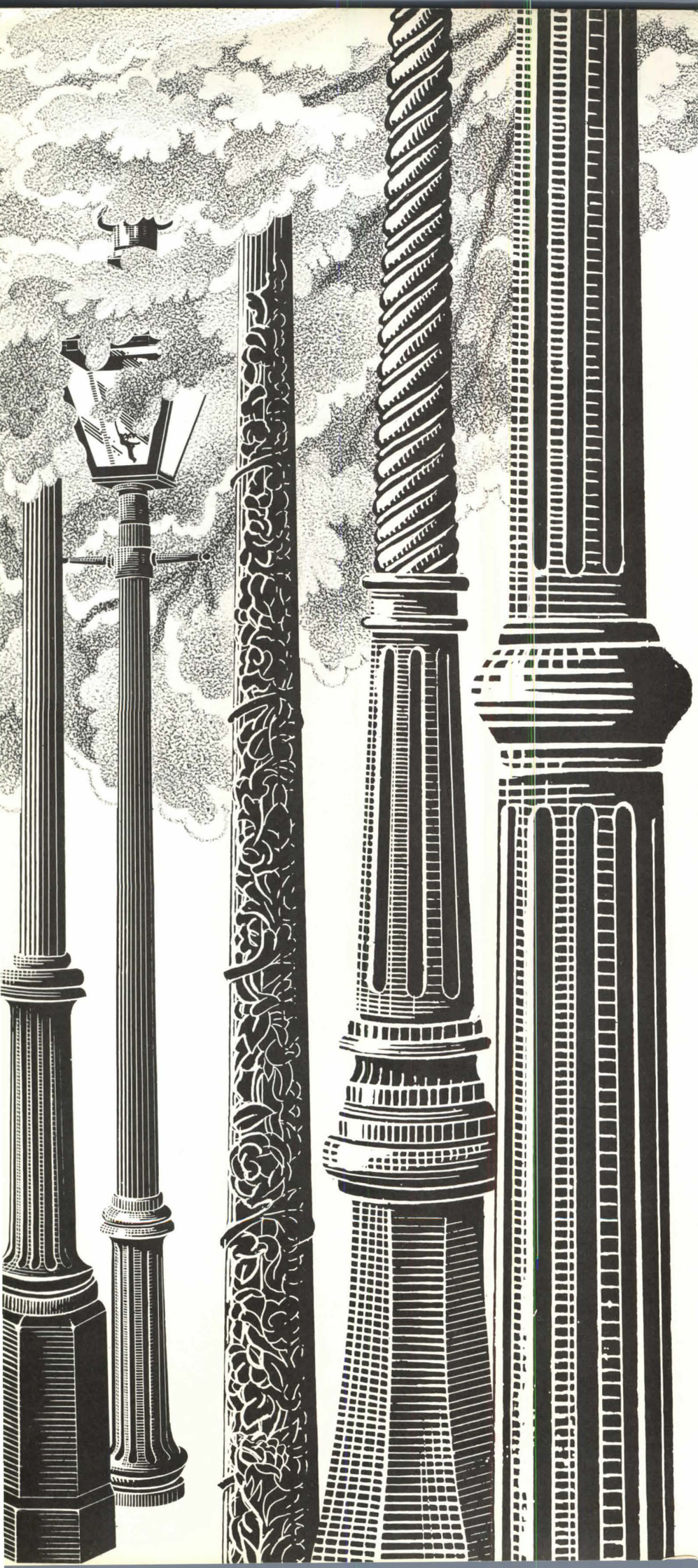
3. Building regulatory reform: The task group on building regulation was formed in Oct. 1973 (Jasper H. Hawkins, AIA, chairman) to recommend methods to unify the regulatory process "in accordance with Institute support of national regulatory policies, not a federal code, with requirements administered at the state and/or local level."

The report finds that the country's ad hoc regulatory process "is in great need of coordination, uniformity and improved means for representation." The task group proposes a regulatory *system* rather than the present disjointed *process*. It does not ask AIA "to call for a total and immediate reform of the entire building regulatory process," but recommends instead specific actions that show promise of improving the process in the next few years. The report sets forth a recommended building regulatory system, with checks and balances, in which state governments would act jointly "to assure that a sufficient and widely applicable set of building regulations are developed."

The task group views the authorization of the National Institute of Building Sciences as a "major opportunity to make progress toward improvement of the building regulatory process." It recommends that the AIA "lobby as necessary and appropriate" to assure that NIBS receives all of the funds appropriated by Congress; that the AIA work to assure that qualified architects are appointed to the NIBS board and to its consultative council; that AIA work to make NIBS a "viable and effective organization" and that it "continually monitor" its operations and assist in its programs; that AIA appoint and fund a task group which would report to the board on the extent to which NIBS has increased coordination of the regulatory process and make recommendations for future AIA activities to improve the building regulatory process.

4. Energy efficient buildings: The energy steering committee (Leo A. Daly, FAIA, chairman) presented the second in a series of reports on the relationship of the nation's energy problems to the built environment. The first, prepared in May 1974, indicated dramatically that a strategy of

continued on page 10



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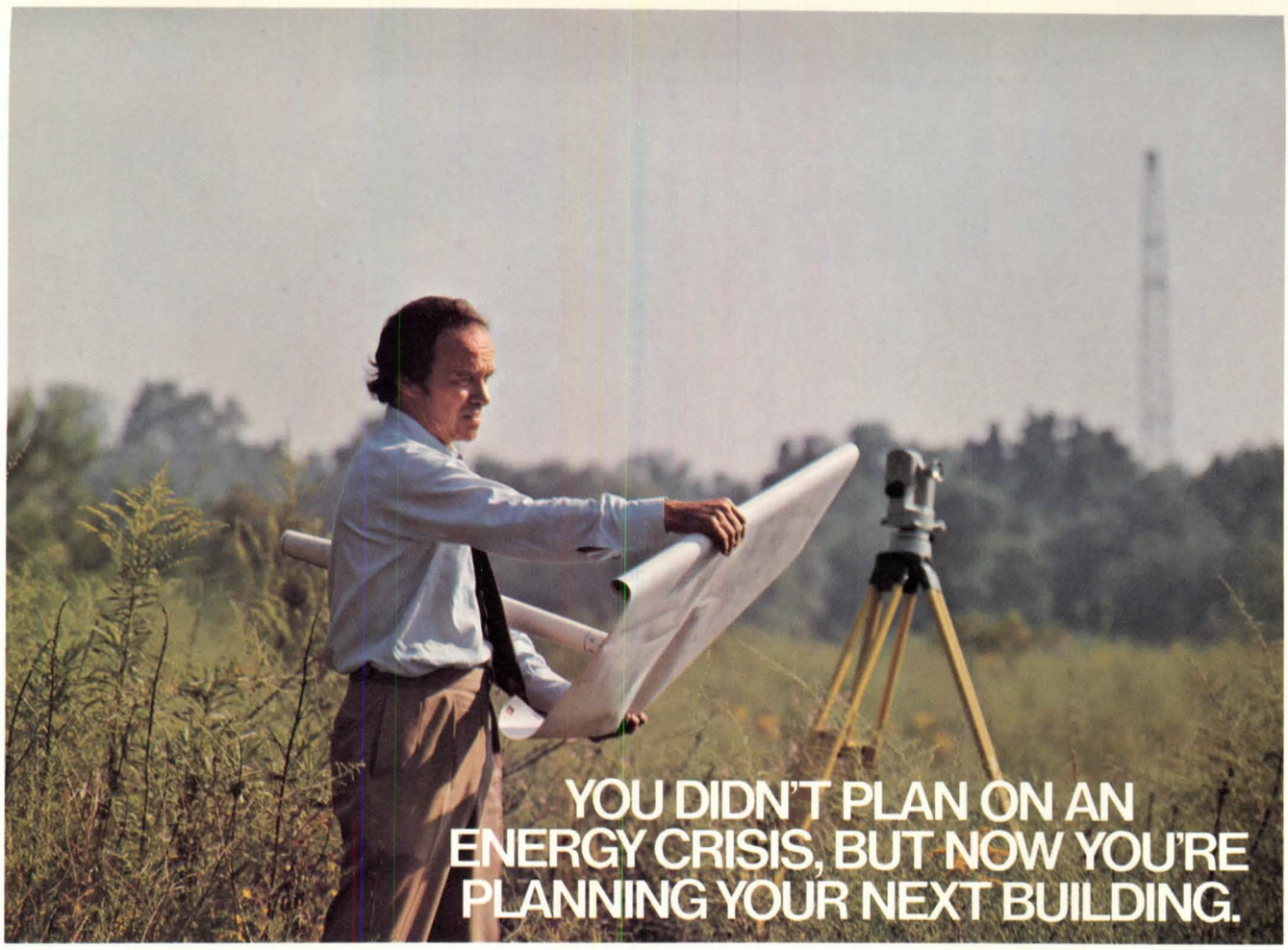


Which building material will you use?

You've got energy shortages to think about. Air-conditioning costs. Heat gain through the long, hot summers. Heat loss in the winter months. Heating equipment costs. The whole set of energy-use factors suddenly has become critically important. The building material you use affects all of them.

Compare the energy conserving capability of masonry, for instance, with double-plate glass walls.

At 4:00 P.M. on a hot August day in Washington, D.C., the heat gain through a square foot of west-facing insulated brick and concrete block wall will be 2.2 Btus an hour.

The heat gain through a double-plate glass wall in the same location will be 173 Btus a square foot in an hour. A big difference.

Project this differential over 10,000 square feet of wall. You come up with a heat gain through masonry of 22,000 Btuh, while the heat gain through double-plate glass is 1,730,000 Btuh.

In the case of the masonry wall, cooling equipment with a two-ton capacity can handle the heat gain. But with the double-plate glass wall, about 143 tons of cooling capacity will be needed.

An analysis of a typical 10-story building shows that over its useful life, the air-conditioning cost for a square foot of our masonry wall will be about 23 cents. For the double-plate glass wall, it will be $7.60.

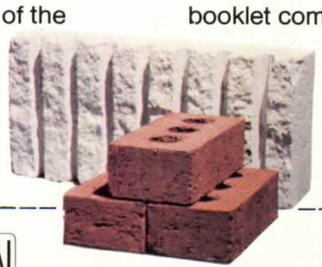
It takes a lot of money to buy, install and create space for all the extra air-conditioning equipment required by the double-plate glass wall. A lot of money and a lot of energy to run that equipment.

Compare the heat loss in winter. It has a dramatic effect on energy consumption and building operation costs.

Our masonry wall, for example, has a "U-value" of .12. The double-plate glass wall has a "U-value" of .55. (U-values are used to determine heat loss through one square foot of wall area in Btuh per degree Farenheit differential across the wall.)

This means that the masonry wall is about 450% more efficient, on the average, than the glass wall in reducing heat loss.

Over the useful life of the building, the heating cost per square foot of wall area for masonry will be about 30 cents. For double-plate glass, about $1.38.



In a time of one energy crisis after another, masonry makes eminently good sense as a good citizen.

The masonry industry believes that the thermal insulating qualities of masonry are an important economic consideration to building designers, owners and investors, and all citizens.

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Going On from page 6
energy conservation in building could contribute significantly to helping solve the nation's energy problems.

The second report, titled "A Nation of Energy Efficient Buildings by 1990," examines the economic and administrative feasibility of energy efficient buildings, examining supply/demand aspects of capital as a basic resource in the national economy. The report indicates that if present policies are continued, "more than $415 billion of capital will be invested by 1985 in facilities to generate energy, which will be wasted in the operation of inefficient buildings—energy which could be saved simply by making our buildings energy efficient."

The committee estimates that total investment to realize a potential energy saving in the next 15 years of $1 trillion to $1.5 trillion would be between $729 billion and $1,460 billion. After full recovery of the original investment, it will continue to be recovered every two-and-one-half years thereafter. "The value of the savings is sufficient to permit immediate returns on the investments in energy efficient building packages; to provide immediate reductions of at least 10 percent on energy bills; and still provide a complete payback of the capital investment in much less time than the normal 30 years or so associated with investments for energy plants and for buildings."

The report's basic concepts involve "the evolution of a new form of an energy management utility; some new relationships between that utility and building owners; a new form of architectural/engineering service required to develop integrated energy efficient packages for buildings, groups of buildings, communities and regions; modified procurement procedures to stimulate innovation within the building supply industries; and modified financial and regulatory procedures."

It is suggested that the basic concepts be developed immediately into operational plans for the conduct of at least six national demonstrations to field test the concepts. The committee will invite government agencies, organizations, institutions and related professional associations to join in the development of detailed plans for the launching of the demonstration projects and in having the tests underway before the end of 1975.

National Retirement Plan Moves Toward Completion

Also at its December meeting, the board accepted the recommendations of the AIA pension task force, approving the creation of a six-member board of trustees to replace the task force and authorizing the trustees to complete the necessary preliminary steps to get a national retirement program underway. The pension task force was chaired by David Bowen, AIA.

The preliminary program, developed by pension consultants Towers, Perrin, Forster & Crosby, Inc., and endorsed by the task force, would involve a retirement plan with liberal portability provisions and consist of four separate plans: corporate money purchase plan, corporate profit-sharing plan, Keogh money purchase plan and individual retirement account.

Incorporated employers would have the option of selecting either of the first two plans. Partnerships and proprietorships would be eligible for the Keogh plan. The individual retirement account, created under the 1974 pension reform legislation, would be available to eligible employees whose firm is not participating in any kind of retirement plan.

All permanent full-time employees, with at least one year's service in AIA-member owned firms, would be eligible to participate in the program. AIA corporate members would be eligible immediately.

Contributions to the retirement program would vary, depending upon the type of plan selected. Incorporated employers would be required to make contributions to the money purchase or the profit-sharing plan. Although not required, employees would be permitted to make voluntary contributions annually up to 10 percent of salary.

Under the Keogh money purchase plan, partnerships and proprietorships would be required to make contributions up to a maximum of $7,500 a year, and employees would be permitted to make voluntary contributions up to $7,500 a year.

The new individual retirement account would permit a maximum voluntary contribution of $1,500 a year.

Regardless of the type of plan selected, all participants would be covered by a portability clause, assuring retention of benefits when participants move from one AIA member-owned firm to another.

Normal retirement would be at age 65, although participants could retire as early as age 55, except that partners and proprietors would not retire until reaching the age of 59½ years.

Vesting—the right to a pension from the program even if a participant leaves the program before retirement—would vary, depending upon the plan selected. For example, participants in the two corporate plans would vest in 100 percent of their service credits after five years in AIA-member owned firms. Under the Keogh plan and the individual retirement plan, participants would be fully vested immediately. Regardless of age or vesting, the program would include a death and disability benefit.

The retirement program will be further developed by the newly appointed board of trustees and presented to the AIA board and, hopefully, the May convention.

Fire and Life Safety: New Initiatives in Government And the Profession

President Ford recently signed into law a bill that calls for the establishment of a national fire prevention and control administration in the Department of Commerce. Secretary Frederick Dent has appointed Joseph Clark, formerly associated with the National Bureau of Standards' fire program, as acting administrator. The legislation also provides for the establishment of a fire research center in NBS to perform and support research on all aspects of fire.

The fire prevention and control administration's program will consist of public education; the establishment of a national fire academy to advance the professional development of fire service personnel and others; a fire technology program of development, testing and evaluation of equipment; and the initiation of a national fire data center to provide accurate analysis of the nation's fire problem, identify major problem areas and monitor progress of programs to reduce fire losses.

The administrator of NFPCA is authorized to establish master plans for fire prevention and control at state and local levels and to suggest and review improvements in state and local fire prevention and building codes and in federal and private codes and regulations.

The establishment of the NFPCA is the result of the work of the National Commission on Fire Prevention and Control, which in 1973 published a report titled "America Building," which has been called the most comprehensive study ever made of this nation's fire problem. During the preparation of the report, testimony was heard from many organizations and individuals, including AIA. Of the 90 recommendations made in the report, 38 were suggested in AIA testimony.

During the intervening years, the AIA task group on fire and life safety has continued to work for affirmative action by architects to improve fire and life safety aspects of building design. The group's final report, called "Educating the Architect: Fire and Life Safety," was approved by the AIA board of directors at its December meeting.

As the task group report comments, the nation's firefighters say that there are three reasons for this nation's staggering record of fire loss: men, women and children. Annually, 12,000 Americans die because of destructive fires, and for every person killed, 25 more are injured. The loss to property amounts to $11.4 billion a year, making this country's record of fire loss "the worst in the world" by any standard of measurement.

Most of the nation's losses of life and

property occur in fires in buildings. In spite of the horrors engendered by the thought of being trapped in a highrise during a fire, killer fires in such buildings account for only a very small portion of the national fire loss. Of the people killed in building fires, 87 percent lose their lives in residential fires.

The task group in the development of its report obtained information from schools of architecture, federal agencies, professional organizations and others. It found that few architectural students are taught fire and life safety design. Only three schools offer courses of this type, and these are elective. Moreover, most practicing architects and educators have never participated in planned educational programs in fire and life safety.

The report of the task group sets forth "program imperatives for the future," which include:

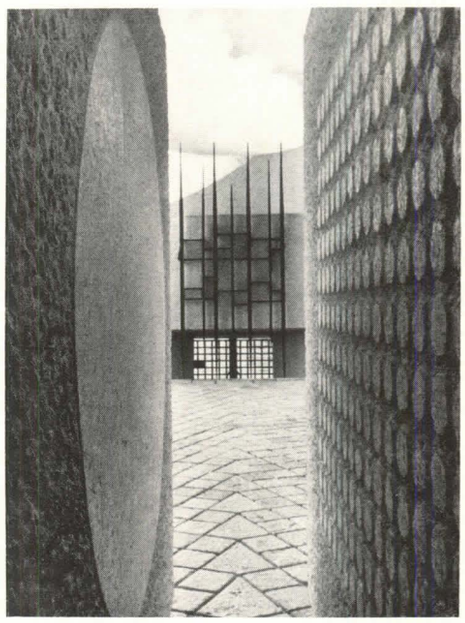
- Inclusion in the architectural curriculum courses that will teach the student both the fundamentals of fire control and the behavior of human beings exposed to fire conditions:
- Modification of registration exams to test the preregistrant on design for fire and life safety;
- Establishment of continuing education programs for practitioners to enable the architect to increase his achievement in building design in order not to impose unreasonable risk from fire upon the occupants of a building;
- Development of learning aids in fire and life safety aspects of design that are applicable to normal design practice;
- Assistance from AIA to schools of architecture in the establishment of viable educational programs;
- Funding by AIA of a small group of members to monitor and advise on the overall effort to reduce loss of life and property;
- Increased emphasis on research related to fire-safe design.

The task group says that cooperative effort by many organizations and individuals will be of primary importance, and pledges itself to "initiate and encourage a variety of supplemental efforts," including the publication of articles, provision of counsel to federal agencies, maintenance of liaison with interested groups, encouragement of activities at the grass roots and, in general, helping make "the American public more aware of the fire problem."

Memorial to Nazis' Victims Given Henry Bacon Award

A memorial to the French victims of Nazi concentration camps, sited on the eastern tip of the Ile de la Cité in Paris behind the gardens of the Notre Dame Cathedral, has been named recipient of the AIA Henry Bacon Medal for Memorial Architecture. The award will be presented at the 1975 AIA convention in Atlanta. The memorial, called by the AIA jury on Institute honors a "poignant monument of utmost simplicity," is the design of French architect Georges-Henri Pingusson.

The Memorial des Martyrs de la Deportation was praised by the jury for the manner in which it captures "the oppression and isolation of the concentration camps." Consisting of a sunken enclosure and a crypt reached by two flights of narrow stairs that lead downward to the pub-



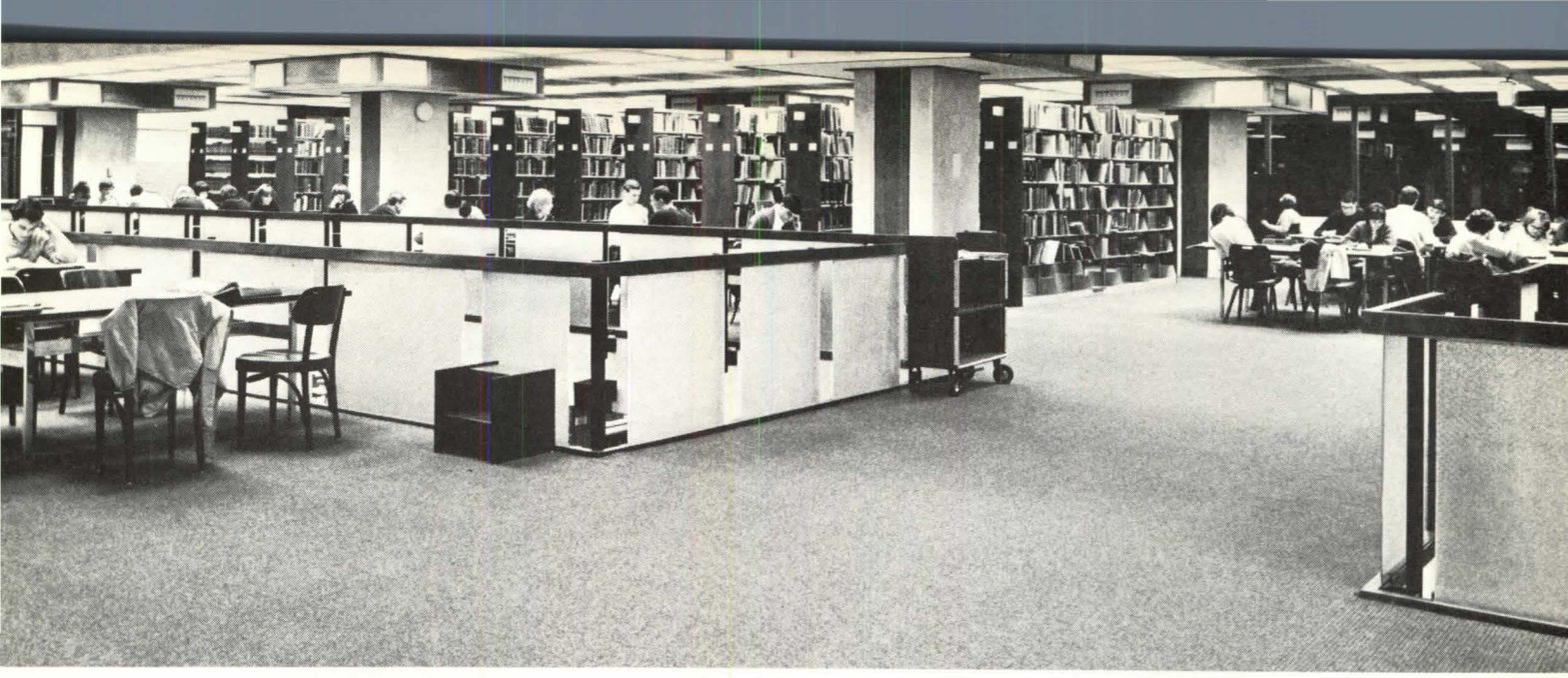
lic gardens, the memorial, says the jury, "succeeds in expressing dramatically the highly emotional impact associated with the recollection of the suffering of thousands of victims of brutal oppression."

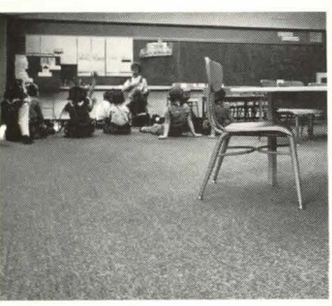
Established in 1966 in honor of the designer of the Lincoln Memorial in Washington, D.C., the medal for memorial architecture is given once every two to five years to memorial buildings that symbolize a high spiritual concern. Previous award winners are the Gateway Arch in St. Louis and the Fosse Ardeatine Caves in Rome.

Professional Selection Board for Louisiana

Louisiana Governor Edwin Edwards, by executive order, has established professional selection boards for state design commissions. He acted when the state legislature concluded its 1974 session without acting on a bill that would have created the boards. Governor Edwards, who has promised another try at legislative reform in 1975, has been commended by AIA President William Marshall Jr., FAIA, for his action.

In his statement praising the Louisiana governor, Marshall said, "The actions taken and supported in Louisiana have important national implications. The key





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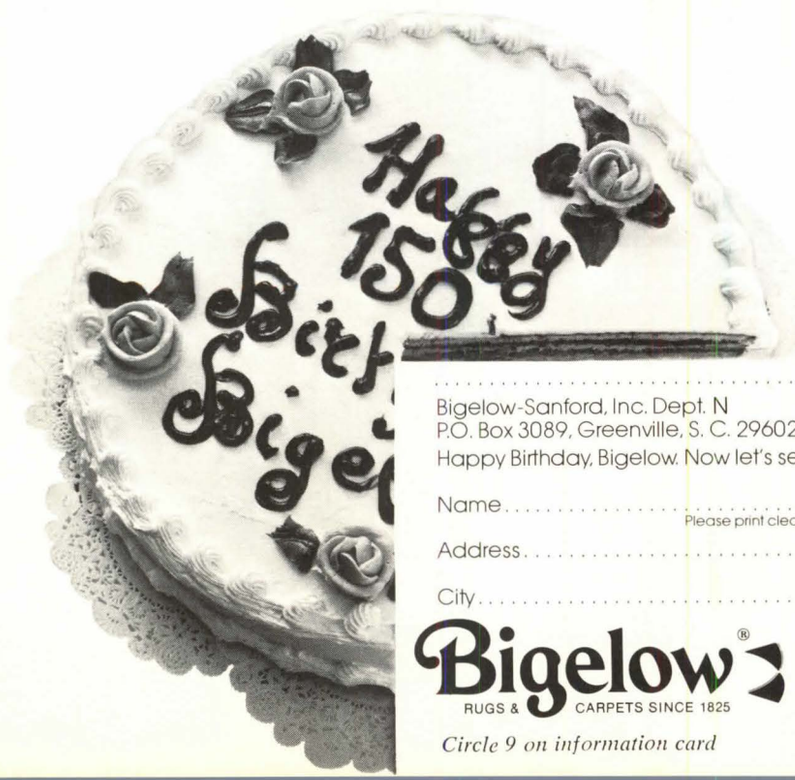

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provisions on selection board membership, public announcement of design contract opportunities and qualification and selection of firms by the boards are essential elements of any selection board proposal. This order represents a model for this purpose."

The system ordered into effect by Governor Edwards establishes an architectural selection board on which there will be five architects, three chosen by the Louisiana Architects Association/AIA and two by the governor. Board members will serve for a year, with their firms ineligible to compete for state design commissions during their terms and for a year afterward. Similar boards will be established for the selection of engineers and landscape architects.

New A/E selection bills also have been recently signed into law by California and Delaware governors. These bills differ from the Louisiana executive order in that they make a state agency rather than an independent selection board responsible for the procurement of professional design services.

In this process of selection, individual agencies announce publicly any proposed project that requires professional design services with compensation. Interested firms are ranked by the procuring agency, with the one ranked highest invited to negotiate with the agency. If an agreement is not reached, the second-ranked firm begins negotiations, and the process continues until a firm is retained.

In addition to Louisiana, Massachusetts and Minnesota are among the states which have lodged authority for the selection and ranking of firms with independent boards. The usual procedure is to make a public announcement after a state or local agency has expressed its wish to employ professional designers. After review and evaluation, the board supplies the requesting agency with a list of three firms ranked in order of highest qualification. The agency then negotiates with the highest ranked firm, and the procedure continues until a firm is selected.

The agency is required to document its reasons if it does not hire the highest ranked firms. The board issues an annual report summarizing the projects processed and naming the firms selected.

The AIA government affairs department will supply additional information to anyone requesting it, as well as copies of the various bills that have been passed and of the Louisiana executive order. Requests may be addressed to Tom Bennett at AIA headquarters.

Housing Aide Appointed

Dennis Duane Beese has been appointed assistant director of AIA urban and housing programs. He comes to the Institute from the Washington, D.C., office of the

Nonprofit Housing Center, where he was executive vice president and director, and earlier assistant secretary-treasurer and director of special programs. He also has been associated with the Fort Worth and Austin, Tex., offices of NPHC and worked with various architectural firms following his graduation from the University of Oklahoma with a bachelor of architecture.

Endowment Establishes 'City Spirit' Grants

The National Endowment for the Arts has initiated a new matching grants program called "City Spirit," whose goal is "to weave the arts into the fabric of the everyday life of a city, neighborhood, town, region or state."

The guidelines for this major bicentennial effort are purposely general. One firm guideline, however, is that "projects must reflect the involvement and participation of many segments of the community with the goal of bringing the arts into the life of the community now and for the future."

Grants generally will not exceed $25,000, and all must be matched on at least a dollar for dollar basis. Funds may not be used for deficit funding, capital improvements, construction or renovation, purchase of permanent equipment or real property.

Applications for projects to begin Oct. 1 and thereafter must be postmarked no later than Apr. 15. The endowment will give counsel to applicants where time and funds permit, sending consultants to meet with community representatives if the applicants submit a brief narrative of their basic idea prior to the preparation of an application. Such consultation is not a prerequisite, however, nor does it guarantee that a project will be funded.

More information may be obtained from Grants Office, National Endowment for the Arts, Washington, D.C. 20506.

Historic Houses Made Part of Education Center

A Denver, Colo., preservation organization is restoring 16 old houses there at a cost of $500,000 and will give them to the state.

Historic Denver, Inc., is undertaking the project as its contribution to the American Bicentennial and Colorado Centennial in 1976. The modest late-19th century Victorian houses will be adapted as faculty and administrative offices for the Auraria Higher Education Center, now under construction.

The Ninth Street Historic Park, as the project is called, is just a few blocks from downtown Denver in the city's Auraria section—where Denver was founded in 1858. In the late 1960s, the Denver

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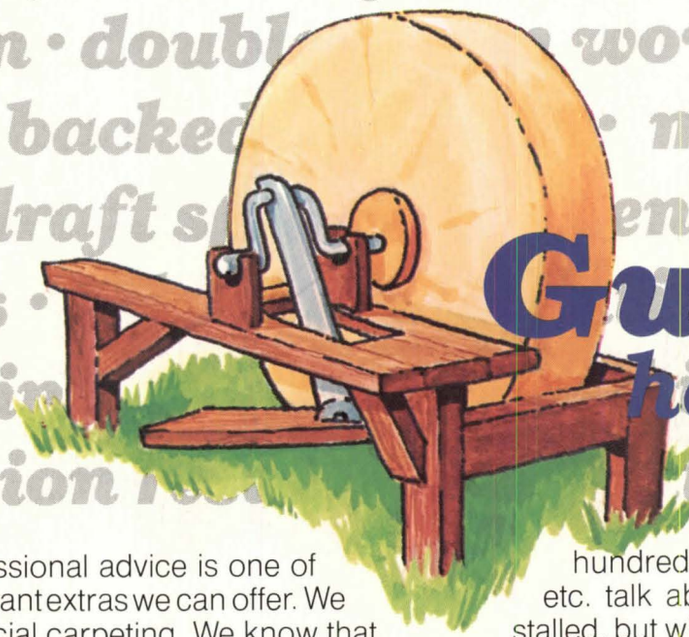

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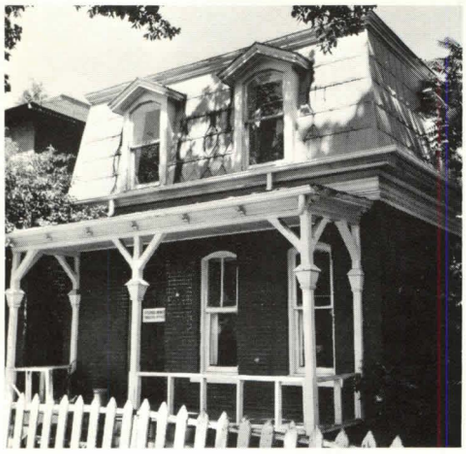

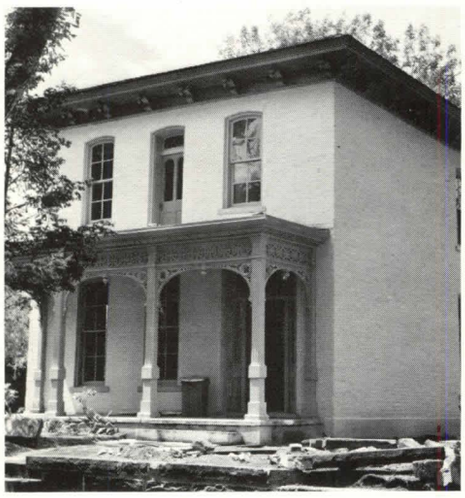

Urban Renewal Authority planned to demolish the entire 38-block district for the new education center—to be made up of Denver Community College, Metropolitan State College and the University of Colorado at Denver. After demolition the area was to be sold to the state, which would construct the new campus.

A Denver lawyer, Don D. Etter, and the executive director of Historic Denver, Kenneth D. Watson, changed those plans, however. In 1972, Etter published a photographic essay, *Auraria, Where Denver Began,* which documented the history of the area. He and Watson then put together a plan that would retain one block of the houses in the center of the new campus. The street would be closed and the area would become a park.

Officials of the education center announced their enthusiastic support of the concept in December 1972, but the usual bureaucratic delays put off the actual signing until the following July.

To undertake the work, Historic Denver decided that it could save money as well as do a better job by acting as its own contractor (the architect is Victor Hornbein, FAIA, of Denver). Philip L. Hannum was named to direct the project in March and he reports that cost considerations are an important part of the work. "We are doing field cost accounting, just like a regular construction company," he says, "and we hope that preservationists everywhere will be able to use our figures to guide them in their work."

To date, Historic Denver has raised $400,000 from area individuals, corporations and foundations. It has applied for some matching funds from the National Park Service under its grants program for the National Register of Historic Places (the houses form a historic district). A "City Options" grant of $50,000 from the National Endowment for the Arts will be used to landscape the entire Auraria campus including the Ninth Street Historic Park. *Carleton Knight III*

Associate Editor Named

Beth Dunlop has been appointed associate editor of the AIA JOURNAL. She was formerly urban affairs reporter for the *Pittsburgh Press* and a freelance writer for *Mass Transit* magazine and other publications.

'Bricks and Mortar' Grants For Historic Preservation

Those historical societies which sometimes have funds for studies but none for "bricks and mortar" will be helped by a $100,000 matching grants program for the preservation of national historic sites. The program, initiated in celebration of the nation's 200th birthday by the manufacturing firm of Bird & Son, Inc., offers cash awards up to $5,000 for exterior restoration and preservation.

Officials at Bird say that "a ghost town in Utah has as much chance of receiving assistance as a salt box on Cape Cod. . . . Likely projects might include an improved right-of-way, new landscaping, a roofing job." Any private nonprofit incorporated group in the U.S. is eligible to apply. The site involved must be registered, or under consideration for registration, by the National Register of Historic Places, and the proposal should refer to an exterior improvement project that can be finished by Jan. 1976. Evidence of matching funds must be submitted.

The program has been set up with the assistance of the National Trust for Historic Preservation. The proposals, due by Mar. 1, will be judged by a panel of na-

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Total projects estimated—1974.

AIA JOURNAL

"It was a bad year for architecture." Thus began the New Year's essay of Washington Post critic Wolf von Eckhardt.

Few architects would disagree. As usual, recession was hitting the building industry, and thus the architectural profession, early and hard. The impact varied from firm to firm and area to area, but by year's end there was little doubt that it was a profession in distress.

In response, as the New Year began, AIA's new president summoned 15 architects, economists and others to a two-day charrette to determine how the Institute's resources could be mobilized to help the profession, and individual members and firms, through this critical time. At this writing, there is underway an across-the-board re-examination of virtually all Institute programs to be sure that 1975 priorities meet the profession's immediate needs.

The JOURNAL is joining in this mobilization. During 1975, or for the duration of recession, we will publish as many articles as we can find or develop that have the potential of helping practitioners cope with financial crisis. An example is the article on page 24, offering a method of seeking new business with maximum efficiency and minimum waste of time and resources. Others in coming issues will relay ideas developed in the charrette and attempt to identify some new markets for architectural skills and services.

Von Eckhardt, of course, was not talking primarily about economic conditions. He discerned another kind of crisis in the public portrayal and reaction to today's architecture. As evidence he pointed out that in some of the most widely publicized new movies modern architecture is the scene of disaster. Elsewhere in this issue these movies are reviewed and an architect explores the even more disquieting role that contemporary buildings and cityscapes play in more serious films.

All of this relates to still another kind of crisis, one of professional self-confidence. Many architects these days are peering into the looking glass darkly. This has always

been an introspective profession, given to self-flagellation, but it seems more so now than earlier.

Perhaps the most widely read architectural prose of 1974 was Peter Blake's "The Folly of Modern Architecture" in the Atlantic. In it, Blake gleefully lambasted a rather elderly straw man, defining modern architecture largely in terms of structural expression, glass cladding and prefabrication. The premises upon which his generation of architects "have almost literally built our world," he said, "are crumbling," something succeeding generations have been trying to tell them for some time. Emboldened, Blake went on to larger matters, proclaiming that rather than improved transportation systems, the nation needs "vital concentrations of people that will make transportation systems unnecessary"—and later, that cities, which are precisely such concentrations, are somehow obsolete. He came closer to the bone with the notation that the public "is asking us, in effect, whether we know what we are doing."

A good many architects (including the author of the film article) are ready to join the critics in their concern about the obvious gap between public and professional standards of architectural quality. Others feel the hot breath of packagers and other competitors who would displace the architect from his role as client's agent and building team leader. Still others worry about the damage inflicted upon the reputation of the profession as a whole by the few who have been caught in political financing scandals.

All of these are legitimate concerns, worthy of serious discussion in the JOURNAL and other forums and councils of the profession. But one wonders, at times, whether the public can be asked to believe in a profession that isn't all that sure it believes in itself. D.C.

Profile: AIA's New President William Marshall

James Bailey

When you ask him why people call him "Chick," he will only tell you so much.

"Almost everybody in the South has a nickname. It's one of those bad Southern customs," he says in his gently rolling Southern accent. "Mine derived from a chance remark that somebody made while I was playing basketball in junior high school."

What was the remark? "I'd like to keep that out of print," he says, slowly evolving a grin that spreads his neatly trimmed mustache and wrinkles his eyes behind his rimless glasses.

William Marshall Jr., FAIA, (no middle name), the new president of AIA, isn't characteristically secretive, though talking about his life and himself doesn't come easy for him. He seems especially uncomfortable when he mentions his strengths and successes. "The technical stuff came easy for me," he says of his student days at the University of Virginia. Then he looks a little shocked at allowing such an immodest remark to escape his lips, and says, "I hope you won't use that. It sounds like I'm bragging."

Chick Marshall is tall, lean and quiet-spoken. His suits are conservative, though he often relieves his dark pinstripes and tweeds with brightly striped shirts sporting white collars and cuffs. His graying, slightly receding hair has the quality of fine, champagne-colored yarn with gold flecks. Though he laughs easily, his face generally has a sober—even melancholy—expression.

Marshall's modest mien is more than offset by a quiet determination to achieve what he thinks needs to be achieved. During his 1974 term as first vice president and president-designate of the Institute, he introduced and painstakingly developed the kinds of programs that are best served by quiet determination: new planning procedures for creating and budgeting AIA activities, new approaches to the AIA's relationships with its components across the country. Marshall's programs don't make for snappy headlines, but they do show promise of bringing renewed strength to the AIA—both at headquarters and at the grass roots.

Except for military service and a year of postgraduate work at Columbia, Chick Marshall has stuck close to his Southern roots. He was born on November 24, 1925, in his mother's home town of Ashland, Ky., moved "back to Virginia," his father's home state, a year later, and has remained a Virginian ever since.

After spending a few years in the mountain country of northeastern Virginia, where Marshall's father, a civil engineer, helped build Skyline Drive and the Blue Ridge Parkway, the Marshall family (Chick, his parents and a younger sister, Ann) settled permanently in Norfolk, his paternal grandmother's home. "It was September 1, 1939, the day the Germans invaded Poland. So it's easy to remember."

Marshall's first choice of college was pretty automatic. Virginia Military Institute was "a family tradition," he says. "My father and others in the family had gone there." So he went there too, expecting to become an engineer.

But he stayed at VMI less than a year. "At that point the draft was imminent," he says, "so I volunteered. I figured it was time to get it over with. I spent the next two years in the Army."

It was "sometime during that period" that Marshall decided he wanted to become an architect. "I just felt a desire to be involved with the creative side. We didn't use the word *environment* in those days, but I was intolerant of many things that I saw in the environment that were bad, hypocritical and needed changing. I guess I was no less a rebel than anyone else those days. I hope youth will always be that way, and I hope they grow out of it sooner or later."

After his discharge in 1946, Marshall entered the University of Virginia. "It was an interesting time in the life of any architecture school," he says. "Most of the students were returning from the war. A lot of them had children. The faculty was also returning from service. So in a sense it was a little more mature on the student side and a little less professorial on the faculty side."

Mr. Bailey, president of The Associates, Inc., a Washington-based editorial-graphics consulting firm, is former managing editor of *City* and senior editor of *Architectural Forum.*

Marshall quickly developed a love for the history of architecture and art. One of his professors was John Canaday, now art critic of the *New York Times*. "I was fortunate enough to have three-and-a-half solid years of history under him," Marshall says. "He was a superb teacher, really inspirational."

Another inspiration was Edmund S. Campbell, who headed the school's department of architecture. "He said some-

thing I'll always remember. He thought architecture students got their inspiration in various ways—from design, from technology, sometimes from the study of the past. Mine was the history side. I'm not a history buff—not a preservationist. I don't know enough about it. But I came to understand architecture through studying the history of architecture and other art forms."

Still another inspiration was Thomas Jefferson. "Anybody who's studied at the University of Virginia has to be inspired by Jefferson's buildings," Marshall says. "The way the old part of the school is fitted into the landscape. The beautiful setting in the mountain."

Marshall earned his bachelor's degree in architecture in 1949, worked for the summer in an architect's office, then entered Columbia's two-year master's course in the fall. "I went one year and decided not to go back," he says. "Somehow I felt it was time to stop school. The second year didn't look very different from the first year. Just another year. I decided the time had come to do something real. I never really regretted it."

But Marshall concedes that Columbia had some advantages Virginia couldn't

offer. "There were bigger names on the faculty. Talbot Hamlin taught history. I enjoyed his courses. Percival Goodman was a design critic. He was excellent. And being in New York made it possible to expose graduate students to people like Lewis Mumford. We saw them in small gatherings and had a chance to talk to them. That aspect was very interesting."

Marshall won a student design competition while at Columbia. It was for a combination office and training school sponsored by Junior Achievement, an organization that shows high school students how to run a business by actually operating one.

From Columbia, Marshall went to Charlotte, N.C., and worked for six months in an architect's office before heading back home to Norfolk, where he has lived and worked ever since. In Norfolk, he 1) took a job in the firm of Alfred M. Lublin and 2) got married. His wife, the former Joan Goodyear Ellingston, "went to a funny little school on the eastern shore of Maryland," Marshall says. "I met her when she came to visit my sister."

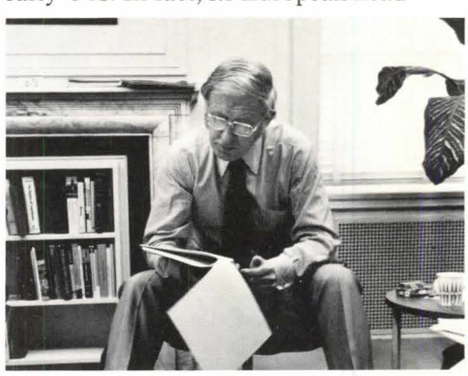
The Marshalls have five children: William Marshall III, now 22; Jennifer, 21; Charles, 19; Elizabeth, 17 and Christopher, 13. "We thought that's what rhythm meant—boy, girl, boy, girl," Marshall says. "We finally stopped after Christopher broke the tie."

They live in a "very nondescript" two-story house in Lochaven, an old neighborhood in the heart of Norfolk. "In order to build a house we would have had to move out of the city into the suburbs," Marshall says. "I really didn't want to do that. I can get from home to office sometimes in as little as 10 minutes."

In 1953, Marshall "miraculously" passed his licensing exam and two years later became a partner in the firm of Lublin, McGaughy & Associates. After Lublin was killed in a plane crash in 1960, the firm's name was changed to McGaughy, Marshall & McMillan. "I became the senior architect in the firm after Al's death, and have been ever since," Marshall says.

Marshall describes the firm as a "multidisciplinary" organization. "We started off with the concept that we were trying to create all basic design skills within one firm—architecture, planning, many branches of engineering, architectural planning, interior design. Interior design is something I personally have very strong feelings about. Too few architects practice interior design. To me it's inconceivable that someone else would take over and decide colors, textures and three-dimensional elements in something you've designed. We don't *always* get to do the interiors, but we try."

McGaughy, Marshall & McMillan has had a large practice in Europe since the early '50s. In fact, its European head-



quarters in Athens has more employees than its home office in Norfolk—about 120 of the firm's total of some 260. There are also offices in Frankfurt, Germany; Tehran, Iran; Washington, D.C., and Omaha and Grand Island, Neb.

One of the firm's largest projects is El Marj in Libya, a new city built by the government to replace an old community that was destroyed by an earthquake. The firm's plan for the new city was picked by an international jury, and the firm designed all of the community's housing units.

"We are general practitioners," Mar-

New efforts to determine 'what the Institute can do to help the profession during difficult times.'

shall says. Projects for government agencies—federal, state and local—represent a large part of the firm's work. Another is housing, including PUDs, public housing and other federally subsidized shelter. Recent projects that Marshall is especially proud of are the Kirn Memorial Library and the student center at Old Dominion University, both in Norfolk.

Marshall has been active in Institute affairs for seven years, first serving as vice president and president of the Virginia chapter's Tidewater section, then holding the same positions for the chapter as a whole. His experience with the national AIA began in 1969 when he was appointed to the federal agencies committee. "That was when the whole fight was evolving to force architects to bid," he says. "I was always opposed to it on the basis that it doesn't make any sense for anybody—particularly for the client."

Marshall was serving as chairman of the AIA government affairs commission in the spring of 1971 when George White, then an AIA vice president, was appointed by Nixon as Architect of the Capitol. White resigned his Institute post and the board picked Marshall to fill out the remainder of the term.

The next year Marshall ran against Archibald C. Rogers, FAIA, for first vice president/president-designate of the Institute. He lost. "The next year," he says, "I found myself running again—unopposed. I really never dreamt of running again, but I suppose you get conditioned to the possibility of doing a job, then when you're not successful, you let go of the idea of doing it with some reluctance." Actually he was urged to run by several officers and members. This time he won.

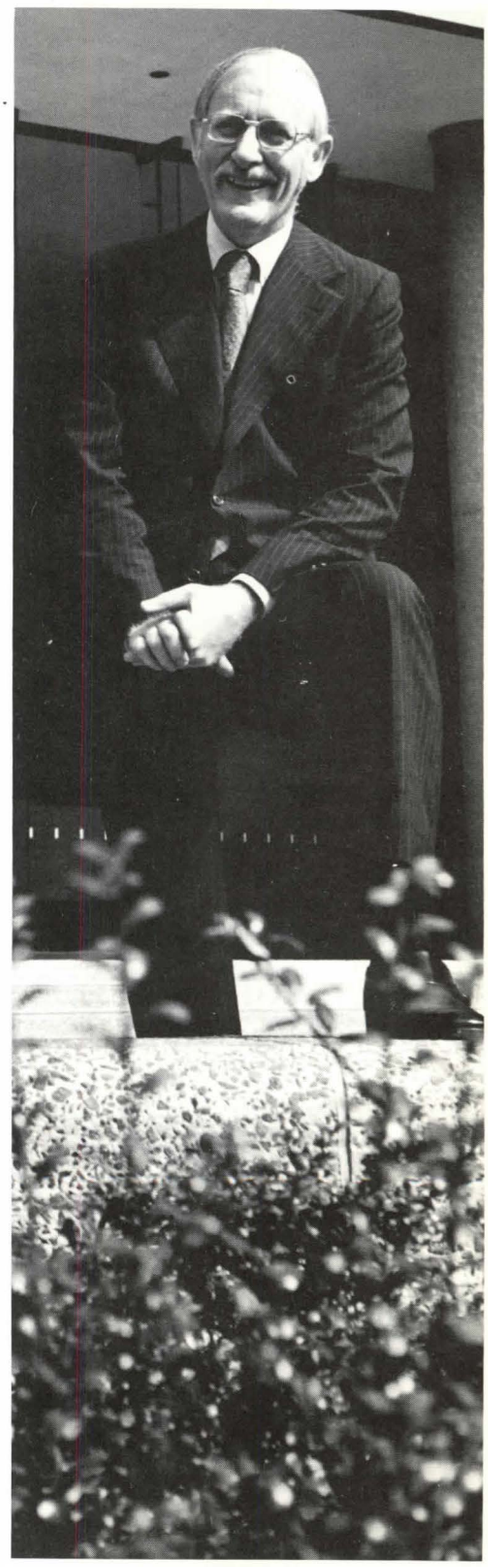
"Circumstances are kind of a strange companion we find ourselves dealing with as life goes on," Marshall observes as he begins talking about what he wants to accomplish as AIA president. "A year ago things were very different. The economy was good and most architects were busy. Now we're in a recession, and it's having its effect on the profession. We hope it's a short-range condition, but while it exists it's incumbent on the Institute to do what it can. We don't have a great deal of experience in dealing with this kind of thing, but we need to determine what, if anything, the Institute can do to improve things for the profession in difficult periods like this."

This month Marshall summoned architects and others from all parts of the country to participate in a "charrette" to determine what the AIA can do to help its members get more work. The goal of the charrette is a list of AIA programs in order of priority, designed to increase the market for architectural services, and suggestions for implementing these programs.

Marshall's key set of programs for 1975—he has been working on them for a year—involve efforts to improve the effectiveness of AIA's components. Last year, at Marshall's request, the board created the Component/Member Delivery and Communication System, an in-house study that analyzed the Institute's existing programs and activities and proposed changes to make them more effective for components and members. The new system, which tailors the delivery of services to specific conditions and objectives, is being inaugurated this month.

Marshall cites the Housing and Community Development Act of 1974, with its provisions for federal block-grant revenue sharing, as one example of how decision making is shifting from Washington to the local and state level. "In our own self-interest we need to play a part in the process," he says. "Some of the traditional workload of the architectural profession is shifting from a categorical to an unencumbered basis. The Institute needs to help local and state components strengthen themselves. We need to take our experience at the national and translate it into systems for our components across the country. We need to deliver more services directly to the local level and create better communications between national and local. Communications is a two-way street. We need to know what the components are doing and what their needs are."

He pauses for a moment, then underscores what he has been saying: "Instead of adding to the national AIA, we should be primarily concentrating on the local and state level. That's where the real action is." □



Marketing: A Method of Avoiding a Hopeless Chase After the Wrong Job

David Travers

How to select jobs to pursue and how much time to spend on the effort are problems totally ignored by the several textbooks on marketing professional services. The books are valuable, no question. They outline sales programs, tell how to marshall forces into an efficient sales machine, how to get leads and how to follow them as aggressively as conscience and professional objectives will allow. But none mentions an even more basic problem: how to avoid a hopeless chase.

(Another problem: The books leave untouched the question of how the small, vulnerable office can put into effect the marvelous programs and strategies described. Even the large and successful firm can be frustrated. When it's busy, so are its people. When work drops off—in an efficient office—so does manpower, and again there are no hands or heads to create the well-oiled sales machine. In short, the books tell what and how, all right; but who's going to do it?)

The inclination is to go after anything and everything, especially if you're a worried practitioner who is winding up drawings on the last job in the shop. The theory is: "Buy chances on enough lotteries, and you're bound to win one." Even the A/E juggernauts, who should know better, frequently base the decision on what work to pursue on something other than a hard appraisal of their chances to get the job and the costs of trying. A juicy commission on the horizon can cloud the judgment. For example, a Midwest firm with no hospital experience—not so much as an outpatient clinic to its credit—made a costly effort to get three large hospital projects, pitting itself against firms which had done thousands of beds. This is an instructive example of hope subduing reason, and we'll examine it more closely later.

More and more, architects are being selected on the basis of a rather formal system of comparative analysis and interview. A result is that even the most innocent letter expressing interest in providing architectural or A/E services for a project can have unpleasant consequences if—out of overconfidence, desperation or excessive zeal—you ask for a more ambitious bite than you can chew.

First of all, presentations to a search committee can be expensive propositions if done properly. Done badly, they can hurt you where you are most vulnerable: in your reputation. Selection committees don't like their time wasted, and word gets around. And finally, it's tough enough on office morale to lose out on jobs where you have a good competitive position. To reduce your average by repeatedly going after commissions where your chances are at best small can paralyze a firm by draining its morale as well as its finances.

Decisions about what jobs to pursue, how much time and money to spend on the effort and what to spend them on should be made on the basis of a well thought out business development program that is derived from professional goals, profit objectives and—most importantly—a realistic evaluation of a firm's strengths, experience and personnel compared with competing firms. It seems elementary, yet somehow unreality creeps in. It's easier to fool ourselves than others.

Let's try to reconstruct how the Midwest firm arrived at its unfortunate decision to try to break into hospital work although unprepared. First of all, it was anxious to get into a new and fruitful field. Enthusiasm had ebbed for its bread and butter work—hotels and other commercial buildings. It felt fettered by its own specialized abilities. Two of the firm's proposals, for mammoth federal medical centers, were made in association with a small regional office that had some 40- to 90-bed community hospital experience. The smaller firm asked the larger one to associate, needing its substance and believing it to have political influence (which it didn't) and to know its way around the Washington, D.C., labyrinth (which it didn't).

The aura of business ability that clings to the largest of the A/E firms is as persistent as it is false. This might be understandable if it were seen as the small looking at the large, but even the large firms believe their peers to be free of their own faults and inefficiencies. This is a paradox, since human nature generally attributes its own frailties and vices to others. Of course, where design is concerned, human nature reasserts itself.

The larger firm carelessly agreed, thinking it had nothing to lose. But, because of its greater manpower and graphics capabilities, it undertook to fashion the proposals and to prepare a 251 form that displayed to best advantage the meager hospital experience of the proposed joint venture. The cost in time and materials was in the order of $5,000. The result: 0 for 2.

The third prospect, a 350-bed hospital, was brought to the large firm by a friendly hospital planner who asked if the firm wanted to be included in a select list of A/Es being considered for the job. There would be an expensive out-of-state interview requiring the attendance of the principal, the project architect and the project designer. The partners huddled. The firm had a few medical office buildings and a psychiatric nursing home to its credit. Ergo, the firm had hospital experience! On top of that, there was its experience in hotels. Hospitals are really just hotels for the sick, aren't they? The decision was to accept the invitation.

In preparation, the principal assigned to be in charge began to do some research on hospital planning and design. He suddenly found himself in a strange new world with a new language that only sounded like English—intensive care, acute care, ambulatory and extended care, inpatient, outpatient, nuclear medicine, multiphasic screening, comprehensive health care planning. Another huddle and a sober reconsideration by the partners. They were now caught between two stools: Attend the interview, show their ignorance, humiliate the firm and embarrass the friendly planner; or not attend and also embarrass the planner, but perhaps less so. They chose to decline the invitation. Cost of their original folly: one friendly consultant, plus the earlier $5,000. Result: 0 for 3.

Mr. Travers heads his own management consulting firm to architects and engineers, David Travers & Associates, based in Santa Monica Calif. He is former director of corporate planning and vice president of Gruen Associates and was editor and publisher of *Arts & Architecture* magazine.

Stiffening competition 'calls for dealing from your greatest strength, not exposing weaknesses.'

Times are lean, and they are going to get leaner. The competition is going to be stiffer for every commission. This calls for dealing from your greatest strength, not exposing your weaknesses. Let's take some time to analyze what constitutes an office's strength generally, and then look at specifics. Viewed from the marketplace, the architectural office has shaken down into three major types of operation. Classified by business strength and strategy, they are:

1) The design office: This category produces high profit-margin architecture. Preeminent design talent—real or illusory—is its competitive edge. In a price-conscious world, these offices are not competitive in terms of cost. The most successful of them can pick and choose among the limited number of institutional and corporate clients for whom cost is, at most, of incidental concern. Relatively small, elite and exclusive, these offices are diminishing in number.

2) The volume office: In its purest form, this category is the polar opposite of the design office. Highly competitive and market oriented, it deals in a large volume of diversified services and uses the sophisticated selling and promotional techniques of big business—which it is—including the exploitation of bigness itself. To maintain a high volume of work and to insure profit stability, this office follows a strategy of growth in capacity and in capabilities by acquisition of talents and skills. It may go public, invest in its own projects, merge with like-minded aggressive firms in related fields, etc. It rapidly discovers and penetrates new markets as they open up, acquiring existing regional practices rather than associating or joint venturing with them. (This may be reinforcing the myth of infallibility of the big firm, but this is a description of its strategies, not its successes. Some firms in this category aren't doing so well in the "recession.")

3) The "line of strength" office: This is a catchall category. Firms in this third and by far the largest classification have achieved whatever measure of success is theirs by developing and following their own lines of strength. The competitive advantage of this kind of office is the result of a resourceful pursuit of at least one—but usually more than one—of the following strategies: specialization (building types); design skill (solid but unspectacular); efficiency of operation (lower fees); geographical specialization (local influence); ideas (better mousetraps); and promotional skill (aggressive sales).

The ability of a firm to capture a particular commission is related to the sum of its *relevant* experience, capabilities, reputation and ability to present these qualities effectively—plus a fifth element that can completely upset what would otherwise be a very simple equation: influence. Each of these factors has component elements. I have broken out what I consider to be the most important from the client's point of view and have assigned point values corresponding to their importance. In this manner, the architect can assess his and his competitors' strengths in specific prospecting situations.

1) Experience:

• Experience with projects of the same type and equal or larger size. No self-delusion allowed; same type means exactly that. If the job in question is a hospital, don't count clinics, medical office buildings or pharmacies. Only hospitals—and they must have the same number of beds (minus 10 percent allowable), or more. If it's a 40-story corporate monument, no 10-, 15- or even 30-story speculative office building.

Value: ten or more projects = 100 points each
six to 10 = n^2
one to five = n times 2.

• Experience with the same project type, but smaller in size. Still no pharmacies, etc., for hospitals; no motels for hotels. If it's an 800-room downtown convention hotel and the competitors' experience is with 150- or 200-room motels, don't count them here. They properly belong in the next category.

Value: ten or more projects = 20 points each
six to ten = n times 2
one to five = n.

• Experience with projects of related types. Examples: motels for hotels; five- and ten-story speculative office buildings for 25- and 30-story office buildings; neighborhood shopping centers for regional shopping centers, etc.

Value: n/2.

2) Capabilities:

• Size of firm: Given an important project, generally the larger the firm, the greater its competitive advantage. Smallness is suspect, even (especially?) when it's deliberately maintained. Bigness, on the other hand, connotes strength and stability. Unless, then, you know that the client is an exception to the rule, Value = staff size.

• In-house disciplines: Although special circumstances, including local custom, vary the rule, generally clients prefer to deal with one design consultant, and it is a decided advantage to have in-house all the disciplines that the client will require for the project at hand.

Values: All services required are offered = 50 points
Architectural and structural only (if less than all required services) = 25 points
Architectural only (if less than all required services) = 10 points
Design only (if less than all required services) = 1 point.

If less than full A/E services are required, scale all categories upward, i.e., if only architectural and structural are asked for by the client, then A-S becomes 50, Architectural = 25, Design = 10.

3) Reputation: The importance of a good professional reputation is manifest. The chances are that good general repute is what got you and the others on the list. Now you need specific references—impressive and persuasive third-party recommendations. The range of points allows you to scale yourself and your competition according to:

• The importance of the person or company giving the recommendation; the closer he is to being a respected peer of the prospective client, the greater his influence will be;

• The enthusiasm of his recommendation, which is a function of: satisfaction with building(s); adherence of project(s) to schedule; adherence of project(s) to budget; services rendered; fees charged; relevance of the projects that are eliciting the recommendation. Value: 0 to 100 per reference to a limit of 200 points.

Usually, you will be familiar enough with the reputation of your competitors to be able to quantify them. Finding out who they are, however, will frequently take some digging. Get on the phone, talk to your contacts, get out to professional and business community lunches and meetings. Secrets don't stay secret very long in architecture. You don't have to know every firm being considered to come up with a reasonable estimate of your odds. Look out for any anomaly on the list. There's probably a good reason that he is there, and it probably is not favorable to your cause.

4) Presentation: There are two theories about the role and importance of client presentation and interviews. One is that it is the big opportunity to sell your firm and clinch the job. The selection committee has gone over the brochure and qualifications materials of all the candidates and is eagerly waiting to have questions answered and doubts resolved. The firms that don't shine will be sent packing. In short, this theory holds that it is during the interview that the commission is won or lost.

The other theory maintains that the presentation-interview process is actually one of elimination. The task of the committee is to reduce the number of firms qualified to undertake the project at hand to three or two or even one. It is looking for flaws in the candidate's experience, abilities, character. The differences for which the committee is looking are negative ones. Usually, according to this theory, most candidates will blow it somehow, and if a firm can just make it through the interview without doing anything wrong, it will find that it's made the cut.

I subscribe to this theory that there's more to be lost than gained in the interview, and suggest you put an upper limit of 20 points on presentation ability.

5) Influence: Even if you've been honest in the appraisal of your experience, capabilities, reputation and presentation ability, the influence wielded by you or your competitors can play havoc with the calculations. It's possible to get a job with only influence and a license. Not only can influence be the single most powerful of the five factors, it is the most elusive. In a philosophically egalitarian society, favoritism—whether from friendship or darker motives—is not advertised. It's private in nature, but it exists.

Start with an assessment of your own direct and indirect influence. Do you know the prospect? Do you know anyone close to him? (One firm's librarian does profiles on important prospects, finding out where he and his key people went to school, what clubs they belong to and the like. A search of alumni lists and membership rosters reveals useful names often enough to make it worthwhile.) Have you done a project for a respected competitor of your prospective client?

In evaluating the competition's influence, you should assume that if they have been in business locally for any length of time, they will at least know someone who knows the client. The more active the architect is in the community—socially, professionally, philanthropically—the more influence he is likely to wield. Influence can be of such titanic importance that you should do your utmost to uncover any that may exist on your part or that of the competition.

The point range here is large; the depth and warmth of the relationships are the controlling factors:

- Previous project designed for the same client. Considerations: client satisfaction and relevance of that project to the present one. If you've done a good job of a relevant nature for this client before and none of the others has, the commission is yours, providing there has not been a catastrophic change in your or the client's firms. Value: 0 to 500.
- Previous projects designed for members of the client's selection committee or, if there is no committee, then for a member of the client's board of directors. Same considerations as above. Also consider the strength of the particular board member in the client's scheme of things. Value: 0 to 200.
- Knowledge of the client. You tend to run in the same or touching circles, and the prospect has had a chance to appraise you, but in nonprofessional circumstances. Value: 0 to 100.
- Client as friend of a friend. This is a three-way relationship and difficult to give value to with any certainty. To be safe, be conservative in your own behalf and liberal with the competition. Value: 0 to 50.
- Know key man in the client's organization who is assigned to the project. Value: 0 to 50.
- Know key executives in client's organization. Value: 0 to 15 each.
- Know members of the selection board or, in absence of one, members of the board of directors. Value: 0 to 20 each.

In each of the categories of experience, capabilities, reputation, presentation and influence, I have listed the obvious kinds of qualities and relationships. You should not take the list as definitive; add to it, refine it in any way that you can. The more inclusive and finer grained it is, the more accurate will be your forecasting.

Let's work out the probabilities on a hypothetical project (*see* Table).

Assume the project is a 12-story, 170,000-square-foot headquarters office building for a growing company, located in a suburban population center of a large metropolitan area. The building will have more space than the client now needs, but he plans to grow into it. Meanwhile, he will rent out the unused space, amounting to about half the structure. The client is president, chairman of the board and founder of his company. He has appointed a five-man architectural selection committee comprised of four members of the board of directors and the client's executive vice president. The client will make the final selection himself from the top three firms winnowed by the selection committee from a field of ten firms.

The architectural firm in which we are interested is a 35-man office, down 15 people from last year when it billed $1.5 million (including engineering, which it subcontracted). It has been in business 10 years, growing sufficiently in the good times to be able to weather the bad. Its biggest volume has been in lowrise apartment developments, which led it into the planning and design of planned unit developments. In the last three years, the office has done several low- and medium-rise apartment buildings in conjunction with the PUDs. Now that housing has dried up, it is looking desperately for an-

EVALUATION TABLE

	Our Firm	Competition 1	2	3	4	5	6	7	8	9
1. Experience										
a. Projects of same type/size										
Values: ten or more = 100 points each		1100			1300					
six to ten = n^2			36	64						
one to five = n times 2	6					4				
b. Projects of same type/smaller										
Values: ten or more = 20 points each										
six to ten = n times 2	14									
one to five = n						3				
c. Projects of a related type										
Value: n/2	35	230	70	80	100	10				
2. Capabilities										
a. Size of firm										
Value: number of employees										
b. In-house disciplines*										
all required services offered = 50 points										
architectural and structural only = 25 points										
architectural only = 10 points	50	50	50	50	50					
design only = 1 point						25				
*Note that "all required services offered = 50 points. Thus, if architectural and structural are all required, it is worth 50. Architectural only becomes 25, design only 10.										
3. Reputation										
Considerations are:										
a. Importance of references to client										
b. Enthusiasm of recommendations (a function of satisfaction with services, fees, adherence to time and budget schedules, etc.)										
c. Relevance of projects done for references										
Value: 0 to 100 points	50	90	75	75	90	25				
4. Presentation Effectiveness										
Value: 0 to 20 points	0	15	5	10	10	0				
5. Influence										
a. Designed prior project for prospect										
Value: 0 to 500 points										
b. Know prospect nonprofessionally										
Value: 0 to 100 points		50	80	25		20				
c. Prospect is a friend of a friend										
Value: 0 to 50 points						50				
d. Know key man assigned to the project										
Value: 0 to 50 points		25								
e. Know key executives in client organization										
Value: 0 to 15 points		30								
f. Designed prior projects for a member of selection committee or board of directors										
Value: 0 to 250 points	200									
g. Know member of selection committee or board of directors										
Value: 0 to 50 points each		60	30		30					
A. Individual Totals	355	1650	346	304	1580	137	?	?	?	?
B. Total of All On List					4372					
C. Probabilities (A/B)	.08	.38	.08	.07	.36	.03				

The combined chances of competitors 1 and 4 getting the commission are 74 percent.

other market to take up the slack. The principal has never had much time for a social life, which probably means that he prefers not to have one. He has a reputation as a competent practitioner.

1) Experience:

- Projects of the same type and size or larger: The office has done two 12-story office buildings of about the same square footage and one 15-story office structure. Value: 6 points.
- Projects of the same type, smaller size: The firm has completed seven office buildings in the two- to five-story range. Value: 14 points.
- Projects of a related type: none.

2) Capabilities:

- Size of firm: Value: 35 points.
- In-house disciplines: architectural, but that is all that is required. Value: 50 points.

3) Reputation:

Be honest. The firm has done only three buildings of the same type and size, or larger. The last one was the 15-story structure for a savings and loan, whose president is on the board of the client's company and also on the selection committee. That's why our friend is on the list under consideration. He got the earlier building because the savings and loan had financed two of the residential developments designed by the firm, and the savings and loan president was favorably impressed.

The firm's performance on the 15-story building was good. Our friend the architect had decided wisely to please the client at all costs, believing that he would or could be of future help. Question: Should the good will of the savings and loan president be counted both here and under "influence," where it will most certainly be counted? In the interest of conservative evaluation, I suggest not.

The savings and loan building was published in one of the professional magazines, and this should be considered here. Also, the good references from the clients of the smaller two- to five-story buildings were pleased with the firm's performance. Value: 50 points.

4) Presentation:

Although the principal of the firm is effective in talk about residential planning and design, he is still learning office buildings and hasn't much in the way of visuals. Value: 0.

5) Influence:

The firm's strength here is its relationship with the savings and loan president on the committee. Everything depends upon how heartily he will fight for the firm during the initial elimination process and then—if it makes the cut—how effective he is with the client. His savings and loan is considering financing the project, which should count heavily with the client. Value: 200 points.

Our friend's total point value is 355. The points alloted to the firm's competitors are self-explanatory now that we've gone through the one tabulation. Let's say that our friend is only familiar with five of the firms on the list, those that are in his area. The other four are all out of town or out of state, and unknown quantities. (If the picture is not clear using the firms with which you are familiar, you should call any contacts you may have in the home towns of the unknowns to get a line on them.)

By taking the grand total of all points, dividing that total into the individual totals, we get a percentage of probability for each firm. Bear in mind that the four firms not figured into the total lessen the chances of all the others to some unknown degree, i.e., the 12.3 percent probability for our friend is probably inflated.

In addition to providing an estimate of a firm's chances, the percentages indicate how much time and money should be spent in the attempt to get the job:

1) The building will be about 170,000 square feet. At $35 a square foot, that amounts to $5,950,000 in construction cost.

2) The fee should be about 5 percent, but half of that will go to the engineering consultant, leaving 2½ percent, or about $150,000.

3) A reasonable ratio of direct labor and materials expense to fee is 5 percent, in this case, $7,500. (Although few firms do so, promotional and all other expenses should be derived from expected profit, i.e., your profit planning—where all budgeting should begin.) Since the chances of our friend's getting the project are only 12.3 percent (actually less because of the other four competitors), we should discount the expenditures accordingly, bringing the promotional expense justified by the probabilities to about $900.

That is the absolute maximum. In reality, our friend should only consider spending that much if he will later have good use for the presentation materials developed and the experience gained in the interview process.

The times call for prudence and self-control in all aspects of your operations. Plan, and then adhere to the plan, deviating only after a hard appraisal of the situation and a skeptical look at your own motives. Keep records of costs of pursuing jobs; build up information on your successes and failures, and evaluate. You may find yourself winning more commissions—you certainly will lose fewer. □

Seeing the City Whole: New York

Charles A. Blessing, FAIA

City of islands. Three hundred fifty square miles. Glacial moraines, pallisades, three large islands, a near peninsula, hills, ridges, granite outcrops, natural woodlands, three rivers, three ocean bays, Long Island Sound with its many bays and inlets, salt water wetlands, ocean beaches the Atlantic Ocean.

New York. A city of eight and a half million people. The major port of North America. The second largest air terminal in the world. The largest concentration of industry in the United States. The dominant financial and commercial center of the world. The culture and communication center of the nation.

New York. Port facilities, train and passenger ferries, airports, railroads, subways, freeways, parkways, island-to-island bridges, island-to-island tunnels under bays and rivers—bold feats of engineering to subdue for man's purposes the natural topography. The world's most complex transportation system.

New York. Framed by Sandy Hook and the Jersey coast bordering Raritan Bay on the south, and—west of the Hudson—by Newark, Jersey City and the Hackansack Meadows.

The National Park Service has proposed the Gateway National Seashore. Sandy Hook on the south and Rockaway Point and Jamaica Bay on the north frame the entrance not only to New York, but to an entire continent. This natural gateway to our country can become a national urban park, accessible to millions.

Through this gateway have come 16 million immigrants. Through this gateway once passed F. Scott Fitzgerald. As he approached Manhattan from Upper New York Bay, he wrote: "For a transitory enchanted moment man must have held his breath in the presence of this continent . . . face to face for the last time in history with something commensurate to his capacity for wonder." □

This is a continuation of a series of sketches by Charles Blessing, longtime city planning director of Detroit, exploring the elements of city form. The series started in the September 1974 issue.

Post-Occupancy Evaluation Of Hospitals

(Editor's note: Early last year the JOURNAL *invited a team of architects to investigate and report on the application of post-occupancy evaluation to hospitals. Joined by a hospital administrator and nurse-consultant, the team met at St. Mark's Hospital in Salt Lake City, which has been the subject of several structured evaluations.*

The participants were Richard Adam, assistant administrator of Alta Bates Hospital in Berkeley, Calif.; Wendy Everett, R.N.; William Frye, AIA, of Golemon & Rolfe, Houston; Herbert McLaughlin, AIA, of Kaplan & McLaughlin, San Francisco; Philip Tobey, AIA, of Metcalf Associates, Washington; and W. H. (Tib) Tusler Jr., AIA, of Stone, Marraccini & Patterson, San Francisco.

Their report begins below. In order to underscore it with the results of an actual evaluation, the JOURNAL *requested McLaughlin to summarize the results of a study of the public spaces of St. Mark's and two other hospitals. His summary follows the team report.)*

The architectural profession must begin to learn from its mistakes—and its accomplishments as well. The means of doing so is post-occupancy evaluation of buildings as an extension of the design process. The idea of performing such evaluations is not a new one, but the profession as a whole has seldom engaged in a structured approach to them on an extensive scale.

The major questions they address are how well does the building work, and how well the building achieved the objectives initially established for its design. The answers to these questions, widely disseminated, could produce better buildings by putting a new data base under design.

While buildings of all types could benefit, health facilities are particularly good subjects for evaluation because the buildings' effects on many of the tasks performed within them are measurable. Also, hospitals tend to present similar problems one to another, which makes comparative data available and means that findings can be put to wide use. Finally, hospitals are among the most "compulsory" environments that architects design, creating a special need for investigating their impact upon users, since the users cannot express their preferences through choice as they can in other building types closer to the marketplace.

Who should be the evaluators? A multidisciplinary team is vital to provide quality and scope for evaluations of health facilities. A nurse, for example, will be more sensitive to the work environment and to the detailed issues of patient care than an architect might be. The need for a multidisciplinary approach to overcome narrow focusing in familiar areas is emphasized by one recent, relatively unstructured study of a hospital. The evaluation team was comprised of a construction administrator, a recent architectural graduate and a nurse who had considerable architectural training. Each person developed a series of comments based on his own subjective and unstated criteria.

The construction administrator focused almost exclusively on details where problems had occurred or might develop. The recent graduate looked at the behavioral aspects of the building environment. The nurse directed her attention almost exclusively to the performance of the nursing unit with emphasis on patient well-being.

There are obviously many combinations of professionals available. In a hospital evaluation the basic team, a health professional, a social scientist and an architect, can be expanded by individuals such as architectural psychologists, economists, engineers, et al. The social scientist may seem extraneous to some, but is necessary because he has a familiarity with research design which other team members may lack. For example, the use of semantic differential tests or behavior mapping matrices, unknown as evaluation techniques to most architects, provide useful information for nursing unit designs.

Criteria and techniques. Generally, the criteria used for evaluating a building are drawn from two sources—norms established by other buildings having the same overall purpose and norms established by the expectations and experiences of designers, users and others.

The first task of an evaluation team is to determine the criteria and to identify topics to be evaluated. It is imperative that areas of investigation be narrowed as tightly as possible in order to produce valid results. And it is of consummate importance to select the proper tools. For example, in looking at traffic patterns between the medication room and the nurses charting area, a questionnaire or open-ended interview would be less productive than a direction observation system.

Architects should increase their efforts to develop criteria and test the implications of such criteria on both the performance of the building and user behavior. In this way a validated body of criteria and design guidelines can evolve, be refined and incorporated into the framework of common design understandings among medical facility architects. Care should be taken in evaluating to screen for normal limitations of experience and attitudes on the part of both evaluating teams and users.

A whole range of persons, from maintenance staff to board member, from visitor to critically ill patient, use the hospital. Each person applies his standards in judging the effectiveness of a particular building. Users can, of course, be limited in their experience or biased and this should be borne in mind when tapping them for information. Their comments often tend to emphasize the negative and things that could have been better, and to underemphasize features of significant benefit. Persons who participated in original design decisions often react more favorably than those who did not, but this sometimes means that something which should be criticized will be defended instead.

There is a great temptation for architects and others to focus on functions which are easy to quantify, such as mechanical performance, sometimes at the expense of those factors which may be of equal or greater importance in determining the building's effectiveness. A typical example is the problem of relationships between departments. On numerous occasions hospital planners have attempted to develop simple quantitative matrices to describe the nature of the relationship between various functions in a hospital. Most have learned that although certain aspects of such relationships can be quantified, relationship matrices greatly oversimplify the subtle issues involved.

The assessment of human behavior of

attitudes is the most difficult part of quantitative measurement. Techniques and criteria for appraising human factors are just now being developed. Practical working tools which will allow cross-comparison between facilities and environments exist only on the simplest level for use in very carefully controlled circumstances.

Implementation. Once an evaluation has been made, however, its value is purely academic unless there is a commitment to implementing the findings both in the existing building and in future projects. The problem of implementation is one of sorting out the data as it is obtained and developing a well-oiled process to modify ongoing and future designs. The options for the existing building are either to modify and improve the building itself or to modify the activities within the building so that design and function are as compatible as possible.

General implementation is dependent on publication; this is critical. At present, architectural publication is characterized by fulgent praise, so that the most minor failing is seen as a disaster. The usefulness of evaluation is dependent on a large base of experience, accurately and uniformly reported. This will entail a change in attitude by both architects and journals.

Then, too, there is a basic, overriding question of funding. Architecture is a highly competitive profession. There has been, and continues to be, pressure to include more services within the basic compensation. As post-occupancy evaluation becomes more widespread, the profession must decide how to integrate the cost of this service into the fee structure. Persuading the client to allow an evaluation to be done in his facility may not be the problem we as architects think it is. The evaluation provides the client with a vast amount of useful data about his facility.

In recent years , systems integration and cost-benefit analysis have emerged as methods of getting the best use of minimal resources for maximum functional and esthetic results. All clients are becoming cautious as costs rise. It is only logical that the emphasis on questions such as "how well does it really work?" will increase significantly, and with it the importance of post-occupancy evaluation. □

What One Such Evaluation Produced

Herbert P. McLaughlin Jr., AIA

From the Dickenesque image of a place where charity cases go to die, hospitals have been transformed into gleaming miracle mills in this century. In spite of the radiance of this germ-free halo so often seen in films and television, hospitals are still places of anxiety. Illness, disease and operations are traumatic whether you experience them as a patient, or as a relative or friend awaiting the outcome. Can architects and designers make visiting and waiting in a hospital a less anxious experience? That can only be accomplished through study of feedback from visitors' experiences in existing hospitals and design based on that data.

Recently our firm brought in two architectural researchers, Maggie Mills and Mike Durkin, to evaluate the visitors' and outpatients' experience in St. Mark's Hospital in Salt Lake City, (photos following pages) and two other hospitals, both modern and well-designed in southern California, referred to here as hospitals A & B.

Working with us, they prepared questionnaires with both open-ended and restricted choice questions. These were distributed to 150 subjects selected at random in 14 waiting areas in these hospitals. User behavior was also observed in each area.

They also interviewed the architects, hospital administrators and personnel, planning and design consultants, as well as the interior and graphic designers for each hospital. Their findings are summarized below.

The exterior image. For at least the last 25 years, three architectural images of hospitals have dominated in the United States; parochial school bland and factory austere are found mostly in the eastern half of the country, and modern institutional white in the Western states. In contrast to these stereotypes, we attempted to make St. Mark's a bold noninstitutional sculpture on a flat plane against the backdrop of the Rockies. Hospital A is dominated by a new simple white tower wing rising out of an older, anonymous white, well-landscaped base block. Hospital B is more industrial, a massive, simple, ex-

Mr. McLaughlin is a principal in the San Francisco-based architectural and planning firm of Kaplan & McLaughlin.

The study focused on the use of three hospitals' public spaces by those visiting and waiting.

posed concrete structure, surrounded by parking lots.

When we asked what the hospitals looked like, visitors responded most often with "contemporary, up-to-date, modern" or "the way a hospital should look." The survey team found that preconceptions and actual perception of hospital buildings were tightly interwoven. Visitors read, or tried to read, into the exterior hospitals the high technology of interior medical services.

Landscaping played a role in how visitors formed an impression of the exterior of each hospital. Respondents, especially women, felt that landscaping added a reassuring warmth to the technical, institutional imagery they wished in the building. Hospital A is lavishly landscaped and respondents to questionnaires said it gave the hospital a comfortable, home-like impression. Garden patios were considered "colorful, peaceful, attractive, sunny." Obviously then landscaping is valuable generally, but one member of the research team felt it is particularly well utilized in relation to some other function, such as eating or waiting.

Finding your way. When entering a hospital, outpatients and visitors are anxious either about their own condition or that of a family member or friend. This anxiety increases with difficulties in finding the desired section of the building or a specific room. In older hospitals this problem is accentuated by additions constructed over the years. Thus planning for the information desk in the main lobby is critical as it is consistently utilized. As one of the research team noted, in the space of one hour every other person entering the lobby stopped at the information desk. The desk itself needs a prominent place; the institution can determine whether the desk itself should be low, which connotes informality, or high and thus more formal.

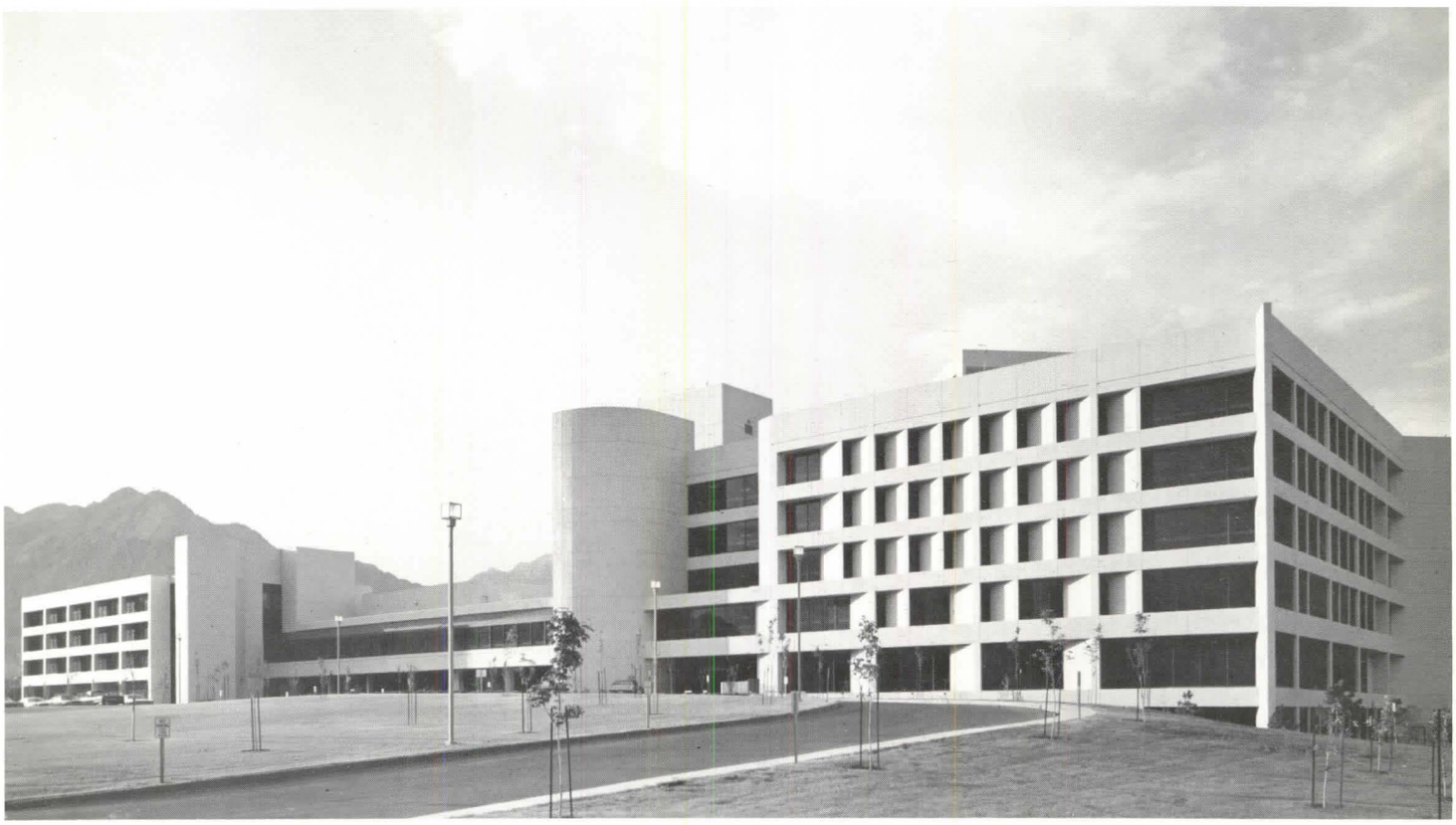
Because it is easier to seek directional help from a person than to quickly grasp an impersonal graphic or color-coded system, the information desk is the starting point for the majority of hospital visitors. But once beyond that point, visitors are usually on their own. Receptionists located at particularly confusing decision points in the corridor system is one solution, but a rather expensive one. Better to spend money on clear and readable, large-scale signage systems, preferably in an alcove so that people can stop and look without feeling jostled. Even foreign language users quickly learned signage systems if they were clear. Maps were of little use.

Waiting and waiting and . . . For visitors and outpatients, waiting is the major hospital experience. For outpatients the waiting experience may influence or affect expectations of the type of treatment they will receive. Visitors are in waiting areas for a variety of reasons and lengths of stay; but most waiting areas in hospitals are similar if not the same design, whether for emergency, surgery, the intensive care unit (ICU) or the crisis care unit (CCU). They should not be. Waiting can be a matter of a few casual minutes or hours of boredom or intense anxiety.

What forms the design criteria for waiting areas? Duration of expected period of waiting is the first factor, the anxiety level second, the mix of population in the waiting room third. Is it to be mainly adults, the elderly, children, or a mixture of these three, and therefore, what is the range of activities expected?

In emergency, duration of waiting time cannot be easily defined, nor can the number of people there at any given moment be predicted. But in physical therapy and most clinics, the length of time and number of people who will be waiting can be accurately predicted. CCU and ICU sections or surgery and surgical recovery have open-ended durations for waiting. Assuming the hospital lobby does not serve as a waiting area for one of the departments, waiting there will probably not be extended.

Size of the waiting area must be based not only on the size of the population but how long it is going to be there. Short term waiting areas can be designed with less space per person and more flexibility than larger waiting areas. All should allow interaction. For instance, the waiting area for a rehabilitation department can become quite sociable as patients with similar regular treatment schedules become friendly. In general, small waiting rooms or makeshift waiting areas in corridors



were extremely distasteful to questionnaire respondents. To the researchers, large waiting areas with moveable furniture seemed the best solution in most situations. A special problem exists in surgery waiting areas, for family members watch the corridor outside the recovery room. The research team suggested that another route be found for removal of the patients and that a screening element be erected between the waiting room and corridor. All lobbies should be subdivided to accommodate those waiting, but particularly the main lobby to separate those watching the main entrance for the arrival of someone to take them home and those being admitted if admittance is also done there.

In hospital A, the interior designers had arranged furniture in the waiting areas in airport style rows. This did not work in long time waiting areas such as outside surgery. People rearranged chairs into more comfortable configurations for resting, talking or privacy. This points out the complex sliding scale of interaction and privacy which takes place in waiting areas where long stays occur. Strangers strike up conversations or, in moments of grief, offer consolation. Families naturally cluster for mutual support. On the other hand, privacy is especially important to people in surgical and ICU waiting areas because they are under a great deal of stress. Ideally, waiting areas should provide options for both social interaction and privacy. How can this goal be attained?

Visual privacy can be accomplished by provision of physical barriers such as planters and partitions. Acoustical privacy can be afforded by arrangement of seating and use of sound-deadening materials like carpeting. These aids are especially important for those who want to nap during long waiting periods.

The choice of furniture is critical; a chair that is comfortable for ten minutes can be a minor form of torture for several hours. Certain chair designs are literally cruel to the elderly who must struggle to get out of them. Small children face different but equally tiresome problems with furniture designed for a six foot adult. In surgical and ICU waiting areas, chairs and tables are sometimes used as foot rests and sofas should be able to double as beds when waiting stretches into hours. Furniture should be moveable so that visitors can group pieces as they wish.

It is also important that furniture be selected which does not look disarrayed when moved about. Housekeeping staff felt very pressured to keep rectilinear furniture in straight lines, which was a headache for both them and the visitors who suffered through periodic "tidying up." It would seem sensible that curved furniture forms and casual arrangements be more frequently used. Lessons are to be learned from office landscaping which utilizes screens and planting to make irregular furniture arrangements attractive.

Lighting. Lighting plays a very important role in creating a relaxing environment in waiting areas. Many people read while waiting, others watch TV, still others talk to pass the time or bring handwork, office or school work. Soft or warm lighting is most desirable in waiting areas, with

brighter lights for reading where people wait for long periods of time. Softer light is best for areas where people are most anxious, and the researchers found that harsh fluorescent ceiling lights were often turned off in these areas. After the advent of the energy crisis at St. Mark's, they noted that over half the lights in waiting areas and corridors were off without noticeable depreciation in the overall lighting quality. Table lamps would seem to be an ideal solution functionally. Typically maintenance staffs dislike them for they make cleaning more difficult and theft is a conceivable problem, but the functional gains would seem to be worth the housekeeping problems.

Telephones and food. Provision of public telephones and food facilities depends on the amount of time and the reason for a person's visit to the hospital. People waiting in emergency, ICU and CCU units, as well as surgery, must have telephones immediately available for they often relay news to others outside the hospital. People on the way in or out of the hospital often need a telephone in the main lobby area. Usually, outpatient waiting areas do not need telephone facilities immediately at hand. All phones are ideally located in quiet alcoves.

Eating and drinking are important to anxious people. Opportunities to do both in pleasant circumstances should be provided. This was highlighted by the fact that all cafeterias were very well utilized, but in hospital B the administrator commented that food machines in emergency waiting areas were underutilized and would be removed. One of the researchers observed that people went to eat after the surgeon gave them news of surgery results. For visitors who know how long their wait is going to be, the hospital cafeteria provides a welcome change from the waiting area and should be related to landscaped courts or patios and should be easy to find. Ideally, a portion of the cafeteria with vending machine service should be available 24 hours a day. Housekeeping and security for such an area is not difficult if it is readily accessible and observable, which suggests a location close to the lobby.

Finishes and materials. The criteria for choice of finishes and materials for corridors, waiting areas and furniture should be based on the kind of "look" or effect that is desirable and important, as well as cost to obtain, install and maintain. Visitors wanted a cheerful, warm and "new" look. They were distressed by areas where furniture had deteriorated. There seemed to be no preference between traditional or modern furniture and decorating styles. They valued carpet and patterned wallpapers in preference to tile floors and walls—or smooth plaster wall finishes or solid color vinyl wall coverings.

Hospitals tend to have a "hard" look due to the use of supposedly low maintenance materials. This "hard" look is contrary to the desire for a warm atmosphere cited above. In many instances hardness is not necessary to low maintenance.

In corridors, tears in wall coverings, smudges and marks are caused by gurneys (carts used to transport patients), portable x-ray machines and housekeeping carts. In waiting areas, walls were generally unmarked but tears and holes in upholstery were often caused by children playing or, more often, by burns in furniture caused by smokers.

In waiting areas particularly, carpet can be a lower maintenace item than vinyl asbestos tile. Sand plaster finish walls provide a rough texture which is not only pleasant, but discourages rubbing against and drawing. Patterned wall coverings cover marring better than do plain colors. Rough appearing furniture coverings, even if artificial materials, showed less abuse than slick naugahydes.

None of the hospitals studied had extensive art on the walls. However, based on other data one can assume that detailed representational paintings or prints would be appropriate for all areas, but particularly so for long term use areas.

Anticipation and experience. Hospitals exude an atmosphere of anxiety and hope. The architect and designer are dealing with an elaborate set of preconceptions on the part of the public. By accurately grasping the correct cues of physical form and space from the public's images of "what hospitals ought to be," the architect and designer can establish better environment for visitors and patients. □

Six Architects' Offices in Recycled Buildings

Bergstedt Wahlberg Bergquist Rohkohl occupies a third of the top floor of Park Square Court in St. Paul. The Victorian brick warehouse was built in 1886 for a drug wholesaler and is now being renovated for shops, restaurants and offices. The building is in Lower Town, St. Paul's old factory and warehouse district which is now enjoying a renaissance.

The firm designed Park Square Court so that the first three floors house shops and restaurants with an inside lobby and an open stairway. The three upper floors have office space. The building sits across from a new city park.

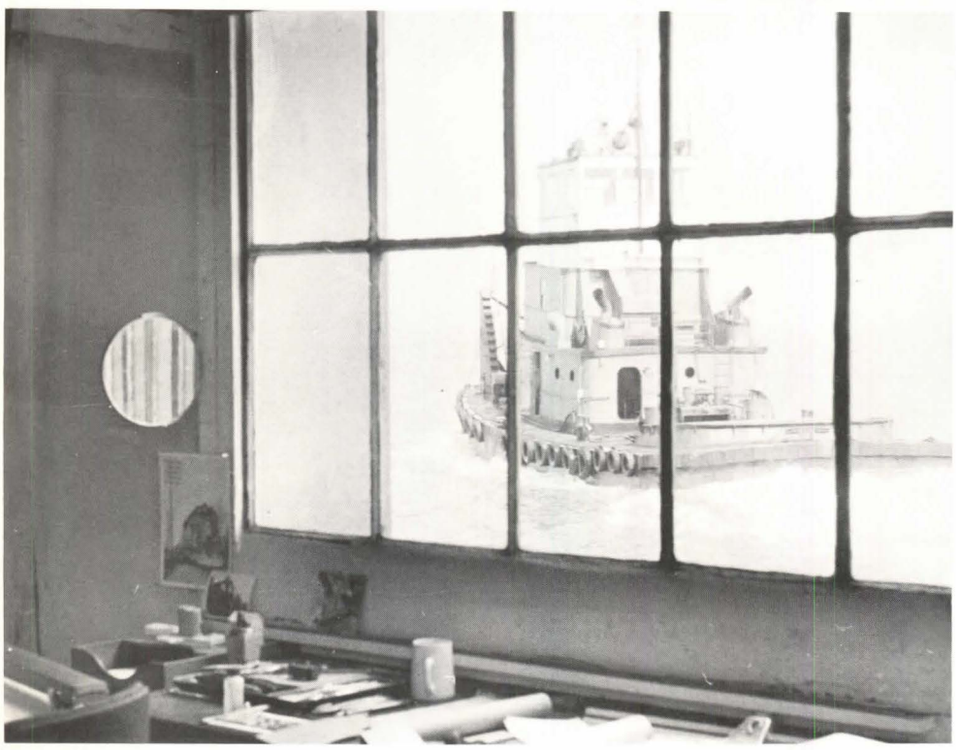
Bergstedt Wahlberg Bergquist Rohkohl kept its offices open to make full use of a skylight and to focus attention on the building's central garden court. Basic elements of the old warehouse—arched entryways and brick walls—were kept. A grid ceiling system was specially designed to permit the existing sprinkling, mechanical and electric systems to be exposed.

Joyce, Copeland, Vaughan & Nordfors acquired ample office space and a bargain rent by moving into an 1892 warehouse in Seattle's historic Pioneer Square district. The old, four-story brick warehouse had been vacant in the 1950s and early 1960s, and in 1965 the firm rented the second floor for $45 a month. By that time, Pioneer Square had become a target for preservationists, and the area was attracting architects, designers and restaurateurs.

A year later, the firm expanded into the third floor of the building, and last year, the office area was enlarged even more by penetrating bricked-up arches at the south end of the building.

Out of all of this came 3,294 square feet of office space, left open, for the most part, with exposed brick walls, heavy wooden beams and columns which were all part of the original building. The firm used stained particle board for flooring and added sprayed accoustical plaster ceilings. Heating ducts were also left exposed.

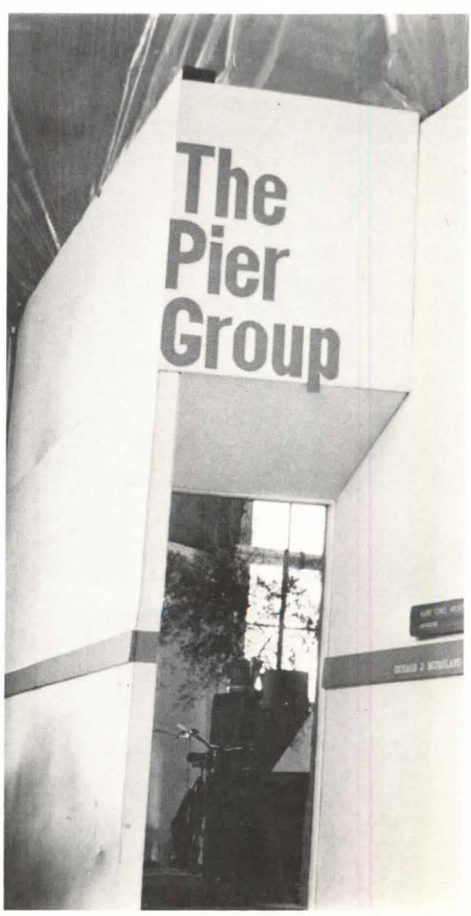
The firm estimates its investment in the conversion at about $20,000. The rent: $3 per square foot a year.



The Pier Group—two San Francisco architects in a loose alliance—moved into offices at the end of the city's Pier 3 four years ago. The future of the 600-foot pier had been threatened by new development, but when the Ferry Port Plaza project became snarled in legal problems a flock of shopkeepers, artists, potters, designers and architects began to move into the buildings.

Harry Turko, AIA, and his Pier Group partner, Richard D. McFarland, rented space on the waterfront which they adapted using available materials—pieces of the pier, racks used for shipping, old tugboat parts—as much as possible. To break up the space they used solid partitions 12 feet high with transparent plexiglas reaching the rest of the way up to the 25-foot-high ceilings.

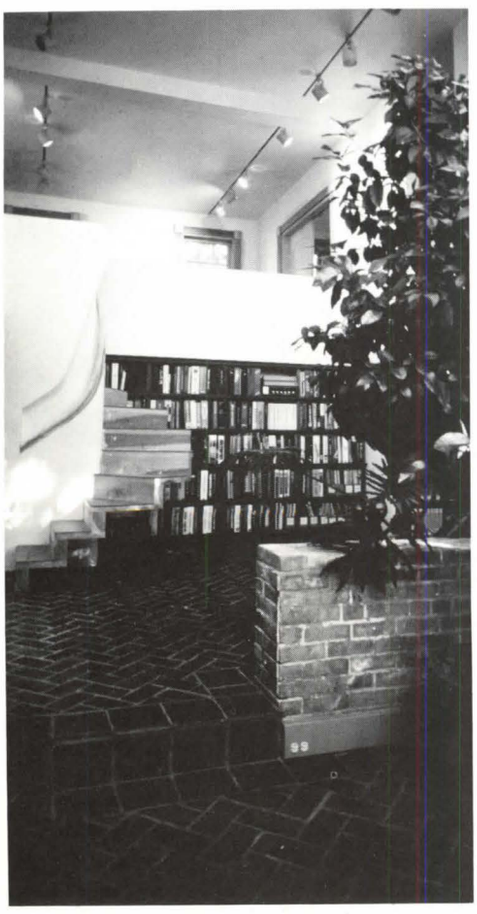
The offices are next to the Red Stack Tug dispatching office, and the view embraces the harbor, with ships arriving and tugs going out to meet them.



Arrowstreet Inc. has adapted three floors of an old Cambridge, Mass., warehouse into working space for 65 architects, designers and planners. The heavy wood timber warehouse, built in the 1860s, was the home of the Reversible Collar Co. of Boston until 1902 when the Boston Book Binding Co. moved in.

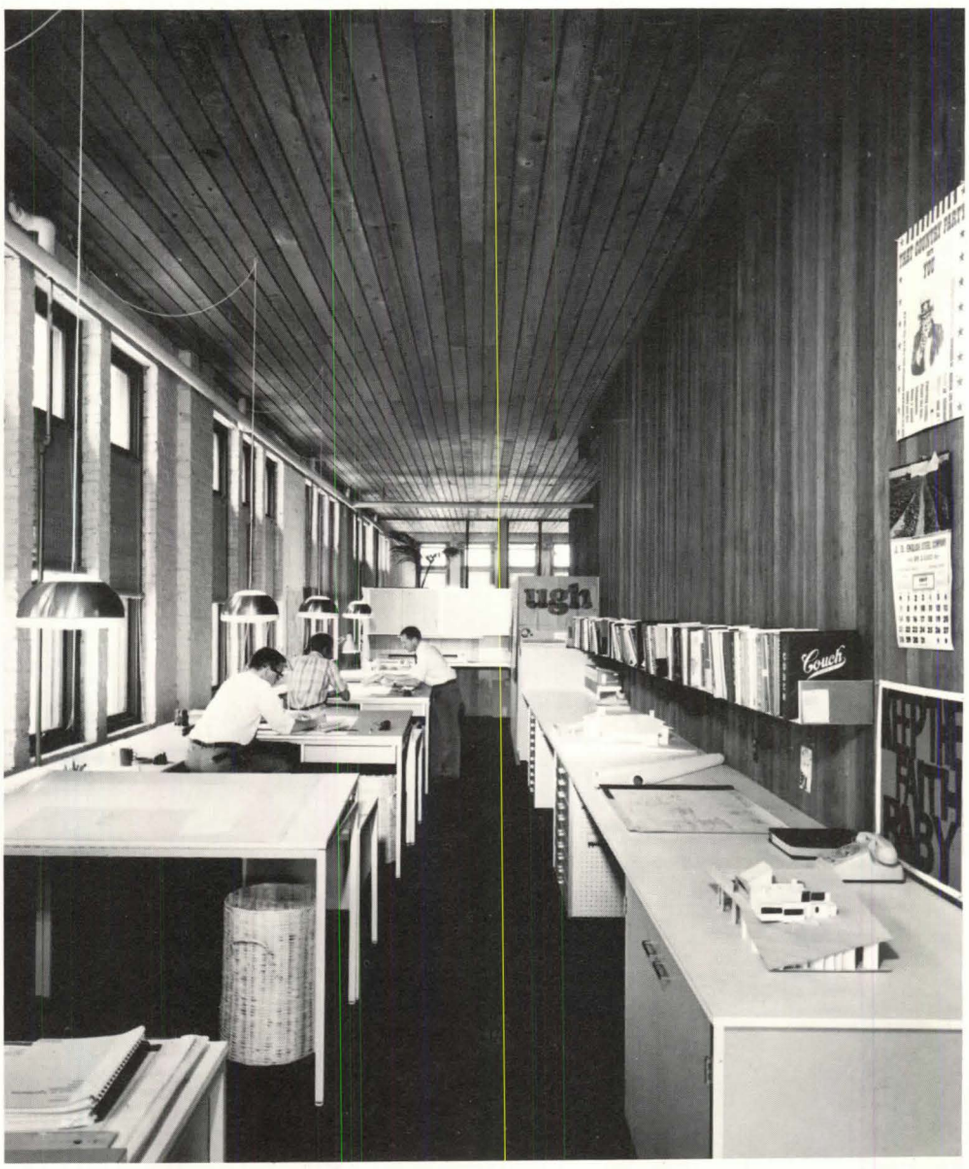
Since 1966 the building has gone through a series of transformations, half of them designed by Arrowstreet. The final form enabled Arrowstreet and an associated firm known as the Environmental Design Group to occupy the second, third and fourth floors of the old warehouse.

The three floors are connected by an open stairway, and balconies and mezzanine work areas were added. Spiral staircases climb to the balconies and the mezzanine, and additional work space was created underneath by hanging bulletin boards. Skylights and floor-to-ceiling windows provide plenty of natural light and a view of the Charles River and the Harvard University campus.



Richard Bergmann, AIA, bought a ramshackle 1836 house in the town center of New Canaan, Conn., and converted it into a home and architectural offices while preserving the original facade and the interior woodwork and fireplaces. When the Greek Revival house went up for sale in 1973, it was considered a firetrap and attracted few potential buyers until Bergmann decided it could be adapted into an office for his firm.

In the renovation, a portion of the second floor was cut away to provide more natural light and a two-story space, and an original fireplace was uncovered when the old walls were gutted. The off-street side of the house was converted into a drafting room which opens onto a courtyard filled with flowering dogwood.



Architect Alan C. Liddle, FAIA, joined with an investment counselor to purchase what he described as a "semi-derelict" building in downtown Tacoma, Wash., and then renovated it with space for both small firms and room for rentals. The long, narrow (only 25 feet wide) building is more than 75 years old and sits across from Tacoma's old City Hall, which is currently being converted into a home for 30 stores and restaurants.

When Liddle and his partner, John Hewitt Jr., bought the building in the early 1960s, the ground floor, which had been used for storage, contained only a small freight elevator to the basement and a bathroom. The second floor had been designed as a hotel and had eight rental rooms and five bathrooms.

Missing ornamentation was replaced on the exterior which was then painted tan. The trim and the front door are bronze and the awnings are black. The interior was renovated so that the investment firm could have a separate side entrance and use the back third of the first floor. A stairway was installed leading to a basement conference room. The front of the first floor was turned into storefront office space, now rented by an advertising agency.

The entire second floor was gutted with the exception of two bathrooms. New walls and partitions, many of them of stained hemlock, were put in and the existing brick walls were painted.

The building was finished in 1965 and was one of the first restoration projects in Tacoma. Now, says Liddle, the idea is picking up, although many of the city's businessmen still prefer to tear down than save. *Beth Dunlop*

The Disquieting Roles That Architecture Plays in the Movies

Herbert P. McLaughlin Jr., AIA

Contemporary architecture is seldom shown in present-day films. When it does appear, it is generally in two modes. First, there are the "sophisticated" films, in which modern structures are faithfully and knowledgeably used to set scenes of hostility and disorientation. And, second, there are the more popular films, in which a stage-set style of extraordinary contemporary kitsch emerges.

The so-called sophisticated films cover a wide topic range, from social commentary to comedy, and it is in them that contemporary architecture suffers most blatantly, with its monuments shown in their most repressive aspects. "Prestige" buildings so admired by architects are viewed in films with a particularly jaundiced eye. This careful and essentially hostile presentation should give architects considerable pause.

Perhaps the most visually acute of such films is "Fahrenheit 451." The concrete buildings of Sheffield, the British new community, set a background for the brutality and impersonality of a totalitarian world. The symbolism is explicit. The streetscape is dull and barren. Fire trucks of book burners rumble out of a fire station whose drab concrete speaks more eloquently of repression to the average person than did the Hitlerian classic monuments that we architects smugly cite as examples of authoritarianism.

Then there's "Clockwork Orange," which deals with modern design in much the same terms. Strewn litter and depressing council flats represent dehumanizing squalor. But equally frightening are the extravagant modern icy nightmare images: the fiendish assembly of droogs in their plastic-porno milk bar; the "singing-in-the-rain" rape of Mrs. Alexander in her 20th century Grand Style home; even McDowell's polymer-Pop bedroom and its silver eggbox walls. Aberration of a sort yet unequalled in film is smashed home through the use of contemporary design that is intended to set a stage of cold, hard amorality.

Other "serious" films and their directors reflect the same antagonistic approach. Fellini and Antonioni, two directors who use contemporary architecture most often, have a universally surrealistic view. For example, Antonioni's "Red Desert" is "the" film for showing alienation through architecture and the industrial landscape. Very modern, very stark.

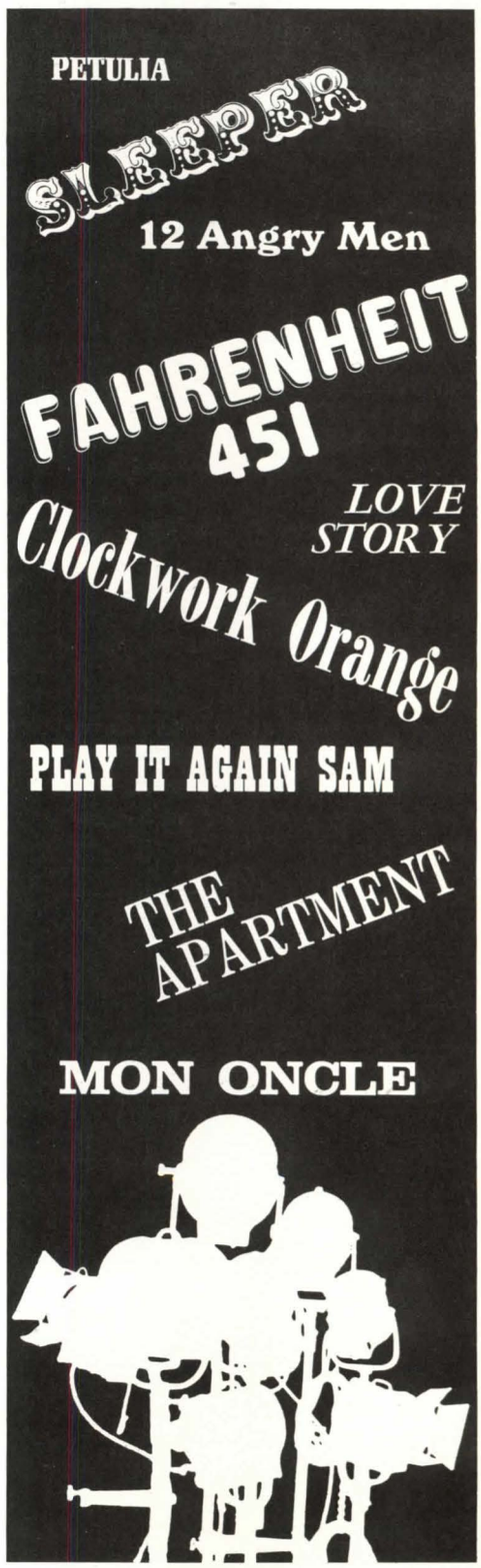
One could perhaps argue that films such as "Fahrenheit 451" and "Clockwork Orange" are all so extreme as to be unreal both in their view of society and use of contemporary architecture, which portrays selectively only the starkest and most alienated examples of life and art. But the environments are honestly and completely shown. The architecture is varied in style and important to the message of despair of these films.

Perhaps films about more ordinary lives, where the messages of the plot and the characters are not so ominous, would use contemporary architecture in a different and more sympathetic manner. Not so. The architecture itself may not be so extreme or distinguished, but the architectural themes are constant.

For example, in "That Man from Rio," the contemporary environment—although avoidable in the city of Rio—is continuously intrusive, as a picture postcard, kaleidoscopic background. The principal character finally scurries frantically from the plasticity of Rio to the scalelessness of Brasilia, a sere moonscape filled with harsh, hostile, isolated monuments, where unreality of both environment and plot reaches a peak.

Traditional Paris in this film is presented as a warm island of sanity from which the excursion into lunacy proceeds. Also in Paris, Jacques Tati's "Mon Oncle" is played against the visual fascination of Tati's flat—a hybrid rash of colors and textures contrasted with the white-on-white suburban residence of his nephew that is deep-frozen in disinfectant. A glorious 2D world of mechanical fountains and futuristic eye-shaped windows threaten sanity and reality.

On a more mundane level, "Petulia" makes clear a distaste for the more inhuman aspects of contemporary architecture. The clinic, hotel garage and check-in scenes are effective in setting moods of disorientation and of the isolation and cruelty of modern life. The film's director, Richard Lester, is particularly sensitive to architecture. He finds a peculiar but typi-



cal ambivalence in the architecture of actor George Scott's apartment. Although ostensibly "interesting," warm and woody, the apartment comes off as a cold and temporary place—as was intended. The list can become dishearteningly long.

When Mike Nichols, another visually aware director, wants to smash home his final message of hostility and isolation in "Carnal Knowledge," he does it in the coolness of the actor's classically contemporary apartment, replete with Eames chair, Mies coffee table, etc.

Comedies are no exception. Woody Allen films are a running commentary on modern design. The contrast between the "kitschy" warmth of his apartment and the sterile good taste of his cuckold friend in "Play It Again, Sam" foreshadows the slapstick modern of "Sleeper."

Billy Wilder, perhaps the most architecturally conscious director of them all, is typical in "The Apartment," where he contrasts the warmth of actor Jack Lemmon's brownstone with the anonymity and sterility of an impeccably presented modern office scene.

Wilder himself presents an interesting insight into film styles. A man of wide-ranging and selective taste, he has decorated his own office at MGM studios in a mixture of Bauhaus and classic traditional furniture. He knows modern design and designers well. Eames has designed a chair specifically for him. In his own personal life, he uses contemporary design selectively to create an attractive and electric environment. In his films, he emphasizes modern designs to create moods of sterility. Wilder's duality serves to accentuate the overpowering popular image of contemporary design. Its symbolism is so strong that even sparing use of it in films serves to set in an alien mood.

Thankfully, there are a few exceptions to the rule of contempt for distinguished contemporary design, and they usually occur in movies about young pseudo-intellectuals. When actors O'Neil and McGraw make it moderately big in Manhattan in "Love Story," they find themselves in an apartment straight out of Design Research. In the same style, Dustin Hoffman's apartment in "John and Mary" was perhaps the only attractive aspect of that modern-day version of Dagwood and Blondie. But even in these examples, the mood is somehow ambivalent. Is the New York apartment of "Love Story" intended to presage a painless, sterile death? Is Hoffman's apartment really seen as attractive, or as empty as the hero and heroine?

Inevitably, it seems that contemporary design has emerged as a shorthand for estrangement. Perhaps to the point that even if the directors wished to use it sympathetically, it would be impossible: The audience, accustomed to one set of associations, would become confused.

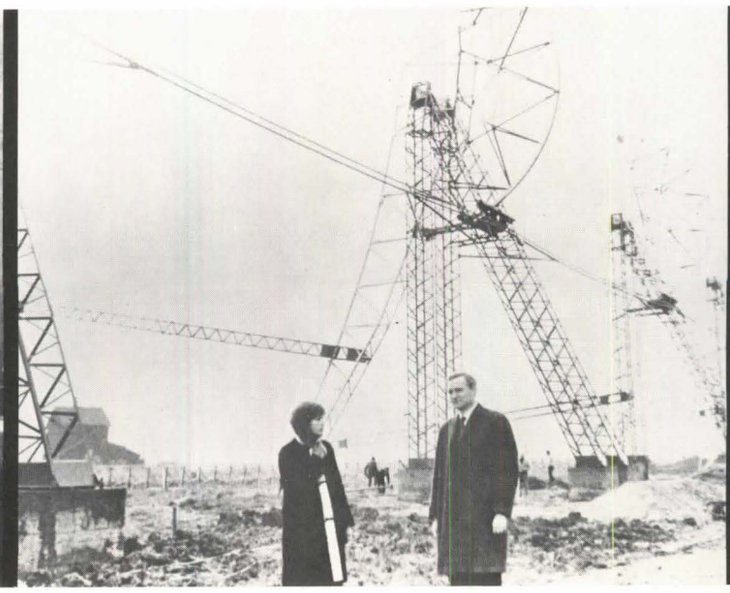
All this is a fairly recent development. Film and contemporary design have not always been so unsympathetic. Perhaps it was the out-of-work architects languishing in the studios in the '30s, but "The Gay Divorcee" romped through a set of sympathetic, sophisticated and clearly modern environments, similar to most of the boudoirs and boîtes through which the vintage Astaire glided. Contemporary architecture was glamorous, sleek and spatial—and very much in the films.

It was a derivative, stage-set style, but carefully and seriously designed, and obviously in tune with the spirit and needs of the time. Even now, Hollywood and the public seem to see some romance in architecture, but it has to do with the image of architects and not the reality of their work. Son of Fountainhead rides again.

Movies are still made with architect heroes, among them "Strangers When We Meet," "12 Angry Men" and "Two for the Road." The use of architect heroes is peculiar, however. They don't seem to have much to do with buildings.

When Albert Finney played an ideal-

Left to right, below, Lemmon at home, "The Apartment"; landscape, "Red Desert"; Allen in borrowed apartment, "Play It Again, Sam"; Lemmon at work, "The Apartment"; principals, "John and Mary."



ized architect (tousled, frantic, basically confused) in "Two for the Road," he spent a great deal of time bounding about cars and Aubrey Hepburn—but not the buildings that he presumably created. It happened at the movies, and Finney was evidently a serious architect. Since serious architecture is unsympathetic, it simply wasn't shown.

In "12 Angry Men," Henry Fonda, the architect hero, was kept locked in a dingy jury room for most of the time. In "Strangers When We Meet," the action focuses on a house under construction—unfinished and anonymous.

(Even so, architects are doing better than other contemporary cultural types. Painters and sculptors have been able to achieve such massive and obscure irrelevance that they are usually portrayed as lunatics. "Morgan" and Gully Jimson in "The Horse's Mouth" pretty well typify the modern movies' view of artists—mad and sad.)

The use of contemporary design in "popular" movies for the mass escapist audience is equally disheartening. Here, the movie maker is frequently obliged to show modern man and his environs sympathetically. So, since serious good design is too austere, a new style is concocted—a sort of confectioner's renaissance naughahyde. The residential variant, usually a swinger's apartment, is a pseudo-Playboy-fake stone, plywood, glass and tufted rug horrow show.

"The President's Analyst" is typical. The hero candles skulls from the apogee of Hollywood life—the bachelor pad—suede-smothered, cheaply paneled, multilevel, orange-carpeted, which presumably leaves bunnies weak-kneed in wonder. This particular type of stage settery topped out with Frank Sinatra (who else?) in "Tender Trap."

The family equivalents of these bachelor atrocities, such as "Divorce American Style," present similarly astounding parodies of contemporary design. Even at this level, the movies still have *some* taste. The viewer is spared the sight of those real subdivisions that serve as models for the films' marmalade monuments. Their epicenter is Truesdales Estates, perhaps the most tawdrily pretentious scatter of architecture ever assembled. Here many of the film colony live—where the pre-presidential Richard Nixon bought land for the dream home of his Los Angeles exile.

Further taste is demonstrated by the relative absence in films of some of Los Angeles' recent neo-Mussolini civic style. Not that it's much different from cultural centers in other American cities, which are civic visual jello cast from the same old mold—and about as ubiquitous as McDonalds.

One is then tempted to seek refuge in the notion that the contemporary film's portrayal of architecture is truly irrelevant. We may take hope and believe that in sophisticated films, architecture is the victim of unjust associations and it is the resulting shorthand that makes its sympathetic use impossible. And in middle-brow films, perverted to a Sears & Roebuck version, once again, there is the need of the set designer to establish moods very rapidly through commonly known and understood symbols.

Somehow, we believe that they really do love us and—just like the movies—it will turn out all right in the end. Doubtful. The message is that they really don't seem to like us. They don't like our cool, our cubes, our plazas, our abstract sculpture. They yearn for a softer, more comfortable and yet more spatial style. The message is simple and worth heeding. The set designers can turn out well-crafted and respectable environments. Simple attention to their palettes of materials, their consistent use of multilevel spaces, ample detailing and conservative proportioning systems is rewarding.

What more do we do? A first step to architecture/film compatibility might well be to bring King Kong back to do his thing with a block of Uris Brothers' buildings. That's probably not a bad way to begin—and to end. □

Architecture in Film, Cont: Reviews of Two Recent Disasters

Earthquake.
Universal Studios.
Filmed in Technicolor and Panovision.
Produced and directed by Mark Robson.
Starring Charlton Heston, Ava Gardner, George Kennedy, Lorne Greene, Genevieve Bujold, Richard Rountree.
Written by George Fox, Mario Puzo.

Of all the recent spate of spectacular disaster flicks, "Earthquake" is of especially significant interest to architects. For "Earthquake" demonstrates the concern of the film-makers, and of the public, about where, how and why we build.

I wanted to see it for this reason, and also because it offers an added attraction. For $3.50 not only do you get tricky photography and lots of blood and gore but you also get SENSURROUND, which puts "Earthquake" into a horror movie category of its own. While Los Angeles is being shaken to the ground in wide screen technicolor, you get shaken out of your seat by low frequency sound boomed out of giant speakers. After about 10 minutes of this, my major concern was not the city of Los Angeles but the structural integrity of the Uptown Theater.

The film begins with the usual series of subplots: a faked suicide attempt, a minor tremor, a chase scene, barroom brawl, L.A. Flash, and several other seemingly unrelated events including a young graduate assistant who successfully predicts the tremors and giant quake almost to the minute. The subplots seem to be calculated to both confuse and add suspense as to when you will experience SENSURROUND. The characters are either righteous and heroic or disgusting.

Most films depict the environment in a vocabulary described as inviting or forbidding, romantic or sexy, awesome or surrealistic, etc. Probably the most important aspect of "Earthquake" is not SENSURROUND or the absence of sex, but that the director successfully depicts how potentially lethal the built environment really is. As a major earthquake (at least 7 points on the Richter Scale) begins to reduce Los Angeles to a pile of rubble, you become frightfully aware that seemingly innocent buildings and parts of buildings can be harbingers of death and destruction. People are rocked out of

their desks and their windows to plummet 30 stories, huge signs, cornices, giant panes of glass, nifty concrete details and even entire curtain walls once thought to be perfectly static and harmless are suddenly shocked into motion. People are flattened, speared and crushed by the appendages and artifacts. Streets and avenues of communication are filled with broken buildings and their parts. The freeway system becomes a goulash of automobiles, broken concrete and twisted steel. It is probably the most complete and thorough example of carnage wrought since God visited the twin cities of Sodom and Gomorrah. As the quake subsides, a panoramic view of the city reveals hardly a brick, curtain wall or massage parlor left unturned.

"Earthquake" also questions seriously and emphatically the codes and standards by which we build. The central figure of the film is none other than Charlton Heston, who is cast as "the best engineer in the world." Just before the giant quake strikes, Heston, chief engineer for a large

construction company, is badgering the owner of a building soon to be erected to upgrade the specifications of that building even though they do meet code requirements. Heston feels the code to be inadequate for a structure so large in an earthquake zone. He demonstrates his point to the magnanimous client through use of a machine that simulates the actual ground action of an earthquake past. After the giant quake and between aftershocks he says, "This is the first time I have been ashamed of my profession. We never should have built those monstrosities . . . 40 stories . . . not in this place. . . ."

"Earthquake," though probably not an Oscar winner, will be remembered beyond its gimmicks if for no other reason than that it dramatizes for the average American the susceptibility of our cities to disaster and the vulnerability of urban support systems, notably communications and transportation, to the consequences of disaster. *Patrick B. Davis Jr., past president, Association of Student Chapters/AIA*

The Towering Inferno.
Directed by John Guillerman.
Produced by Irwin Allen.
Based on a number of bad novels.
Starring McQueen, Newman, Holden, Dunaway, Astaire, Blakely, Chamberlain, Jones, Simpson, Vaughn, Wagner and numerous other actors low on work.
It's a good movie. It's exciting entertainment. It doesn't make you wiser, like maybe "Last Tango," or uplift you like "400 Blows." It does not examine the human condition. It doesn't exactly have epic *sweep*. It's not big on character development or symbolism. But it's *thrilling*. The special effects are convincing. There are some technical flaws, like pretending you can get a chopper upside the tower, as if you could retract the blades for a little while. And some technical terms are left hazy. My companion thought a duct damper was something you used to sprinkle them with before pressing.

The architect fared well, if that's what is on your mind. The electrical sub changed the specs, which were above code, down to barely legal. The only charge (I hope you're getting all these puns) leveled at him was that although the building was designed (but not built) to *prevent* fires, it was not adequately designed for fighting them. Other than that, Newman portrays an architect who is lucky at love, very well paid, good looking, chock full of scruples and with a slightly bohemian outdoorsy predeliction, which was inadequately exposited. Because of certain acts of heroism, it was my impression that Newman came off about as well as the fire chief, played by McQueen, even though the theater I was at was handing out plastic fire hats, not T-squares. There's a little mawkish dialogue at the end about designing fire-safe buildings, but it's so unsubstantial and dumb that I don't think the audience was getting into it much. Only two issues emerged, really—and they were considerably confused with each other. One was should we make buildings like this at all—and the other was how do we make them safe.

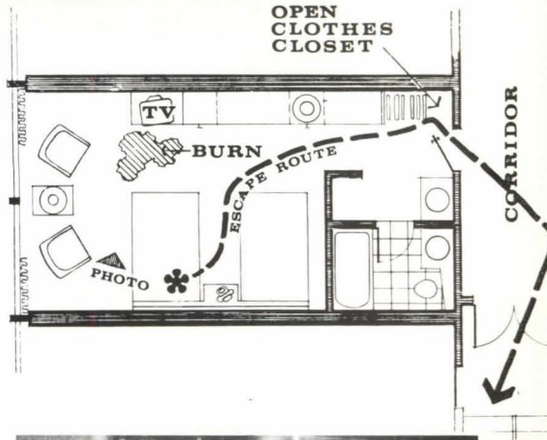
For myself, I'm proud to say that my total tenure on a tall building design team was three months, during which time I concentrated on the plaza and concourse

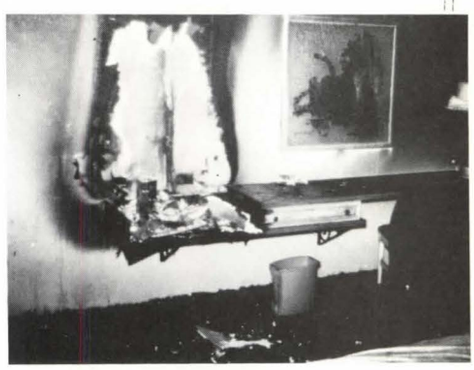
levels—the only places that really held any interest or significance for me as a designer. I mean, I really think tall buildings are a bad *idea*—and even brilliant solutions to their many problems have to be at least a little dumb because of that. They are blind products of greed, corporate ego, turf and medieval real estate practices. Fire (which is only *one* problem) is nearly impossible to contain in a vertical format, and the person who solves the problem will deserve the same amount of credit as anyone who perfects a fundamentally *bad idea*—very little. And because of the overpowering impact of the height (as opposed to how the spaces feel) and the preponderance of essentially nonarchitectural problems, tall building design offers the least satisfaction of any project imaginable. Some people like to do them because they're naturally inspiring—but I would maintain that if you're incapable of designing an inspiring one-story building, then you ought to sell shoes instead.

But tall buildings—and their incredible cost in money, resources and existential "groundlessness"—appear to be with us for awhile as a testament to original sin or whatever else you think is bad and pervasive. The least we could do is insist (by law, since architects are minor actors in this drama) that all tall buildings connect with at least one other at regular intervals of, say, ten floors. Fire is easier to contain in a horizontal direction as playing with a match will reveal. It also means that no building can be more than nine stories above the next—which may slow down the world's dumbest contest some. Of course, it also means that a bronze window with black trim may have to tube over to an aluminum one with green glazing, and it might be hard to detail. *Dave Clarke, executive director, Association of Collegiate Schools of Architecture*

Learning a Fire Protection Lesson The Hard Way

Jasper S. Hawkins, AIA





An early morning fire in a TV set caused minor fire damage and considerable smoke damage to a second-floor room and hallway [of a hotel in Orlando, Fla.] . . . on January 9, 1974. The occupant of the room narrowly escaped death. . . .

The preceding quote is taken from the opening paragraph of the report of the fire record department of the National Fire Protection Association.

I was the occupant of that hotel room. As most travelers do, I use the TV set as a major source of news because newspapers and radio are not always readily available. So it was that I turned on the TV set upon retiring that evening. As I had done so many times before, I fell asleep with the TV still on.

At about 4:10 a.m., I awoke. I will never know what prompted me to awaken, but immediately I had the most horrible feeling that I've ever experienced—lack of air. I could not get my breath, and the smell of burning plastic was overwhelming.

Somehow, I immediately knew the danger, and as I raised my head off the pillow, I could see a flame less than one inch in height framing the TV set. If I had not recognized the shape of that flame, I would not have been able to orient myself as to the direction of the exit door. The room was pitch black and totally filled with plastic smoke. There was no sensation of heat.

Immediately, I rolled onto the floor between the two beds and attempted to crawl on my hands and knees. Even at that low level, approximately 18 inches off the floor, there was not enough oxygen to breathe; so I dropped flat on my stomach, and with my nose right in the carpet began to belly crawl toward the door.

Finding the wall in which the door was located was difficult. It seemed as though it took hours. Upon reaching the wall, I groped along it to find the knob. I couldn't find it. With little or no ability to breathe except with my face down in the carpet, I began to panic.

Lying flat on my stomach minimized my length of reach, but somehow I found the doorknob. I have never used the chain bolt, and this experience has taught me a good reason not to do so in the future. If I had latched the door with the chain-type unit, I never would have been able to leave that room alive.

After finding the knob, I proceeded to turn it, but from a position flat on my stomach, I could not get any leverage. The door would not open. I gulped as much air as I could right out of the carpet, sat up and pulled on the door. It opened a crack, and I jammed my hand into the opening and pulled. I cracked the door open enough to wedge my body through the opening and rolled out into the corridor.

The corridor was fully lighted. The air was so beautiful that it is impossible to describe my reactions.

As I lay on the floor, the smoke poured out of my room, thick and black. Knowing full well that I should close the door, but having rolled to a point some eight feet away from the door and still gasping I was mentally unable to re-enter the smoke-filled room that had almost killed me.

I ran to the front desk of the hotel and yelled at the desk clerk to call the fire department. The time was 4:20 a.m. The fire department arrived within minutes, and the fire was quickly extinguished.

As a result of this personal experience, several things come to mind that we should all consider carefully:

1) If there had not been an open clothes closet adjacent to the knob side of the door, I could not have opened the door inward and rolled out into the hall, for I would not have had any place to position my body out of the way of the door swing.

2) If there had been a door-closer on the door that pulled with additional pressure in the direction of the corridor, I would not have had the strength to crack the door open.

3) If the door had opened outward, it would have required merely turning the knob and leaning my body weight against the door to open it. Additional space immediately adjacent to the door would not have been required. A door-closer in this instance would not have been detrimental to escape. By providing a recess at each room entry on the corridor side, the out-swinging doors would not obstruct the main exitway of the corridor.

4) The darkness of a hotel room, coupled with an individual's lack of familiarity with his surroundings, should be considered relative to methods of providing low voltage illumination within 18 inches of the floor, or reflective or glowing-type trim around the exit door. Anything above 18 inches is useless in a black smoke-filled room.

5) The amount of heat generated was so little that it caused no sensation of heat in the room. Based on my experience, I feel warranted to say that fire sprinklers or heat detectors would not have operated quickly enough to change the conditions of the room or the hazard to life.

6) The ultimate solution is the installation of a combustion detector *within the room* that is connected with the front desk of the hotel. If my room had had such a device, I would have been awakened far earlier. Indeed, the desk clerk received a signal from my room at 4:05 a.m. which indicated that the TV had been unplugged. What actually happened was that the fire shorted out the electrical connection at the wall. At that point, there was enough combustion to alert a detector. A detector would have reduced the time in which I inhaled toxic smoke and gases by a full five minutes.

It is time that we require combustion detectors in hotel occupancies, especially since the occupants of hotel rooms are completely unfamiliar with their surroundings. □

Mr. Hawkins, chairman of the AIA codes and standards committee, is a principal in the Los Angeles firm of Hawkins & Lindsey. This article has been adapted from one published in the June/July 1974 issue of *Southern Building* and is used with the magazine's permission.

Laxity Charged in Fire Standards for Nursing Homes

A Congressional committee has charged that fire continues to kill elderly, often helpless, residents of nursing homes because of inadequate safety standards and lax enforcement of the standards that do exist.

The House committee on government operations recommended that the federal government, which pays about a third of the residents' bills through medicare and medicaid, apply tougher standards and see to their enforcement. Specifically, the committee recommended that sprinkler systems be made mandatory in all nursing homes.

About a million elderly live in nursing homes. Federal programs account for about a third of the homes' revenues, or about $1.5 million annually. The Department of Health, Education and Welfare sets the standards for certification of nursing homes with medicare and medicaid patients and pays for the training of state inspectors. But the House committee has serious doubts about the efficacy of both the standards and the state inspections.

Nursing homes have been required to meet the standards of the national Life Safety Code since 1970. Under this code, all homes must have sprinkler systems except those which are fire resistive—meaning a building of any height constructed of materials which will withstand fire for two hours or more—or homes which are only one story and built of material that can withstand the spread of fire for a minimum of one hour.

HEW, however, grants a series of waivers. A home claiming hardship can be exempted from installing a complete sprinkler system if it installs sprinklers in hazardous areas and smoke detectors throughout, has one-hour fire resistive materials separating rooms and corridors and has certification from the state fire marshall that the local fire department can respond quickly. In other cases, HEW allows nursing homes to continue operaating without meeting the required safety standards if a plan of correction has been filed.

In December 1973, fire broke out in the Caley Nursing Home in a suburb near Philadelphia. Eleven people were killed. In a subsequent investigation, the House committee staff discovered that this nursing home had been improperly classified as fire resistive. In fact, the report said, the nursing home was not fire resistive and should have had a sprinkler system.

As a result of this discovery, the committee requested the General Accounting Office to conduct a survey in an effort to determine the extent of misclassification of nursing homes and to see if the standards used for exemption from having a sprinkler system were being properly applied.

The GAO surveyed nursing homes in six states and found that 28 percent of them had been misclassified and did not meet the standards which would allow them to do without sprinklers. The surveyors also found that 79 percent of the homes were deficient in one or more of the 13 areas covered by the Life Safety Code. And 89 percent of these defects had not been reported in state inspections.

The GAO then looked at nursing homes in five other states which had been exempted from having sprinklers by state inspectors. The survey showed that 85 percent of the homes which had been granted waivers had not met all four of the standards for exemption. This study disclosed that many of the waivers had been granted because the homes had filed plans of correction, were certified conditionally and continued operating past promised completion dates for the corrective work.

That last finding inspired a third GAO survey—this time of nursing homes in the state of Washington. The survey showed that 60 percent of the homes which had submitted plans of correction had not met promised completion dates.

The surveys, said the committee report, "all point to significant weaknesses in enforcement of the Life Safety Code. The inadequacies in inspection and in administering the system of plans of correction raise questions about relying on state inspectors to enforce federal standards." For example, in early 1974, HEW regional inspectors checked 72 nursing homes certified by the state. The HEW inspectors found deficiencies not included in state reports in 61 of the 72 homes.

Although HEW set rigorous guidelines for the qualifications of state inspectors, the guidelines are not mandatory. And in at least 17 states inspections are carried out by health departments rather than by architects or engineers, as prescribed in the guidelines. "Obviously," said the report, "guidelines that are not imposed as standards, and thus left discretionary, are of dubious value."

Although the committee recommended in 1972 that all nursing homes, regardless of construction, be equipped with sprinkler systems, HEW disagreed with that recommendation. Since then, two states—California and Ohio—have mandated that all nursing homes have sprinklers. The committee report noted that there are no reported instances of multi-death fires in nursing homes with sprinkler systems, adding that sprinklers are the "single fire safety feature deemed most effective by the National Fire Protection Association." Said the report: "Unlike other fire safety requirements, sprinklers extinguish fires."

The committee report urges HEW to reconsider requiring sprinklers in all nursing homes. "The tragic multiple-death fires that have occurred this year, as in other years, happened in homes that were not equipped with sprinklers," said the report. "Aged people are more vulnerable to death by fire and their infirmities increase this potential. Special fire safety precautions are necessary in any structure designed for the aging." *B.D.*

Practice Profile: Making a Change in Leadership Work

For an architectural firm, the transition from one generation of leadership to another can be traumatic if not fatal. This is especially true of firms whose projects are heavily concentrated geographically and by building type, and whose reputation and approach have been strongly shaped by the personalities of the first-generation principals.

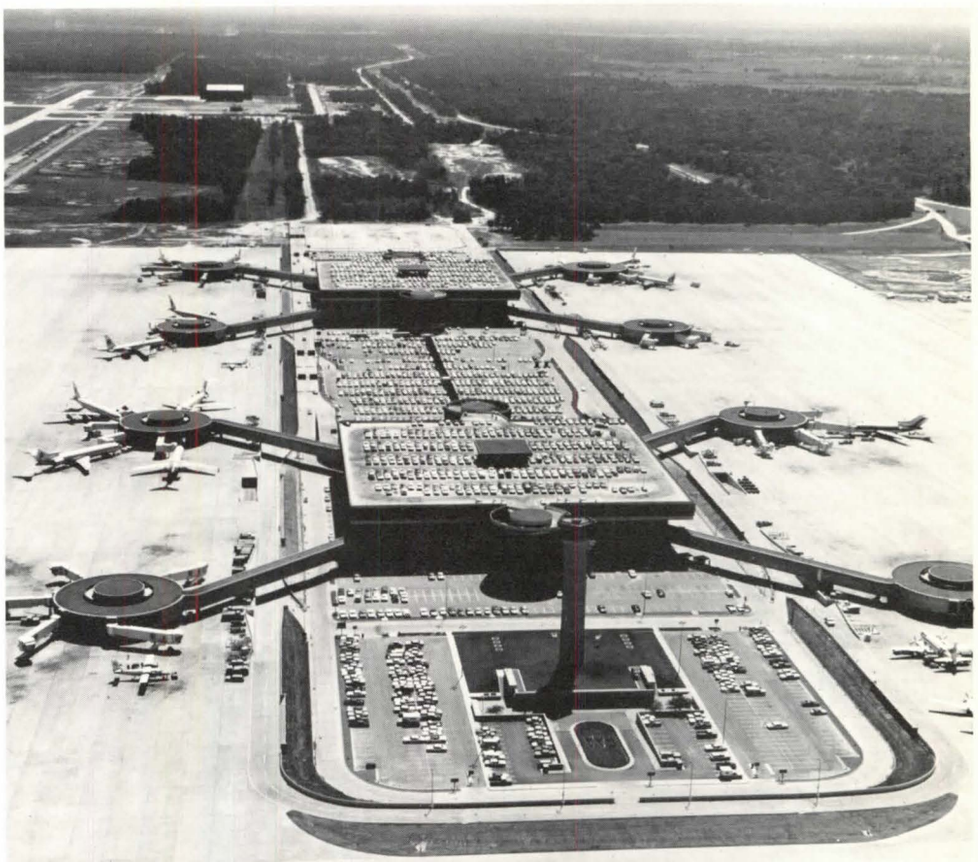
Golemon & Rolfe, a 60-man Houston firm founded in 1946, faced such a transition in the late 1960s. Walter T. Rolfe died in 1967 and the other founding partner, Albert S. Golemon, FAIA, began contemplating a less active role in the firm. At the same time, a beginning recession was cutting into the firm's workload, especially in the medical and educational fields in which it had specialized.

Golemon was acutely aware of the pitfalls of the generational transition. "We saw one of the largest and most successful practices in Houston dissolved upon the death of the owner, who had no partners," he says. "The same thing happened a few years later to another large firm.

"Their key men scattered to all parts of the country. It seemed a crime that such experienced firms should dissipate into thin air, and not continue to serve the area while providing a future for the capable men on whom the principals had depended for years."

With these things in mind, the founding partners had started early to lay the groundwork to perpetuate the practice by making talented young men junior partners and giving them more responsibility and participation in the firm's profits. And this second-generation leadership has brought the firm through the transition with apparent success.

"We have put more than a decade of work into this and are still working on it," says Harry A. Golemon, FAIA, who is Albert Golemon's nephew and has been in the firm since 1952. "Going into a second generation takes a lot of soul searching, anguish and hard decisions. It cannot be done without a two-fold goal: that the firm must continue to grow, and that all agreements must be beneficial to the founders as well as to the younger people in the firm. Once these goals are understood, the change can take place."



Golemon & Rolfe buildings: above, terminals A and B, Houston Intercontinental Airport, in association with George Pierce and A. B. Pierce; page 48, dining hall, FBI Academy, Quantico, Va., page 49, diagnostic clinic, Houston.

When it did take place, the new leaders focused on two key problems: the need to reorganize so that the new generation could effectively assume leadership of the firm and the parallel need to establish a new identity, since the image of the firm as it had been with the two founders at the helm would inevitably disappear.

The identity they set about building upon was of an efficient and businesslike organization dedicated to delivering buildings on time and within budget and to providing a complete and satisfactory service to the client throughout the building process, and thus produce a product that would fully meet the client's needs.

Within the new organization, Bill Frye, Albert Golemon, Harry A. Golemon and Melvin Hildebrandt are general partners. Partners are Bob Brooks, Dave Godbey, Lynn Hanson, George Jumonville, Charles Kerner, Jay Mueschke, Charles Sullivan and Ralph Zander, all AIA.

These are the 12 owners of the firm. "Absentee ownership does not encourage people to work at the same rate of speed," says Hildebrandt, who is the firm's general manager. Albert Golemon saw this, and under an ongoing purchase agreement his interest in the firm is being bought back. In the future, ownership will be further diversified among key personnel.

The firm's mode of operation can be characterized by the term flexibility. In the first stages of reorganization, roughly five years ago, the firm eliminated most fixed departments. Now when a project comes in a team is created from the staff architects and specialists.

The key man in this system is the proj-

ect manager, who is fully responsible to the client and to the firm for the project. This responsibility includes design quality, critical path scheduling, on-time delivery of the documents, meeting the budget, and seeing that the firm makes a profit on the job.

Hildebrandt describes the project manager's role as being "an architect within a larger firm." To the client, he is *the* architect from beginning to end, and yet he is backed by all of the firm's resources of talent and knowledge.

The other key men on the project team are the project designer and project architect. The project designer's role is to create the concept, space and form for each project. The project architect is construction systems specialist whose role it is to design the systems, to manage the development of the construction documents and to assume the role of construction administrator on the project.

The client is "an integral part of the design team," says George Jumonville, project manager. "The critical path schedule is submitted to him for approval, and he is in on all major decisions—especially financial.

"We don't just report to the client, we keep him involved in decisions," Jumonville says. "It's his money. We advise him how to spend it. If the program, as it evolves, is going to take the project over budget, we give the client alternative recommendations and he chooses among them. After all, no investment counselor tells you that there's only one way to invest your funds."

The partners are proud of the firm's record in budget-minding, claiming accuracy of within 5 to 8 percent in predesign cost estimates. This skill in projection plus regular warnings to clients if costs begin to escalate prevents problems at the bidding stage.

"Recently," Bill Frye, director of medical facilities design, says, "the firm bid a $20-million medical facility that had been in the works two years and the base bid was 10 percent under the estimate of the client's construction manager."

The firm's favorite terms for its management approach are "management-by-objective" and "management-by-involvement." Just as teams are organized for each project, task groups are formed to attack major problems within the firm. Each task group consists of a cross section of personnel with one of the partners as chairman. Final shots are necessarily called by the managing partners, but those shots are based on the recommendations of people from every level in the firm.

Gordie White, the firm's business manager, believes such involvement increases motivation on the part of staff members, as does the firm's "participative salary system." This system operates through a semiannual evaluation procedure in which everyone, from partners and project managers down, is evaluated for his performance.

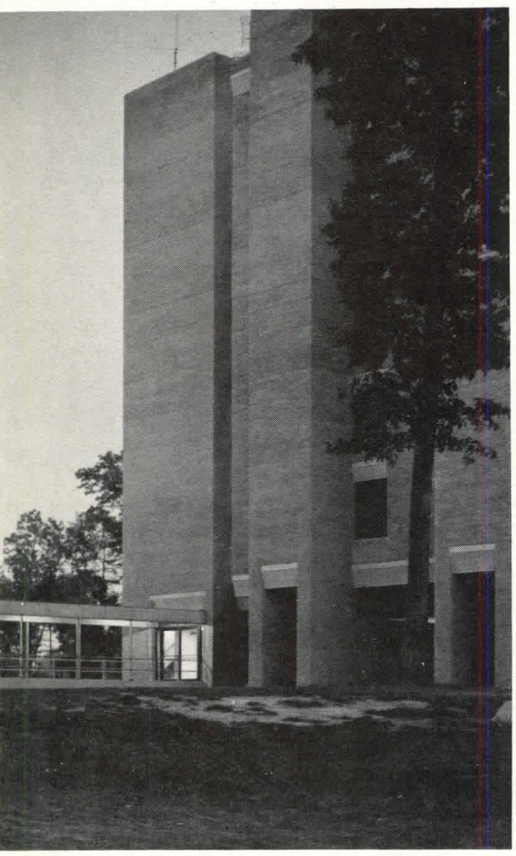
Such a procedure is especially important in a nondepartmentally structured firm. It also provides an early warning on deficient performance, so that it does not become habitual. If someone doesn't do his job, he knows it right away.

The procedure was set up by a task group headed by Frye and is administered by White. Each staff member and his manager evaluate his performance on a prepared form. His and the manager's scores are combined and plotted on a curve, which is used to help determine his salary and share of profits.

Personnel policies, project delivery and cost control were the initial concerns addressed in the firm's reorganization. More recently, although there are about 50 projects on the boards, attention has been turned to devising a more organized approach to marketing with the help of an outside consultant. "We wanted to know what clients were looking for," says Dave Godbey, who with Bob Brooks and Harry Golemon are responsible for the marketing program. Consequently, a survey of some 100 businesses and institutions was undertaken in late 1973. The survey sought to determine what these clients and potential clients thought of the firm and the architectural profession in general.

The image of the firm that emerged was

A marketing survey showed that clients put prime value on basic architectural services.



one of solid performance but conservatism in design. The firm's response to the latter finding is the infusion of new blood into the design staff and the development of new incentives to design innovation.

As to services, the survey findings surprised virtually all of the firm's partners. The respondents wanted architects to be architectural craftsmen above all else. In general, they were not looking to architectural firms for such things as design/build or construction management.

As a result of the survey, the firm has placed its marketing emphasis squarely on its performance of root services and has modified its previous plans to go heavily into design/build. Its projects still many times involve a construction manager, but usually he is brought in from outside, frequently from general contractor ranks.

However, the firm remains as interested as before in development building (Golemon was a member of AIA's task force on the architect in the development team and edited a book on financing real estate development). "We initially got into development building as a way to learn," Golemon says. "We never intended to let it take the place of our architectural practice. What we have learned has helped us gain a number of development clients."

In search of new clients, partners Brooks and Godbey make about 60 calls each month. The firm's approach to marketing is characteristically systematic. At the outset of each year, a five-year plan of goals and objectives is updated and specific marketing efforts are launched to achieve them. The annual marketing plan includes historical data, client lists for initial and follow-up calls, assignments by market segments and a marketing budget.

The partners exude confidence and enthusiasm about the future of the firm. "We've all built a launching platform," they say, "that is constructed of talented people, and a workable organization. Flexibility and innovation are key words. As the market changes and client needs change, the firm will change to meet the challenges of the future." *D.C.*

Supplementing History: Critical Dialogue on A Radical New Design

Robert H. Mutrux, AIA

The following is a transcript via saddlebag of a panel discussion which took place in 1260 in a small town about 50 miles southwest of Paris.

PRESENT WERE: Chutney Brinkheit, news analyst for station WQUOI and moderator; Adele Oui Sextuple, architectural critic for *Le Temps Perdu;* Winsome Scullery, art historian from Sorebonne University; Catherine Beaucoup, freelance jouster with words and art; Lui Mumsthword, philosopher and high-level gadfly.

And Jean des Carrières, master mason representing the architects who, for reasons unknown, chose to be nameless.

* * * *

BRINKHEIT: Miss Sextuple, pray tell what moved you most when first you cast your eyes upon this shrine?

SEXTUPLE: It is a far-out wonder to behold; a credit to its makers, who but yesterday, had led us to embrace the Romanesque. But I delight in it.

BRINKHEIT: It is indeed artfully fashioned and yet soundly based, on 30-cubit fundaments. Mumsthword?

MUMSTHWORD: A novel structural concept, true and yet beneath a flimsy veil of social worth it cannot hide the showman's touch. What else defends this ostentatious altitude?

CARRIERES: We would have settled, sir, for half the height but for the haughty Bishop's grand designs.

BRINKHEIT: How did you get it past the zoning board?

CARRIERES: As parish folk, they were a captive group who bore us no ill will. But we were sorely pressed by a coterie of heretics who hated highrise buildings, on the premise that they despoil the skyline. Yet when we said it would serve as theater, and school for centuries to come, they acquiesced.

SCULLERY: Why do those rude half-arches ring the walls like common scaffolding left unremoved?

CARRIERES: They act as braces; buttresses, they're called, to take the roof weight clear of the inside and leave more space for prayer.

BRINKHEIT: Mistress Beaucoup, does the interior rouse you to emotion?

BEAUCOUP: It's bare as bones! A geometric forest joined at the top by artifice to make a misty distant vacuum.

CARRIERES: But it was done in fullest consciousness to lift the soul, the spirit and the eye!

MUMSTHWORD: A lot of outside wall has been left out. To down cost, perhaps?

CARRIERES: 'Twas done solely to bring the outside in, recalling Genesis, "Let there be light!"

BEAUCOUP: But you betrayed the very thing you sought with all those candid scenes in colored glass! The vulgar tradesmen with their homely wares, mongers of iron, butchers and those furriers despite the pleas for wild-life conservation. And to allow the guild of courtesans a space you sought to consecrate! For shame!

CARRIERES: The Bishop thought 'twould help to raise his funds; from everything I hear, it worked out well.

BRINKHEIT: Of hearing, what say you, Maitre Carrières?

CARRIERES: We have a few adjustments in the works; meanwhile, Gregorian chant sounds great, and when we can afford a organ, pipes and all, the music will fall gently on the ear.

SCULLERY: Have you provided air-conditioning?

CARRIERES: Not yet. But if the sash are double-glazed, 'twill mark the line dividing heaven and hell.

MUMSTHWORD: There is a marked tilt from front to back, a sloping floor, indeed, but why reversed?

CARRIERES: Alas, it was a comedy of errors. There was a sudden strike among the workmen who claimed the nobles only pulled their weight whene'er the chroniclers were present. So I had to arbitrate. The floor was laid while I was gone.

MUMSTHWORD: Where was your superintendent?

CARRIERES: 'Twas I who was the super on the job.

GOTHIC CHORUS: But that's illegal! The College of Fellows states that to be both architect and builder is wrong, on pain of banishment!

CARRIERES: But in our guild, 'tis lawfully permitted, if I accept only a single fee.

BRINKHEIT: What say the folk about the towers that don't match?

CARRIERES: It adds a special flair. At Amiens and Rheims, when you've seen one you've seen them both.

SEXTUPLE: Perhaps. But at the other shrines they seem to have a lot more sculpture. Why is that?

CARRIERES: They chose to put their money where it shows. Meanwhile, my friends Luzarches and Honnecourt, both still await full payment of their earnings.

BEAUCOUP: But don't you think it adds public appeal?

CARRIERES: It stands or falls on history's final verdict, and time alone will tell.

BRINKHEIT: Now that it's built, what future plans have you?

CARRIERES: I have observed that my colleagues have taken to the pen to fill the income gap. So I propose a book entitled "Those Anonymous Men with Their Flying Buttresses."

SCULLERY: A hit! A palpable hit, say I!

BRINKHEIT: Well said! So now at twelve-hundred and sixty-one as usual we are running out of time. So for my goodly sponsors, many thanks, guest architect and panel members. And this is Chutney Brinkheit bidding you all a good millenium! □

Mr. Mutrux is a senior associate in the firm of Fletcher-Thompson Inc., in Bridgeport, Conn.

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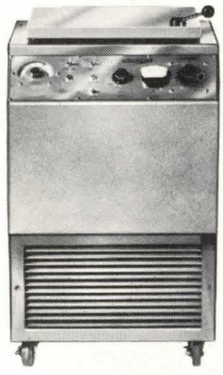

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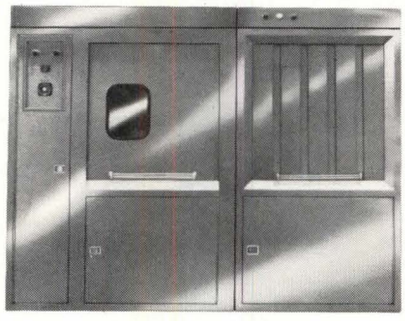

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BOOKS

The Decorative Tradition. Julian Barnard. New York: Atheneum Publishers, 1974. 144 pp. $12.95.

As an architecture student, I have been required to read several deep, theoretical accounts of architectural history in the last few years. I was not looking forward to reviewing this book, which I had immediately classified in the above category. The author, however, may anticipate the reader's possible lack of enthusiasm, making it clear at the beginning that his book is *not* a history of architecture, but a study of decoration and form that is applied to architecture. He deals exclusively with the Victorian era in England in the second half of the 19th century. Most of the terms and descriptions are applicable to Victorian decoration in America and could be of interest to both the layman and the professional (or preprofessional, as the case may be).

A brief description of the lifestyles and living conditions of Victorian England serves as an introduction, providing a background for understanding the architecture and decoration of that time. As the author describes, the machine and its influences became a way of life with the advent of the Industrial Revolution and were the primary contributing factors in the development of Victorian ornament. Overwhelmed by the machine age and mass production, the cities became crowded and dirty, with many people coming in from the surrounding country in search of work. Detail and decoration emerged, resulting from the need for individuality and esthetics, which had been present in the country but absent in industrial cities. Machines, indirectly causing this need, made mass production possible, and decorative forms were available to more people than ever before. Manufacturers published catalogs with descriptions and drawings of decorative details, and it became popular to "mix and match" ornaments to satisfy the tastes of owners or builders.

Barnard classifies and describes with simple narrative and representative photographs the six basic forms: abstract lines, geometric shapes, vegetation, animals, mythological subjects and human scenes. He does not go into great detail, which is

refreshing rather than detrimental, and the reader gains a clear understanding of the forms. And, as the old saying goes, the photographs are "worth a thousand words" as an aid in associating the categories with actual examples.

A subsequent discussion of materials defines the relationship between decorative forms and choices of building materials. Twelve materials, either natural or artificial, are described, with attention given to physical properties and methods of adaptation to decoration.

The final chapters summarize, covering not only those subjects discussed previously but also the state of Victorian decorative art at the end of the 19th century. In spite of the imagination and beauty in the Victorian era, all was not well. There were no antipollution or clean air acts, and more recent destruction by wars and redevelopment have marred the original purpose of the "decorative tradition." However, the Victorian spirit must not be lost, and the author urges contemporary architects to learn from the Victorians' understanding of human needs by putting interest and individuality back into their buildings.

All in all, Julian Barnard has restored my faith in an element of architectural history. Through his simple approach, I have gained an appreciation of Victorian decoration and architecture that I never found in the average architectural history text. *Marsha Glenn, AIA scholar, 1974*

Applying the Systems Approach to Urban Development. Jack W. LaPatra. Stroudsburg, Pa.: Dowden, Hutchinson & Ross, 1973. 296 pp. $18.

This is an excellent and timely book. There is a growing disenchantment in the design professions regarding the applications of the so-called "systems approach" to urban development problems. These feelings are not without foundation. So far, the applications have showed two things: 1) We know less than we thought we did about these problems, and 2) where we thought we had a solution to a problem, the solution was incapable of being carried out. LaPatra recognizes these shortcomings, but he doesn't give up hope. He believes that ignorance is no virtue and that rationality will prevail. The question of whose rationality, he leaves for the audience to decide.

The first part of the book is devoted to a candid appraisal of what has been done to date in applying the systems approach or methodologies to major urban problems. Incidentally, the title appears to be misleading in this context. Most of the examples are not developmental but rather social service oriented, i.e., crime prevention, health facilities, education, etc.

The second part of the book examines the systems approach as applied to transportation and regional analysis. The great transportation models produced in metropolitan regions in recent years point up how one set of rationalities can conflict with others.

The third section covers an analysis of basic service subsystems of the urban environment. These are nonphysical systems in the sense that they deliver services rather than physical environment.

The last chapter called "The Future" is an excellent evaluation of the possibilities ahead for the systems approach. This chapter along with the first two eloquently define the contemporary state of affairs regarding the application of systems analysis to urban problems.

"After earlier periods, when human pioneering and creativity had been focused on geographical exploration, formation of governments, literature, science and technology, it is exciting and pertinent to commit ourselves to the understanding

of social processes. The message of this book is that the means to make this commitment are visible." Thus, LaPatra concludes his final chapter on a note of optimism.

The book is recommended to students and practitioners in the design profession without Ph.D.'s in math who want to tune into the problems and pitfalls of the systems approach. *Michael B. Barker, Administrator, AIA Department of Environment and Design*

Burnham of Chicago: Architect and Planner. Thomas S. Hines. New York: Oxford University Press, 1974. 445 pp. $19.50.

Many a writer has credited Winston Churchill with the first use of the admonition, "Make no little plans." But it was Daniel Burnham, long before Churchill, who said: "Make no little plans, they have no magic to stir man's blood and probably themselves will not be realized. Make big plans; aim high in hope and work, remembering that a noble, logical diagram once recorded will never die."

Burnham abided by his own advice. His contributions to Chicago alone were many, but he also had a great influence on other places. It is strange, then, as Hines points out, that there has been heretofore "no sustained analysis of Burnham's leadership and influence in a profession that has guided, reflected and articulated American culture." The aim is to "illuminate that achievement," and Hines succeeds admirably.

The reader gains new insights into the projects that occupied the mind and energies of Burnham, such as the World's Columbian Exposition; the Washington, D.C., plan of 1902; the San Francisco plan of 1905; and the Chicago plan of 1909.

Despite his many planning commitments, Burnham headed one of the world's largest architectural firms. First associated with John Root, he became head of D. H. Burnham & Co. upon the death of Root in 1891. Between 1891 and 1912, the firm built such structures as the Reliance Building, the Railway Exchange and the Marshall Field Store in Chicago; Claridge Hotel and the Fuller (Flatiron) Building in New York City; the Union Station in Washington, D.C.; and the Union Station in Pittsburgh. There were more than 200 executed structures in this period alone.

Of all his architectural projects, the one that most occupied Burnham's mind, says Hines, was the plan for the improvement of Chicago. "Far more compelling than his schemes for the Rookery or the Railway Exchange, was the dream that transcended individual buildings—a dream that made the pragmatic architect a visionary planner of his city's growth."

Burnham's relations with the AIA were not always happy. Twice elected as its president, he served on many committees over the years. But he resigned in 1911 in a controversy about an architectural competition. He objected to the AIA's requirement that members refrain from participation in the competition unless the commissioning client made the rules and guidelines of the competition public. Burnham called this position "strictly trade unionism" in that "members could not be employed" unless the agreements were approved by the AIA.

The AIA did not accept this resignation, and Hines says that officers "proceeded to insult Burnham and to challenge his integrity." When he entered the proscribed competition anyway, he was written by AIA officials that he must stand trial for his "transgressions." Burnham rebuked the AIA, saying that he had already resigned, and he called officers to account for "insulting him so odiously and tastelessly."

The book contains a great deal of information about Burnham as a human being—his relationships with John Root

and with Frank Lloyd Wright and his fierce competition with his antagonist Louis Sullivan. He loved gadgets, automobiles, books and the pleasures of the table. He worried lest his daughters flaunt proprieties.

He died in Germany in 1912, and eulogies proclaimed him great. But in the mid-1920s, the tone changed and doubts were cast on his achievements, and more recently, critics have attacked him and other City Beautiful planners.

"Yet," says Hines, "in seeking to do justice to those complicated figures, we can still not avoid assessing their weaknesses—significant weaknesses that affected our times." And from this distance of more than 50 years, "It is easy to see dark qualities in Burnham." But he made lasting contributions, particularly in the development of the skyscraper form, in his encouragement of the comprehensive planning concept and in the creation of the modern architectural office.

Hines believes that in these things and others that Burnham equalled or surpassed Sullivan. But in "sheer design genius," Sullivan was master. "The Sullivans and Burnhams of our history have been distinct and different voices, separate and unmergable. As students of history, we accept that and continue trying to understand them both—while knowing, here and now, that as citizens and architects, there is always the need and the possibility of synthesis."

The book consumes the reader's interest; Hines seems to make Burnham into a man who can be admired and loved in spite of any "dark qualities." This reader commends the book to others. *M.E.O.*

Planning of Surgical Centres, Including Units for Maternity, Intensive Treatment, Radiology. 2nd edition. Ervin Pütsep. London: Lloyd-Luke, 1973. 250 pp. No price given.

This updated edition of a book first published in 1969 is a "must" for architects, students, researchers and teachers interested in health and hospital facilities design.

Pütsep focuses in depth, as well as breadth, on the complex considerations involved in the design of the total surgical center environment. The book is well researched, and this research is supported by extensive footnotes, diagrams, charts, sketches, flow diagrams and a bibliography. It deals in specifics with ecological factors, such as lighting, color, acoustics and climate for surgical environments. It delves into detail on the operating theater complex itself by discussion and illustration of circulation, staff, changing, scrubbing and gowning, pre-op and post-op and catastrophe areas, and spaces for anesthesia.

Surgical spaces are analyzed as well as speciality facilities for eye surgery, trauma, orthopedic surgery and endoscopy. Supporting areas that affect the surgical center design, such as post-operative units, delivery suites, radiological areas and laboratory areas are also presented and discussed in detail.

By focusing on this important facet of health facility design, the author, who is a hospital architect in Stockholm, has made a very tangible contribution to the art and science of health and hospital facility design.

I recommend this book highly for the libraries of those who are interested in health facility design. *George J. Mann, AIA*

The Yale Mathematics Building Competition: Architecture for a Time of Questioning. Charles W. Moore and Nicholas Pyle, editors. New Haven, Conn.: Yale University Press, 1974. 117 pp. $15.

Every so often, a competition occurs whose entries are subsequently published in book form. This is such a book, although it is considerably more selective than most since it records less than 6 percent of the submissions. These 26 (of 468) were selected as "particularly representative or interesting."

Moore gives a brief summary of the factors prompting the competition and

follows with a statement on its conduct. He touches briefly on some of the matters that made it one of the more controversial competitions of recent years.

Prof. Rickart, one of the jurors, representing the math department at Yale, tells of his reactions as a mathematician to the winning design. His satisfaction is evidenced by his thought that "it presents a beautifully simple and economical solution to a relatively complex problem for which the program was only a partial description."

The editors then discuss some of the problems to be solved in designing the building and point out how different competitors handled them. This analysis is followed by a more detailed presentation of four selected boards for each of the 26 selected entries. The second stage solutions of the five finalists are presented in more detail, that of the winner by Venturi & Rauch being quite full. The text of the program completes the book. Unfortunately, the building at time of writing has not yet had a date set for construction, due to economic considerations.

Perhaps it is well to stress with Moore one point that he makes: A competition does not usually select a final design but rather a point of departure, and a competition is basically a method of selecting an architect. Too often this fact seems to be lost sight of.

This is an interesting presentation of "where we are 50 years into modern architecture." *George E. Pettengill, Hon. AIA, Staff Executive, AIA Architectural Design Competitions Committee*

The Psychology of Color and Design. Deborah T. Sharpe. Chicago: Nelson-Hall Co., 1974. 170 pp. $9.95.

In the past few years, architecture has gradually expanded into fields beyond its former boundaries. Today, architects must know more and more about advances in such areas as economics, sociology and politics in order to keep abreast of a changing world.

A field that architects have neglected until recently is that of color. It is a broad subject, reaching out into such sciences as physics, physiology and psychology, each with its rapidly growing fund of literature. A recent addition to this source of knowledge is this book.

The volume covers some of the latest developments in the psychical approach to color preferences, color perception and related areas. It describes the work done recently on the reactions of children to color, including their responses to color dominance as opposed to form dominance. On the other hand, there seems to be some connection between color preference and the individual personality. Colors are often associated with personal characteristics, as with the "man in the gray flannel suit."

Physicists and physiologists have made important discoveries in the past few years with regard to color vision, both normal and defective. Still more recently, color perception has been studied from the standpoint of psychology, as this book indicates. The author gives considerable space to Gestalt psychology, with its emphasis on the relation between figure and ground in design. And there is a final chapter on applied color from the Victorian era down to psychedelic color of the present day.

The book's conclusions seem too general and too vague to be of much practical value to designers. *Waldron Faulkner, FAIA*

Construction Education Directory. 2nd edition. Washington, D.C.: Associated General Contractors, Education and Research Foundation, 1974. 308 pp. $2.

This is a reference tool to help young people who want to become professional managers and leaders in the construction industry. It lists 83 educational institutions with construction curricula—an increase since the first edition in 1969, in which only 45 colleges and universities were included. The directory is divided into three parts: institutions that offer programs whose primary objective is the

preparation of individuals for careers in the construction industry; those that offer basic programs in architecture or engineering with some elective courses in construction-oriented subjects; and those that offer two-year programs in construction technology, civil engineering technology or specific trade areas.

Without Rhetoric: An Architectural Aesthetics, 1955-1972. Alison & Peter Smithson. Cambridge, Mass.: MIT Press, 1974. 97 pp. $6.95.

British architects Alison and Peter Smithson are authors whose writings titillate the mind. The reader constantly has to go back over sentences to be sure that he has juiced in full their cogent, terse and most descriptive prose. In this small book, they talk of many things—American advertising, Mies van der Rohe, the Doric order, the present state of architecture, etc. The essays are separate but somehow all jell so that the book is of one piece. As they remark, "We write to make ourselves see what we have got in the inescapable present—to give another interpretation of the same ruins—to show a glimpse of another esthetic."

Looking at Architecture. Roberta M. Paine. New York: Lothrop, Lee & Shepard, 1974. 127 pp. $6.25 AIA members, $6.95 nonmembers.

Written for young readers, this book may even interest the adult who wants a broad sweep of architectural history that is written in simple and understandable English. Miss Paine tells of the architect's patrons through the ages, the artists and craftsmen who are involved in the creation of a great work of architecture and the society of which architecture is a part. From ancient Egypt to Moshe Safdie's Habitat, she describes architectural achievements.

There is a great deal of illustrative material to appeal to the young reader, as well as a glossary, biographical notes, a map showing locations mentioned and a list of books for further reading. The book would make a good Christmas gift for the young person who has architectural aspirations.

Human Settlements: The Environmental Challenge. New York: United Nations, Department of Economic and Social Affairs, Centre for Housing, Building and Planning, 1974. 209 pp. $15.

The United Nations Conference on the Human Environment held in Stockholm in 1972 brought together leading scientists and statesmen to recommend a course of action that would bring man-made elements of the environment into closer harmony with the natural elements in order to prevent greater environmental impairment and to improve the quality of human life. This book is a compendium of papers prepared for the conference. They cover a great variety of topics, ranging from population growth and urbanization to the house and its neighborhood. A comprehensive planning approach is advocated. Also included are the recommendations for policy and action made by the conference and the resolutions adopted by the United Nations General Assembly.

Etienne-Louis Boullée (1728-1799): Theoretician of Revolutionary Architecture. Jean-Marie Pérouse de Montclos. New York: Braziller, 1974. 128 pp. $6.95.

Boullée was a French architect who played a major role in the revolt against rococo architecture in 18th-century France. There is a growing interest in his work, says the author, because we are beginning to change our ideas about neoclassicism—"too often equated with the most sterile and hidebound academicism."

In this assessment of Boullée's contribution to architectural theory, the author finds close parallels between Boullée and Le Corbusier, for example, in their "distribution of light within architectural space" and between Boullée and Frank Lloyd Wright in their mutual concern about merging nature and architecture. The author warns against overstating the

affinities between modern architecture and Boullée's progressive views of architectural design, however. If the expectations of theorists had been fulfilled, he writes, architecture today "would be substantially different from what it is."

About half the book is devoted to illustrations of Boullée's work, serving to document his development as an architect.

Architecture. David Jacobs. New York: Newsweek Books, 1974. 191 pp. $10.

Architecture is called the "badge of civilization" in this story of building through the ages. Architecture "is the requisite sign, the certain credential without which a society cannot be called civilized." Jacobs says that barbarians remained barbarians until they learned to build with stone—then they became Europeans. "Architecture is a reasonable measure for the existence of civilization because it proclaims, as few other products of a society proclaim, that the society expects to survive, progress and prosper beyond the present."

Jacobs maintains that architecture is a cultural phenomenon, revealing information about the society that built it. Architecture tells us "what we ought to know before we can begin to understand the ideas and vents. It defines, most significantly, the main source of power in the society; and it also explains what the central cultural concern of society was."

Jacobs describes the architecture and the civilization of Mesopotamia and Egypt, of Greece and of Rome, of the age of the cathedrals and of the Renaissance, and on down to our own time. Of our era, he says that the day of the individual monument may be gone. "We seem to be in for a period of mass projects calculated to not only provide buildings to serve the urban-industrial society, but to make breathing spaces for the people who live in it. . . . The day of the planned urban space may be coming. Perhaps it would be more appropriate to say coming back—coming back from the days of the Romans."

A concluding section of the book is titled "Architects on Architecture," and here are excerpts from the writings of such notables as Louis Sullivan, Frank Lloyd Wright and Louis I. Kahn. The book has some 170 illustrations to complement the text, and more than a third of them are in full color. A five-page chronology relates buildings to cultural and political events.

The book will intrigue both architect and layman, and it is highly recommended to both for its insights into architecture and cultural history in general.

Structural Steel Design. 2nd edition. Lambert Tall, editor. New York: Ronald Press, 1974. 875 pp. $18.50.

As in the first edition of this work, the second edition relates design specifications to the basic behavior of structures, indicating the manner in which such specifications may be used in the solution of practical design problems. The present work incorporates changes that have occurred since the publication of the first edition a decade ago, reflecting the basic research accomplished at the Fritz Engineering Laboratory at Lehigh University.

The 19 contributing authors—all originally of the Fritz Engineering Laboratory—have a broad background in education, industry and research. The book begins with the basic behavior of steel structures and goes from there to translate this behavior into the "language of specifications and codes." There are hundreds of illustrations to explain each step and procedure. Both building and bridge specifications are considered, with more emphasis placed upon the former.

Architecture in Italy, 1400-1600. Ludwig H. Heydenreich and Wolfgang Lotz. Harmondsworth, Middlesex, England: Penguin Books, 1974. 432 pp. $49.50.

This book covers that remarkable period in Italy when architects of such unique importance as Brunelleschi, Alberti, Michelozzo, Bramante, Michelangelo, Vignola and Palladio made their contributions which have affected architectural history for all time. Written by two authorities, it is a scholarly treatise, carefully documented and presented with 360 plates. It is a worthy addition to the renowned Pelican History of Art series.

Heydenreich writes of the 1400s, discussing architects and their works and the state of the art in such cities and areas as Florence, Rome, Urbino, Venice, Lombardy and Emilia. He masterfully paves the way for the contribution by Lotz on the 1500s, who begin with the classical architecture in Rome of Bramante and Raphael. Lotz continues a probing investigation of the architects of the period—Michelangelo and Palladio among them—and of the architecture of Rome, northern Italy, Venice and Padua and Tuscany.

The book is an important contribution to the history of architecture and should be in every university and large public library.

Soviet Urban Housing: Problems and Policies. Alfred John DiMaio Jr. New York: Praeger, 1974. 250 pp. $16.50.

The Soviet housing system is very much one that is in the "process of becoming," says DiMaio. Up to 1957, when the Soviets placed new emphasis on the development of a housing program, it was "difficult even to discern the existence of a housing system." But since then, both the government and the Communist Party have endeavored to end the housing shortage and to give every family proper housing.

DiMaio discusses the reforms undertaken for a reorganization of the housing construction industry. Only recently, however, he writes, have the reforms tried to "tackle the problem of quality," and improvements have been slow in the interest of providing housing in numbers. He views coordination as the most serious problem in all phases of Soviet housing. "In theory, the local Soviets should have overall control of house planning and construction and city development on the local level. In practice, however, the local Soviet is far from being the 'master of the city.' " There is the eternal struggle against "powerful, well-entrenched ministerial and enterprise interests," which often are in conflict with general city plans. As a result, the local Soviet must beg for funds to meet housing and municipal service needs and engage in prolonged negotiations with republic and central ministeries, which don't know much about local needs but all too often have the deciding vote.

DiMaio also discusses city planning. Although the satellite city concept was aimed at decentralizing the urban center and at developing a rational plan of population distribution, economic pressures for industrial expansion "have greatly modified neatly drawn plans." He reports that the present policy appears to concentrate more on solving problems of urban agglomerations than it does on stopping urban growth.

The author comments that the Soviet state is managing to improve housing conditions, but "it has decided to improve the housing of certain select groups or individuals faster than others." He concludes: "Only when and if the Soviet Union passes from the preliminary stages of communism, where the socialist principle 'to each according to his labor' still predominates, to the full communism of 'to each according to his needs,' will decent housing emerge above all as a public service and guaranteed right of all citizens."

Those in this country who are concerned with urban planning and decision-making processes for this nation's housing policies will find a great deal of food for thought in this book. DiMaio is an assistant professor of government, John Jay College, City University of New York.

Cast-Iron Architecture in New York: A Photographic Survey. Text by Margot Gayle; *photographs* by Edmund V. Gillon Jr. New York: Dover, 1974. 190 pp. $6.

Cast-iron architecture was one of the major building innovations of the 19th century, paving the way for contemporary highrise construction. In 1848, the first cast-iron building was erected in Manhattan by the pioneering inventor James Bogardus, and today New York City can still boast that there is more cast-iron architecture there than anywhere in the world.

Margot Gayle, chairman of the Friends of Cast-Iron Architecture, supplies an interesting commentary to the handsome photographs of Edmund V. Gillon. She tells the history of each cast-iron structure and identifies architect, foundry, location and date of construction. She is the author also of an introductory essay on cast-iron architecture, which affords an interesting insight into this remarkable American building innovation.

Concrete Construction Handbook. 2nd edition. Joseph J. Waddell, editor-in-chief. New York: McGraw-Hill, 1974. Variously paged. $29.50.

Since the first edition of this handbook was published in 1968, there have been important changes in concrete construction. The 15 contributors are experts in their field, and the updated information gives the practitioner reliable source material. There have been extensive revisions in the sections on building construction systems, cement handling, pumping concrete and mixers.

Bicentennial City: Walking Tours of Historic Philadelphia. John Francis Marion. Princeton, N.J.: Pyne Press, 1974. 210 pp. $14.95 hardbound, $4.95 paperbound.

Twelve walking tours to Philadelphia's most important historical sights are outlined in this book. Beginning with the "most historic square mile" in the U.S. (the area around Independence Hall) and ending with lower Germantown, the guide takes one through streets and alleys and gardens; through houses, churches, taverns, museums. The running commentary is informative and enjoyable; there are maps as well as photographs of some of Philadelphia's noteworthy architecture.

Landmarks of Rochester and Monroe County: A Guide to Neighborhoods and Villages. Paul Malo. Syracuse, N.Y.: University Press, 1974. 277 pp. $15 hardbound, $6 paperbound.

This guide to the architectural landmarks of Monroe County in New York State is arranged geographically so that the user can easily make tours of the neighborhoods of Rochester and of the villages throughout the county. The text, captions and photographs combine to give resident or visitor a new appreciation of our architectural heritage. The photographs, mostly the work of Hans Padelt, are exceedingly handsome.

Manual of Rendering with Pen and Ink. Robert W. Gill. New York: Van Nostrand Reinhold, 1974. 368 pp. $12.50.

This is a helpful and copiously illustrated guide to the techniques and methods of rendering. Intended primarily for the student, it will be of assistance to the practicing draftsman as well. There is concise and clear information on such topics as perspective drawing, techniques and equipment. Gill demonstrates how to draw transportation vehicles, landscapes, people, furniture and fabrics. He has had 20 years of experience in graphics and heads his own industrial design firm in Australia.

The New West: Landscapes Along the Colorado Front Range. Written and photographed by Robert Adams. Boulder, Colo.: Colorado Associated University Press (distributed outside Colorado by Light Impressions Corp., P.O. Box 3012, Rochester, N.Y. 14614), 1974. 121 pp. $15.

This is a photographic essay about the things that now fill in what was once the open American West. Why photograph billboards, tract houses and freeways when there is the grandeur of the mountains? Adams answers this question by saying that we don't live in parks and to improve things we've got to "see the facts without blinking." We have to see the natural *and* the man-made. He contends that no matter what terrible things we've done to the land, it still has "grace, an absolutely persistent beauty." Actually, his subject, then, is not the freeways and billboards, but the "source of all form: light." In his beautiful photographs, we can somehow overlook man's harm to the land and see the shape of the land itself.

Many of Adams' photographs in the

book were first exhibited at the Museum of Modern Art in New York City, and some are in its permanent collection. The museum's director of photography, John Szarkowski, provides a foreword in which he says that the book's moral is that the "landscape is, for us, the place we live. If we have used it badly, we cannot therefore scorn it, without scorning ourselves. If we have abused it, broken its health and erected upon it memorials to our ignorance, it is still our place, and before we can proceed we must learn to love it. As Job perhaps began again by learning to love his ash pit."

The Weather Handbook. Edited by H. McKinley Conway and Linda L. Liston. Atlanta, Ga.: Conway Research, Inc., 1974. 255 pp. $25.

For those whose decisions about business or travel depend upon worldwide weather probability, this book is a valuable tool. It gives principal climatic data for some 250 major cities in the U.S. and for 300 cities in other parts of the world, outlining for each month what temperature, humidity and precipitation to expect. There are also pages of charts and maps to give additional information on such things as mean annual total heating degree days in the U.S., mean annual number of days with thunderstorms, average annual temperature and hurricane tracks. The book may be bought from Conway Research, Inc., Peachtree Air Terminal, Atlanta, Ga. 30341.

Plant Layout: A Guide to the Layout of Process Plants and Sites. J. C. Mecklenburgh. New York: Wiley, 1973. 148 pp. $10.

The spatial arrangement of a plant is important for its economic efficiency and process relationships. Good layout practice must take into account safety, maintenance, operation, future expansion and the environment.

Divided into two major parts, this guide to layout planning first describes the general aspects of site and plant layout, setting forth principles and techniques for such planning. The second part has more detailed information about the layout of plant items, such as furnaces, centrifuges and conveyors. There are also chapters on the layout of storage areas and of pipework.

How to Build Patio Roofs. Revised ed. Editors of Sunset Books and Sunset Magazine. Menlo Park, Calif.: Lane Books, 1973. 80 pp. $1.95.

A patio roof can make an outdoor living room more versatile. The editors of *Sunset* combine 68 photographs and 70 drawings with an easily understood text to tell how to plan and construct a patio roof for maximum year-round pleasure—even in areas where there is snow and ice. There's a great deal of practical information on the materials to use, screens, louvers, the control of sun and shade, vines to plant—and much more besides. Written for the layman, the book nevertheless will tell the architect a great deal about the design of a living room right in his own backyard.

The International Handbook of Finnish Sauna. Allan Konya and Alewyn Burger. New York: Wiley, 1973. 176 pp. No price given.

There are more saunas in Finland than automobiles, and the popularity of these insulated rooms heated to create the proper environment for a dry heat bath is increasing over the world. The authors of this book are careful to point out that one does not *take* a sauna—one *goes* to a sauna. They say that a person who has never experienced the "sauna ritual" cannot possibly design one. It would be like someone designing a church who has never attended a church service. So the book begins with an explanation of the "sauna ritual" and a description of the many varieties of saunas and the cleansing and relaxing qualities each can provide.

There is detailed information on sauna room materials and design and construction. Discussions follow on sauna room heating; siting, layout and ancillary facilities; and prefabricated saunas. To make the most of a sauna, one must know how to care for it, and attention is given to maintenance, as well as to such accessories as the *vihta,* or birch switch, the buckets and ladles, thermometers and hydrogometers and towels and bench covers.

The authors are not Finnish, surprisingly. Konya is an architect in private practice in South Africa, and Burger is a professor of architecture at the University of Pretoria in South Africa. Both, needless to say, are sauna addicts.

Architecture of Middle Tennessee. Edited by Thomas B. Brumbaugh, Martha I. Strayhorn and Gary G. Gore. Nashville, Tenn.: Vanderbilt University Press, 1974. 170 pp. $17.95.

Middle Tennessee has a rich architectural history. During the 19th century, architectural styles in vogue were adapted to the region, and builders used whatever materials were available locally. Thirty-five structures, built from the late 1700s to the early 1900s, are described in this book, which was compiled by architectural historians and researchers for the Historical American Buildings Survey of the National Park Service.

The photographs by Jack Boucher add a considerable dimension, and there are also measured drawings of many of the buildings. The arrangement is by building type: government and public buildings, commercial structures, churches, educational institutions and residences.

Some of the buildings depicted are under threat of or are actually scheduled for demolition. Those who care about this country's architectural heritage are grateful to the HABS for its program of preservation through documentation.

Build a Yurt: The Low-Cost Mongolian Round House. Len Charney. New York: Collier Books, 1974. 134 pp. $7.95 hardbound, $3.95 paperbound.

A yurt is an inexpensive and easy to build lattice-work round house that can be used for a weekend retreat, hunting cabin or backyard playhouse. Charney says that nearly anybody with no special skills or tools can tackle this form, and have a shelter for less than $500. The yurt has been used by nomadic Mongolian herdsmen for centuries, and the know-how for its construction has been passed along by word of mouth. Now Charney's guidelines tell the builder how to select a site, build a solid foundation, construct the walls, assemble the roof and even how to decorate both exterior and interior. There are many drawings, diagrams and photos to help the builder along. The final structure has a great deal of charm.

Monasteries of Western Europe: The Architecture of the Orders. Wolfgang Braunfels. Princeton, N.J.: Princeton University Press, 1973. 263 pp. $25.

This book interprets monasteries not only as groups of religious buildings but also as self-sufficient cities in three separate senses of the term: a system of services and goods complete with breweries, hospitals, kitchens and smithies; a manifestation of the "rules" of the monasteries; and a physical representation of St. Augustine's City of God. Each is a valid level from which to see *any* kind of city, and Braunfels gives all three their due. It is a fascinating study, and all my favorite monasteries are here: Melk, Mont-Saint-Michel and Cluny. Also included, as a pleasant surprise, is Le Corbusier's La Tourette near Lyon, France. *Dave Clarke, Executive Director, ACSA*

From Idea into House. Rolf Myller, AIA. New York: Atheneum, 1974. 64 pp. $6.95.

This book by an AIA member tells a young person about the "growing process" of bringing a house into being. He takes a family, whom he calls the Kummerfelds, and tells how mother, father and two children find a site, go through the business of buying the lot, find an architect and work with him on the design.

The plans included in the book are real plans; the house was actually designed by Myller & Szwarce and built.

The book is intended for a juvenile audience, but it will also help adults who want to know how a building evolves from concept to reality.

LETTERS

Land Reclamation: Architects are for ecology and respect the environment, but we are not afraid to add to the natural setting.

When I looked at the photo published in the August issue (p. 8) that illustrates a report on "House Passes Surface Mining Restrictions Supported by AIA," I wondered: Would it not be interesting to reclaim some portions of the land that is "disturbed" by mining so that the result would remind our posterity of the present time—a period of our civilization characterized by industrial activity? We must not be ashamed of what this period has accomplished. Yes, we changed quite a bit of the environment, but some of the changes are not for the worse. The photo mentioned above is quite interesting with those man-made curves and terraces. They offer a different kind of reclamation, partly preserving the traces of man's work.

Surely, we can reclaim the land and restore the situation as it was before. I have seen land reclaimed by the Montana Power Co. so that even ecologists admitted that the result is beyond what they expected. Vegetation is better than originally, and rabbits, deer and fowl prefer to live there.

I wish that some of the man-made changes—carefully selected and slightly modified if necessary—would be reclaimed, restoring the valleys, hills and slopes produced by those ugly bulldozers, their noise and pollution gone. We must not forget, however, that man was at work here to produce what our civilization wanted us to produce.

Eugene Padanyi-Gulyas, Architect
Billings, Mont.

In Defense of a Visitor's Center: To call the projected National Visitor Center at Union Station in Washington, D.C., an anachronism, as Houstoun does in his article titled "Let's Concentrate on Saving Rail Service Instead of Stations" in the September issue, is not only a premature judgment with construction barely started but a gross misunderstanding of the intent and purposes of the project.

The implication that the Union Station will cease to function as a train terminal is pure fantasy. It is to the credit of the planners behind the NVC project that they had the foresight to realize that much more than a mere train station is needed for the anticipated 50 thousand people who will visit the nation's capital daily during the bicentennial. This was realized more than five years ago when passenger train service was all but dead from lack of public support.

Houstoun's view of NVC as only a renovation, a "desecration" of an existing train station, is a simplistic and narrow one. From the very beginning, the thrust of the planning effort has addressed itself not only to the problems of passengers arriving by train—and by bus and car as well—but also more importantly to the way in which visitors can familiarize and orient themselves to new surroundings, a most necessary but frequently overlooked function.

It is clearly evident that these two areas of transportation and communication enjoy a symbiotic relationship which is appropriately fulfilled by an intermodal terminal/visitor facility, such as the one planned. In view of the fact that Washington will continue to play host to millions of tourists long after the bicentennial is over, it is not too much to ask for a bit more than a renovated train station. I suggest that anything less would be an anachronism.

Richard M. Kalt
Washington, D.C.

Not by any known definition of "anachronism" did I apply such a term to the National Visitor Center. Moreover, it is not accurate to state that the official plans call for integrating the center with the existing terminal. Indeed, the proposals placed before the National Capital Planning Commission still call for relocating the passenger facility a full two blocks from the present site and the future Metro station. This would hardly facilitate intermodal connections; perhaps some better

plans will be forthcoming. Union Station is large and can handle a great deal.

Lawrence O. Houstoun
Washington, D.C.

The Issue Is Furniture: The October issue on furniture as architecture, co-edited by Andy Harney, is the most exciting, knowledgeable and tantalizing survey that I have ever seen. Congratulations.

Howard Barnstone, FAIA
Houston

I have just finished thumbing through the October issue. My first reaction was one of disgust, then bewilderment. I thought, "Do these people actually believe that there is only one type of architect—the kind that does nothing but large projects with seemingly endless funds?"

I am so tired of seeing this kind of building depicted in the magazine. You may be surprised to know that many architects of small firms have designed furniture that would far surpass that of Mies van der Rohe, although they didn't have the privilege of doing as many big projects.

I have looked through some issues of the old *Pencil Points* magazine here in the office, and it is amazing to think that there were actually magazines at one time that gave so much comprehensive information to the architect.

Really, gentlemen, I have gained absolutely nothing from the October issue. It seems that since you have a captive reading audience (since a subscription is part of the AIA dues) that you can throw anything at us. I would like to be proud of the AIA JOURNAL, but it leaves very much to be desired for a professional magazine. *Edward A. Kane Jr., AIA*
Edwardsville, Ill.

What a brilliant issue! From the cover showing the Drusch rocker to the scoop on the Mies sketches, it clearly establishes that the AIA JOURNAL is a most knowledgeable, comprehensive, sophisticated and authoritative publication. A welcome voice in the field. *Carl Ruff*
Carl Ruff Associates
New York City

Thanks for Writing: In the January 1974 issue, there was a letter from me in which I expressed the desire to exchange views and opinions with American architects. As a result, I have received a great number of letters from the U.S. Because I have been struggling hard to make progress in my work and have changed localities several times, I deeply regret that I have been able to contact only a few of the persons who were so kind as to be willing to communicate with me.

I hope that this letter will express my gratitude and will reach many of those who wrote to me. I want to thank my American colleagues for the letters that I received, from which I have gained pleasure. I am happy that designers in America are so exceedingly obliging to other people.

My business is now more secure, and I hope to be able to establish further contact with my correspondents.

Lane Geelnard
Maenharju 9
00730 Helsinki 73, Finland

'Valuable Contribution': I would like to express my appreciation of Charles Blessing's drawings of major American cities in the September issue. I have been aware of his work of this nature for some time and have been a great admirer of it.

The published series was superb, but only a sampling of the depth and breadth of vision and comprehension that only Blessing has to offer. His travels have been worldwide, and his method of seeing and portraying cities in their overall geographic context is so unique and valuable a contribution that I hope the series can be continued. *John Desmond, FAIA*
Baton Rouge, La.

EVENTS

Jan. 22: Submissions deadline, research proposals for the design and optimization of experimental systems for heating and cooling of buildings. Contact: Barry Brown, Contracts Branch, Room 630, National Science Foundation, 1800 G St. N.W., Washington, D.C. 20550.
Feb. 1: Applications deadline, James Stewardson Travelling Scholarship. Contact: New York Chapter/AIA, 20 W. 40 St., New York, N.Y. 10018.
Feb. 1: Applications deadline, special 1975 fellowships for doctoral level research and study. Contact: S.C.A. Paraskevopoulos, AIA, Chairman, Doctoral Program, College of Architecture and Urban Planning, University of Michigan, Ann Arbor, Mich. 49104.
Feb. 2-9: International Furniture Show, London.
Feb. 6: Design submissions deadline, Reynolds Aluminum Prize for Architectural Students. Contact: Maria Murray, AIA Headquarters.
Mar. 1: Entries deadline, nominations for the Henry Hering Medal of the National Sculpture Society for outstanding collaboration among architect, owner and sculptor. Contact: Claire A. Stein, NSS, 75 Rockefeller Plaza, New York, N.Y. 10019.
Mar. 4-5: Industrial Adhesives Applications symposium, University of Wisconsin, Madison, Wis.
Mar. 10-11: Flame Retardancy of Plastics conference, Shoreham-Americana Hotel, Washington, D.C. Contact: Heidi Kaplan, New York Management Center, Department 14NR, 360 Lexington Ave., New York, N.Y. 10017.
Mar. 17-19: American National Metric Council conference and exposition, Washington Hilton Hotel, Washington, D.C. Contact: ANMC, 1625 Massachusetts Ave. N.W., Washington, D.C. 20036.
Mar. 19-24: American Subcontractors Association national convention, San Francisco. Contact: ASA, 815 15 St. N.W., Suite 902, Washington, D.C. 20005.
Mar. 23-25: AIA/Association of Collegiate Schools of Architecture teachers' seminar, University of Nebraska, Lincoln, Neb. Contact: Dave Clarke, AIA Headquarters.
Apr. 11-May 6: Architecture and Gardens Tour of Japan and Taipei/Hong Kong. Contact: K. M. Nishimoto, AIA, 147 S. Los Robles Ave., Pasadena, Calif. 91101.
Apr. 15: Applications deadline, Kate Neal Kinley Memorial Fellowship for 1975/76. Contact: Dean Jack H. McKenzie, College of Fine and Applied Arts, 110 Architecture Building, University of Illinois at Urbana-Champaign, Urbana, Ill. 61801.
Apr. 16-17: Air Pollution Control Association government affairs seminar, Washington Hilton Hotel, Washington, D.C. Contact: APCA, 4400 Fifth Ave., Pittsburgh, Pa. 15213.
Apr. 20-23: Environmental Design Research Association annual conference, University of Kansas, Lawrence, Kans. Contact: Basil Honikman, School of Architecture and Urban Design, University of Kansas, Lawrence, Kans.
May 18-22: AIA annual convention, Civic Center, Atlanta. (Reconvened session, Rio de Janeiro, May 23-June 7).

GOING ON

Continued from page 17
tionally recognized historians, architects, environmentalists and businessmen. Decisions on awards will be made on June 1.

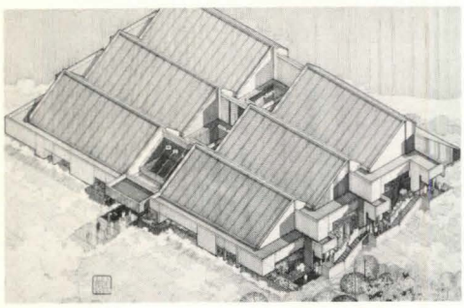
To make application, write Bird & Son a short letter of intent, describing the project and indicating plans for obtaining the matching funds. If the project is considered eligible for further consideration, an official application form will be forwarded to the applicant. The address is Bird & Son, Inc., East Walpole, Mass. 02032.

Correction

Because of inaccurate information supplied the AIA JOURNAL, the November issue reported the death of R. Richard Royce, AIA, Columbus, Ohio. This is an error. It was Robert R. Royce whose death should have been noted. R. Richard Royce, his son, is still living, we are pleased to report. We regret the mistake.

Owens-Corning Awards Emphasize Conservation

The purpose of the energy conservation awards program sponsored annually by Owens-Corning Fiberglas Corporation is to "encourage a national awareness of the urgent need to conserve natural resources," recognizing architects, engineers and owners of buildings that are designed and equipped to conserve energy. The winner in the governmental category of the third annual awards program is the Detroit firm of Smith, Hinchman & Grylls Associates, Inc., for the Federal Building in Saginaw, Mich. Winner in the institutional category is Jack Miller & Associates of Las Vegas, in association with Arthur D. Little, Inc., Cambridge, Mass., for the design of the University of Nevada Systems Desert Research Institute in Boulder City.



For the first time in the three-year history of the awards program, there are no winners in the industrial and commercial categories. George T. Heery, AIA, president of Heery & Heery of Atlanta and jury chairman, called this a disappointment in view of the fact that these categories account for about 70 percent of the energy consumed in this country.

Other members of the jury were H. Fred Campbell, president and chairman of H. F. Campbell Co.; Walter Costa, FAIA, general partner, Skidmore, Owings & Merrill; Sital Daryanani, senior vice president, Syska & Hennessy, Inc.; Donald Greenberg, professor of architecture, Cornell University; Philip J. Meathe, FAIA, president of Smith, Hinchman & Grylls Associates, Inc.; Richard Mullin, AIA, principal, Symmes, Miani & McKee Inc.; and Thomas Stokes, vice president and chief engineer, Cary B. Gamble Associates, Inc.

The Federal Building in Saginaw was cited for its "innovative energy and resource conservation systems." Heery said that the building has "a very low heat gain and loss factor because of the fenestration being pushed into the earth and a park area covering the roof." Its most prominent energy-saving feature is an 8,000 square-foot flat-plate solar energy collector, oriented to take maximum advantage of the sun's heat at the building's latitude.

The University of Nevada structure was called by the jury "an exemplary project. The design reflects originality and creativity in a compact structure, while it makes very good use of solar collectors and relates to those reflectors through a highly functional and attractive architectural form." The Desert Research Institute is designed so that "new developments in solar technology can be incorporated, providing an on-going test facility for solar climate control equipment." Design and engineering of the solar climate control system is by an architectural and engineering team from Arthur D. Little, Inc.

Honorable mentions in the institutional category went to Glave, Newman & Anderson of Richmond, Va., for the mechanical design of the Science Museum of Virginia in Richmond, and to the A.B.R. Partnership in Denver for its design of the Community College of Denver/North Campus at Westminster, Colo.

At the awards dinner in New York City recently, William W. Boeschenstein, president and chief executive officer of Owens-Corning, said that "the energy crisis has never been more serious." He called upon the nation's architects and engineers to "alert the American people to the reality of the situation," saying that the country should be "mobilized" to take "immediate defensive measures."

Eight Naval Buildings Receive Design Awards

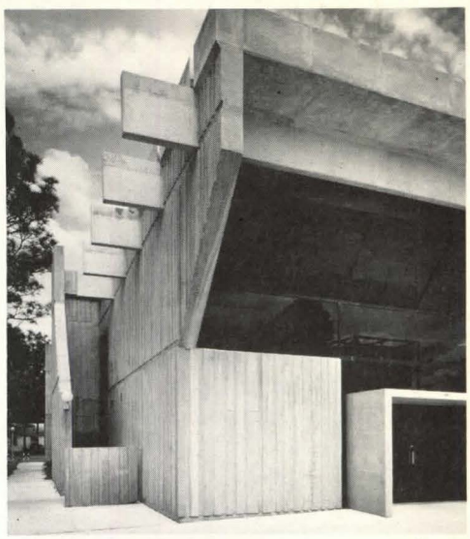
First honors in the fourth biennial awards program for architectural achievement sponsored by the AIA and the Naval Facilities Engineering Command have gone to a theater, a research facility and a hospital. Also, awards of merit were given to two medical facilities, two housing facilities and a mess hall.

The structures winning first honors:

- Theater, Whiting Field Naval Air Station, Milton, Fla. (architects: Barrett Daffin & Figg, Tallahassee, Fla.)
- Atlantic Oceanographic and Meterological Laboratories, Virginia Key, Miami, Fla. (architects: Ferendino/Grafton/Spillis/Candela, Coral Gables, Fla.)
- Charleston Naval Hospital, Charleston, S.C. (architects: Lyles, Bissett, Carlisle & Wolff, Columbia, S.C.)

Winners of awards of merit:

- Bachelor Enlisted Quarters, Marine Corps Air Station, El Toro, Calif. (architects: Deasy & Bolling, Los Angeles)



- Naval Officer Family Housing, Fort Adams, Newport, R.I. (architects: joint venture of Hart Krivatsy Stubee and C. E. Maguire, New York City)
- Mess Hall, Naval Amphibious Base, Little Creek, Norfolk, Va. (architects: Waller & Sadler, Virginia Beach, Va.)
- Naval Regional Medical Center, Long Beach, Calif. (architects: Hugh Gibbs & Donald Gibbs, Long Beach, Calif.)
- Composite Medical Facility, Griffiss Air Force Base, Rome, N.Y. (architects: Max O. Urbahn Associates, Inc., New York City).

Jurors for the 1974 program were Randolph J. Stauffer, AIA, Clarks Summit, Pa., chairman; Fletcher Rush, AIA, Roanoke, Va.; and Patrick B. Davis Jr., president of the Association of Student Chapters/AIA.

Deaths

Merle V. Abbott, Wayzata, Minn.
Martin I. Aitken, Lincoln, Neb.
Mario Barrera, San Antonio, Tex.
Walter E. Bohrer, Minot, N.D.
Joseph G. Carchidi, Trenton
Neil A. Connor, Norfolk, Conn.
J. Raymond Corwin, Alexandria, Minn.
Robert C. Deigert, Asheville, N.C.
B. A. England Jr., Corinth, Miss.
Manoug M. Exerjian, Great Neck, N.Y.
Guy C. Fulton, Gainesville, Fla.
J. Stanley Hagan, Emporia, Kan.
Norman W. Kelch, South Laguna, Calif.
William S. Kinne Jr., Madison, Wis.
Benjamin H. Lackey, Harvey Cedars, N.J.
Niels H. Larsen, FAIA, Bronxville, N.Y.
Robert L. McGee, St. Paul
Charles J. Pate, Tyler, Tex.
Palmer W. Power, Long Beach, Calif.
Christy K. Roberts, Dallas
John F. Sierks, Roslyn Harbor, N.Y.
Maurice D. Sornik, Massapequa Park, N.Y.
Edward J. Trautman, Buffalo

Nicholas Satterlee, FAIA: Well known for his meticulous rehabilitation of historic landmarks, Nicholas Satterlee headed his own firm in Washington, D.C., and was deeply involved in the capital's affairs. He served on such organizations as the National Capital Planning Commission, the Commission of Fine Arts, the Committee of 100 on the Federal City and Mrs. Lyndon B. Johnson's Committee for a More Beautiful National Capital. He also was a past president of the Washington Metropolitan chapter/AIA and was active on many AIA committees. He died on Nov. 16 at the age of 59. As a local newspaper commented in an obituary, "His voice was heard in letters published in newspapers or in newspaper interviews on such matters as the location of the Kennedy Center, the need to preserve Glover Archbold Park against encroaching development and the need to remove restrictions hampering urban renewal." Educated at Harvard University, he served as an officer in the U.S. Navy during World War II.

Newslines

The American Society of Civil Engineers has installed William M. Sangster, dean of the college of engineering, Georgia Institute of Technology, as its president. Arthur J. Fox Jr., editor of *Engineering News-Record,* is president-elect of the 68,000-member national engineering society.

The National Elevator Industry, Inc., has prepared a revised edition of its publication "Standard Elevator Layouts." It provides the architect with information about standards of clearance and dimensions, and work performed in the installation of elevators, favoring no particular manufacturer of elevators. A copy may be obtained for $3.50 from NEII, 101 Park Ave., New York, N.Y. 10017.

A curriculum in construction engineering is planned for Case Western Reserve University, Cleveland. The new program is designed "to train construction managers who can work with architects, engineers and builders to see that construction jobs are completed properly, on schedule and within cost estimates."

Robert C. Einsweiler, a planning consultant in Minneapolis, has been re-elected president of the American Institute of Planners for a one-year term.

Seven landmark Victorian houses in San Francisco, weighing from 125 to 150 tons, were recently moved from their previous sites in the Western Addition to new locations. The $230,000 move, which saved the historic structures, was a cooperative effort by the Redevelopment Agency, the city's Landmark Preservation Advisory Board and the Foundation for San Francisco's Architectural Heritage. Heritage acquired the houses for sale to individual owners, who will restore them at costs ranging from $35,000 to $100,000.

The Texaco Service Station on the Avenue of the Americas in New York City has been cited by the Association of Village Homeowners "for its appropriate architecture and design in relation to the three New York City historic districts." Designed by Steven Papadatos, AIA, the circular structure and all its facilities were built to accommodate the physically handicapped (*see* Mar. '73, p. 30).

The National Sculpture Society wishes to receive nominations for its Henry Hering Medal, given for distinguished use of sculpture in an architectural project and for outstanding collaboration among architect, owner and sculptor. Nominations should be sent in the form of portfolios to describe the nature of the project and with names of architect, sculptor and owner; photographs should clearly show the site of the sculpture. Nominations should be submitted before Mar. 1 to NSS, 75 Rockefeller Plaza, New York, N.Y. 10019.

John Noble Richards, FAIA, senior partner in the Toledo, Ohio, firm of Richards, Bauer & Moorhead, and former president of the AIA, was one of five float judges for the Tournament of Roses parade on New Year's day.

Tulane University's school of architecture will begin in Aug. 1975 a new program leading to a master of architecture degree. The major focus will be on architectural design in the man-built environment, and applicants are being sought from varied professional and academic backgrounds.

OSHA officials warn employers to be on the lookout for persons who pose as OSHA inspectors. If an employer doubts the authenticity of an inspector, the identification number and inspector's name may quickly be verified by telephoning his home office. Some bogus inspectors demand instant payment of penalties for conditions that they claim violate OSHA rules; others suggest a particular tool, machine or piece of equipment for the correction of an alleged violation. Both procedures violate federal law. Employers are also warned about misleading ads that assert a product is "OSHA-approved." OSHA does not approve any safety equipment.

How to apply for housing and community development funds is outlined in a recent booklet titled "Meeting the Data Requirements of the Housing and Community Development Act of 1974." It locates and assembles data required to apply for block grants and other funds. A free copy may be obtained from the Urban Statistical Division, R. L. Polk & Co., 431 Howard St., Detroit, Mich. 48231.

The Acoustical and Board Products Association is a new manufacturer organization which resulted from the recent consolidation of the American Hardboard Association and the Acoustical Materials Association. The first president of the new association is David L. Carpenter of Johns-Manville Corp. ABPA is headquartered at 205 W. Touhy Ave., Park Ridge, Ill. 60068.

Visually coordinated signage materials and components are provided in a file folder of product literature that is available upon request from Jas. H. Matthews & Co., 1315 W. Liberty Ave., Pittsburgh, Pa. 15226. The kit provides architects, designers and owners with a number of brochures which describe and list specifications on pressure-sensitive legends and emblems; fiber-reinforced polyster signs, components and monoliths; post and panel assemblies; metal letters; building directories; etc.

The first use of solar energy for both heating and cooling of a postal facility has been commissioned by the U.S. Postal Service. The general mail facility, to be located in Ridley Park, Pa., a suburb of Philadelphia, is designed by architect John-Robertson Cox of Environmental Design Collaborative, Philadelphia. Solar collectors will be roof-mounted. Bids will be taken in the spring, with construction completed in 1976. □

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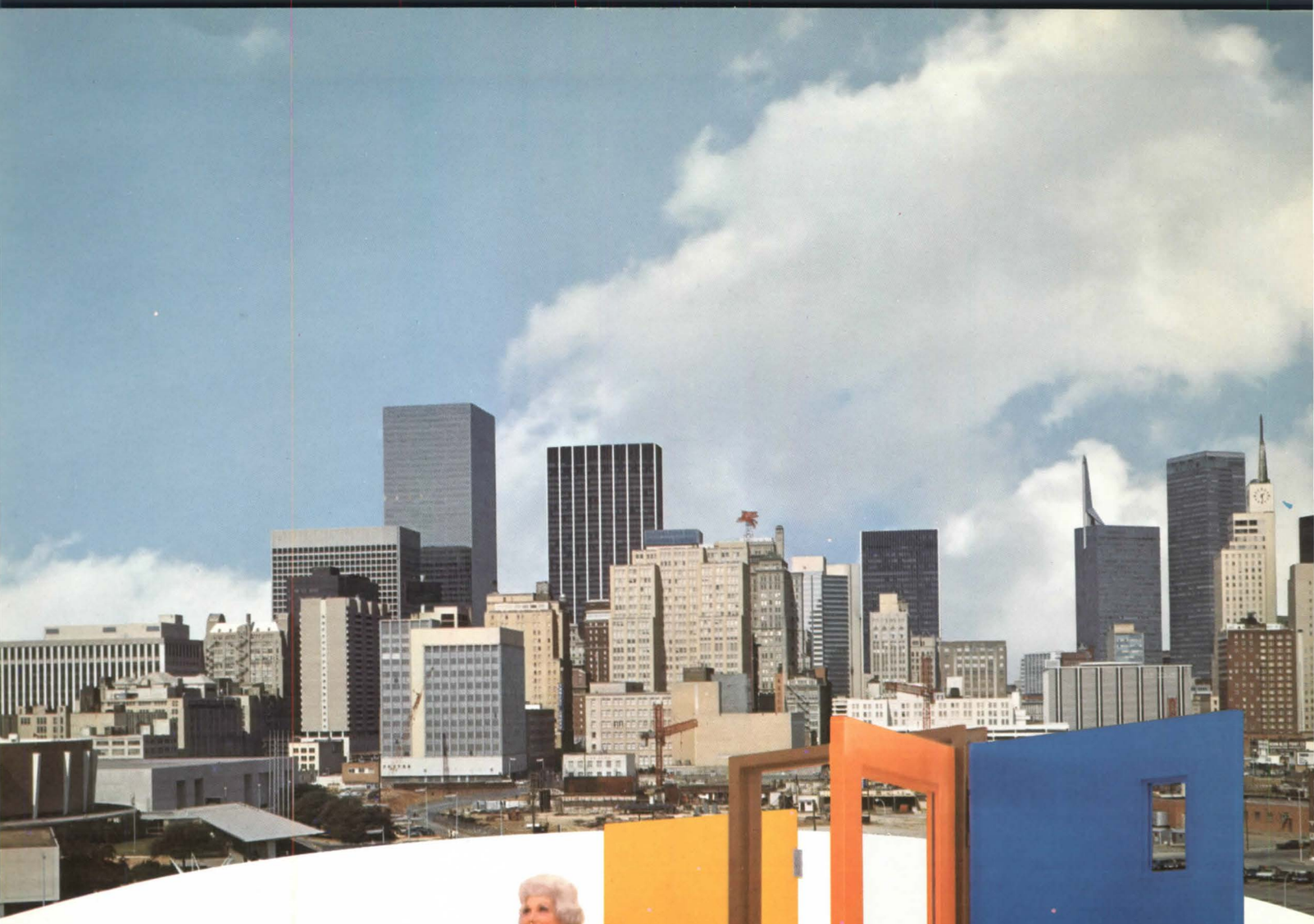
Opportunities in Industrial Architecture draws from "inside" accounts to help architects inside *and* outside industry. NEW. See Resourcenter # 29.

Waterfronts: Opportunities in Land Development and Marketing of Architectural Services describes the strategy needed to tap the potential architectural business that exists in almost every community. See Resourcenter # 21.

The Architect as Land Developer lists do's and don'ts of land development and answers key architectural questions. See Resourcenter # 14.

Land Development helps you put together your own development project. See Resourcenter # 2.

Notice that our AIA Resourcenter lists many other important, economical aids to help you manage your firm in a professional, marketing oriented way. And we're developing more for the future. So watch for this page on alternate issues. In March, the focus will be on management. The AIA Resourcenter. We mean business.



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Ryland Homes, Columbia, Maryland.

Put on New Olympic Overcoat®. It's guaranteed better than house paint!

Olympic Overcoat® is a unique 100% acrylic latex exterior coating specifically formulated to provide a durable, flat, one-coat finish on challenging surfaces such as hardboard and smooth, painted material. Five years of field testing have time and again shown Overcoat to be superior to other products tested for application and performance. In commercial applications Overcoat has delivered as much as twice the coverage per gallon as conventional latex products. Results are so outstanding that Overcoat is backed by two remarkable money-back guarantees.

Overcoat is available in most of the popular Olympic Stain solid colors. To finish unprimed hardboard, the matching color in Olympic Solid Color oil-base stain should be applied before applying Overcoat. Hardboard and Overcoat. Think of them together. For more information on Overcoat and the entire Olympic line, consult 1975 Sweet's Catalog, or contact Olympic Stain.

Application and Appearance Guarantee: Overcoat's quality, durability, protection and ease of application are so outstanding, we would like you to use it. While the first gallon of Overcoat is being applied (at the recommended rate), if you're not convinced Overcoat is better than house paint, the remainder of that gallon plus any other unopened gallons purchased can be returned to your Olympic dealer for a full refund. Receipt required.

Performance Guarantee: If, after proper application in accordance with the label directions, Overcoat does not perform satisfactorily, replacement gallons will be furnished or a refund of the cost made at the manufacturer's option. Labor costs to apply any material as well as cracking, peeling, or blistering caused by a breakdown of a previous paint film are not covered under this guarantee. No other guarantees expressed or implied are valid.

Olympic Stain. A division of COMERCO, INC.
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Circle 21 on information card