

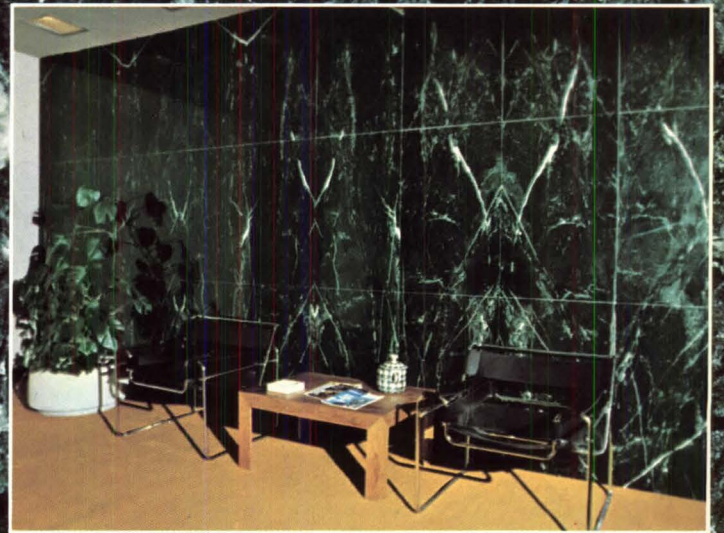


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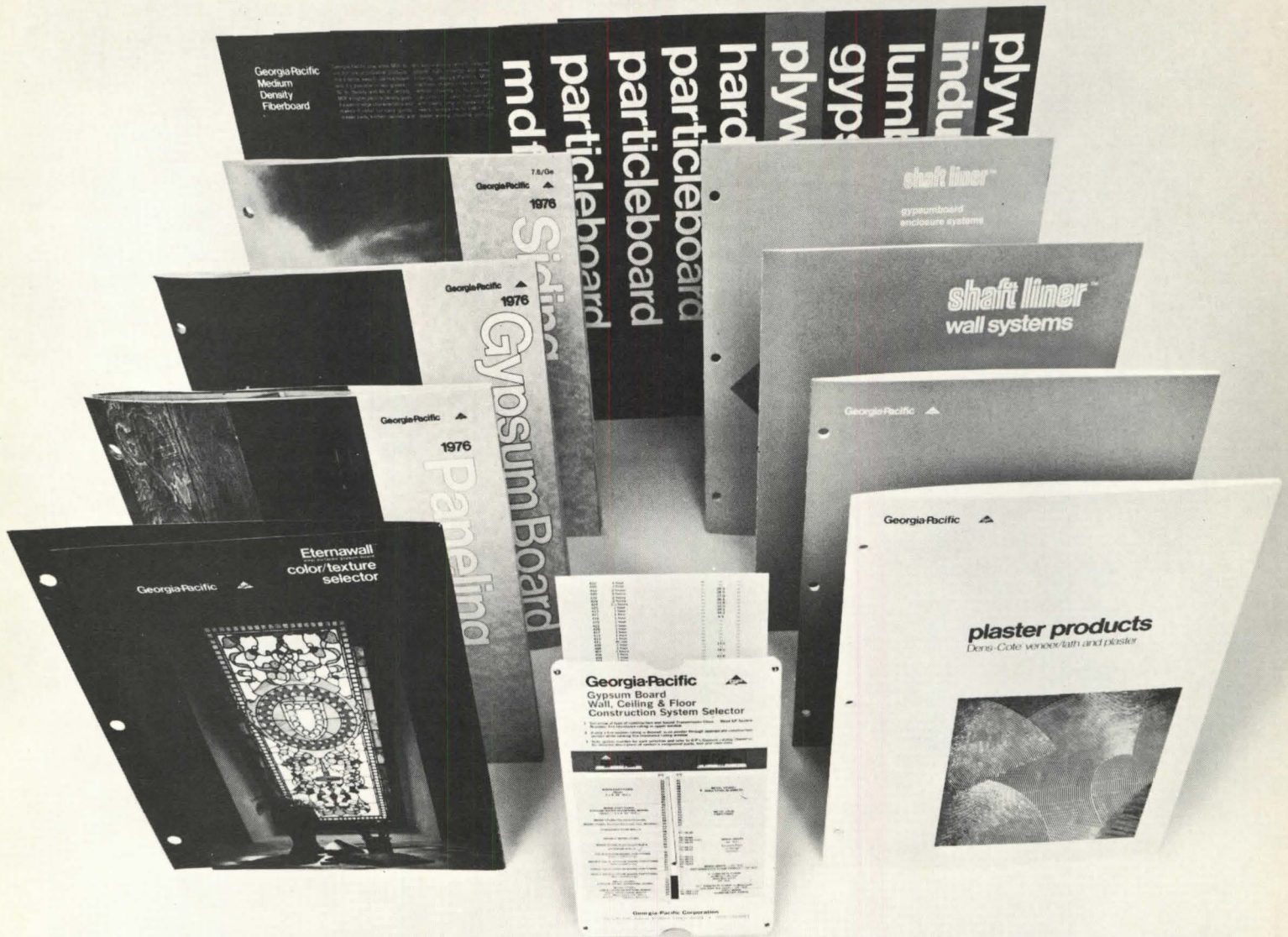


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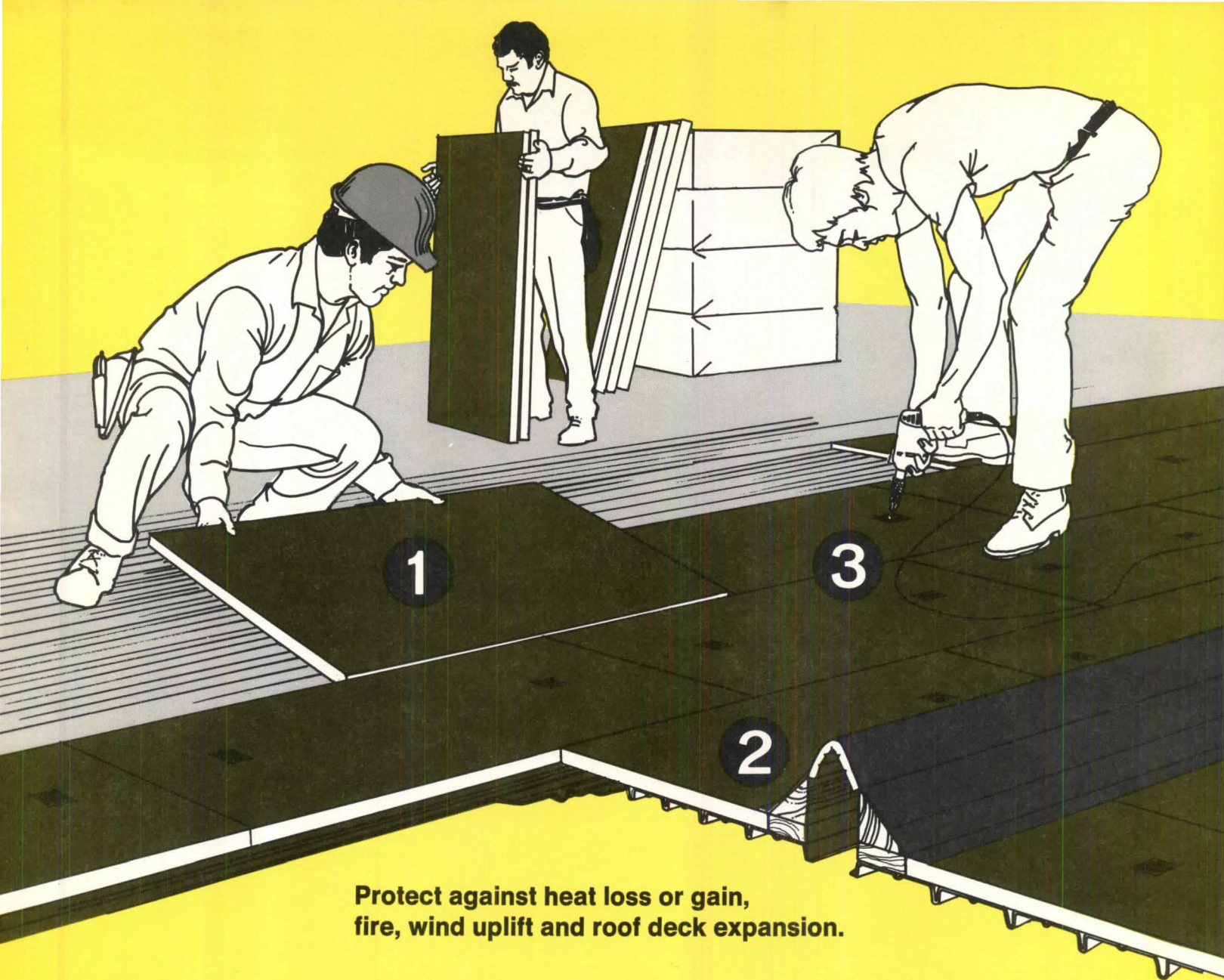
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## Convention '76: Ethics Decision Deferred, Botsai Chosen as President-Elect

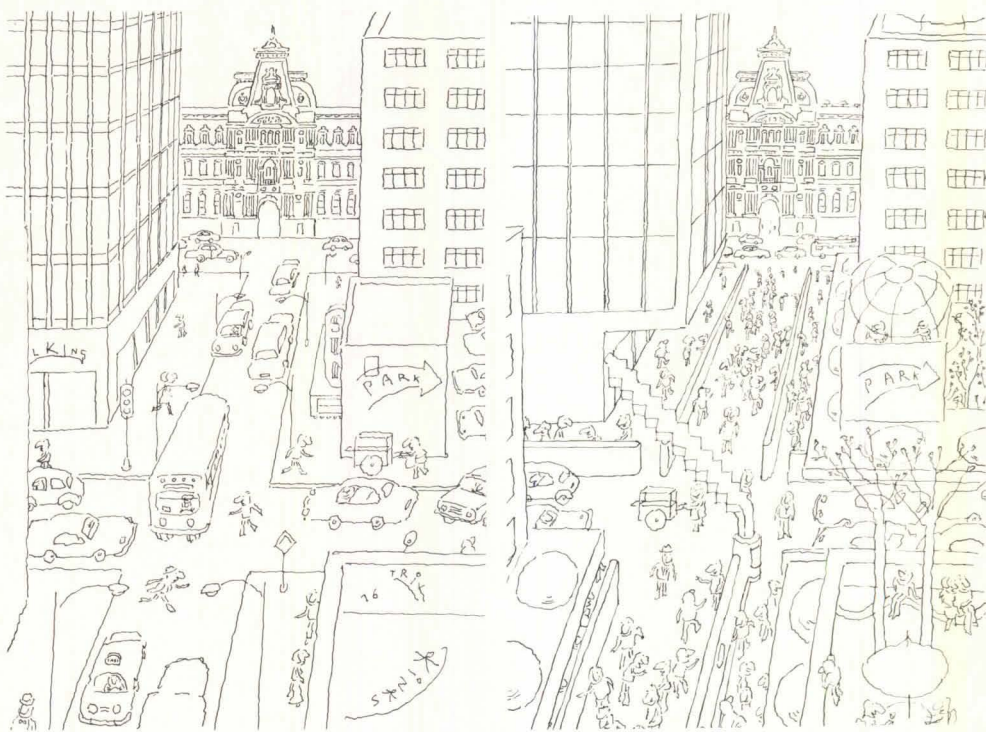
A smaller-than-usual Philadelphia convention, after a shorter-than-expected floor debate, voted for another year of discussion of ethical change. It elected a set of officers headed by Elmer E. Botsai, FAIA, of Oakland, Calif., as first vice president and president-elect.

Botsai is a past treasurer of the Institute and is in his second consecutive term as a vice president. Other vice presidents elected in Philadelphia from a field of five were Herbert Epstein, FAIA, of Brooklyn, for three years an AIA director and currently in his third year as chairman of the commission on education and research; Ehrmann B. Mitchell Jr., FAIA, of Philadelphia, who also has just completed a three-year term on the board and is chairman of the commission on Institute and component affairs; and Robert L. Wilson, AIA, of Stamford, Conn., for whom this will be a second vice presidential term. Professional practice commission chairman Robert Lawrence, FAIA, Oklahoma City, was elected secretary.

It was clear from the start of the ethics discussion that the delegates wanted more time to consider changes in the Standards of Ethical Practice, especially changes so sweeping as those drafted by the executive committee in February and endorsed by the board in early March.

One of the first opposition statements, by board member Jerome M. Cooper, FAIA, of Atlanta, drew applause loud enough to make clear the eventual outcome of the vote and set the framework for the discussion. Cooper focused on the proposed deletion of "prohibitions against contracting, commission agents, free sketches and advertising."

Calling the proposal "hurriedly conceived," Cooper urged support of the motion that eventually passed putting the ethical question off until the 1977 convention in San Diego. The motion called for a new study by a special task force and submission of the results of its work to next year's grassroots meetings.



## Convention '76: From a Fable to Fireworks, with A Lot of Moving Around Philadelphia in Between

The 1976 convention opened on Sunday afternoon, May 2, with a keynote fable instead of a speech. Written by convention chairman Richard Saul Wurman, FAIA, and entitled "What-If, Could-Be", it had to do with what people could do to their cities by employing curiosity, imagination and information.

The fable was read at the opening session by Gerald Cope, AIA, and also handed out in booklet form. The booklet was illustrated by R. O. Blechman. His drawings of Market Street in Philadelphia (above) were the front and back covers and illustrated the kinds of changes in the feel and life of the city that Wurman had in mind in the fable and, to some degree, in the convention format.

It was, in a word, unconventional. Determined to get the attendees into interaction with the city, the convention committee scattered the theme seminars all over downtown, in such places as bank board rooms and offices of host chapter firms as well as public meeting rooms.

Topics of the theme seminars also varied widely. Speakers ranged from a covey of urban, landscape, graphic and other designers to Dr. Jonas Salk, discoverer of the polio vaccine. Dr. Salk discussed his theory of "metabiological evolution" and spoke warmly of his friendship with Louis Kahn, FAIA, architect of the Salk Institute in La Jolla, Calif. Kahn's widow attended Salk's session.

There were also more than 30 "marketplace of new ideas" seminars, most of them on practice-related topics. Not surprisingly, given the economic condition of the architectural professional, the best-attended were those on marketing techniques and getting federal contracts. Overall convention attendance was 2,548—down from last year's 4,210, a fact which also may have something to do with the economic crisis.

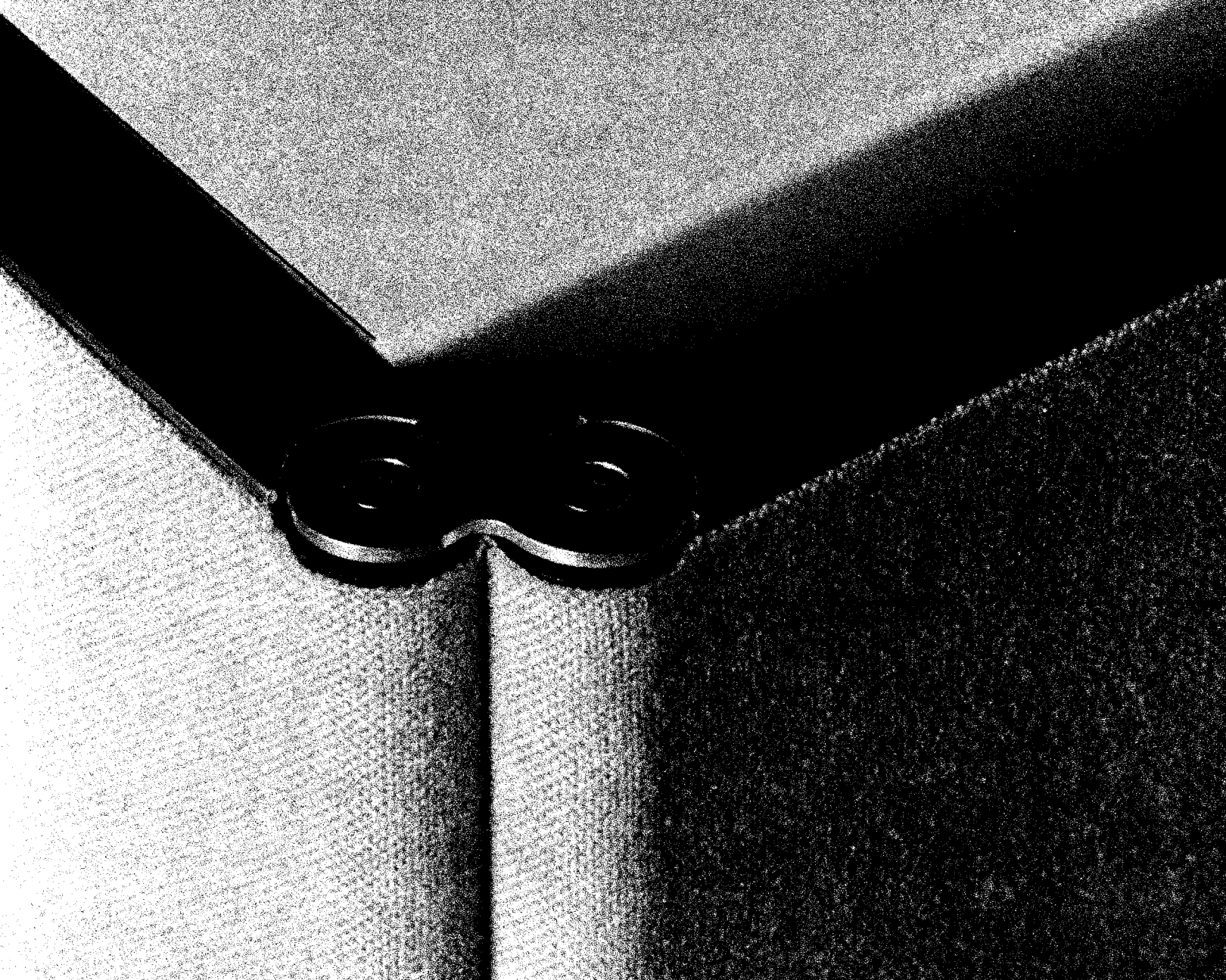
Wednesday, the final day, opened with an early morning lecture by R. Buckminster Fuller, FAIA, in the resplendently eclectic Church of the Holy Trinity. Then



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followed coffee and music in (fortunately) sunlit Rittenhouse Square and a return to the church for the annual awards presentation.

In the evening there was a special concert by the Philadelphia Orchestra conducted by Eugene Ormandy, followed by a ball. Outside, most downtown buildings turned on their lights by prearrangement and there was a major fireworks display (photo above).

## Convention '76: Action On Other Resolutions

The ethics debate (p. 6) commanded much of the delegates' attention at the Philadelphia convention. But there was a full slate of proposals that extended the business session late into the afternoon.

A resolution calling for the establishment of an office of legal assistance at AIA that would be "available for consultation with members and their law consultants" was defeated. However, a related resolution which was passed mandates that the Institute establish a policy and support programs that would obtain "in all states equitable administrative or legislative relief" in the cost of defense of architects in "capricious, frivolous, nuisance and meritless third party arbitrary 'scattershot' lawsuits."

Concerning suits against components of AIA arising out of the Institute's by-laws, rules, regulations, documents, policies or actions, a resolution was defeated which would have called upon the Institute to pay the legal fees.

Among other resolutions passed:

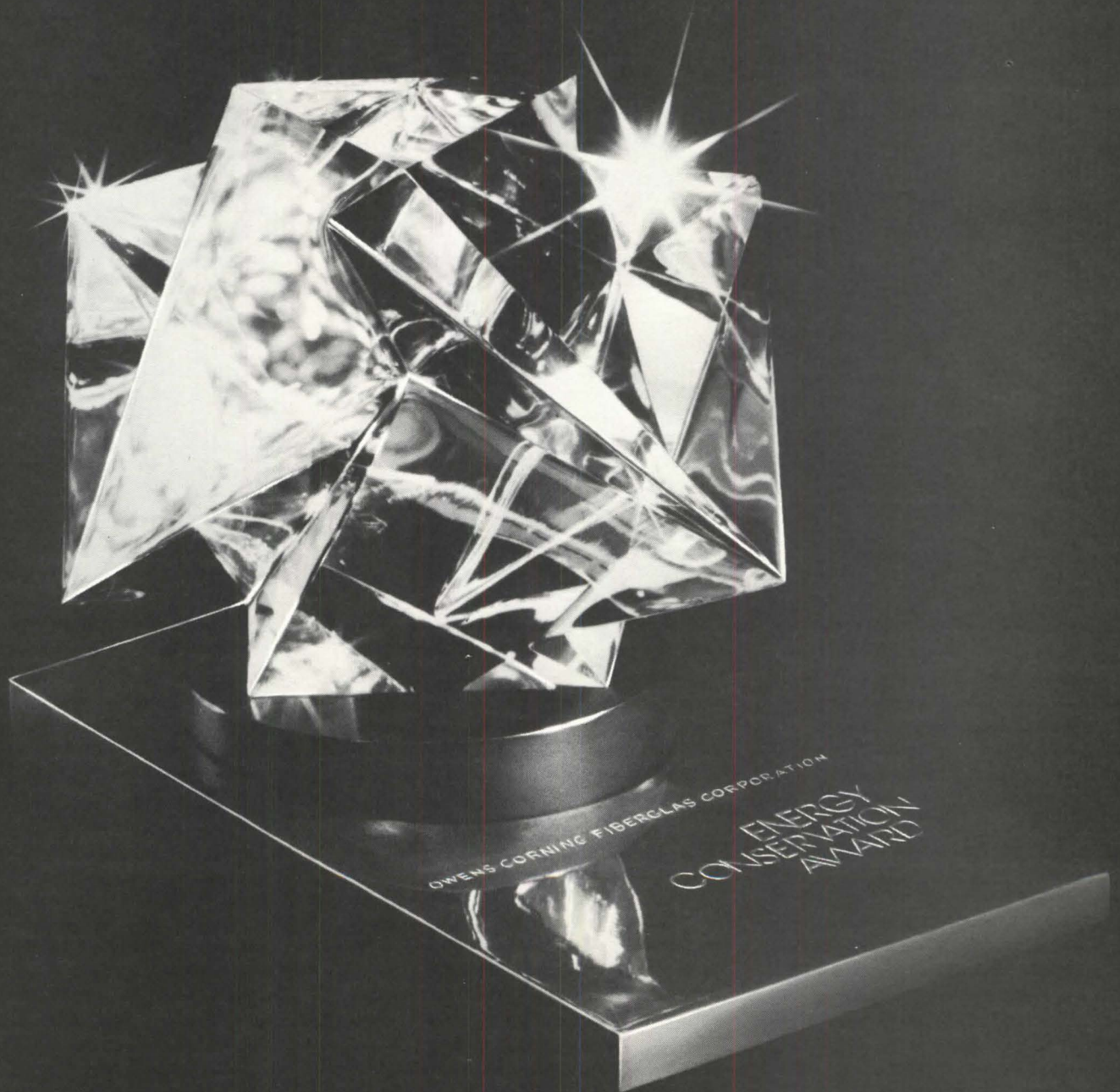
- That AIA initiate a joint effort by design professions, industry and labor to "seek federal legislative and other appropriate remedies to establish proper long-range fiscal planning and a balanced flow of funds for public and private sectors."
- That a "membership review and a majority of delegates at the annual convention" be required in order to approve requests from the board of directors "and/or other fiduciary agents of the Institute for levying supplemental dues."
- That in the handling of resolutions submitted for consideration to the national convention, the AIA bylaws be amended to grant the proposer the opportunity to speak for the resolution prior to debate and to rebut prior to the vote on that resolution.
- That AIA denounce sexist advertising: "The AIA [will] call upon the manufacturers of architectural products . . . to raise their level of excellence in the practical dissemination of relevant information, demonstrating a sincere concern for the integrity and honor of womanhood, and that the unnecessary and exploitive practice of using nude and scantily clad models in advertisements, product literature and information cease."
- That AIA continue developing positions and statements concerning the reduction of energy consumption in buildings, stressing that building configuration and programming are prime determinants of energy use and "that improvement of mechanical functioning of equipment should follow this architectural determination."
- That the secretary of the Institute publish at least annually a summary of infor-

mation on his interpretations of the ethical standards. This would aid the executive directors and component presidents who "are besieged with requests for interpretations" of the documents.

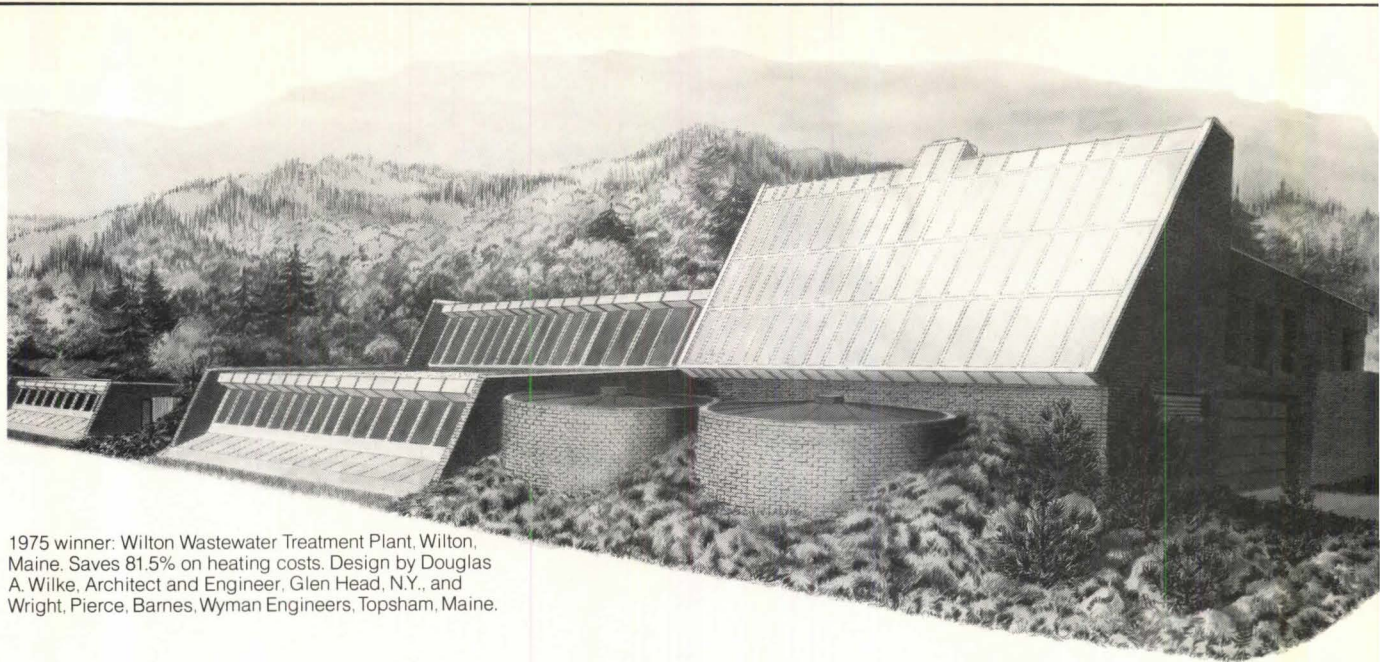
- That a study be undertaken to "determine how best to effect a change in priorities so that the major effort of the national AIA be directed toward communicating to the public the full scope of the profession's skills and principles."
- That a news column be set up in the *Memo* for state components, chapters and members to communicate with the board, other components, chapters or members on matters of mutual concern.
- That AIA lead in developing a continuing education program.
- That the Institute examine its planning, funding and approval procedures to determine whether simplified, speedier procedure is feasible.
- That the minority/disadvantaged scholarship program be funded for 1977; that efforts to encourage minorities in the profession be continued and strengthened; that the Institute assist minority firms by making available literature and continuing education themes focusing on minority concerns, and that AIA encourage joint ventures between minority-owned and majority-owned firms.
- That AIA establish a preservation reuse assistance team program similar to the R/UDAT program to encourage preservation and adaptive use.
- That every effort be made to support existing legislation which provides funds for historic preservation, and to obtain new legislation concerning preservation.

*Going On continued on page 16*

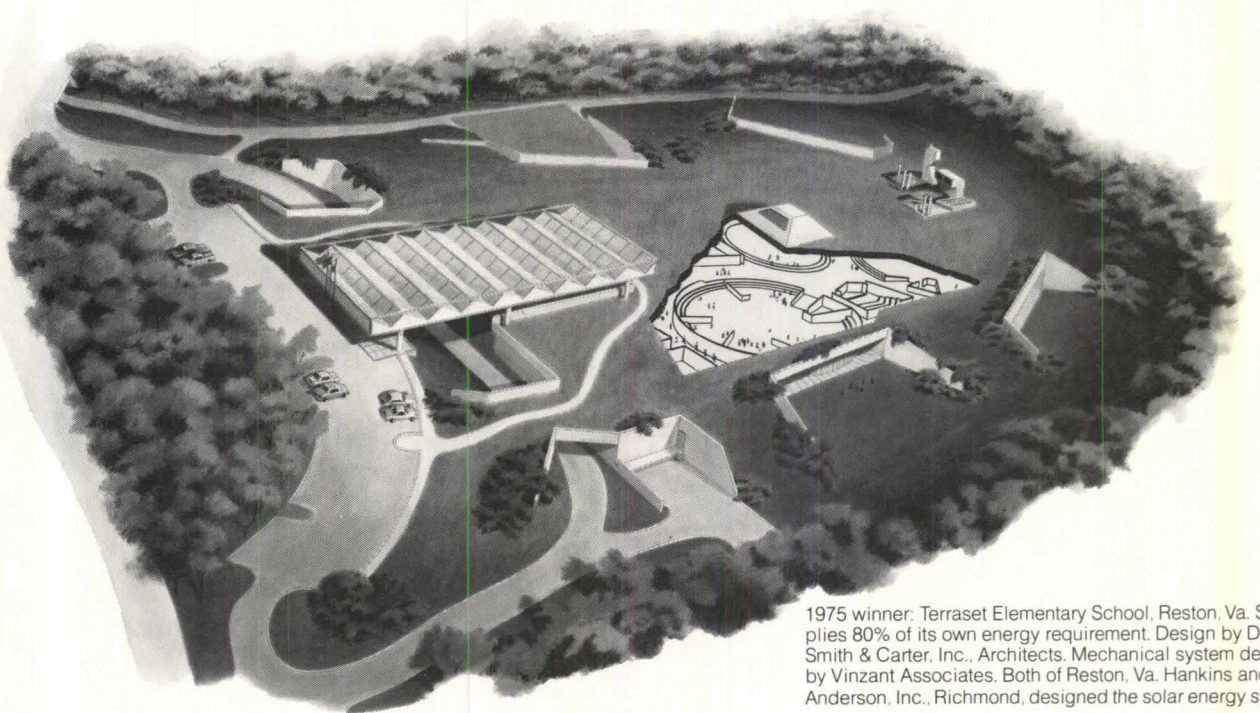
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## **The ceiling. Handsome is as handsome does.**

The ceiling is the single most important acoustical component in an open office. It should absorb, not reflect, sound. A perfect ceiling would have the same

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# should remember you design an open office

sound attenuation as the open sky—a Noise Isolation Class (NIC) rating of 23.

An independent acoustical testing laboratory examined eight ceilings, including costly coffered and baffled systems. Their verdict: Owens-Corning's Nubby II Fiberglas\* Ceiling Board, in any standard exposed grid suspension system, is *best* for achieving speech privacy at economical installed cost. In these tests, Nubby II was the *only* ceiling board with an NIC' as high as 20 in a flat configuration.

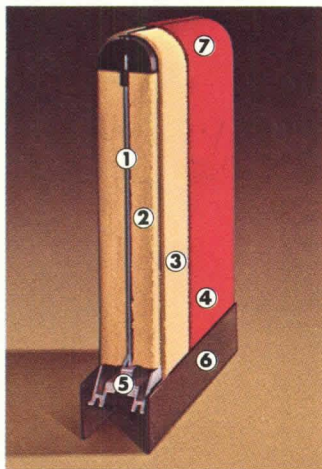
Some architects prefer the look of ceilings with *concealed* grids. Caution: As yet, *no* such ceiling provides the minimum NIC performance necessary to achieve satisfactory acoustical privacy in an open office.

In this league, handsome is as handsome *does*.

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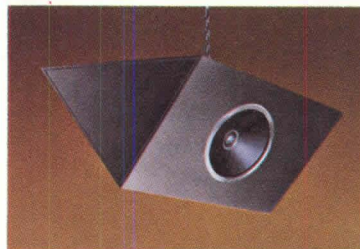
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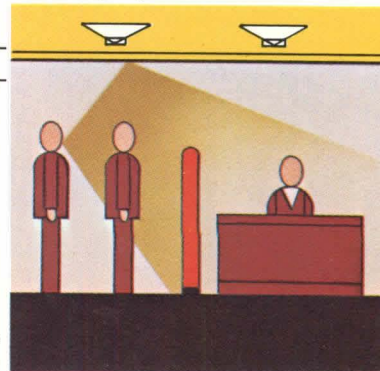
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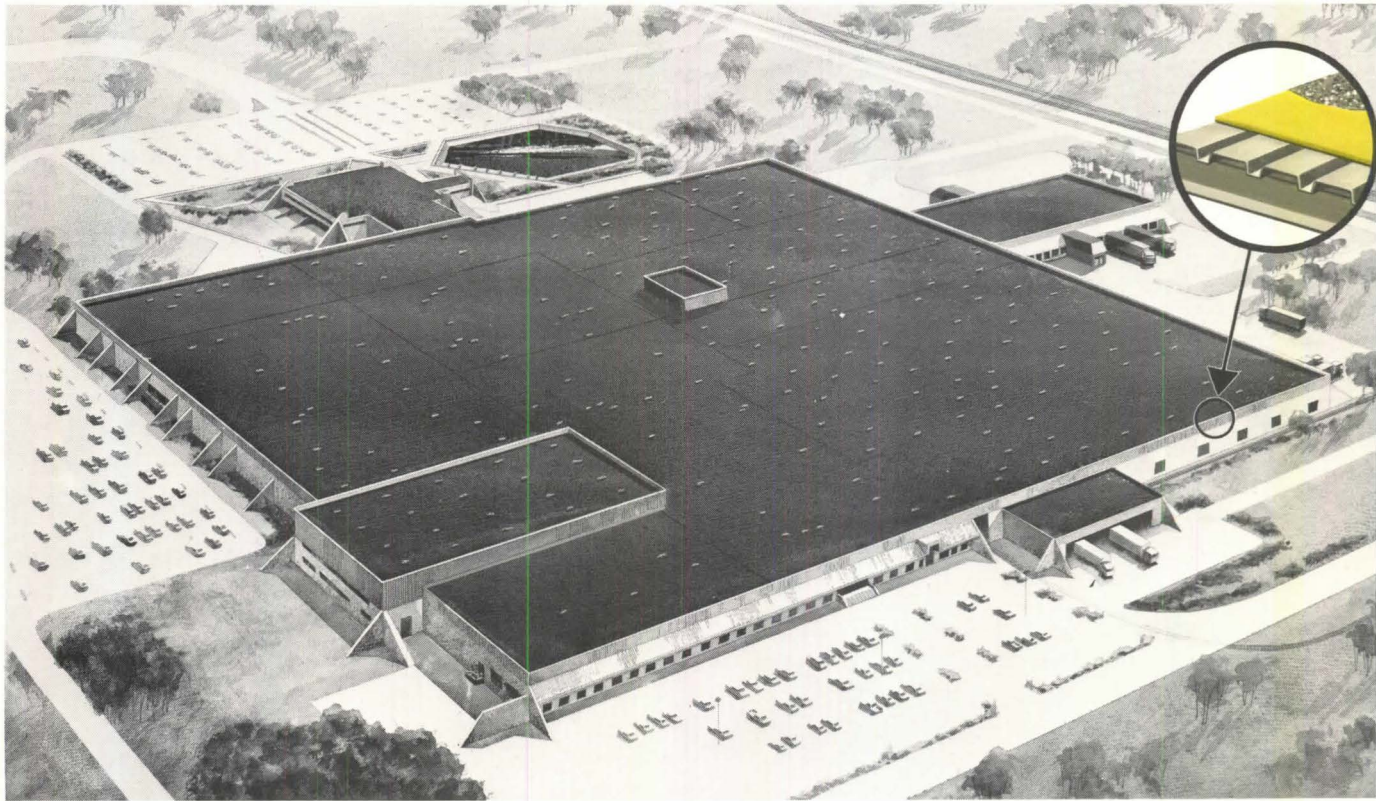
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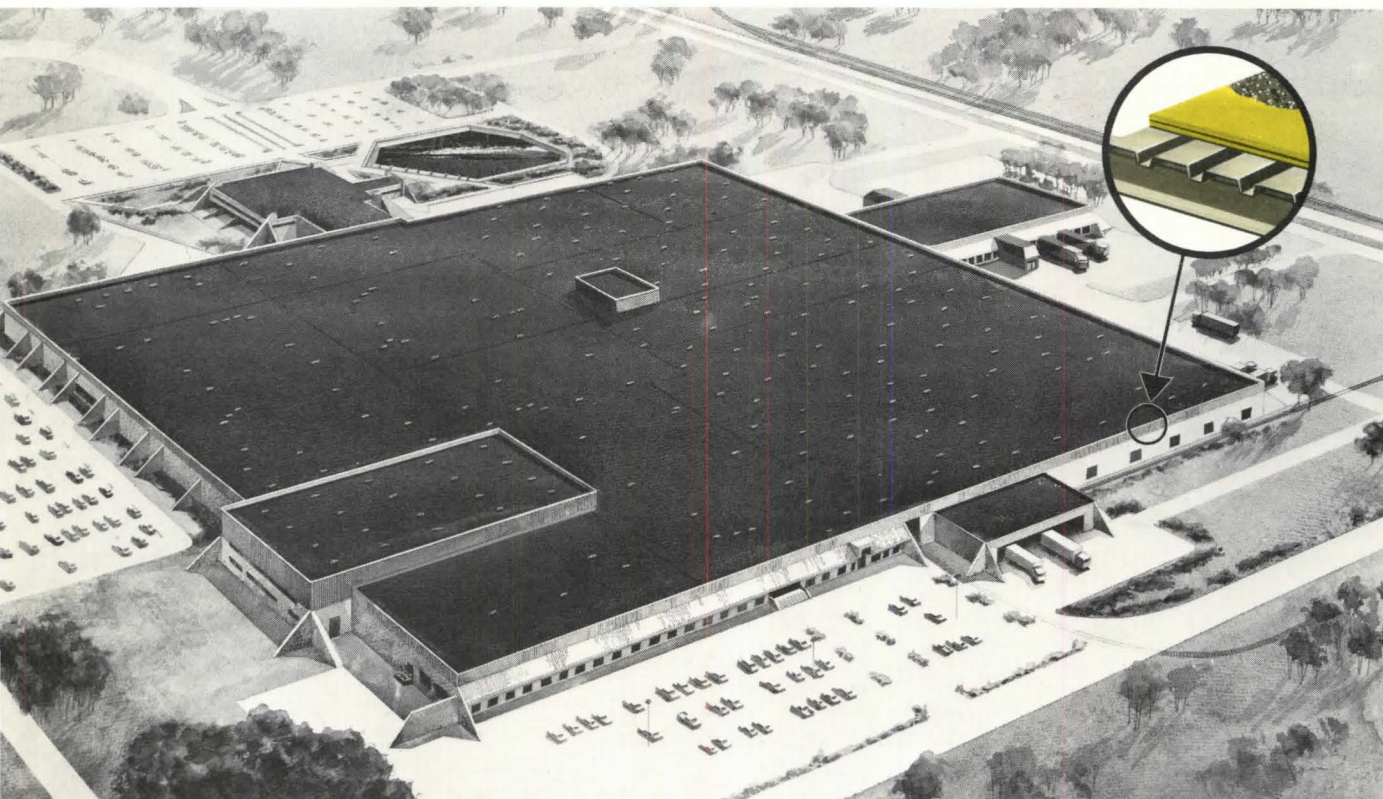
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(Due to present availability of natural gas, propane and fuel oil are used as additional fuels for heating, and as a result of using these higher-priced fuels, actual savings may vary.)

2. It saves on construction costs.

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## Pilot Internship Program Underway in Three States

The so-called gap in the preparation of an architectural candidate for registration refers to the time after graduation from an architectural school and before examination, a period when he or she must develop basic practice skills. In order to close the gap, the intern-architect development program (IDP) has been initiated. The IDP coordinating committee, cochaired by Dwight M. Bonham, AIA, representing the National Council of Architectural Registration Boards, and Institute Vice President Elmer E. Botsai, FAIA, was formed to develop the IDP concept and to evaluate its effectiveness, as well as to integrate and coordinate the efforts of AIA and NCARB, IDP's primary sponsors.

In recent months, planning for IDP has shifted to action, and a pilot program is now being implemented in Colorado, New Jersey and Texas. The IDP committee calls this the "first stage of what many regard as the profession's most significant venture in years."

Last fall, the committee sent letters to AIA corporate members in the three pilot states, and the members were asked to indicate whether they were interested in participating in the project as professional sponsors. The professional sponsor would be the primary source of guidance for the intern-architect, serving as a "teacher" on a daily basis. The responses, say Bonham and Samuel T. Balen, AIA, NCARB's director of professional development, were "gratifying."

From the group responding, the committee has now selected 60 firms as professional sponsors, and 114 intern-

architects have been chosen to work in these firms. In addition, AIA, through its three pilot state societies, has identified 17 volunteer professional advisers to provide independent guidance to intern-architects on both an individual and group basis. All of these individuals will participate in the pilot IDP.

The purpose of the IDP is to give intern-architects the best possible head start in the early critical years of an architectural career, and to help them establish the habit of continued learning. The profession will provide guidance to intern-architects as they obtain experience in 28 practical training subjects considered crucial to professional practice and public protection and in a variety of related special subjects of the intern-architects' individual choosing. Acceptable experience may be gained in one or a combination of these ways: direct participation, indirect observation and supplementary education.

Among the responsibilities of AIA in the project is the development of the program's supplementary educational resources. Oriented specifically to intern-architects' needs, these learning packages will be designed to allow participants to gain knowledge where experience is lacking and in special areas of interest, paralleling the practical training and special subjects which have been identified for IDP.

AIA is developing an overview package as well as 35 specific topical packages for use in the pilot IDP.

"The learning packages in the supplementary education program will not be traditional," says James E. Ellison, AIA, administrator of the Institute's department of education and research. "They will not provide answers or simply restate substantive material already available elsewhere. These packages will help intern-architects enlarge on their education and

experience, stimulating and challenging them to seek answers and a full understanding of the subjects covered and providing guidance to existing information resources and appropriate 'people' resources. The AIA supplementary education program promises to make a significant contribution to the success of the IDP."

Charles A. Blondheim Jr., FAIA, NCARB president-elect, says that the ultimate purpose of IDP "is nothing less than the development of better architects: young men and women who will provide this society with better professional services in the course of creating a superior environment. . . . When the IDP pilot program now under way . . . has operated long enough to prove its strength and overcome its yet-to-surface problems, it will go nationwide."

## Reynolds Award Goes to Reflective British Offices

The R. S. Reynolds memorial award for distinguished architecture using aluminum was awarded by an AIA jury to the architectural firm of Foster Associates of London and Oslo for its design of the country head office of the British insurance brokerage firm of Willis, Faber & Dumas, Ltd., in Ipswich, Suffolk, England (left).

Officially opened in June 1975, the building accommodates 1,350 people, has an exterior of solar tinted glass and ceilings of highly polished aluminum channels, which heighten the quality of daylight penetrating the interior.

Said the jury: "The entire site has been skillfully occupied utilizing an edgeband structural system and a three-story, suspended glass exterior wall—both of which follow the curving, amorphous shape of the enscinding streets. In daylight, the one-acre of mirror glass exterior wall uniformly reflects and augments the historic neighboring structures."

A distinctive feature of the interior is an open, vertical circulation well, which creates a large overall space. The jury commended the "very human interior scale and . . . lower than usual open plan dividing units which totally avoid the 'cattle pen' cubicles of many similar installations."

The jury consisted of William Marshall Jr., FAIA; Ehrman B. Mitchell Jr., FAIA, and James J. Foley, FAIA.

## Court Rules for Architect As Construction Manager

An Arkansas county court ruled that a Little Rock architectural and engineering firm was not acting as a contractor in providing construction management services and did not, therefore, need a contractor's



license to do construction management.

The suit was initiated in January 1975 by the State of Arkansas Contracting licensing Board against the firm of Cromwell, Neyland, Truemper, Levy & Gatchell on the opinion of the state attorney general that a construction manager must be licensed as a contractor, because like a contractor he "assumes charge, in a supervisory capacity or otherwise, of the construction, erection, alteration," or repair of a building.

The Cromwell firm requested assistance from AIA, stating that "we feel that a decision in this area could affect construction management services in other parts of the country." The firm denied the charge on grounds that the rendering of professional services is not the same as contracting, as defined by the Arkansas statute, that the construction manager acts as an agent for the owner and that all work done on projects is performed by licensed contractors.

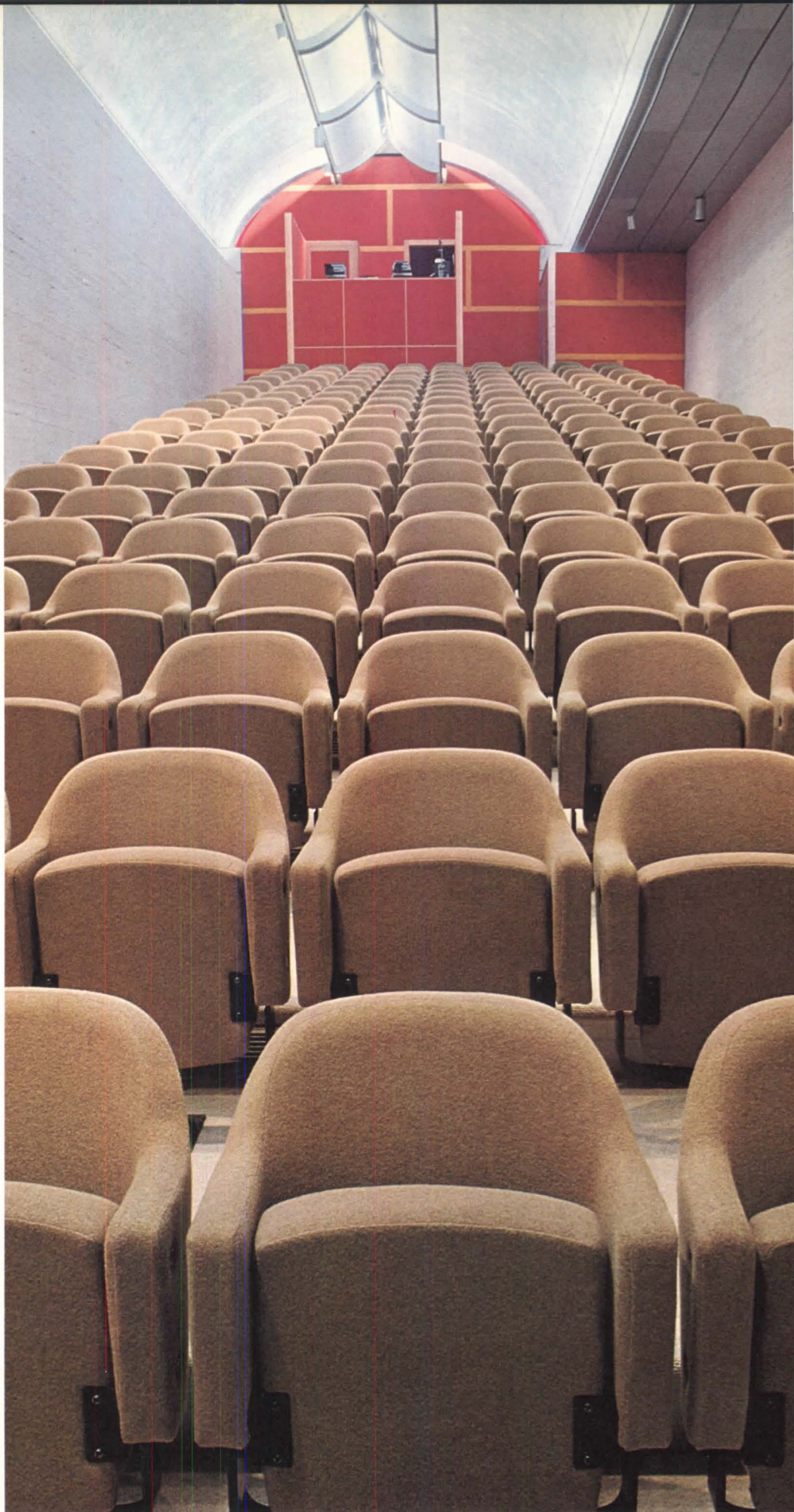
In August 1975, the boards of AIA, American Consulting Engineers Council and Associated General Contractors of America all ratified a statement saying, "It is the view of this group that neither architects, engineers nor contractors should take any action in connection with the licensing or other laws which would have the effect of reserving to themselves construction management markets." William Marshall Jr., then-AIA president, sent a letter to formally notify the Arkansas chapter/AIA (intervenor in the case) that the AIA board approved the statement.

On April 9, 1976, the presiding judge decreed that "construction management is not, per se, in violation of the Arkansas Contractors Law. In this particular case there was a general contractor who had the supervisory authority, and, because of that fact, the services that the defendant undertook to perform, and did perform . . . do not fall within the definition of 'contractor,' in the law."

## Trust Gives Seven Awards For Historic Preservation

The National Trust for Historic Preservation has bestowed awards for significant achievements in the field of historic preservation on seven recipients. Thus honored were:

- Boston architects/developers Childs Bertram Tseckares and the Raymond Cattle Co. for rehabilitating historic structures for present-day use. (This is the first time a Trust award has been given to an architectural or development firm.)
- Muriel Dinsmore, an editor for the Eureka, Calif., *Times-Standard* for "keeping the preservation of Eureka's fine 19th century heritage before the public eye," according to Trust President James Biddle.



# JG

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- Sigma Phi Fraternity, University of Wisconsin chapter, for restoring the 1909 Bradley House in Madison, designed by Louis Sullivan and owned by the chapter.
- The Junior League of Louisville, Ky., for restoring to contemporary use a late 19th century mercantile building threatened with demolition.
- The Colorado and New Mexico Railroad authorities for preserving and restoring 64 scenic miles "as a living museum [of] an historically important railroad system," said Biddle.
- Georgia Ray DeCoster and Mrs. John Musser of St. Paul, Minn., for saving that city's Old Federal Courts building.
- Anna F. Hesse and Historic Hermann (Mo.) Inc. for preserving the "buildings, records and cultural traditions of the Germans who came to Gasconade County during the 19th century," according to Biddle.

Also honored with Trust youth awards were young people's groups from Monterey, Calif., Fredericksburg, Tex., and Milwaukee.

President Ford recently declared the week of May 9 as national historic preservation week. He said in an official proclamation that such an observance "gives each of us a special opportunity to applaud the creative leadership of The American Institute of Architects and the National Trust for Historic Preservation whose members have worked closely with this and previous Administrations, the Congress and the National Park Service to enhance public appreciation of the cultural accomplishments that helped shape our national character."

## Jean Labatut Honored Jointly by AIA, ACSA

Jean Labatut, FAIA, is the first recipient of the joint award for lasting achievement in architectural education, given by AIA and the Association of Collegiate Schools of Architecture. At the Institute's recent convention in Philadelphia, Labatut, cited for his distinguished 50-year career at Princeton University, was presented with a certificate signed by many former students and with an unset citrine topaz, a jewel which traditionally has symbolized the search for wisdom.

The newly established award is made to living educators who have taught at least a decade and have made a primary contribution to architectural education on the North American continent.

During his tenure at Princeton, Labatut taught many architects who have achieved distinction in the profession. He was instrumental in establishing the first doctorate program in architecture in this country. Since his retirement in 1967, he has served as resident critic at Princeton's school of architecture and graduate school

of architecture. During his career, he has received many honors, including the Thomas Jefferson Memorial Foundation medal in architecture.

## Furness Award Instituted

The Pennsylvania Academy of Fine Arts in Philadelphia has established the Furness prize to mark the centennial celebration of its landmark building designed by Frank Furness. The prize is awarded to "recognize particular distinction by an American architect." It will be presented "from time to time as deemed appropriate," and recipients will be chosen by a committee made up of members of the Philadelphia chapter/AIA and the academy's board and staff.

The first recipient of the Furness prize is Hyman Myers, AIA, of the Philadelphia firm of Day & Zimmerman Associates. Myers was the architect in charge of the recent restoration and renovation of the academy building. Richard J. Boyle, the academy's director, said in his presentation of the prize to Myers: "He is that happy combination of scholar and practitioner who brings energy and perseverance to his research and insight and planning to his practice."

## Housing Awards Announced for 1976

Seventeen architect-designed houses and multifamily housing projects have been cited for honors in the 1976 Homes for Better Living Program, sponsored by AIA in cooperation with the magazine *House & Home*. Award certificates were presented to the winners at the AIA convention in May.

There were more than 300 entries in this year's program. Entries were divided into three categories: custom houses designed for specific clients, merchant-built houses designed for sale and multifamily housing complexes. Two juries selected the award winners, one for custom homes and the other for merchant-built and multifamily housing. Chairman of the custom jury was Alfredo De Vido, AIA; chairman of the jury for selection of winners of merchant-built and multifamily entries was John K. Rauch Jr., AIA.

In the custom house category, first honor awards went to architects Edward Larabee Barnes, FAIA, of New York City for a residence on the coast of Maine; Hartman-Cox of Washington, D.C., for a house in Montgomery County, Md., and to MLTW/ Turnbull Associates of San Francisco for a house in Great Falls, Va.

Awards of merit for custom-designed houses went to: Hobart Betts, AIA, New York City; Booth & Nagle, Chicago; Kirby Ward Fitzpatrick, AIA, San Francisco; Donald Jacobs, AIA, The Sea

Ranch, Calif., and Daniel Solomon, AIA, San Francisco.

In the merchant-built house category, an award of merit went to SMS Architects of New Canaan, Conn. (associate architects: Donald Sandy Jr., AIA, and James A. Babcock) for Lyon Farm, Greenwich, Conn.

Architects/planners Donald Sandy Jr., AIA, and James A. Babcock, of San Francisco won an honor award in the multifamily housing category for University Park, Ithaca, N.Y. Awards of merit in this category were given to the Sandy/Babcock team and to Clark Tribble Harris & Li, Charlotte, N.C.; Fisher-Friedman Associates, San Francisco; Mackinlay/Winnacker/McNeil, Oakland, Calif.; Schoneberger, Straub, Florence & Associates, Phoenix; Walz & MacLeod and Willis & Associates, San Francisco.

## Chair Design Competition For 1977 AIA Convention

The San Diego chapter/AIA is sponsoring an international chair design competition. Prototypes of winning entries will be displayed at the AIA 1977 convention in San Diego, Calif. Each of 10 finalists will receive \$1,000 to help develop a full-size prototype. From the 10 finalists, three chairs will be selected for grand prizes: \$15,000 for the first prize; \$10,000 for the second; \$5,000 for the third. After the

*continued on page 72*

## Employment Exchange

### Positions Available

Executive director; duties include legislative/governmental agency relations; internal communications; public relations; office, financial management. Starting July 1; \$20,000 proposed salary. Washington State Council of Architects/AIA, S. 311½ Occidental Ave. S., Seattle, Wash. 98104, (202) 623-3666.

Asst. prof. for architectural design studios, lectures, research. Salary \$13,000 full or part-time, depending on qualifications. Master's degree, prior teaching, research or practice experience required. Contact: Patsy Kleypas, Office of the Dean, School of Architecture, Rice University, P.O. Box 1892, Houston, Tex. 77001.

### Positions Wanted:

Principal, small firm. Former principal, large A/E firm, with heavy design, administration, marketing, policy formation experience. B.S., M. Arch. Seeks career opportunity. Résumé. Contact: L. Brody, AIA, 164 Winthrop Place, Englewood, N.J. 07631.

Building: First International Building, Dallas, Texas, completed and occupied late 1974. Architects: Hellmuth-Obata & Kassabaum, Inc., Harwood K. Smith & Partners, Inc., Dallas; Consulting Engineers: Ellisor & Tomner, Dallas; General Contractor: Henry C. Beck Co., Dallas; Fireproofing Contractor: Carpenter Plastering Co., Dallas.



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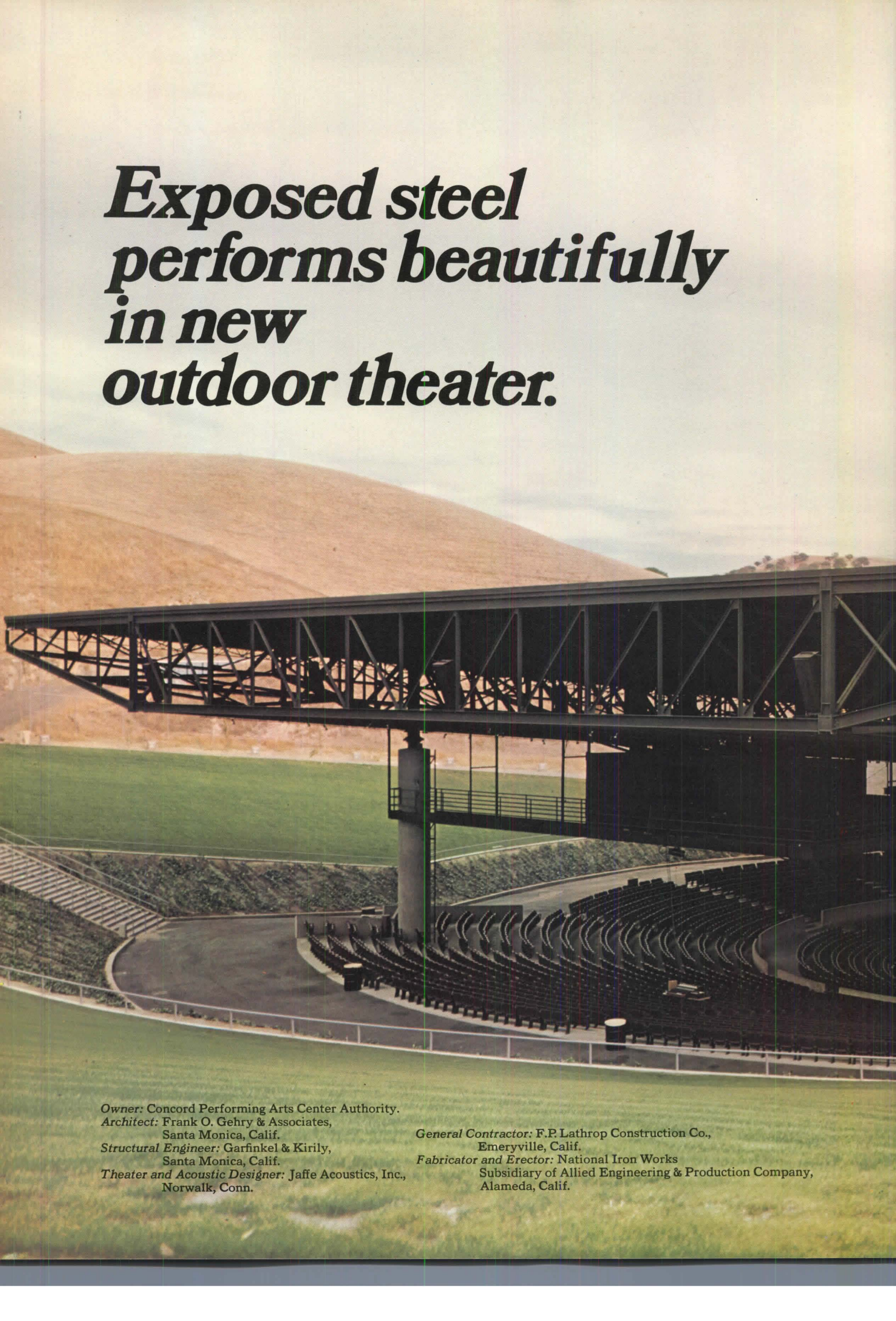
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## GRACE

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***Exposed steel  
performs beautifully  
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outdoor theater.***

*Owner:* Concord Performing Arts Center Authority.

*Architect:* Frank O. Gehry & Associates,  
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*Structural Engineer:* Garfinkel & Kirily,  
Santa Monica, Calif.

*Theater and Acoustic Designer:* Jaffe Acoustics, Inc.,  
Norwalk, Conn.

*General Contractor:* F.P. Lathrop Construction Co.,  
Emeryville, Calif.

*Fabricator and Erector:* National Iron Works  
Subsidiary of Allied Engineering & Production Company,  
Alameda, Calif.

Nature set the scene for the creation of what has been called the world's most acoustically perfect amphitheater—the new 4.5 million dollar Concord Pavilion, located in Contra Costa County, 28 miles northeast of San Francisco.

Built in a natural bowl in the foothills of Mt. Diablo, it can seat 3,500 people under the roof, while 4,500 more can enjoy the sights and sounds from a grassy, gently sloping hill.

The 40,000 square foot, exposed steel roof deck is supported by two main trusses, each 200 feet long and 13 feet deep, weighing 50 tons each. Six intermediate roof trusses are 200 feet long, varying in weight from 15 to 25 tons. Both high-strength bolts and field welding were used for connections. The roof is supported by four columns of 14-inch wide flange structural steel shapes encased in concrete.

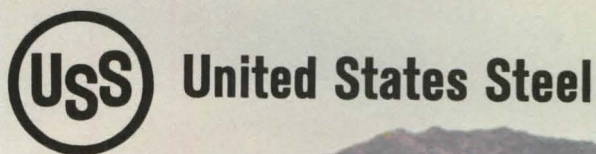
Three hundred fifty tons of structural steel went into the Concord Pavilion. Seventy per cent

of the steel is U.S. Steel's USS EX-TEN (A572) high-strength low alloy steel; the remainder is A36. Fabrication and erection were completed in only 15 weeks.

Spectacular by day or night, the new Concord Pavilion represents an expression of contemporary architecture that blends to perfection with the environment. It is one more beautiful example of the imaginative use of exposed steel.

For further information, and for advice on the many uses of architectural steel, contact a USS Construction Representative through your nearest U.S. Steel Sales Office, or write: United States Steel, P.O. Box 86, (C576), Pittsburgh, Pa. 15230.

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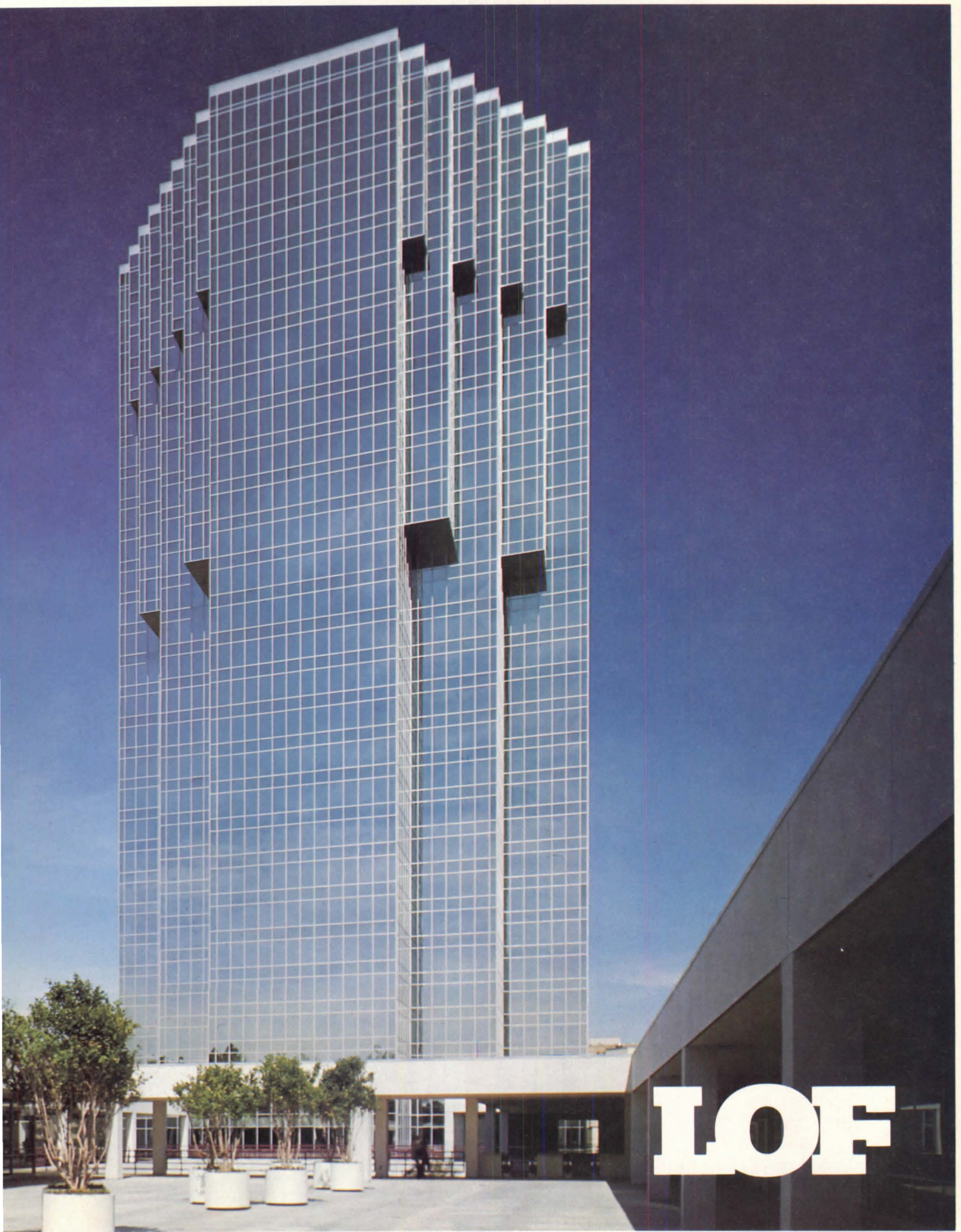
For more detailed information on LOF glass products, please refer to LOF's Sweet's Catalog—"Glass for Construction." Or you can write Marty Wenzler at Libbey-Owens-Ford Company, 811 Madison Avenue, Toledo, Ohio 43695.

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<b>Heating, Cooling and Distribution Equipment</b>	1,433,054	574,308	858,746	60
<b>Comparative Initial Construction Costs</b>	2,497,068	2,230,060	267,008	11
<b>Annual Heating Cost</b>	25,715	23,377	2,338	9
<b>Annual Air Conditioning Costs</b>	28,473	12,018	16,455	58
<b>Annual Insurance Premium</b>	2,497	2,230	267	11
<b>Annual Property Taxes</b>	49,949	44,601	5,348	11

Building: Tower Place, Atlanta, Georgia  
 Developer: Ackerman & Company  
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# AIA JOURNAL

There was a sense of significance about the ethics discussion in Philadelphia: a sense that decisions were at hand that could virtually define the shape and future of the profession. Perhaps as a consequence, the floor debate was unusually measured and reasoned.

Now the debate has been extended over the next 12 months and, it was the hope of the convention delegates, to the profession at large. To open it as widely as possible, we hereby open the pages of the JOURNAL as a forum for discussion of the ethics issues, and invite expressions of members' opinions about them.

Starting in August (July is our bicentennial issue) we will regularly and prominently publish such expressions as we receive them. We will probably get more than space will permit us to use, and so will have to be selective.

The selections will be objective (the JOURNAL, like, we suspect, much of the profession, really hasn't made up its mind on these issues). Some of the criteria for selection will be that shorter will prevail over longer, reason over emotion, readable prose over rhetoric.

We hope that you will accept this invitation; we will be watching the mails. D. C.

# Adaptive Use: Economic And Other Advantages

Andrea O. Dean



"It is apparent, then, that pride *and* profits are the ultimate joint venturers in this business of urban conservation." Thus Dana Crawford, a director of the National Trust for Historic Preservation, underscored a main theme of last summer's conference on the economics of preserving old buildings for new uses. The conference was sponsored by the National Trust and papers presented there by developers, mortgage bankers, politicians, architects and others have recently been published as a book, entitled *Economic Benefits of Preserving Old Buildings*. Appropriately enough, the conference was held in Seattle, where the "recycling" of the former Skid Road area into Pioneer Square (closeup photo left, and from air right) served to revitalize the ailing neighborhood and increase its tax base by a whopping 1,000 percent.

Heightened interest in recycling old buildings for new uses has required a prior—or at least simultaneous—recycling of ideas and attitudes. "The market of the past 20 years reflected the beliefs that anything new was better by sole virtue of its novelty, that time brings progress and that all change is for the better," said conference speaker Richard C. Frank, AIA, president of Preservation/Urban Design of Ann Arbor, Mich. Such thoughts seem now like little more than naive reflections of a bygone era. Retired with them into the pages of history are the days of what may be called redevelopment by demolition. "The bulldozer days are dead in Denver, though urban blight is alive and well," remarked Bruce M. Rockwell, president and chief executive officer of the Colorado National Bank of Denver.

"Preservation has come to mean stabilization and conservation—the fullest use of the resources passed on by forebears," said William Marlin of *Architectural Record*.

Seattle is an example of how "making money, making a difference and making sense can happen all at once, given the proper municipal direction," said Bruce Chapman, secretary of state for the state of Washington. It is not entirely coincidental that the renaissance of Pioneer Square began just about the time the bottom dropped out of the local economy



in 1969 and 1970, remarked Wes Uhlman, mayor of Seattle since 1969. Despite economic depression, the city decided to invest in what many consider frills: old architecture, an old market, old trees and parks. As a result Seattle began to "re-attract young people as residents, tourists as consumers and business people as investors," said Chapman. Under the circumstances, there is some irony in the fact that the Seattle business community at first resisted the notion of recycling the old skid row.

Ultimately, social and emotional reasons have been less important than economic ones in changing attitudes about old—and new—buildings. The new concern about conserving energy and resources has provided impetus to reuse old buildings. But, most important for developers, architects and financial institutions, is the fact that "recycling has proved to cost 25 percent less than new construction and that a sophisticated tenancy is responding to the increased interest in our heritage," according to Earl B. Seaman, president of the Heritage Group Ltd., a development corporation.

Case studies presented at the conference showed that generally the cost for renovation is running a quarter to a third less than the cost for new construction. Herbert McLaughlin, AIA, who in addition to his architectural practice is a principal in the development firm of Conner/McLaughlin, which specializes in the reuse of old buildings, said that renovation is especially advantageous "in terms of 'soft' costs. These are roughly 18-20 percent of hard costs and aggregate to less than one-third of the comparable costs in new construction." On the other hand, George Notter of the Boston architectural firm of Anderson Notter Associates, which specializes in adaptive use work, said that more often than not, the total dollar expenditure for preservation, including the acquisition of the property involved, is about the same as for new

construction. According to him, "The plus factor is achieved by developing the potential assets into a final project of greater amenity—one having the right location, more space in either height or volume, more area or more character, materials of a special quality or a potential for time savings in construction."

The expense of recycling old buildings usually compares favorably with new construction because it generally requires shorter construction time and shorter construction loans, each of which results in substantial savings. Moreover, rehabilitation can often bypass lengthy development review processes, local neighborhood opposition to construction and zoning delays. "This leads to a shorter, smoother development process, and less fear of alienating the community," said Frank of Preservation/Urban Design.

One reason renovation has been relatively unpopular until recently is that there are certain risks involved. Unexpected difficulties may pop up when work actually starts on an old building, making cost estimating for adaptive use work less reliable than for new building construction. Increased experience on the part of architects and contractors is diminishing these problems, but larger contingency funds than for new construction are still required to cover risks.

The first step in any adaptive use project is to make a careful assessment of economic feasibility. Said Roger Webb, president of Architectural Heritage, a Boston development firm, it is not enough "to 'save' a landmark by loudly proclaiming its potential for reuse." Ultimately, an adaptive use project must make good economic sense. "An old building with 'charm,'" said Ron Kaufman, who heads the Ron Kaufman Companies, a real estate firm specializing in old properties, "cannot be a crutch or a substitute for sound real estate economics." To Kaufman, "sound real estate economics" means a reasonable profit for the risk involved,

enough net income to justify a realistic loan and to service the debt, plus funds remaining to pay a distribution to the owners "that is somewhat better or more attractive than that offered by other investments competing for their equity."

The importance of determining economic feasibility and finding ways to make projects more economically attractive were overriding concerns of most conference participants.

The most important factors to consider before embarking on an adaptive use project, said Kaufman, among others, are location, the inherent structural assets and liabilities of the building, cost of construction, leaseability and the availability of financing.

When the matter of recycling Union Station in New London, Conn., was being studied, Anderson Notter Associates retained a real estate and marketing consultant to look into the matter. According to George Notter, the consultant dramatically presented what he considered the three essential criteria of project feasibility: (1) location, (2) location and (3) location.

Location close to high-occupancy and high-rent office areas is considered most advantageous. But, without that, "the project still can be successful if positive features overcome the 'locational deficit,'" said Kaufman. Examples of such "positive features" are excellent bus or commuter train service, proximity to freeways, a large parking garage, a competitive rent scale and attractive design.

When assessing the potential of the building itself, it was agreed, the key is to look under the surface and see what was originally created. It is very important to be able to enhance the original design instead of having to make drastic changes or use slick coverups.

In the evaluation of a building and in all further steps of adaptive use work, the architect's role is far more critical than in new construction or simple restoration, according to Herbert McLaughlin. He says that the architect is at the "center of the economic and building process here more than in any other type of development, because his particular areas of expertise, knowledge of codes and innova-

tive design abilities make an enormous difference in costs. Only the architect can accurately predict them." Because contractors tend to rely on rules of thumb in making estimates, McLaughlin regards them as less than reliable sources for gauging rehabilitation costs.

Importantly, a property developer must be able to comply with structural and life safety codes at a realistic cost. Codes can be a significant problem, but with a sympathetic city building department and code amendments being considered in some localities for historic buildings, the problems are easing. Said Richard Frank, "One of the best ways to resolve many code problems is to simply bite the bullet and install a complete sprinkler system in the building, surprisingly inexpensive at \$1.25 per square foot. This installation greatly aids insurance costs as well."

Frank's firm has found that construction costs range from \$15 to \$40 or more per square foot. "Basically, this wide variation is a function of the investment in such requirements as new exits, stairs, elevators and rest rooms," he said. Since a large building does not require many more of the basics than a smaller one, distributing these high fixed costs over a larger gross square footage reduces the cost per square foot. One reasonable solution to the high cost of adaptive use for small buildings is to join together several that are adjacent to one another.

To minimize construction costs it is essential to market quickly, so that interim financing charges are as low as possible. Using phased construction (or fast-track) to conform with the marketing program also reduces interim financing time. Said Herbert McLaughlin, "Do not improve unless you have to. Do the lobbies and elevators first, then try to market from the existing space. One advantage of rehabilitation is that it can be marketed faster than new construction." He claimed that aggressive construction management is critical. "My development company," he noted, "often acts as a limited general contractor, subbing out the electrical, mechanical and elevator work in advance of the normal general contractor work."

In McLaughlin's experience, commercial tenants want buildings that have ro-

mantic touches, such as exposed brick walls, but they do not particularly care about the height or detailing of their doors. "Architects do, and the architect's vision is an expensive one. Doors that go up to a 9-foot ceiling add \$1 per square foot to improvement costs, for instance. The tenants should pay extra for this, but few are willing to do so. If these kinds of improvements are provided, it is often at the cost of profits."

The ultimate test of project feasibility is whether the space is leasable. "Do just enough work on a building to give the user a suggestion about the finished product and then stop," said Kaufman.

Roger Webb, who acted as developer in the recycling of Boston's Old City Hall for commercial use (which won a 1976 AIA honor award), emphasized that full occupancy of that old landmark resulted mainly from trying to attract tenants who would appreciate the historic value of the building, and rejecting those whose purposes "are in conflict with the historic character of the landmark." Rejected, for example, was McDonald's hamburger chain, which "wished to erect a golden arch across the front lawn."

"The two elements of recapture and faster marketing time," said Charles Tseckares, AIA, of Childs Bertman Tseckares Associates, Inc., of Boston, are very important when testing the economic viability of old buildings and can be distinct advantages over new construction. He suggested that in old buildings with high ceilings, mechanical equipment can usually be stacked, thus reducing the amount of lost rental area. And any other method of increasing the percentage of rental areas should be investigated.

Availability of financing is a key ingredient in economic feasibility. Many leading institutions have been reluctant to lend on older properties, because they have wanted to see the finished, fully-occupied project before considering a long-term loan; and because they are not convinced that adaptive use is profitable. However, with increased publicity, education and public acceptance, these attitudes are slowly changing. Said Dana Crawford, "Preservationists must understand that few bankers can really 'see' the city. They

recognize only existing conditions—grime, blight, decay—and cannot visualize a physical transformation." They must be convinced, she said, that adaptive use can be very profitable.

Bankers may also be nudged, said Richard Crissman, director of project mortgages in the Los Angeles investment firm of Ralph C. Sutro, by a reminder that the majority of their real estate portfolios hold aging properties in the center cities. Thus the financial stability of central business districts is a subject of primary interest to the financial community.

Crissman said lenders will want every loan to have three ingredients: There should be enough net earnings to insure monthly payments; the borrower should have enough equity to make loan payments worthwhile even if the property fails to meet projected earnings for a while, and both borrower and tenants should have good enough credit to justify the lender's confidence. "If a loan request meets these measures, much of the difficulty of finding a loan for an old building will disappear," he said.

Seattle's Mayor Uhlman pointed out that one lesson learned in the development of Pioneer Square was that a wide variety of agencies, organizations and economic interests can be enlisted in preservation projects in one way or another. Pioneer Square financial participants included clubs, banks, Jaycees, arts groups, the convention and visitors bureau, the U.S. Post Office, the downtown development society, to name but a few. In addition, groups such as the National Endowment for the Arts, the National Trust, HUD and other federal government agencies can provide funding. The book *Economic Benefits of Preserving Old Buildings* provides a brief rundown of such funding sources.

"Although the tone of the conference on economic trends for recycling the nation's old structures was one of welcome optimism, the truth is that facts and figures shared there are little known in the real estate industry and even less known among lending institutions," remarked Dana Crawford, adding that the business community's endorsement of adaptive use work is still to be won. □

## A Once-Proud Seattle Office Building Is Brought Back to Life

During the days of the Alaskan gold rush, the Victorian, brick, terra cotta and sandstone Pioneer building was the most prestigious office address in Seattle. By 1973, when the Pioneer was bought by the Theta Co., a developer, and renovations were begun, the once glorious building had a leaking roof, rotting floors and many broken windows. The upper floors had been unoccupied for almost 25 years and only small portions of the ground and basement levels were in use.

According to Earl Seaman, partner-in-charge of restoration at Theta, the first step was to research the market to make sure that there was a need for medium-priced, quality office space. Ralph D. Anderson & Partners were chosen as architects both for their design capability and for their experience in dealing with the various city agencies having jurisdiction over the development of historic properties. They had successfully rehabilitated a nearby building, and "much of the motivation and leadership for the rebirth of Pioneer Square was the result of Anderson's efforts," said Seaman.

After establishing that the building was structurally sound, a contractor with restoration experience was selected, drawings were developed, economic projections were made and, finally, the project was deemed "a feasible real estate venture." The "fast-track" method of construction was used, despite its higher cost, because it allowed earlier occupancy.

As little work as possible was done on the building. Among the renovations were a new roof, new floors and joists, two new skylights, a new mechanical penthouse, the removal of penthouse structures to make room for a fire stair, a new sprinkler system and standpipes. The exterior was sandblasted, patched and repainted; new downspouts were also added as were new storefronts on the ground floor.

The building now contains 90,500 gross square feet and a net rentable area of 68,750 square feet, which yields 76 percent efficiency, according to the architects.

The gross construction cost was less than \$19 a square foot, compared to more than \$30 estimated for new construction of similar quality.





## In Tacoma, Wash., An Old City Hall Is Filled with Shops

Many of America's great public buildings such as courthouses and city halls are continuing to suffer through winters of their discontent. Threatened by wrecking balls, these abandoned buildings ache for new uses. Fortunately, more and more are being rescued.

A recent save was in Tacoma, Wash. The old city hall was built in 1893 and abandoned in 1959 when a new city-county building was constructed. Designed by San Francisco architects Heatherton & Atkinson, the ochre-colored brick structure with a six-story clock tower sits on a hill at one end of downtown. The site was ripe for development and in 1969 the building was sold for \$17,400 (the value of the property less the cost of demolition).

After teetering on the edge of the abyss of demolition for several years, it was rescued by a group of Seattle and Tacoma businessmen who were convinced the building could be converted into commercial space. That was in 1972. Last fall, following \$2.3 million in renovation work, the old city hall reopened with more than 30 businesses on five floors. Eventually, there is to be space for 50 shops and restaurants.

One of the building's new owners is Seattle architect Barnet Schorr, AIA, who redesigned Pier 70 on the Seattle waterfront into a successful shopping complex. In the case of the city hall, he wanted to let the building be itself. Thus a series of 36 brick arches throughout the building are emphasized. Brick walls are free of color and ornamentation. New work such as plumbing, electrical runs and air-conditioning ducts are left exposed.

Because of the high ceilings, it was possible to create mezzanines on each floor. These are built from laminated wood beams bolted to huge metal plates on the walls; wood decking forms the floors of the mezzanines. Each mezzanine is on a number of levels and there are many open spaces to the floor below. The effect is that of a large bazaar with areas flowing, one to another.

Some of the shops are in unusual places. A bookstore, Inkslinger's, is located in a trapezoidal space next to the main staircase. The wood beams, arched exterior





windows and multicolored bookcovers create a visual treat. There are 10 old, walk-in safes in the building; one is used as a wallpaper showroom for a shop, others for storage. Jail cells in the basement (the building served as the city police station from 1900 to 1929) are game rooms and private dining rooms for a restaurant called the Foundation. The old boiler acts as a monumental sculpture in the entry.

The clock tower is now the office and shops for Pat Daley & Co., makers of custom jewelry and clocks. His craftsmen work on various levels of the tower, surrounded by antiques. In their midst is the pendulum for the building's clock, which Daley restored to working condition. It had not run for 37 years. Last September 3 at 11:59 A.M., Tacoma's architect-Mayor Gordon Johnston, AIA,

set the pendulum swinging and one minute later the 5-ton chimes, cast in 1904 by the same firm that cast the Liberty Bell, struck noon.

Visitors to the building are able to go up to the roof where a greenhouse-restaurant has been built and take in a view that extends from Mount Ranier on one side to Puget Sound on the other. Patrons also are able to see the handsome detailing of the terra cotta and brickwork at eye level rather than from 100 feet below on the street.

Architect Schorr says that the cost of conversion was \$5 to \$8 per square foot less than new construction and points out that in addition to the dollar value found in recycling, there is also "a psychological value. This building could never be replaced."

As with most projects, there are prob-

lems. A number of tenants have come and gone mostly, says Schorr, because they offered marginal services or were unfamiliar with business. Unlike Seattle, Tacoma does not attract many tourists. The big difficulty is that the shops must compete with suburban shopping centers. People in Tacoma have to be convinced to shop downtown, an effort that will take time.

In this kind of venture, one cannot expect overnight financial success. The project is completed and open, and considering the problems with financing adaptive use projects, that is most important. The old city hall received a second chance at life; there are hundreds of other buildings waiting for that same chance. A look at the track record to date shows the concept to be a viable one and the old city hall offers further proof.



*Text and photographs on these and the following two pages are by Carleton Knight III, associate editor of Preservation News.*

## A Baltimore School Becomes a Theater With Room to Expand

The Center Stage, Baltimore's professional theater, has a new home—a school built in 1856. It is a case study of the benefits to be found in reusing old buildings. Not only did adapting the school cost less than building a new theater, but it took less time as well. In addition, the school offers something a new building could not—enough built-in expansion space to double the size of the facilities.

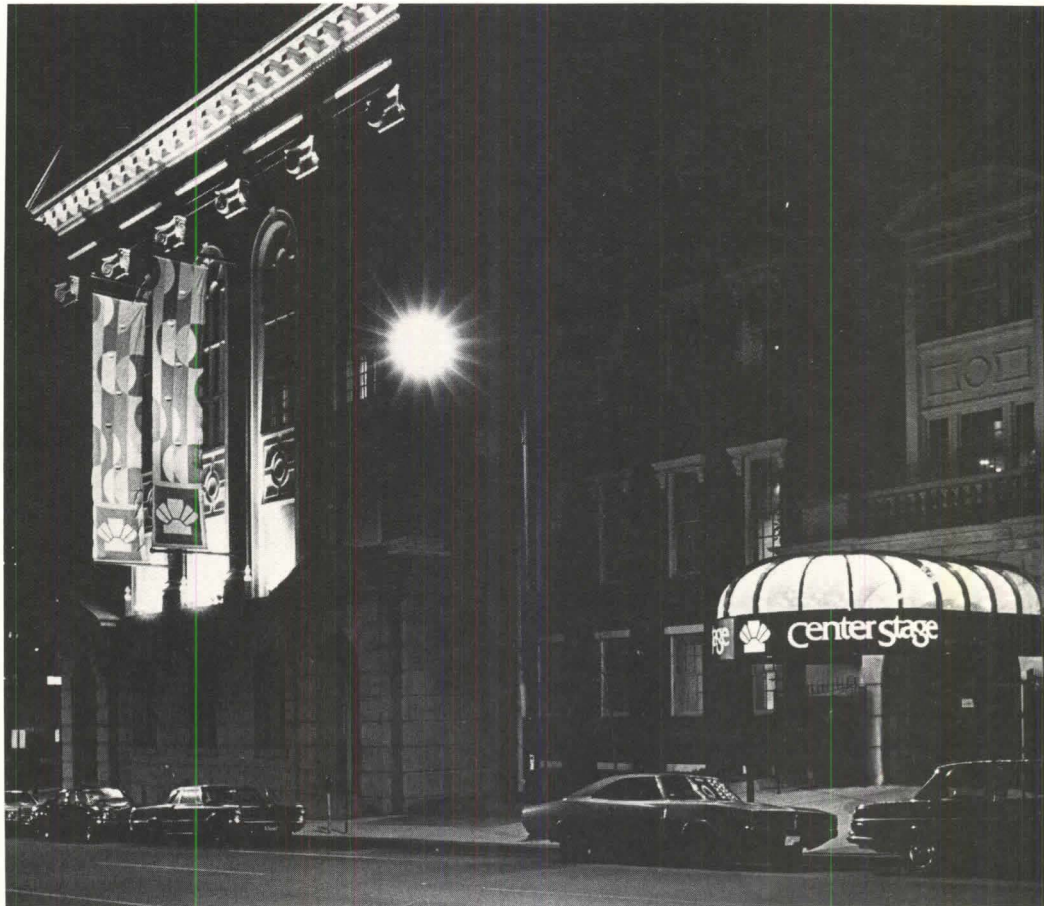
But the story is not that simple. It actually began in January 1974 when fire destroyed the Center Stage's quarters. While the theater was able to continue its season at other facilities, the question of what to do about a permanent home took longer to resolve.

There were those who believed that the Center Stage should move from its downtown location to the suburbs to compete with the dinner theaters. Baltimore Mayor William D. Schaefer was adamantly opposed, as were others, and the theater's directors decided to stay in the city. The question, however, was where. Several sites had been offered when what some describe as a miracle happened.

The Loyola College and High School complex at Calvert and Monument Streets was owned by the Maryland Province of Jesuits, but had been vacant for five years. The Jesuits had received several financial offers for the property. All were rejected because none provided for preservation of the landmark school, which is adjacent to St. Ignatius Church. The Jesuits offered to donate the school to the Center Stage. It was readily accepted.

The location was ideal for the theater; it is at the foot of Mt. Vernon Square in the heart of the city's cultural complex including the Peabody Institute and the Walters Art Gallery. But there were other pluses. Explains Peter Culman, managing director of the Center Stage, "We decided to go with the St. Ignatius property because we had much more space in the long run than we could ever have by constructing a new building. Also, we were recycling a Baltimore landmark, which we thought would appeal to the general public. And, quite frankly, the Jesuits gave us the property."

Other sites were considered, but a new theater would have taken two to three





years to build and cost \$2.5 million. Recycling the school took less than a year and cost \$1.7 million.

Before construction could begin, however, the financial arrangements had to be worked out—a process that took 13 months. Because the building was in an urban renewal area, the city, through its department of housing and community development, was able to purchase the building from the Jesuits. It was agreed that the Jesuits would give the \$200,000 purchase price to the Center Stage. The city then sold the building to the theater for \$5.

The National Endowment for the Arts made a \$100,000 grant to cover design fees. The theater borrowed \$300,000 from a consortium of five Maryland banks—after the 38 members of the Center Stage board signed personal guarantees for the loan. There was a \$200,000 long-term loan from the city. The biggest angel, however, was the Ford Foundation, which lent \$750,000. The last \$150,000 was raised in a fund drive and from theater operating funds.

That done, construction could proceed. The architect, James R. Grieves, AIA, of Baltimore, was a member of Center Stage's board and had been talking with them about future plans even before the fire. Grieves chose as the contractor, Morrow

Bros., Inc., who had acted as a cost consultant and offered "a price for the job which had been projected to be fair and reasonable," said Center Stage President Donald Rothman.

The redesign by Grieves, working with Roger Morgan, a New York City theatrical and lighting designer, is a masterpiece that makes use of found spaces and found materials. Only one-half of the 95,000-square-foot building has been done. Work so far has been a 500-seat theater (350 on the main level, 150 in the balcony), upper and lower lobbies, a cafe offering refreshments between acts, offices, rehearsal space and shops for scenery and costumes. No seat is more than 35 feet from the fully trapped, open-thrust stage.

Future work, to be undertaken only after loans on the first phase are paid, includes a second theater seating 300, more workshops and rehearsal space, an outdoor courtyard theater, a restaurant and apartments for visiting actors.

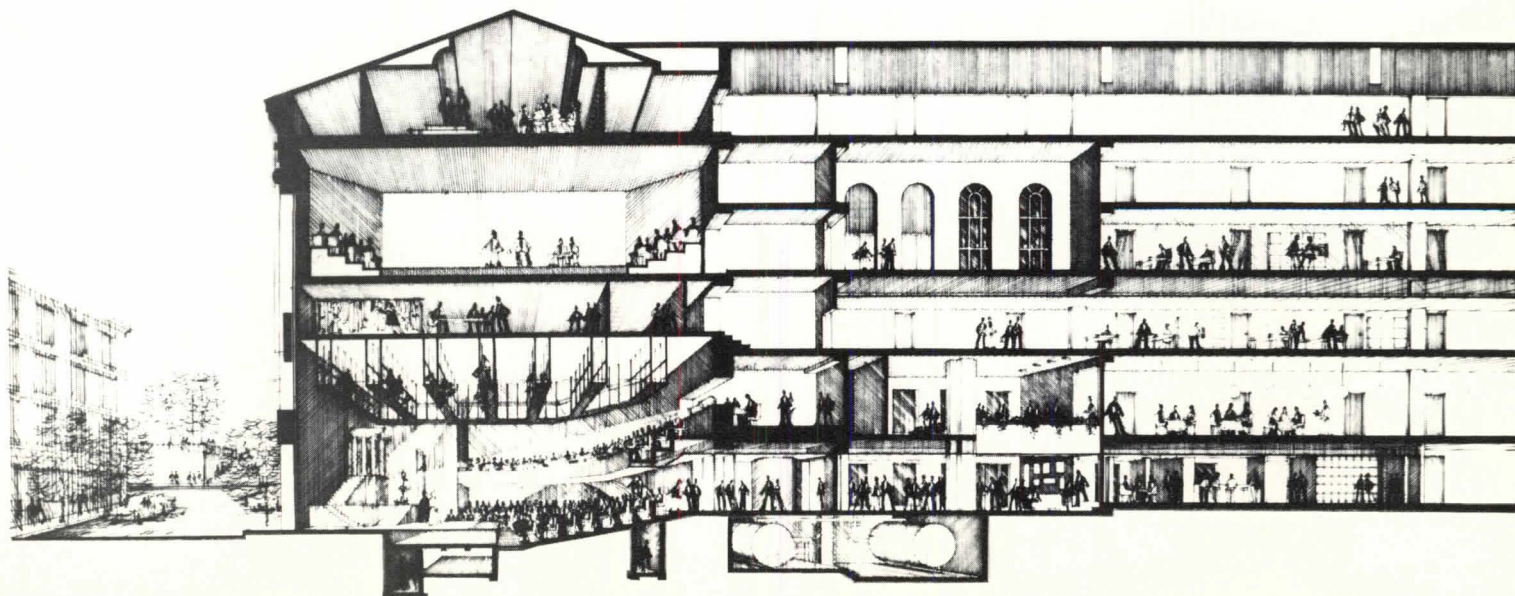
The key to any successful reuse is imagination. Thus, a former stair vestibule has become a sound screen between theater and lobby. Three 11-foot deep trusses were inserted over the stage and theater to hold a system of catwalks. The second theater will rest on top of the trusses; the space between the chords is used for offices and will become a sound

shield between the theaters. Irregularly shaped spaces become stairs; a corner holds a lounge; a niche on the roof contains airconditioning equipment; the area behind the pediment will be a rehearsal hall. Elevators, to be built in the courtyard to take patrons to the second theater, will utilize the existing arched windows as entrances.

Materials found in the building have been used with imagination too. A large kitchen exhaust hood was electrified with small light bulbs and serves as the focal point of the cafe. Old framed mirrors line the natural brick walls of the women's lounge. The signage, by designer Peter Tasi, is particularly elegant. All signs are on pieces of black slate; the typeface is Friz Quadrata.

One other element deserves mention. The glass and metal canopy in front was fabricated in Salt Lake City by Steven Baird, AIA, an architect noted for his restorations of castiron buildings. Grieves was told that if the canopy could have been built in Baltimore, which was unlikely, it would cost \$30,000; Baird did it (including shipping) for \$15,000.

The Center Stage has given Baltimore a theatrical hit. It is an architectural one, too, especially for those architects with enough imagination to realize that old buildings can have new lives.



## Tacoma Bank Made Into an Art Museum

In transforming the former headquarters of the Pacific National Bank of Washington into the Tacoma Art Museum, the architectural firm of Alan Liddle made no changes to the exterior of the 1920s building. In order to create continuous exhibition space, the windows were covered over on the interior, in effect creating a kind of false front.

The budget for the conversion was \$100,000, including fees and taxes. Working within these constraints, the architects converted the ground floor bank lobby into the main museum gallery. Adjacent to it are workrooms, a coat room and small kitchen.

They left intact the existing dropped ceiling of the main banking lobby, which covered airconditioning ducts and fluores-

cent lighting systems, but supplemented it by lower level flexible museum lighting. Though unused during gallery hours, the old lighting system remains useful when changing displays and cleaning up.

In the basement, an old bank vault serves as a children's theater; a children's gallery was also created on this level without making major changes. The second floor has been converted into administrative offices and a small auditorium.

Site of the museum is a prime downtown corner, which Liddle points out would have been difficult to achieve for a new building. "The factor of downtown location cannot be overemphasized," he says. "Few museums in this country are located where the people are. Recycling makes this advantage more attainable."



## The Recycling of a Modern Mediocrity



In its last and original incarnation, this was just another of the many indistinguishable, rundown buildings that characterize rundown industrial neighborhoods in cities all over America. This building, a product of the late 1950s, happened to have belonged to a gas company; and the neighborhood happens to be part of the Georgetown waterfront in Washington, D.C.

Last spring, the National Rural Utilities Cooperative Finance Corporation bought the building, as well as a neighboring warehouse and parking lot. Today, just a year later—and for less than \$500,000—the 56,000 square-foot, once faceless, four-story structure is a distinctive office building, a work place for 75 people. The warehouse will soon be con-

verted into more office space, the parking lot will become an interior plaza for a new residential complex.

At the building's entrance, architect Arthur Cotton Moore, AIA, has added an elevator tower, which gives a whole new dimension to the facade. By scooping out an atrium and topping it with glass, Moore has let in light and transformed the building into a modern, lively space. These were the only major alterations undertaken by the architects.

Washington Post architecture critic, Wolf Von Eckardt, Hon. AIA, remarks that "what is so interesting about all this is that the concept of recycling existing buildings works as well for mediocre 20th century buildings as for glamorous Victorian mansions or colonial warehouses."



## An Architectural Office In a Former City Hall

Tulsa's merchants were about to convince the city to put the hammer to the old city hall and place a minipark on the site when the architectural firm of Coleman-Ervin & Associates purchased it for \$150,000. Together with a law firm, they then developed it for commercial use.

For the sum of \$598,150 (including the land and structure) a "swinging building" was created, which, according to Joseph Coleman, AIA, was fully leased prior to the January 1974 completion date. His firm is now one of the tenants.

The exterior of the building was left virtually unchanged, though decaying wood was removed and old windows replaced with new solar bronze glass in black frames.

On the interior all but the public spaces

were virtually demolished. New partitions and interior finishes were added. Other additions included metal stud drywall construction with gypsum board either painted or faced with vinyl wall covering; all new lighting fixtures and finished ceilings, with 2x4-foot lay-in systems in general spaces, and 12x12-inch decorative tile in executive spaces; new floor coverings throughout; new toilet fixtures and ceramic tile finishes; a new hydraulic elevator in the old elevator shaft; a new mechanical system with rooftop heating and airconditioning units with heating supply ducts to the perimeter areas and air-conditioning supply ducts to the interior areas through a variable velocity zone controlled system, and special wall finishes of hardwoods and decorative fabric.



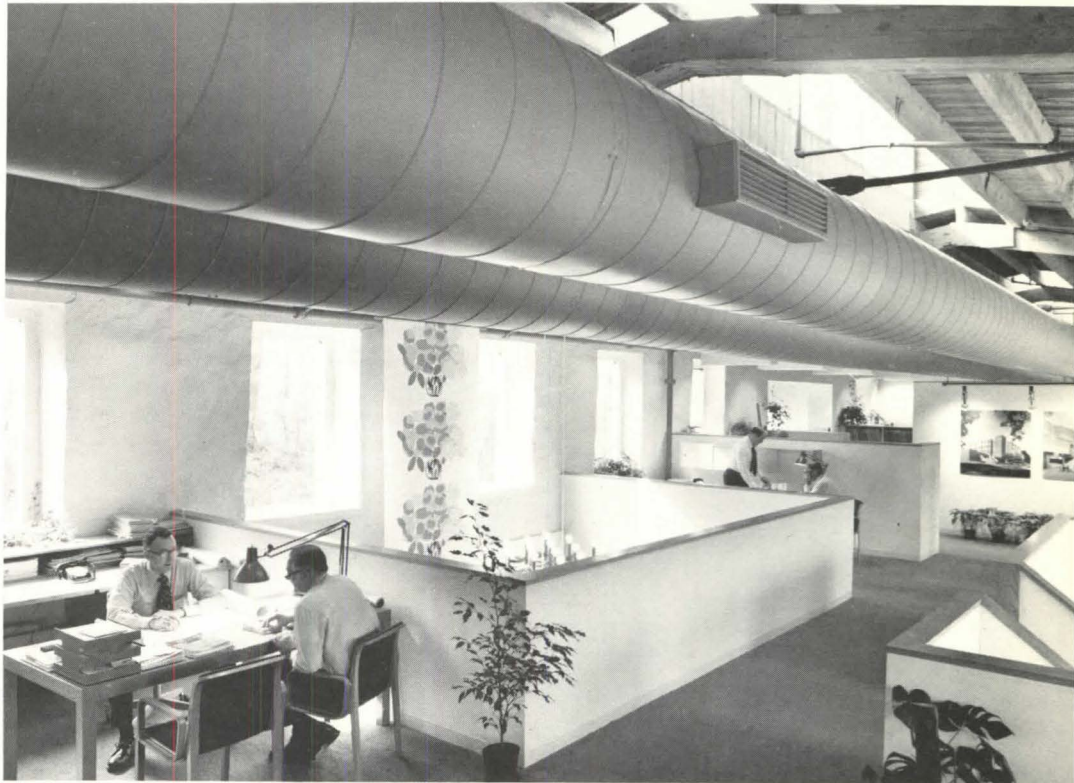
## An Architectural Office In an Abandoned Mill

The spaces housing the architectural offices of Whiteside Moeckel & Carbonell are, to date, the only completed portion in the planned transformation of a huge (1.5 million square-foot) 1850s mill complex into commercial offices and small shops.

Situated in the heart of Wilmington, Del., along the banks of the scenic Brandywine River, the abandoned mills have the advantage of excellent location, as was indicated by a market study conducted by the owner. A broad brush master plan for renovating the entire complex was made by Whiteside Moeckel & Carbonell, but the economic recession put a temporary halt to all plans except for those for their own offices.

The architects' offices occupy the top two floors of one of the older four-story buildings in the complex. "More than basic renovations would have been extremely costly," says Joseph Carbonell III, AIA, explaining that the only major surgery performed on the building by his firm was to cut through a floor to open two stories into a single high-ceilinged one. The firm also relocated some columns and sandblasted the entire interior. "The open plan concept of our office allowed for easy adaptation to the initial plan of the building," says Carbonell.

In renovating the mill for its offices, the firm gained abundant, usable space, with ample parking and views of the river and surrounding countryside from every work table. And they obtained all this at relatively low cost: \$18.75 per square foot in 1973, not including furnishings.



# An Evocative Approach to Adaptive Use

From the time they started life as an architectural firm in New York City some 12 years ago, Hardy Holzman Pfeiffer Associates have been doing reuse work, and for much the same reasons as other young firms—because it is there, available.

But unlike many architects, Hardy Holzman Pfeiffer did not regard adaptive use work as second class; in fact they have always viewed it as having special and positive value. “Many architects tend not to take old buildings seriously, to regard them as merely cute,” says senior partner Hugh Hardy, FAIA. “We make no moral judgments about whether old or new is better.” Many architects, it may be said, approach an old building as a plastic surgeon might an aging woman—with the intent of creating the illusion of youth and modernity.

Instead of trying to create deceptive and unconvincing illusions, “what we try to do is to celebrate whatever was the original character of the building and use it as a contrast with what we add that is new. We expend a great deal of effort trying to tell a story,” says Hardy, a former student of the theater who still spices his conversation with liberal dashes of the dramatic.

A constant theme of the dramas created by the firm in building materials is that seemingly incompatible elements—representing different architectural periods, styles and levels of quality—can coexist very happily and usefully. Hardy applauds “all the crazy quilt juxtapositions and contrasts, including mess and disorganization,” and the “wonderful, fearless combination of the most preposterous sorts of things.”

He also applauds the present, rather than holding to a vision of some idealized past or a future made up “of what we wish things could be. What’s the matter with the present? The present is miraculous,” he says.

Hugh Hardy and his two partners work in, live in and are continually influenced by the city of New York—that last refuge of the melting pot (“a myth to which I unabashedly subscribe”), that monument to startling contrasts (“extraordinarily glorious juxtapositions”).

The offices of Hardy Holzman Pfeiffer



*Three Hardy Holzman Pfeiffer recyclings: The Bronx's Cultural Ethnic Center, containing an experimental school, auditorium and offices, was a 1927 movie house.*

demonstrate again the principals' feelings about diversity. Located in a dark-halled, aging building, they are in part a sort of pop exhibit area. As in the interiors of the buildings they design, the colors here are pure and bright: red wallpaper, orange and chartreuse paint, black shoe moldings. A stuffed moose head juts out from a wall; plastic model airplanes bob from the ceiling. Also on the walls are a bas relief of a “sizzling hot all beef”—in color; a bas relief of the three kings—not in color; scores of diplomas and certificates; an X-ray of a hand; a big yellow traffic light. And so on. In combination, oddly enough, all these disparate scraps and pieces work very well. (At this writing the firm is in the process of moving to larger quarters in the same building. The new offices, they say, will look very different.)

Their buildings, too, are characterized by the bringing together of improbable elements—seasoned, old wood beams, for example, with shiny, new industrial products. Theirs has been called a design process of collage, which is inclusive and is informed by a heightened awareness of the wide range of American traditions as well as contemporary trends. Many of the firm's reuse jobs happen to be in low-income, urban neighborhoods. And above all, there is a commitment to presenting the essential character and logic of the building, be it of a common, infill structure or of an uncommonly elegant old theater.

“The whole logic of the thing and understanding of it are as much the essence of a building as are the lovely marble or the art deco,” says Hardy. Architecture,





*Simon's Rock Art Center, Great Barrington, Mass., used to be a hay barn.*

according to him, is not just a matter of esthetics. "If it were only that, you could put up scenery replicas of buildings, and just look at them and study them in books," he says. In terms of design, this attitude is usually expressed in exposed mechanical systems, which, with the application of paint may become ornament, in "being honest about what is the new life of a reused building," in designing buildings that are easily understood. Hardy talks about buildings as being containers, or backdrops for the action taking place within.

Hardy says that architects have been "pushed" into doing reuse work by clients. "The public in its absolutely desperate hunger to have decoration and all the things that the modern movement had thrown aside, used economics to beat



*Newark's Community Center of the Arts was first a carriage house, then a one-story, concrete block infill building typical of Main Street, U.S.A.*

architects over the head about reusing old buildings. Despite a whole generation's brainwashing about glass boxes, it turns out that (in addition to everything else) they don't work, and they are too expensive to operate."

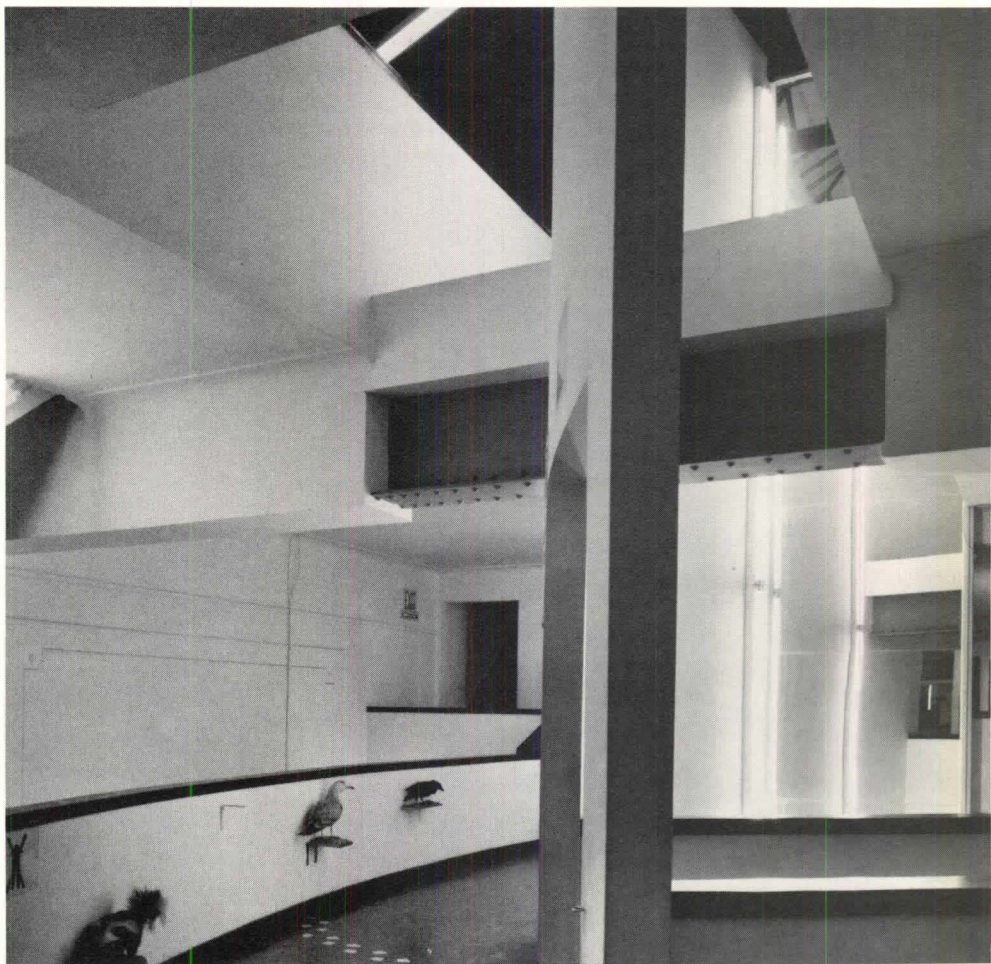
He feels that the increase in renovations and adaptive use work shows that people are trying to figure out how to connect themselves with their origins. Often such yearnings are not completely conscious, he says, giving an example: "I think we didn't know that we were making decoration when we started exposing joists and doing all that stuff [in new construction]. We were trying to make an architecture out of nothing—throwing away the ceiling, then the inner skin to save money. In the process we made ornament, which, with hindsight, we realize is absolutely essential to do."

He continues: "The commercial developers are wonderful. They do it with plants and changes of texture and five kinds of vinyl, and you know the public loves it. How can you say in a democracy that the public taste is inferior to your own? Architecture is always easier, of course, in an autocracy, if you happen to be sitting in the lap of the king."

The economic advantages of reuse are clear, says Hardy. "The building is already there. It must obviously cost less to work with something that exists than to tear it down, throw it away and start over again." He points out, however, that it often becomes more expensive than new construction because clients and architects try to impose inappropriate "images and standards. For example, they may insist that large, loft-like open 19th century interiors become modern, eight-foot, off-the-floor, efficient, fluorescent-lit, landscaped commercial office spaces. The two don't fit."

Hardy says that in the name of modernity—which means inserting airconditioning ducts, suspended ceilings, taking out bearing walls and so forth—the old building is often bowdlerized.

"The successful reuse projects are the ones where the image of the new activity matches, or is complementary to, the image of the original," he says. Generally, the more open the contemporary plan is,



*MUSE, Brooklyn's neighborhood museum, was an automobile showroom and pool hall.*

the more easily it can be adapted to an existing building. But this it not always the case, says Hardy, recalling an old Sunday school built by Baptists in North Carolina, which had lots of little cells made for instruction in Bible reading. These small rooms held up the building and would have been very expensive to demolish. But they worked perfectly when the building was transformed into a music school. "They were wonderful for the very reason they were made to begin with, to afford privacy and acoustical isolation."

Hardy points out that in selected instances it may in fact pay to spend a great deal of money on an isolated aspect of an adaptive use job. "For example, Giorgio Cavaglieri made a proscenium theater out of the old Astor library in New York by taking out a bearing wall 4 feet

thick, two stories tall. He made one transformation which cost a lot, but everything else fit together rather easily. And as a result the neighborhood is better and the building is better for being used."

What is required in adaptive use work, says Hardy, is an inventive matching up of the program to the existing building. "It's not always possible," he adds. "Then the choice may be that the activity and the building are incompatible."

It becomes a real estate game, he says. "The old city hall with five big rooms and one front desk and a staircase would cost too much to make into the new city hall with 25 rooms and a bunch of bureaucrats and airconditioning and all the rest. But that doesn't mean that the old city hall with five rooms can't be made into something else with five rooms." *A.O.D.*

# In California, A State Architect Who Thinks Small

Donald Canty

It's a very long way from the Farallones Institute in the hills of tiny Occidental, Calif., to the office of the state architect in Sacramento. The Farallones Institute is a commune-like school whose faculty and students are teaching and learning "whole systems" for living, with emphasis on alternative energy systems, building modestly and organic agriculture.

The office of the state architect is a formidable bureaucracy of 400 which oversees a multimillion-dollar state building program that has been heavily consumptive of energy and has, over time, produced a public architecture modest only in quality.

What happens when the director and founder of the Farallones Institute becomes California's state architect? Many in and out of the state, notably including California's private architects, are waiting to see—with feelings ranging from fascination to apprehension.

The object of their attention is Sim Van der Ryn, from 1961 to 1975 a professor of architecture at the University of California in Berkeley. At the university, and as a principal in the firm of Van der Ryn & Hirshen, he was in the forefront of the quest for a design methodology that would be at once more systematic and more responsive to user needs.

He also became increasingly disenchanted with "Architecture with a capital A" and an advocate of "thinking small" in terms of building design and the use of energy and other resources. By the beginning of the 1970s he was "totally frustrated" with what he saw as the university's failure to deal with such issues. The turning point in his thinking came with the violent confrontation over Berkeley's "people's park," in which he was deeply involved. He moved to a cabin he had built in Occidental with his own hands which became the centerpiece of Farallones Institute. Located on an 80-acre ranch, the institute describes itself as "an alliance of architects, agriculturalists, biologists, engineers and artisans working together to design integrated, small-scale, self-sustaining systems of habitat and life support."

Van der Ryn met California's youthful governor-to-be Jerry Brown while doing

volunteer design work on a Zen center. Last summer Brown invited him to become state architect. "Ten years ago it would have been a dream," Van der Ryn says, "but this time I was reluctant," partly because the institute was "just getting off the ground."

Asked for ideas, Van der Ryn responded with an 18-page paper entitled "Appropriate Technology and State Government." The paper defined appropriate technology as that which would lead to "a more integrated and steady state relationship between the man-made and the natural environment," development of "social, economic and environmental diversity so that communities and regions can provide for many of their own needs without putting all their eggs in the single shrinking basket of imported and depleting resources" and "creating and managing systems that require less capital, less outside energy, less machine watching and paper shuffling and more personal involvement and direct production."

The paper went on to propose creation of an office of appropriate technology in the Brown administration which would be part think tank, part internal watchdog and part public educator in moving toward this reorientation away from "high-technological values" and "large-scale standardized activity."

In relation to architecture, the paper proposed that the state buildings be "humanized" and small in scale, that "the dead hand of over-regulation" be lifted, that existing facilities be remodeled for less wasteful use of energy and greater responsiveness to the needs of users and that the state should "focus on the design of particular projects that can set new standards for public design through a careful concern for people, resources and environment."

Brown responded positively to the paper, although characteristically insisting that a new office of appropriate technology be kept small and unbureaucratic. Last October Van der Ryn became state architect and in March the new office was created with him as its director.

The first appointment was not greeted with unanimous enthusiasm by California's private practitioners. In postwar



## Assurances to private practitioners and a first 'exemplar' design.

years they had watched the predecessor agency to the state architect's office grow into the largest architectural entity in the free world, with a tightly held monopoly over state building design.

In the late 1950s, after a long struggle, the savvy California Council AIA had succeeded in loosening the agency's grip on one key area, the design of state colleges. In Ronald Reagan's administration, the agency's staff was reduced by nearly two-thirds, new buildings were deemphasized in favor of leasing space, and it became policy to give as much work as possible to private firms. The two state architects who served under Reagan, Fred J. Hummel, FAIA, and John Worsley, FAIA, both had been recommended by the CCAIA.

Gov. Brown didn't ask CCAIA about the Van der Ryn appointment. Moreover, Van der Ryn had let both his AIA mem-

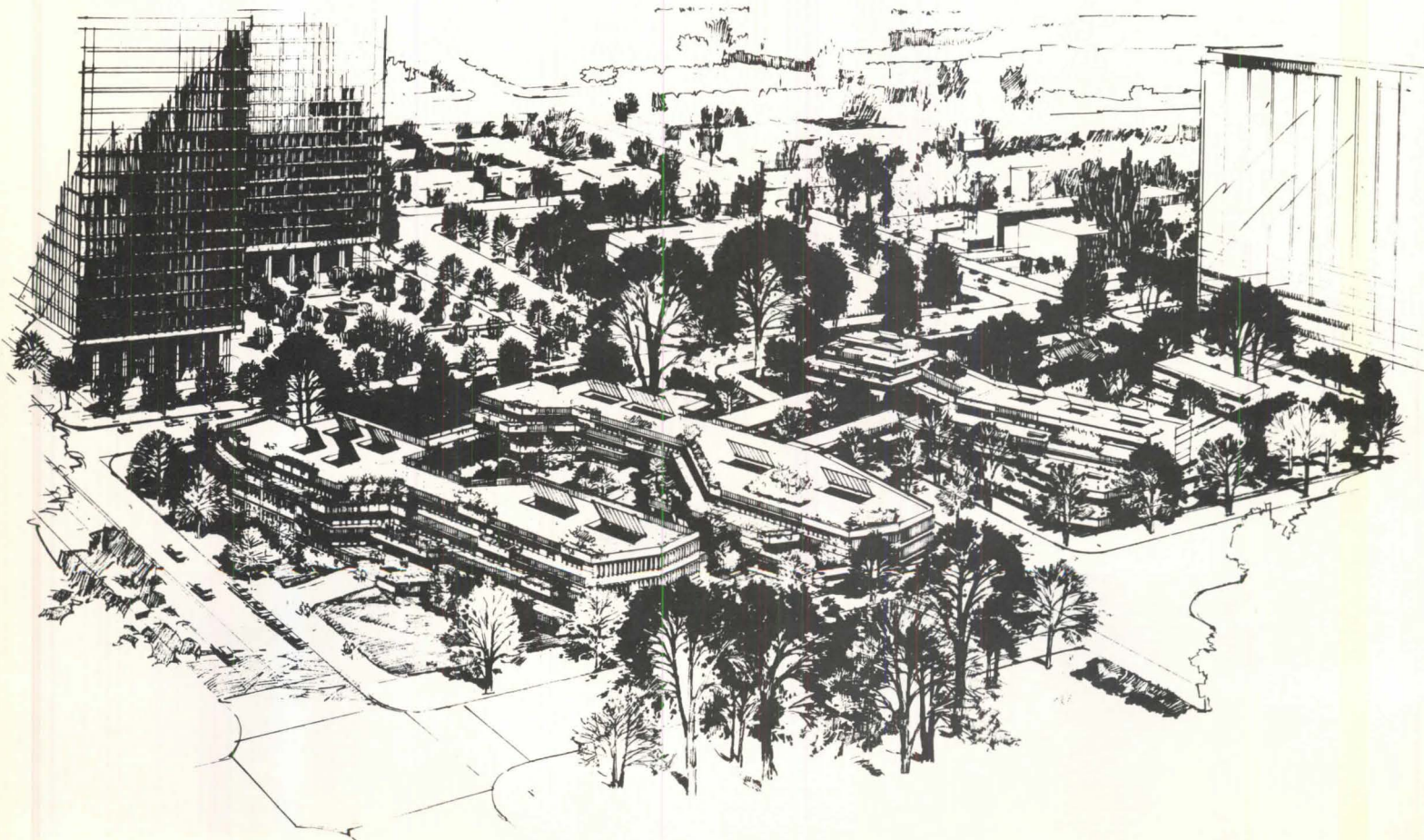
bership and architectural license lapse. Considerable nervousness began to develop over his potential attitudes toward such things as energy standards and, pre-eminently, in-house vs. contract design.

In the end, however, the CCAIA decided to support Van der Ryn in his confirmation hearings. "We want to give the man every chance," said CCAIA President William Hawley, FAIA, in mid-April, "but we'll be watching very carefully."

In January, Van der Ryn sent the CCAIA board of directors a letter intended to clear up "misunderstanding among some architects regarding my intentions as state architect." In it he stated flatly that "I have absolutely no intention of rebuilding the office into a giant architecture and engineering machine." The emphasis instead would be on "policy planning and facilities programming." The concept, he said, "is that of a relatively

small in-house A&E group with a stable workload, with private architects and engineers absorbing a variable portion of the total workload." The letter also expressed unqualified support for CCAIA's position on energy budgeting.

Clearly these were welcome words to the private practitioners. But they were in for a couple of surprises. It turned out that very nearly the first thing that Van der Ryn did when he became state architect was to begin design of a 280,000-square-foot state office building (below). And in a conversation last month with CCAIA leaders, he let it be known that his office was into design of a second major project. He also said that he had in mind giving a string of future projects to private firms, but these have yet to be funded by the legislature. The picture that at least one concerned architect got was that of Van der Ryn's holding funded



projects to himself and holding out only future promises to private practitioners.

Still, the course he has set so far is consistent with both the preappointment "appropriate technology" paper and his letter to the CCAIA board. As he said in an April interview with the JOURNAL, he wants to do a couple of "exemplar projects," then "influence outside architects through programs." Another means of influence that he has in mind is the use of design competitions whose programs would become teaching instruments in such areas as energy conserving design.

Van der Ryn sees his "major work in the next five or ten years" as convincing people that "we can't just talk expanding consumption with more efficient energy use. We must change our ways, and if we do, it will mean a better society and more freedom." He believes that Gov. Brown is "the only major political figure who

understands these things."

Van der Ryn sees his role as that of "change agent," not just in terms of the state's building program but throughout state government. The office of appropriate technology is taking shape as a "steering committee" of representatives from a variety of state departments and agencies—a network of change agents, in Van der Ryn's terms.

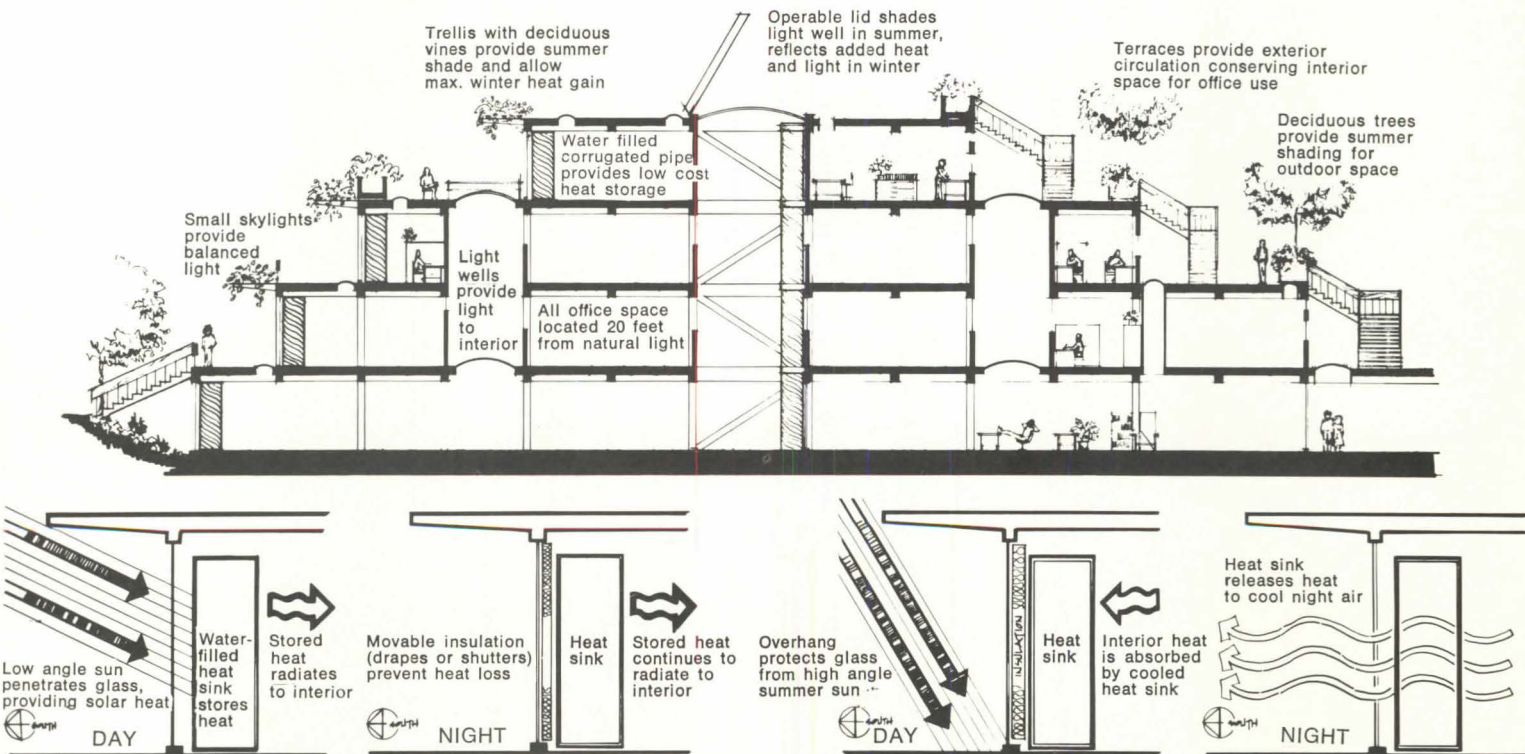
Clearly one area of change will be in the tone of the state architect's office. Van der Ryn has made no wholesale personnel changes, but he is bringing in people of his own choosing as others retire. One key appointment was that of Barry Wasserman, AIA, as deputy state architect. Wasserman was formerly president of Lawrence Halprin Associates and was drawn to Sacramento by what he sees as the potential of generating a significant public architecture there. A self-confessed

"urban type," he balances Van der Ryn's rural bent (which leads Van der Ryn back to Occidental most weekends).

Another of Van der Ryn's early choices was that of Lee Windheim, AIA, as consultant to the state department of general services, parent agency of the state architect's office. Windheim is senior vice president for systems of the Leo Daly Co., and has worked on national AIA energy policy. Windheim's principal areas of concern in Sacramento will be energy and life-cycle costing.

Van der Ryn also brought in a team of Berkeley graduate students to work on the plan of the state capitol area. The students became advocates for residents of adjoining residential neighborhoods who feared state encroachment. "All of a sudden I was the establishment," says Van der Ryn.

It was an unaccustomed role for California's new state architect. □



Van der Ryn's first office building for the Brown administration, in the state capitol area of Sacramento, will be an angular three-story structure organized around a series of open courts and de-

signed to make maximum use of natural light and ventilation and solar energy. Van der Ryn estimates that the first phase (the two elements in the left foreground of the rendering) will cost \$1 million more

than a conventional highrise building initially but will cost some \$14 million less to operate over a 50-year life span. Energy-related design elements are described in the section and details above.

# Julia Morgan of California: A Passion for Quality and Anonymity

Mary E. Osman

"She was America's greatest woman architect—and probably the world's—but Julia Morgan, who died in 1957, has received little attention." So said Bernice Scharlach in an article entitled "The Legacy of Julia Morgan" (*San Francisco Sunday Examiner & Chronicle*, Aug. 24, 1975). Architectural critic Allan Temko is quoted in the article as having said of the architect: "This great Californian, who designed not only San Simeon, but more than 700 other buildings in her long career . . . deserves in American architecture at least as high a place as Mary Cassatt in American painting, or Edith Wharton in American letters."

Julia Morgan, who practiced in the first half of this century, passionately pursued quality of design, while shunning publicity. It is said that she would not even permit a sign with her name on it at a building site; refused, for the most part, to allow

her work to be published; would not grant interviews, and instructed that her files be burned when her office was closed after a distinguished and enviable career.

Art historian Sara Boutelle, director of the Julia Morgan Association in Santa Cruz, Calif., and a leading authority on the architect, has written that Morgan "was a woman who, with a minimum of fanfare, collected many firsts during her 85 years and left three-dimensional evidence of her innovative ideas for all of us to see. She wrote no apologia, asserting instead that architecture was a visual, not verbal, art, that the buildings spoke for themselves. We must respect this view, in spite of the difficulties it makes for the biographer." (*Art: A Publication of the Art Guild of the Oakland Museum Association*, Jan./Feb. 1976.)

Another aspect of the view of Julia Morgan's role of the architect is given by

Elinor Richey in a recent book entitled *Eminent Women of the West* (Berkeley, Calif.: Howell-North Books, 1975). She writes that Morgan thought that the architect should emulate the medieval master builders, "the anonymous coordinators of artisans—the stonecutters, woodcarvers and masons—who together were led to transcend themselves and give the world the great cathedrals."

This shy gentlewoman, Julia Morgan, succeeded, to a degree, in her search for anonymity, and until recently there have been few references to her in architectural books and periodicals. But there is now a renewal of interest in her work, which "is due for rediscovery and public scrutiny; not locally, where it has always had supporters and popular appeal, but in the architectural world at large," writes John Beach, lecturer on Bay Area architecture, in the catalog for a recent exhibition of

*Arches are part of many Morgan designs. Interior court, vice president's house, University of California, Berkeley.*



Morgan's work at the Oakland, Calif., Museum.

"Architectural attitudes in recent years," writes Beach, "have concerned themselves very little with the values and philosophies embodied in her buildings; but fashion in thought and esthetics changes, and though the attention would certainly annoy her, Morgan's work touches upon several subjects which are undergoing intensive examination and re-evaluation in the mid-1970s."

Morgan's attitude about what she wanted to accomplish, in a day well before "women's liberation," compels the least ardent advocate of women's rights to admiration. She was born in 1872 to parents who encouraged her desire to become a professional in a man's world. And in 1890, she was one of the very few women enrolled at the University of California, becoming the lone female in the college of engineering.

Morgan decided early to become an architect, although the university at that time offered no architectural curriculum. When Bernard Maybeck, now widely acclaimed as an originator of the Bay Area style, came to Berkeley, Morgan attended his seminars on architecture and descriptive geometry. And, after becoming one of the few women to have earned a degree in civil engineering from the University of California, she worked for Maybeck for a short time. Recognizing her potential, he encouraged her to become an architect, advising her to go to the Ecole des Beaux-Arts in Paris, then the epitome of architectural schools.

She took the advice in 1896 and first went to the atelier of Marcel Pérouse de Monclos, and later, in 1898, to that of Bernard Chaussemiche, with whom she continued to work through 1902. Meanwhile, officials at the Beaux-Arts had done everything possible to discourage her. Finally, in November 1898, after "gruelling tests and competition," as Sara Boutelle describes it, Julia Morgan became the first woman to gain admission to the Ecole des Beaux-Arts. During her years at the school, she distinguished herself, winning coveted medals and awards.

In 1902, she returned to California. At first, she worked for John Galen Howard,



*The six-story Berkeley Women's City Club (above and right) "plays the delicate against the massive, the manorial against the intimate" (John Beach). Among Morgan's finest structures are the many YWCA buildings she designed; below, the Oakland YWCA.*

who had come from New York City to direct the University of California's building program and to establish a department of architecture. She assisted Howard in his work on the Hearst Memorial Mining Building and the Greek Theater, and she has been credited with major responsibility in the design of the Greek Theater.

She established a partnership in 1904 with Ira Wilson Hoover, a former associate of Howard, and the firm of Morgan & Hoover was established in San Francisco. In 1910, when Hoover returned to New York City, she struck out on her own as "Julia Morgan, Architect." Believed to be the first woman licensed as an architect in California (she was licensed some time between April 1903 and April 1905), she became a member of the Northern California chapter/AIA in 1921 (see her obituary AIA JOURNAL, May 1957).

Her first "conspicuous" commission, as Sara Boutelle calls it in a chronology she has prepared of Morgan's work, came in 1904 for a concrete bell tower on the Mills College campus in Oakland. After the 1906 San Francisco earthquake and fire, she was commissioned to restore the Fairmont Hotel which had "buckled" in the fire before its opening to the public. Elinor Richey writes that "in the first dozen years, her office executed more than 300 commissions, among them some of





Called "America's most flamboyant and ostentatious architectural gesture," San Simeon is probably Morgan's best-known work. Endless hours of patient drudgery over many years of conscientious labor were required for the "fairy tale" complex.

the best work being done in California. With astonishing swiftness, she had built one of the most prestigious architecture offices on the West Coast and the largest in the country run by a woman." In its Oct. 23, 1915, issue, the University of California's *The California Alumni* said: "Miss Julia Morgan '94, pioneer among the women architects of the West, first woman to graduate from the Academie des Beaux-Arts in architecture, planner of half a thousand structures, holds a position unique among the graduates of the University of California."

The November 1918 issue of *The Architect and Engineer of California* contained one of the few contemporaneous assessments of Morgan's work. A lengthy article written by Walter T. Steilberg, her structural engineer, describes with words and 76 half-tones some of her projects. Among them were the campanile, library, gymnasium and social hall at Mills College; the Methodist Chinese Mission in San Francisco's Chinatown; the Berkeley Baptist Seminary; the YWCA Asilomar

Conference Center at Pacific Grove; St. John's Presbyterian Church in Berkeley; numerous institutional buildings, including YWCA structures at Oakland and San Jose, and many residences.

She also had designed the interiors of architect William Polk's Merchants Exchange Trading Hall in San Francisco, completed in 1905 and one of the few structures to survive the San Francisco earthquake, where she maintained her office until her retirement in 1952. The building, restored in detail according to her original design, reopened in January of this year as a branch office of the Chartered Bank of London.

It was in 1919 that Julia Morgan's most constant client, William Randolph Hearst, asked her to design a memorial to his mother and a fitting receptacle for his many art treasures. (She had previously worked on commissions for Hearst's mother.) The commission for San Simeon, her best-known work, "captured the imagination and tested the skills of Morgan who had the integrity to keep this building

project going for 20 years," comments Sara Boutelle.

John Beach calls San Simeon Hearst's "mountain-top toy" on California's coast near San Luis Obispo. "Normally, so prominent and controversial a monument would bring fame to its architect, but here the opposite has been the case; popular interest has concerned itself solely with the building and its owner," he writes. San Simeon, as Beach reminds us, was intended as a "palace from a storybook. . . . What is overlooked is how deliberately, how compellingly and how powerfully it fulfills exactly that intention, while simultaneously accommodating efficiently, and even matter-of-factly, the complex and sybaritic Hearst lifestyle."

In spite of the fact that the San Simeon complex cost an astronomical amount of money, with dismantled and reconstructed European structures incorporated into the design, Morgan's accounts showed, says Elinor Richey, that she "never during her entire career drew a salary of more than \$10,000 a year."



## Hearst was a 'constant client' and San Simeon her best-known work.

Morgan did not devote her entire career to Hearst commissions, however, and in the years following, she was architect of YWCA buildings, including one in Honolulu, which is still considered an architectural landmark; numerous churches, such as the Ocean View Presbyterian in San Francisco and Thousand Oaks Baptist in Berkeley; the acclaimed Berkeley City Women's Club, and other structures and residences. She also collaborated with her old mentor, Maybeck, and they worked together on the design of a gymnasium for women at the University of California, given by Hearst as a memorial to his mother.

Morgan's commissions flourished even during the Depression. Sara Boutelle writes (*California Monthly*, Apr. 1976) that "the most extraordinary thing about Julia Morgan may have been the clients she attracted. On the whole they were substantial, rather conservative, absolutely straight and their relationship with her continued through the years. . . . However, it is only fair to say that the greatest single

family client was Phoebe Hearst and her son William Randolph Hearst. It is possible that no other family ever involved one architect in so many projects."

Morgan was known, writes John Beach, "for strict, active, personal supervision of every phase of the construction process; she climbed up and down scaffolding, even in her old age, 'just like a man.'" Brian Suen, research associate at the Oakland Museum, says that the hallmarks of Morgan's work were "strict attention to detail and a high regard for fine craftsmanship." And Sara Boutelle points to her "steady emphasis on the details of craftsmanship, each job thought of as a whole made up of many significant parts." Morgan also had a rapport with all the people who worked for her, which would "hardly be possible under today's conditions, but it was deeply characteristic of Julia Morgan's working style."

Sara Boutelle, in writing of Morgan's relationship to her staff, has said that she thought of every person—professional and workman—as part of her family, tak-

ing "a particular interest in their children, their problems, their development in the craft." Her staff shared in the profits of the firm. "She had the quality of bringing out, in an astonishing variety of people, an affection that was close to worship."

Sara Boutelle has commented that Otto Haake, superintendent of the Merchants Exchange Building, told her that Morgan closed her office there in 1952 and that for a "couple of years" before the office was closed Morgan had been destroying records, refusing to take on new jobs. She spent time in her later years in travel on special Hearst assignments, such as the design of a museum of medieval art, a project never consummated. Morgan was 85 at the time of her death in 1957.

Walter Steilberg, her coworker for many years, wrote that "almost the only condition common (in her residences) was that the first effort was to fulfill the needs of their occupants." In a day before anyone had heard of "user needs," Julia Morgan knew how to translate a client's real needs into a work of architecture.

*The Phoebe A. Hearst Memorial, Women's Gymnasium, University of California at Berkeley (below) was a collaborative design of Morgan and Bernard Maybeck. Morgan designed the Merchants Exchange Trading Hall interiors, recently restored as a branch of the Chartered Bank of London in San Francisco (right).*



Each residence, Steilberg wrote, "was designed from the inside out, and the object was first of all to build a home." Working usually within the confines of a limited budget, she had the "skill in mastery of practical knowledge which enables an architect to keep in the vicinity of prescribed costs."

Structural materials became part of the design, Sara Boutelle notes, "movement within and through the building largely dictating the form. . . . Let us not imagine that because she was a woman she paid particular attention to kitchens, unless it was one for an institutional setting. She built from the site and every detail was significant to her."

An example of the way Morgan typically sought economies, but with quality design foremost, is seen in the design of St. John's Presbyterian Church in Berkeley (now the home of Epic West), built in 1908. Sally B. Woodbridge (*Architectural Forum*, Sept. 1973) wrote of this "simple hall with an exposed redwood structure. . . . The total design exhibited an economy of means and materials con-

sonant with the ideals of the craftsman style then burgeoning in California."

Woodbridge compared St. John's (which she called "stunningly pure") with the nearby First Church of Christ Scientist, designed by Maybeck and built about the same time, which "cost over four times as much. While Maybeck's church reveals his genius for combining disparate styles with innovative use of modern, industrial materials, Miss Morgan's is a single-minded, straightforward expression of one material, much like a perfect barn."

John Beach says that Julia Morgan's work "seems to contemporary eyes to offer a thoughtful compromise between the facts and the fairy tale. Whatever function of aspiration or sense of place her eclectic imagery performs, it is not allowed to overpower other considerations; picturesque expression never obscures clarity of form."

In 1929, her alma mater honored her—and itself—by granting her an honorary doctorate. She was cited as "architect and engineer; designer of simple dwellings and of stately homes, of great buildings nobly planned to further the centralized activities of her fellow citizens; architect in whose works harmony and admirable proportions bring pleasure to the eye and peace to the mind. . . ." □

*The Chateau Apartments, Berkeley, shows careful attention to detail (above, right). St. John's Presbyterian Church, Berkeley, is in scale with its neighborhood (below).*



# Elizabeth Rivard of Kansas City: Pioneer In a Man's World

Lenore Bradley

Among Elizabeth Evans Rivard's records of a lifetime in architecture is a photograph taken at the first annual awards banquet of the Kansas chapter/AIA, held in late February 1930. At the far right, almost out of the picture, in the front row stands Rivard, serious-looking, hands clasped together—a lone woman among 48 men. The camera sees her as reticent, almost passive. A misleading impression.

Elizabeth Rivard was the first woman to graduate from the school of architecture and engineering at the University of Kansas. She received her degree in 1922; by 1925 she was a practicing architect, designing houses—quite an accomplishment in those days when most women in her profession were assigned detail work in large architectural offices or relegated to the drafting room in engineering firms.

In the 1930 Kansas awards competition, Rivard won an honorable mention for a house in Westwood Hills, Kan. Commenting in the *Kansas City Star*, the jury chairman wrote: "The unaffected grace and charm of the Rivard entry detached it from a dozen other excellent and impressive houses we considered."

Although Elizabeth Rivard was to design between 35 and 50 large, handsome houses, her focus was on the smaller dwelling. She explains: "The colonial or early American mode was my fundamental working style. My Kansas background gave me an affinity for both. I grew up with the shapes of farmhouses and barns, less than a mile from our house in Lawrence. My father owned a farm implement business, selling buggies and wagons long before the days of mechanized equipment. His customers were plain, hard-working people. I must have inherited some of their respect for the meaning of a dollar because the challenge of working with clients of average means always interested me far more than working with clients who could afford to build several houses in a lifetime."

For Elizabeth, working in a man's world began when she was 18, in a drafting room above a railroad depot in Par-

sons, Kan. During World War I, Parsons was the main line junction between two army posts, and while there were manpower shortages in drafting rooms all up and down the railroad line, it was especially critical at Parsons where map tracings of troop movements were crucial to the war effort.

Rivard recalls: "After completing a course in drafting earlier that summer (1918), one other girl and myself were told there was work at Parsons. The head draftsman, a dour old gentleman, flinched at the thought of women in the drafting room, and the men openly resented us.

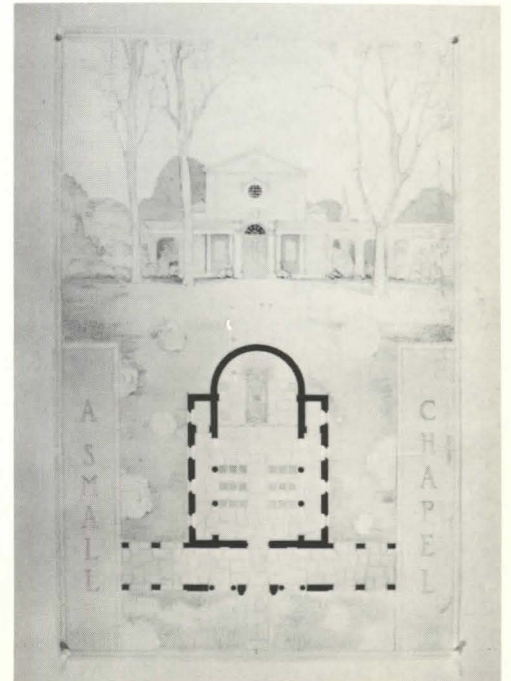
"The heat that year was exceptional, even for Kansas. We used talcum on our arms to keep from sticking to the linen tracing cloths. We could look onto the tracks below and see long lines of open flatcars carrying flag-draped coffins on their way home to Fort Riley or Fort Sill. When the trains roared through, the noise was deafening. The head draftsman seemed to choose that particular time to walk over and whisper instructions in a low, raspy voice. I strained to hear, cringing for fear I would misinterpret and make a mistake. But oppressive as the summer was I gained the confidence I lacked to push ahead with my plans to study archi-

itecture. And I was back in school the following February."

Elizabeth Rivard's struggle with 19th century French Beaux-Arts attitudes began on her first day of class at the University of Kansas. She was, first of all, placed in second-year studio courses, which put her at a great disadvantage. "Although Professor Goldsmith (head of the department) became a lifelong friend," she says, "he remained somewhat of a puzzle. His decision to substitute my work at Parsons and a previous year at the university for a full year in the department can hardly be thought of as a favor. Many years afterward I heard he had said, 'Let her sink or swim. It's not all that crucial to the department.'"

As she remembers her first day of classes: "I walked through the door in time to hear Professor (La Force) Bailey give our first class assignment: 'superimpose the three classical orders on the facade of the library.' My heart sank. I had only the vaguest idea what the orders were, much less how to integrate them within the overall elevation. I certainly didn't know I had been assigned a Beaux-Arts project! I just sat there, painfully aware that I was lacking all basics."

Those were the days when the Univer-



**Mrs. Bradley** is a freelance writer living in Kansas City who sometimes writes about art and architecture.



*The Mediterranean style Allshouse residence in Mission Hills, Kan., built in the 1930s.*

sity of Kansas followed the design orientation and emphasis on intermural student competitions of the Beaux-Arts Institute of Design in New York. And during all the four semesters, Rivard studied the history of architectural styles there, the modernist movement rated only one brief discussion. It was on the art nouveau ornamentation of Louis Sullivan. The Chicago School, the Prairie style and Frank Lloyd Wright were dismissed without mention.

If Elizabeth had doubts about a design curriculum so curiously unconcerned with reality, she kept them to herself: "We worked in a world of dreams," she says. "Paper architecture for an ideal space. Gatehouses for country estates, neoclassical bridges ornamented with garlands and cherubs, city markets that could pass for Venetian palaces. The projects were so all-consuming we had little time or energy left for our more practical courses in engineering. But I had decided right from the start to take what was offered, earn my degree and get on to the business of doing what I wanted, in the way I wanted." Professor Bailey entered her projects in the grand national Beaux-Arts sweepstakes under the deliberately ambiguous name of A. E. Evans.

"Professor Bailey theorized that the Beaux-Arts Institute of Design would not consider giving recognition to a woman," says Rivard, "perhaps because there were so few women architectural students; per-

haps because of his own prejudice. He was extremely critical of my work. He would look at my equisses, sigh, initial his approval reluctantly, and say, 'Evans, why can't you draw more like a man!'"

In 1921, Elizabeth Rivard became the second University of Kansas student to win a Beaux-Arts Institute of Design award. She also won a local award for excellence in architectural design, was elected to an honorary engineering society and graduated with honors in June 1922.

In 1923, she began work as the staff architect for R. L. Falkenberg & Co., a Kansas City construction firm specializing in residential work. Founded by two brothers who had graduated from MIT, the company built houses that were of exceptional quality, if not esthetically distinctive.

"The brothers knew it would prove advantageous for the firm's future to provide clients the services of a staff architect who could design according to individual specifications," says Rivard. "This was quite innovative for a construction firm in those years of mail-order house plans, and they recognized the logic of a woman architect designing houses for other women to maintain."

Rivard designed more than 50 houses during the eight years she was resident architect for Falkenberg. After her marriage to an engineer, Melvin M. Rivard, she continued working for the firm on a part-time basis. Her translations of Ameri-

can colonial and English Tudor styles into the local idiom were a decided contribution to the firm, which prospered even through the Depression years.

In design, Rivard's point of departure was always the efficiency of the interior plan. She kept in mind always Ruskin's precept that houses should be designed for those living inside their walls.

Whatever the derivation of their style—Italian, English or Dutch colonial—Rivard's houses speak in understatement, without hauteur.

Elizabeth also knew her limitations. Although quite amenable to her clients' wishes, she stopped short at the then-emerging international style and art moderne. "I simply could not handle its demands," she says. "And while I have a deep appreciation for organic materials, and used them whenever possible, I was never equipped, either by training or inclination, to design in the modernist idiom."

Today, Elizabeth Rivard has the verve and looks of a vigorous woman; she writes in a fine, legible script, and has some outspoken comments of her own about some of today's house architecture:

"In 1924, Lewis Mumford observed that 'ornament has become an illiterate reminiscence and the classical orders have lost their proportions,'—I can quote it verbatim because I finished reading *Sticks and Stones* recently! He could have been talking about much of the new suburbia, where so many of the houses bear little resemblance to their foreign labels. All too often the houses have odd-shaped appendages on the exterior—oversized gables, diamond-shaped or long, vertical wood strips tacked onto the facade which have no function or bear no relation to the interior. The design emphasis has shifted to the roof—a roof complicated in shape and too massive for the house underneath. Or the garage doors are so prominent, I am reminded of warehouses and loading docks instead of homes."

Or again: "I often wonder what my professors would think of those office buildings that look like so many egg crates piled on top of one another, no real beginning or end, resting on pegs as if surrounded by air. There is nothing solid or structural there." □

# Toward an Architecture of The Theater as a Human Art

Martin Bloom, AIA

*Variety*, the show business trade paper, reports that the 1975-76 New York legitimate theater season has been the best in 30 years. Not since World War II has Broadway experienced such activity and profit. And not since the emergence of television has there been so much interest by the public in experiencing the immediacy and impact of live performances. Concurrently, professionals and critics more and more are questioning the effectiveness of standards of theater architecture, especially as it concerns the shape of playhouses and its effect on the creation of new drama.

Joseph Papp, producer of New York's Shakespeare Festival, spoke in January to a group of American and Canadian art center directors. As quoted in *The New York Times*, he called the theater in which they were meeting—a part of the elaborate National Arts Center at Ottawa—a “lousy” conception whose creator “should have been shot.” He went on to include within this critical broadside the Vivian Beaumont Theater in New York City whose managership he had inherited in 1973 when the Shakespeare Festival took over the theater at Lincoln Center for the Performing Arts. Referring to the Ottawa example, he declared that “there is no excuse today for building a bad theater like this one” and that “if we continue turning out poorly designed arts centers . . . we will end up with costly mausoleums of heartless space.”

Several weeks earlier, Tennessee Williams, while attending a revival of his play “The Glass Menagerie” at the relatively new three-quarter-round Circle in the Square, referred to the theater as a “gymnasium” and complimented the actors for coping successfully with the physical obstacles. This theater, designed along the lines of its predecessor in Greenwich Village and included in the basement of a new highrise office building in the theater district as a space bonus incentive, has been much criticized from both the audience and the actor point of view for being too long and narrow as a space and, con-

**Mr. Bloom**, in practice in New York City, is writing a book, *The Theatrical Experience: An Architect's View*.

sequently, lacking in proper performance focus. Somehow the audience sightlines and the actor's range of performance area stubbornly elude a welding of action and setting into a satisfactory whole.

But it is not only the new theaters which come under critical attack. Directly across Broadway stands the redoubtable Winter Garden Theatre built by the Shuberts in 1911 as a home for musical comedy spectaculars. These have ranged from Al Jolson's “Honeymoon Express” to the present neokabuki “Pacific Overtures.” With its exceedingly wide auditorium and proscenium opening it tends to scatter the attention of its audience, and the too-gentle slope of the orchestra seating relative to the height of the stage makes for poor visibility from most locations. When used for drama, which requires more concentration than musical extravaganzas, the Winter Garden has been uniformly unsatisfactory.

Where, then, are satisfactory theaters to be found?

Several blocks downtown—on 46th and on 45th Streets—stand back-to-back two of the best drama houses in current use in New York City, the Helen Hayes and the Morosco. The Helen Hayes, now housing a revival of “The Royal Family,” is a remarkable house with excellent acoustics throughout. The Morosco, currently playing the British import “The Norman Conquests,” possesses probably the best actor-audience relationship available in a theater of its size. Although both houses are old and possess small lounges and lobbies, they are much sought-after by producers wanting good showcases for their plays.

The Morosco Theatre, opened in 1917, was painstakingly developed with Shubert backing by producer-playwright Oliver Morosco, who chose what he considered to be the best design talent available at the time and supervised the execution down to the smallest detail.

The Helen Hayes had a much less orderly creation. Conceived originally in 1911 as a restaurant-theater, it was named the Folies Bergere after the Parisian cabaret theater but soon was closed because of lack of business. The orchestra level, originally designed for cabaret tables and chairs, was then hastily remodeled for

theater seating, and within a few months the playhouse, renamed the Fulton, opened and has been successful ever since. It was renamed the Helen Hayes in 1955.

To attend a performance in either of these theaters is a very pleasurable experience. The sightlines and acoustics are good and the relationship between the auditorium and stage is such that one is easily drawn into the event.

We must enjoy them while we may, however. Both theaters are scheduled for demolition.

It is not nostalgia which makes one wish to preserve them. It is the fact that the pleasures of attending theater in such houses are so rarely available in some of our more consciously devised and scientifically based recent attempts at theater architecture.

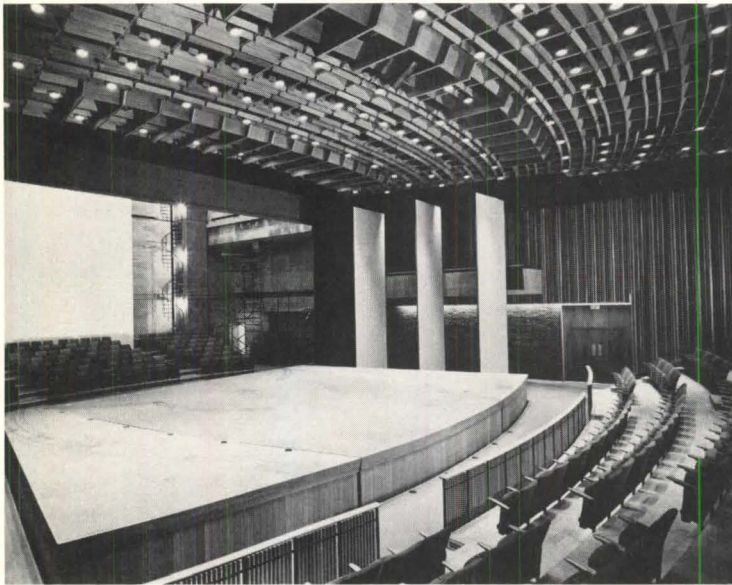
Why are so many of the new theaters unsatisfactory? Is it the quality of the information we possess about theater function or is it our approach to theater design? And, whatever the causes, how can we make contemporary theater architecture more satisfactory?

Generally, there have been three approaches to theater design: the designer approach, the director approach and the eclectic.

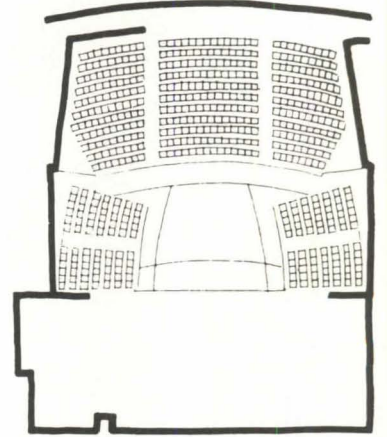
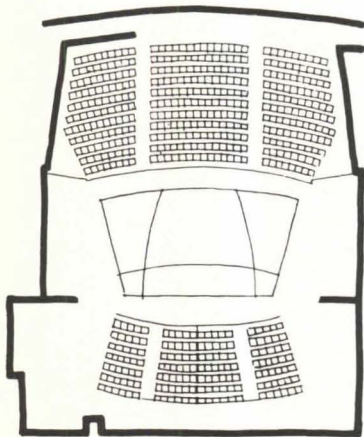
In the first case, an innovative designer takes a visionary approach to the subject. Although he may work with theater practitioners, the designer, in this case, is the dominant member of the team. A prominent example of this occurred in 1927 when Walter Gropius, in consultation with director Erwin Piscator, conceived a theater. Their collaboration resulted in a well-publicized but unexecuted project called “total theater” which emphasized actor-audience unity and a fluid manipulation of stage and auditorium by mechanical means.

In the words of Gropius: “The aim of the total theater is to draw the spectator into the drama. All technical means have to be subordinated to this aim and should never become an end in themselves.”

Although based strongly on the staging ideas of Piscator, the total theater architecture probably would overwhelm any theatrical purpose to which the structure



*The Loeb Drama Center, Cambridge, Mass., in two of its three configurations: a modified arena (left) and a three-quarter thrust. Here, the flexibility is a marvel of remote control technology while directorial considerations are subordinate.*



might be put. The very flexibility of the audience and stage relationships would probably defeat, by their technical virtuosity alone, any effectiveness of performance.

Another noted collaboration between a dominant architect and a director occurred between Frank Lloyd Wright and Paul Baker in the 1950s. Their collaboration resulted in the Dallas Theater Center, a project which was built, although several previous theater projects by Wright were not. This intimate playhouse of about 400 seats was designed as a university and community theater and was founded more on an architectural idea than on any reasoned evaluation of the requirements of the theatrical event.

Wright's warning to his clients that "no matter what you expect to put into this theater, the theater will take possession" has certainly proved correct. As it turned out, Baker's staging philosophy was no match for Wright's design philosophy. Although it is sculpturally interesting both within and without, it lacks cohesion and a sense of dramatic tension. What results is an environment more domestic than theatrical.

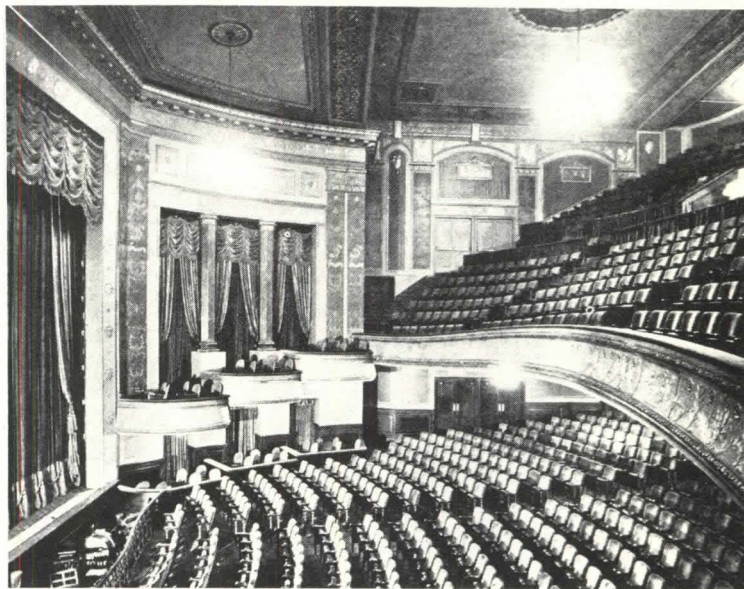
In some instances, designers have planned theaters without consultation with directors. Norman Bel Geddes, really more of an industrial stylist and set designer than a building architect, was more interested in the effect of a stage setting than in developing a space in which performances could take place. Strongly influenced by the visionary projects of Gordon Craig and Adolph Appia, he treated the performer more as a scale-giver than as a participant in an event and his theoretical designs for theaters reveal this. Like Craig, he considered himself as much a director as a designer, and his attempts at combining the two roles left

him without the strengths or convictions of either.

Bel Geddes attacked theater design from an esthetic point of view, but George Izenour took it on in terms of mechanics and technology. The Loeb Drama Center in Cambridge, Mass., opened in 1960. Its interior was Izenour's first opportunity to embody within a single structure the fruits of his research into the electro-mechanical systems which had occupied him for more than 20 years in a basement workshop at Yale.

The fully mechanized theater that resulted could be transformed into a proscenium, a three-quarter thrust or a modified arena, all within the same space. However, this technological approach was not bal-

## Finding drama in form rather than a form to support the drama.



anced by a similarly potent directorial influence, and the effect of each separate form was somehow less impressive than the fact that these changes could all happen so smoothly through a sophisticated system of remote controls. The preoccupation with technology combined with a lesser concern for the integrity of the event resulted in a loss of theatrical effectiveness in any given configuration. The essential flexibility of the theater, foreshadowed by the Gropius project 30 years earlier, resulted in serious compromise.

In short, when idealistic form-giving architects attempt to design theaters, they often err in the direction of substituting architectural theatrics for theatrical architecture. Often they find drama in the form rather than a form to support the drama.

The second approach to theater architecture is that motivated not by designers but by the philosophies of stage directors. The success of such theaters depends on the buoyancy and vitality of the original idea. One of the most influential attempts on the part of a director to translate his staging philosophy into a theatrical space is the development of the Vieux Colom-bier in Paris by Jacques Copeau just before World War I. He evolved a permanent stage scaffolding and integrated auditorium which provided intimacy and flexibility within a simple form. His theater

*A couple of good old New York play-houses: the Lunt-Fontanne (left) and the Imperial. Can their satisfying environments be emulated in new projects?*

established the supremacy of the dramatic text and the performer over technology—a salient characteristic of the director-conceived theaters.

In a similar spirit, director Tyrone Guthrie developed two extraordinarily efficient theaters, one at Stratford, Ont., and the other at Minneapolis. These fused the Greco-Roman amphitheater with Elizabethan performance scaffolding and provided effective settings which related actors and audiences in a way that was most supportive of Guthrie's staging philosophy. A director-inspired theater generally works best under the influence of the original director. However, Michael Langham, Guthrie's successor at Stratford, was able to introduce certain structural changes into the permanent setting to carry forward the intent and the spirit of the original without sacrificing his own directorial bent.

Another prominent director-conceived theater is the Arena Stage in Washington, D.C. Here, director Zelda Fichandler developed an idea for central staging based on experiments which had taken place in the '40s and '50s. In 1961, she was able to translate these into a clear architectural

statement with the aid of architect Harry Weese, FAIA. However, so specific was this statement that, within a matter of only a few years, it was necessary for the Arena Stage to add a separate endstage theater onto the same building complex to provide a space for plays that demand scenic backing. Another director-conceived theater which found its solution in creating two theaters within a single complex, each to house different kinds of theatrical events, is the Houston Alley Theatre founded by Nina Vance.

Whether or not a design problem is solved by creating two theaters is a moot question. Does the creation of two separate theaters in the same complex say something about drama, or does it say something about an incomplete solution to the problem of theater design?

Whatever the eventual solutions, ideally the design of a theater should be a balanced collaboration between a designer and a director. In practice, however, this ideal balance is rarely achieved. Ideal or not, the rationale behind a designer-conceived or a director-inspired theater at least pretends to one overall consistent vision. The third approach to theater architecture is characterized by no such deliberate view.

It is this third approach which inspires the great majority of theaters. These are originated neither by innovative designers

## Analyzing and applying the happy results of chance and instinct.

nor stage directors. They belong instead to a middle range best characterized as eclectic and represent a consensus rather than any driving or unifying concept. These are the theaters which rise in some theater districts and cultural centers, where everything is decided by a committee of changing and disagreeing members, where shape and type of theater usually are conceived for no particular tenant, and where building codes rather than esthetics may have the strongest say of all.

Everything about these theaters may be fresher and newer—more stylish—than anything which has come before. In fact, all of the accepted standards of usual theaters may be improved upon to the best capabilities of the specialists involved. But the validity of these standards is seldom seriously questioned in the process of developing a new theater.

These theaters, when realized, tend to be considerate of their audiences. They have good sightlines, luxurious seating, efficient, attractive lighting in the public areas, silent and responsive airconditioning, an attempt at acoustical control, convenient coat checking facilities, ample space for intermission wanderings, and even carefully chosen works of art for theatergoers to contemplate while imbibing a vaguely alcoholic beverage from a plastic cup.

In other words, all of the more obvious annoyances of the older theaters will have been removed. Why, then, does a sense of uneasiness remain which results in a lack of satisfaction in the theatrical event? We used to blame our dissatisfaction on uncomfortable seats, bad sightlines, foul atmosphere. What can we blame now?

I think it is that in our attempts to improve on the more obvious deficiencies of past theaters we have overlooked the essential issue of theater architecture: the relating of spectators to performers so that both feel deep commitment to the event. This is among the most elusive and technically demanding goals in all of architecture. The stage and the auditorium respond to their own inner logic, and yet the logic which combines them both within one encompassing form very often is at odds with its component parts. Therefore,

totally successful theaters are extremely hard to find.

The design of an audience area is complicated by the fact that it must deal with an aggregation of seat positions in such a way that the individuals will respond with common feeling to the stimuli from the stage. The individuals in the audience somehow must be made to react as a group no matter how large that group may be. This requirement is obviously more readily satisfied with smaller groups of people sharing relatively the same point of view. However, as economic considerations invariably dictate larger audience capacities, this ideal becomes less easy to achieve.

Obviously, the usual approaches to theater architecture often have not been successful. Reevaluation of the assumptions in theater design standards calls for a new approach which uses contemporary tools. Advanced techniques of research and analysis should be brought to bear on the subject in order to arrive at practical standards which will reflect truer conditions of performance and audience assistance. Present design standards must be revised and upgraded to the extent that the more obvious mistakes now being committed in theater architecture can be avoided.

In the past, many good theaters evolved from chance and instinct. The fact that their designers did not formalize their approach does not mean that we are not in a position to extract meaning from their achievement. The tangible, observable results of their relatively spontaneous efforts should be analyzed and formalized into standards that could be applied to future design with precision and assurance.

Although our age has responded to improvisation and spontaneity in theatrical performance, it is quite another thing to improvise in theater architecture. A greater knowledge of the functions inherent both in performing and witnessing is needed to ensure that the theaters which are to replace the few good ones now in existence will be at least as good and hopefully better at containing and sustaining the highest potentials of the theatrical event.

Although each program for the design

of a theater is different, certain measurable needs recur. That these needs are not being met is obvious to anyone attending performances in these houses. Beyond that, actors, directors and technicians know of inadequacies in design where pre-construction consultation would have given them the smoothly functioning theaters they have every right to expect.

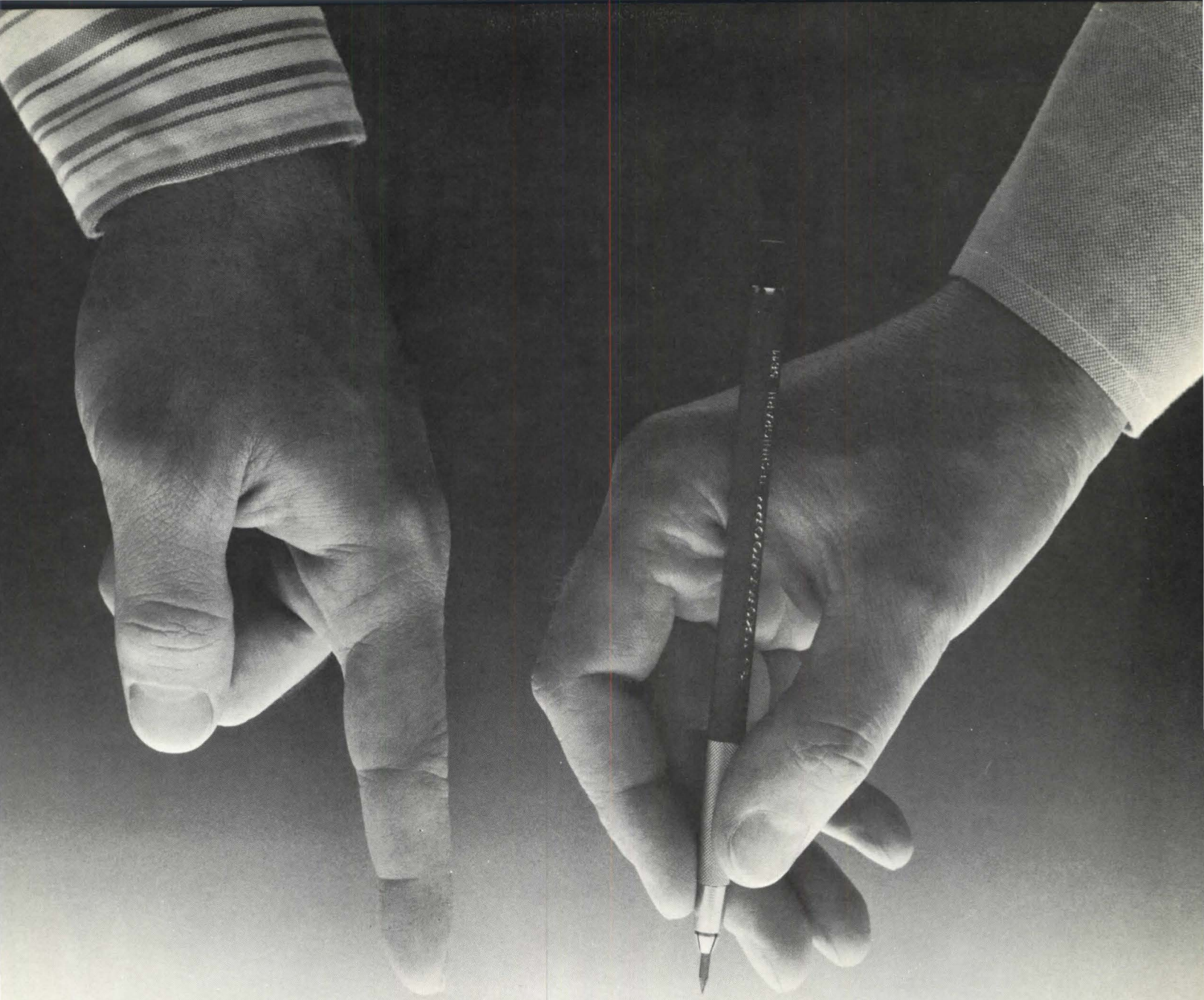
Also, there are challenging and abstract concerns such as actor-audience relationship, involvement vs. detachment, formality vs. informality. The problems confronting theater designers are as dependent for their solutions on psychology as on design. And one way to begin to solve these problems is to intensely study successful theaters to make them yield up their secrets before they go out of existence.

Theaters last. That is one of the special qualities about them. And they are important. Imagine Washington, D.C., without the Kennedy Center which has given it a theatrical and musical focus for the past five years. Imagine New York City a few years from now when many of its best theaters will have been razed to make way for office and hotel construction. What will its new theaters be like? How can we ensure that the new theaters will be the best ones possible?

The social and cultural importance of theater justifies a serious attempt to arrive at workable standards through research and analysis. When the elegant relics are razed, and the new theaters are built which will see us into the next century, we must be certain that these theaters serve with grace and efficiency the venerable yet always vital theatrical art.

For theater itself is becoming a necessity. It is, by definition, a *human* art. It is an occasion, a ritual and a pleasure. And it always involves human contact. No matter how isolated we each get in our individual shells, we will never experience the living theater by pressing a button for it. In decades to come, when we may be more and more subjected to mechanistic isolation, the theater could remain *the* place where we face each other—in person—and where we discover things about each other that we very much need to know. □



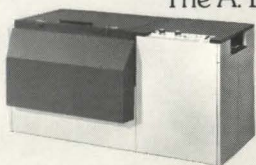


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# Joint Ventures and Associations: Lessons Drawn from a Firm's Experience

C. A. Carlson, AIA, and  
Wallie E. Scott Jr., FAIA

As commissions dwindle and clients become more sophisticated, an architect must search for new ways to increase his firm's competitiveness. How can he assemble the services, management, building-type expertise and successful experience to deal with the client's problems without the risks and time required to hire and train new people that a firm may or not be able to support?

Two ways are to associate or to form a joint venture. Both arrangements consist of organized teams of architects, engineers and consultants with the complementary expertise and experience to compete on more jobs with more credibility than any single participant could do alone.

The terms association and joint venture are often confused in describing the united efforts of two or more firms to design and construct a project. Operationally, the distinctions between the relationships are minor; legally and financially, the differences are major.

A joint venture resembles a partnership with one important difference: A partnership is formed to transact a general and continuing business of a particular kind; a joint venture is formed to render architectural or engineering services for a single specific project. A joint venture essentially requires that the firms involved pool the costs and divide the profits in proportion to the manpower, time or money each invested. Otherwise, the legal and financial liabilities of a joint venture are identical to those of a partnership.

An association is a more loosely defined arrangement. It allows two or more firms to work under the contractual umbrella of one while each participant remains independently responsible for its own facilities, professional performance, legal status, expenses, profits and losses without affecting others in the association.

There are three methods of arranging an association contractually:

- The local firm contracts with the owner and associates with an outside firm;

- The outside firm contracts with the owner and has an association agreement with a local firm; or
- Both firms have a contract with the owner. This last type of association is also called a joint venture. Legally it resembles a joint venture because the project responsibility is shared, but operationally it resembles an association because the participating firms retain their functional and financial autonomy.

David R. Dibner, FAIA, in *Joint Ventures for Architects and Engineers*, wrote: "An essential factor in practicing as a member of a joint venture is that you can secure work which is beyond your present capacity to obtain and produce, before any permanent changes in your firm are necessary. Your part of the effort is measured by your ability."

This also applies to associations. Both associations and joint ventures allow a firm to acquire experience with new building types, an expanded scope of services, larger projects, larger fees and new practice techniques without the inherent constraints of internal expansion. Since most associations or joint ventures are formed during the selection process to give the participants a competitive edge, it is a project-by-project promotional tool that permits a team of firms to demonstrate its sensitivity to the client's problems, issues and concerns. When the association or joint venture results in a contract, it becomes an effective method of producing a job. No single firm has to provide all of the services, personnel or experience to design the project; all firms together contribute the strengths they have at the time of the contract.

One of the most successful joint ventures that Caudill Rowlett Scott has been involved in is with Neuhaus & Taylor, and Koetter, Tharp & Cowell, both of Houston. Formed at the client's suggestion in 1969 to design a 1,000-room Hyatt Regency Hotel in Houston, the joint venture has continued on to design a 47-story office building in Houston; a hotel, office and shopping development in Indianapolis and conceptual design studies for a Hyatt Regency Hotel in Philadelphia. As a joint venture, it is successful because the three member firms can quickly combine talents

and experience within a well-structured organization. Architecturally, its success is largely due to the joint venture's ability to use fast-track scheduling and budget controls to produce well-designed projects that the owners like.

The joint venture maintains an independent identity and an independent office staffed by members of the three firms. Joint venture profits and costs are divided equally among the three firms. While there is equal participation by the member firms, the strength of each firm's participation varies with the different project phases depending on the expertise that each firm has to contribute to the project. The joint venture does not compete with its member firms; new business comes into the joint venture either through repeat work with former clients or through business that the three member firms bring to it. As a joint venture, it combines all the advantages of a small firm and all the experience of a large multidisciplinary firm.

Joint ventures are only successful when there is an equal and obvious commitment by all members to fulfill clearly defined responsibilities. Because the costs and legal liabilities are shared, joint ventures are riskier for the participants than associations which divide the costs and liabilities. Consequently, they require a greater emphasis on the organization of tasks, fees, scheduling and project management. Much of these arrangements will be based on previous project experience, but must be flexible enough to respond to the unexpected. How well joint venturing firms can anticipate the unexpected and agree in advance how to cope with it is basic to their success.

The worst problems encountered in joint ventures are usually a result of poor chemistry between the members, poor definition of responsibilities or a lack of commitment by all members to the achievement of a common goal. There is no prescription for success in a joint venture; the organization, the definition of tasks and division of responsibilities must be worked out in a mutually satisfying way for the members.

The risks can be minimized if the division of tasks is obvious (such as a joint venture between an architect or an engi-

**Mr. Scott and Mr. Carlson** are with the firm of Caudill Rowlett Scott in Houston. The former is senior vice president and director of business development, the latter a vice president.

**DIVISION OF RESPONSIBILITY**

Project:  
Associated Architects:  
Basic Fee:

Percent of Basic Fee	Architectural and Engineering Services	Responsibility*	
		CRS	Associate
15	<b>Schematic Design Phase</b>		
	A. Conferences with the owner	X	0
	B. Analysis of project requirements		
	1. Program analysis and concepts	X	
	2. Site analysis	X	
	3. Space and cost analysis	X	
	4. Climatic studies	X	
	C. Building code information		X
	D. Diagram studies of space requirement	X	
	E. Assembling of utility and survey data		X
	F. Schematic design studies & recommended solutions	X	0
	G. Schematic design plans	X	
	H. Sketches and study models	X	
	I. General project description	X	0
	J. Engineering system concepts	X	0
	K. Cost estimate	X	0
	L. Presentation of schematic design documents to owner	X	0
	M. Percent of fee	12	3
20	<b>Design Development Phase</b>	18	2
40	<b>Construction Documents Phase</b>	2	38
5	<b>Receipt of Bids</b>	1	4
20	<b>Construction Phase</b>	2	18
100	<b>Total</b>	35	65

\*Symbols: X - major responsibility; 0 - minor responsibility; blank - no responsibility.

neer) or if the joint venture is organized like a single firm. However, joint ventures can be disastrous if one member of the venture becomes suspicious that the other members are charging more work to the project budget than is being done. This is most likely to happen when the work is done in separate offices or when communication is poor between participants. Appointing a project manager who has the authority to hire additional manpower or expertise if necessary to successfully complete the project also helps resolve this problem. All participants understand that their profits will be diminished if the work is not completed within the schedule and budget.

At CRS, we generally prefer the flexibility and relative simplicity of legal and financial arrangements offered by an association. Over the past three decades, we have associated nationally with 200 architectural firms as well as economists, engineers, landscape architects, transportation specialists and medical and educational consultants. Although the relationships and responsibilities have varied widely, certain patterns have emerged that are productive for the client, successful architecturally and equitable from a business point of view.

The details of an association (the number of firms involved, the division of responsibility and fee and the nature of the contractual agreement with the owner) can vary according to the capabilities of the two firms involved, the client's requirements or the demands of the project.

William E. Blurock & Partners of Corona Del Mar, Calif., has a national reputation for its experience in vocational, technical and secondary school design. Bill Blurock, FAIA, estimates that 35 percent of his firm's work is done in associations or joint ventures of some kind, not including the architectural or engineering firms that are hired on a consultant basis to supplement the exclusively architectural services his firm offers. "I would rather expand our operation and scope by associating than by hiring bodies into the firm and trying to expand," he says. "That's the simplest way to grow I know of."

When Rockrise Odermatt Mountjoy Amis of San Francisco associates, it is "to

get the job by showing how we can do the job better," says George Rockrise, FAIA. "We attempt to put together a team that best reflects the needs of the times. That usually carries weight with the client.

"The most moral way to approach an association is for the local firm to examine its own capability, examine the competition and examine what national firms may be available that have special capabilities to enhance the project. You do this for the good of the project to fill the gaps where the local firm may only have general knowledge rather than high specificity."

Rockrise says mutual respect between professional people joined together for professional reasons rather than political reasons is vital to a successful association. He places equal importance on good contact and communication between associates; adequate, competent staffing supervised by senior members of both firms, and a clear understanding of the disposition of responsibilities and the organization of tasks.

Blurock agrees. His firm has been in a joint venture type association with CRS since 1967 on the multiphased master planning and design of Cypress College in Cypress, Calif.

"I think that the division of responsibility and the division of fee, if it is handled properly, is the key to almost any association," he says. "The only problems that you have with joint ventures and associations are with firms that aren't big enough to recognize what they are, where they are and what the rules are. If a firm recognizes these things, then your troubles

mainly go away. Or if you have troubles, you're with somebody that you can talk to, complain to and you get it over with. The problems only get out of hand when they fester and continue."

CRS has found that a brief but direct two-part association memo without legal jargon is sufficient to clarify a collaborative effort for virtually any project. The first part lists 16 provisions covering the broad aspects of responsibility, reference to the prime owner/architect agreement, engineering considerations, travel and long distance telephone billing, printing, special consultants, estimating, insurance, division of the total fee and credits for publicity.

The second part of the association memo identifies each firm's responsibilities during each phase of the job in percentage points. The percentage of the fee per phase that each firm receives parallels the typical AIA documents.

A modified breakdown of the division of responsibilities and fees for schematic design is shown in the accompanying illustration.

Since this part of the association memo lists the project tasks, the division of responsibilities is clear and comprehensive for all members of the association. The participation for each phase varies depending on the strengths and experience of the firms involved. But in a typical association between a national firm which takes the major leadership for programming and design and a local firm which takes the leadership for construction documents and construction administration,

# How an Expanding Firm Moved Into Masterspec

Robert E. Fehlberg, FAIA

The cut and paste specification is still alive and doing well at CTA. There have been a few things added to the process, however. We no longer take an old spec from a similar project and work it over. The cutting and pasting is done with sections of Production Systems for Architects and Engineers' (PSAE) MASTERSPEC that we order from a computer service in Salt Lake City. The principle is the same—start with a proven source of information and modify it to fit the problem at hand.

Rewriting the "old spec" just did not fit into our expanding architectural practice. There were too many new project types, new products and materials that needed to be combined into new solutions. As our firm expanded, the idea of roughing out the spec over the weekend also became less practical. And as projects became larger and more numerous, typing became a bottleneck that couldn't be solved by just adding another typist.

Other problems were developing. For example, we needed a specification that covered all the different roofing types on all the possible decks. The result was that, when we sat down to produce the specification, it was a matter of deleting everything except the chosen system—say, gravel surface built-up roofing on a wood deck. This way, at the crucial time, we wouldn't need to search through Sweet's Catalog Files and numerous roofing and decking manufacturers' catalogs.

Our own master specification started to develop. To facilitate the typing and retrieval of the final spec, we leased an IBM MT/ST, magnetic tape automatic typewriter. This piece of equipment enabled us to produce a specification in a shorter period of time. The text was edited, the MT/ST produced at 150 words per minute.

When MASTERSPEC came into being we looked at it, didn't like it—we had our own master. But, as MASTERSPEC de-

veloped, we were finally convinced that it would be an excellent reference tool to cover items that we didn't have in our CTA spec. As our specification writer reviewed and revised MASTERSPEC sections, adopting them to our spec, we started to explore methods of utilizing MASTERSPEC directly.

Our first inclination was to record the entire MASTERSPEC reference catalog on MT/ST tapes, to coincide with the way our own master spec was stored. In January 1973, we leased another MT/ST, hired an additional secretary, trained her and started the recording process. It was soon evident that it was going to take months to record all the data and that inputting the quarterly updates would be a constant problem. The idea of purchasing prerecorded tapes was abandoned because of the cost involved. We shelved the idea of using MASTERSPEC because the sheer volume of information that had to be typed, stored and updated was mind-boggling.

At the start of 1974, we made another attempt to switch to MASTERSPEC. This time, we decided to try the computer service, ARCOM in Salt Lake City, for one project—a small one, not too complex.

The first spec was long, requiring twice as many pages as with our own master. Our spec writer, James Rostron, CSI, used the narrow-scope version of the spec and didn't edit as much as he could have. Everything went beautifully; we were \$570 over the budget for the specification. We budgeted \$572 and it cost \$1,142.11 for in-house time and computer costs. On the next three projects, we were under budget. We had learned how to edit, and had become familiar with the system.

This is the third year that we have been using MASTERSPEC on all projects except federally funded buildings. We don't think about it as just a specification; it is, rather, a system that moves our staff through a project.

MASTERSPEC works like this in our office: Our spec writer and project architect have an initial project conference as early in the project as possible, but no later than completion of design development. Together they review materials that will be used in the project, and make a list

of spec sections that will probably be required. This list is mailed or phoned to ARCOM in Salt Lake City. Within three days, these sections (edit copies) are back in our office ready for the recording of basic decisions. Jim Rostron edits them to conform with the project architect's directions. These mark-up sections are then returned to ARCOM for the first run, with a three-day turnaround. This pre-edited checkset is used in the office by the project architect during the development of the construction documents. It gives the other staff members guidance with regard to what materials are being used in the building, and what scope of information will be in the spec. In addition, the project architect utilized the golden rod instruction sheets of MASTERSPEC as guides for the team members preparing drawings. The sheets list the information needed on the drawings to supplement what will be in the spec.

Near completion of the documents, a final review and editing of sections is done. Sections are added or deleted as required. The material is again mailed to Salt Lake City where it is reprocessed on the computer to prepare the final draft of the project spec, ready for duplication on our offset press.

Division one sections and mechanical and electrical portions of the spec are still produced from our own master via the MT/ST typewriter (we have only one now). We have yet to miss a deadline because of the computer in Salt Lake City or the mails. The turnaround times demand that edited material be mailed on schedule and this has forced us to establish critical dates that have to be followed.

We were forced to adjust our spec preparation to the time it takes to mail back and forth to the computer, but we have found that this creates order out of what used to be chaos. When we used our in-house master and MT/ST, the start time was always delayed until the last possible minute. As a result, the secretarial crew had to work day and night to get the spec out on schedule. Now we have that situation only with mechanical and electrical. We are looking forward to PSAE's M/E MASTERSPEC to get these disciplines into the same system. □

**Mr. Fehlberg** is a principal in CTA, an architectural and engineering firm in Billings, Mont., which was the subject of a JOURNAL practice profile in Aug. 1974. He is a former chairman of the commission on professional practice, and was a chairman of the PSAE board of directors.

# Here's why ECI is proud to be first in pneumatic trash and linen conveying systems:

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- B** Who was second to climb Mt. Everest?
- C** Who was second to run the four minute mile?
- D** Who was second to install a pneumatic trash and linen conveying system?

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30 years ago ECI Air-Flyte introduced a pneumatic conveying system designed for use in laundries. That was long before any of today's competition got involved. Since then, the field has grown and we've stayed up there as Number 1. But, we've worked hard at it.

ECI had the first pneumatic linen conveying system ever used in a hospital. We followed that with the first combined linen and trash pneumatic conveyor. And, today we have more systems carrying trash and linen up, down, around and through more different types of facilities than all our competitors combined. ECI systems are in service in laundries, hospitals, residential complexes, offices and industries around the world. That much experience means know-how that insures trouble free operation.

We're first to admit we've made mistakes along the way. But, those lessons have helped us learn and grow. You'll profit from that. . .because now we know the problems and how to prevent them. And our competition is still learning.

You can be sure that any new advance made in pneumatic conveying systems will happen first at ECI. Innovation, experience and leadership are our strengths, and a lot of each goes into every ECI system you specify.

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\*ANSWERS: A—Charles Lindbergh making his solo flight who was preceded by John Alcock. B—The Swiss team of E. Schmidt and J. Marmet followed Sir E. Hillary on May 23, 1956. C—After R. Bannister did the run, he was followed by J. Lundy. 4—Trans-Vac Co., Jacksonville, Florida.

**Depression Modern: The Thirties Style in America.** Martin Greif. New York: Universe Books, 1975. 192 pp. \$12.50.

Among the recent books on Art Deco, the Skyscraper Style and other aspects of design in the '30s, Martin Greif's *Depression Modern* is a delight to read and is certainly a book architects would want to own. Beautifully designed and rich in illustrations, it does justice to a period the author loves.

This is not a scholarly book; indeed, the text (which is approximately 40 pages, the remaining 150 pages being devoted to hundreds of photographs) is highly personal, starting with reminiscences about the author's parents as they must have been when first married in the early '30s, and ending with descriptions of the designs of his family's gravestones. It is a style of writing which is becoming more popular today, and one which I very much enjoy.

The author at 37 missed first hand the period he describes, but he presents it with the passion of a cause. He abhors the current vogue of Art Deco, which he describes as a Parisian style of the '20s, and makes some effort to square away the terminology of the time, distinguishing among "modern" (which was good), "modernistic" (which was to be despised), "Art Deco" (which is now misapplied to the entire period), and "good contemporary American" or "Depression Modern," which is the subject of this book.

One of the book's weaknesses is its lack of scholarly analysis of the relationship between the designs Greif is describing and the earlier work in Europe. But perhaps we should not see that as a weakness but rather the nature of the book. As is, it is an exuberant celebration of the work of Raymond Loewy, Donald Desbey, Russel Wright, Walter Dorwin Teague, Vahan Hagopian, Dorothy Liebes, Marianne Willisch, Gilbert Rohde, Edward Durell Stone and other designers of the period.

Whatever the details of the fall of the academic styles and the rise of modernism, these are the people who designed the utensils, furniture, automobiles, trains and buildings which brought the strong, clean lines of modernism into the everyday ex-

perience of the average person. Their work is profusely illustrated with photographs taken at the time. Raymond Loewy's work dominates, both in the text which is interspersed with a series of "evolution charts" he did in 1934 showing the tendency toward simplicity and sheerness in glassware, women's fashions, women, telephones, automobiles, shoes, dirigibles, airplanes, clocks, houses, chairs and trains. In the illustration section which shows many of his designs, the streamlined chromium pencil sharpener of 1934 is my favorite.

The work shown here is, of course, greatly influenced by the Europeans, who in turn had been influenced by Frank Lloyd Wright. But it is very American in scale, strength and self-confidence. In looking through *Depression Modern*, one cannot help but wonder what America might have been able to develop if it had not again suffered one of its many European invasions, namely that of the Bauhaus designers in the late '30s and early '40s.

Greif argues that "Depression Modern" marked the beginning of the age we are now living in and that it was uniquely American. He is convincing on both counts. *John Lobell, Associate Professor of Architecture, Pratt Institute*

**Five California Architects.** Esther McCoy. New York: Praeger, 1975. 200 pp. \$9.95 paperbound.

When architectural history is written from published sources, there is real danger in its becoming merely the history of histories. This book, originally published in 1960 and now reissued, serves to put previously unpublished material into the record and, hence, into history.

Randell Makinson contributed the chapter on Charles and Henry Greene; Esther McCoy wrote the rest on Bernard Maybeck, Irving Gill and R. M. Schindler. While this may not be a book that currently *must* be read, anyone is missing a great treat by not doing so. It is a beautiful work of art within itself.

There are unquestionably fashions among architectural writers just as there are among architects. From this book, however, I am not made aware of the

writers' predilections. The reader is granted the intelligence to draw his own conclusions from the well-presented information. In the future, when propagandized ideas of other writers on architecture are challenged and begin to die around them, this work will still be making its solid contribution. It makes no attempt to assign these architects a relative rank; it sticks to facts and uses adjectives for description, rather than for evaluation.

I imagine that I arrive at even different interpretations from those I suspect of the authors. And what good to architects is writing on architecture if not to aid their actions? To my knowledge this book comes closest of any to a nonstatistical study of the profession of small design offices over their lifetimes. From the viewpoint of endurance, it is not a lovely picture. While each of the architects is of interest because of personalized vision, each career eventually fades, probably for the same reason.

It seems we may see an explosion of graduating art historians specializing in architecture. They can't all rework the same material indefinitely. They would do well to follow the example of Mrs. McCoy. It would also have value if some of them scrutinized the writers who evaluate buildings and their creators. In the meantime, will the real McCoy please *not* stand up. We prefer that you stay at your typewriter. *John Blanton, AIA*

**Solar Heating and Cooling: Engineering, Practical Design and Economics.** Jan F. Kreider and Frank Kreith. New York: McGraw-Hill, 1975. 342 pp. \$22.50.

Although exportation of solar radiation by proper orientation of buildings is ancient wisdom and solar heat collectors for furnishing hot water in sunny climes have been common for decades, only now is solar heating/cooling seriously promoted as an alternative to conventional heating by electricity, oil, coal or natural gas.

Already there is a large body of research—and do-it-yourself advice on a primitive level is readily available—but little has been published that would give the professional designer a comprehensive guide to practical application. This book helps fill the void. *continued on page 64*



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After a short review of the fundamentals of heat transfer, the authors provide methods of solar energy collection. The book also meets the demand for ready-to-use methods of calculating solar heating and cooling systems. It is a good and concise handbook for the design of collector panels, fixed spherical mirrors and compound parabolic concentrators, covering also such methods as solar cells for direct conversion of solar energy to electric power, solar-assisted heat pumps and other backup systems. It also discusses economic analyses, test procedures and legal problems. A bibliography, special references and extensive technical data make the book a most useful tool for the designer.

Several architectural examples of experimental houses are shown, with data

on location and solution. It is surprising, however, that the authors, who work in Colorado, look only Eastward for examples. None from the West Coast is shown, such as the Coos Bay home in Oregon, unusual for its location and in practical use for years. It is now under further study by the University of Oregon's solar energy center.

Another notable example is the HUD-sponsored house at Atascadero, Calif., which was studied by California Polytechnic State University. The design uses a novel system of natural airconditioning, utilizing roof ponds and movable insulation for heating and cooling.

In a time of rapid development, the reader, of course, will have to keep up with new experimentation. The architect should make himself sufficiently conver-

sant with the various systems and their problems before making decisions. The sprouting manufacturers that are widely advertised these days could easily create a consumer protection problem.

This manual, however, will give the initial tool to master the new and increasing sophistication in the use of the sun's ever-present blessings. *H. H. Waechter, AIA*

**37 Design & Environment Projects: First Annual Review.** Edward K. Carpenter. Washington, D.C.: R. C. Publications, 1976. 96 pp. \$13.95.

The magazine *Design & Environment* conducts an awards program for excellence in environmental design. This book is devoted to 37 winning projects in the first annual program. In a foreword by Jonathan Barnett, AIA, it is pointed out that only recently have architects and engineers "come to realize that raising the design level of individual structures is only part of the problem." The central design issue of our day, he says, is the improvement of the "physical surroundings that we live with every day."

He says that the "three main players of the environmental game are government, with its dual role as regulator and builder; the real estate industry . . . and communities, including both local interest groups and national consumer lobbies." The design professional must come to an understanding of the "working mechanism and priorities of all three, if he is going to be able to intervene successfully in the design of the environment."

As Barnett remarks, the winning projects presented in this copiously illustrated book reveal that the design professional is "beginning to assume new roles and to operate in realms that have been closed to him up to now." The projects, arranged in the three general categories of environmental enhancement, preservation or recycling and urban design and planning, are wide-ranging. Among them: an educational program to preserve back roads in Vermont; Waterfront Park in Boston; the bilingual signage program of Canada; housing for the elderly in Pleasanton, Calif.; pier renovation in Seattle, and the Artpark in Lewiston, N.Y.

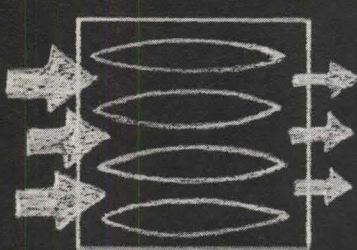
**Shopping Centers: Planning, Development and Administration.** Edgar Lion. New York: Wiley, 1976. 198 pp. \$16.

In 1957, there were 2,500 shopping centers in this country and Canada; in 1973, there were 17,000. Despite a decline in the number of large regional centers built in 1975, the author of this book maintains that there is "still a large potential for smaller, medium-sized centers in many well-developed urban areas."

Lion provides an excellent and comprehensive source of information on shopping

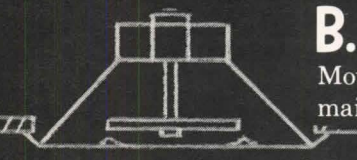
*continued on page 68*

# A + B = C



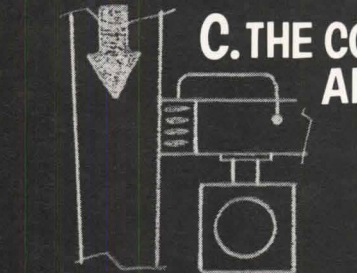
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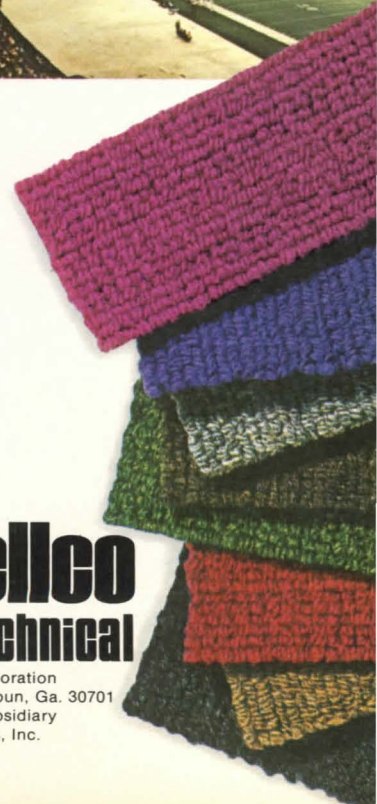
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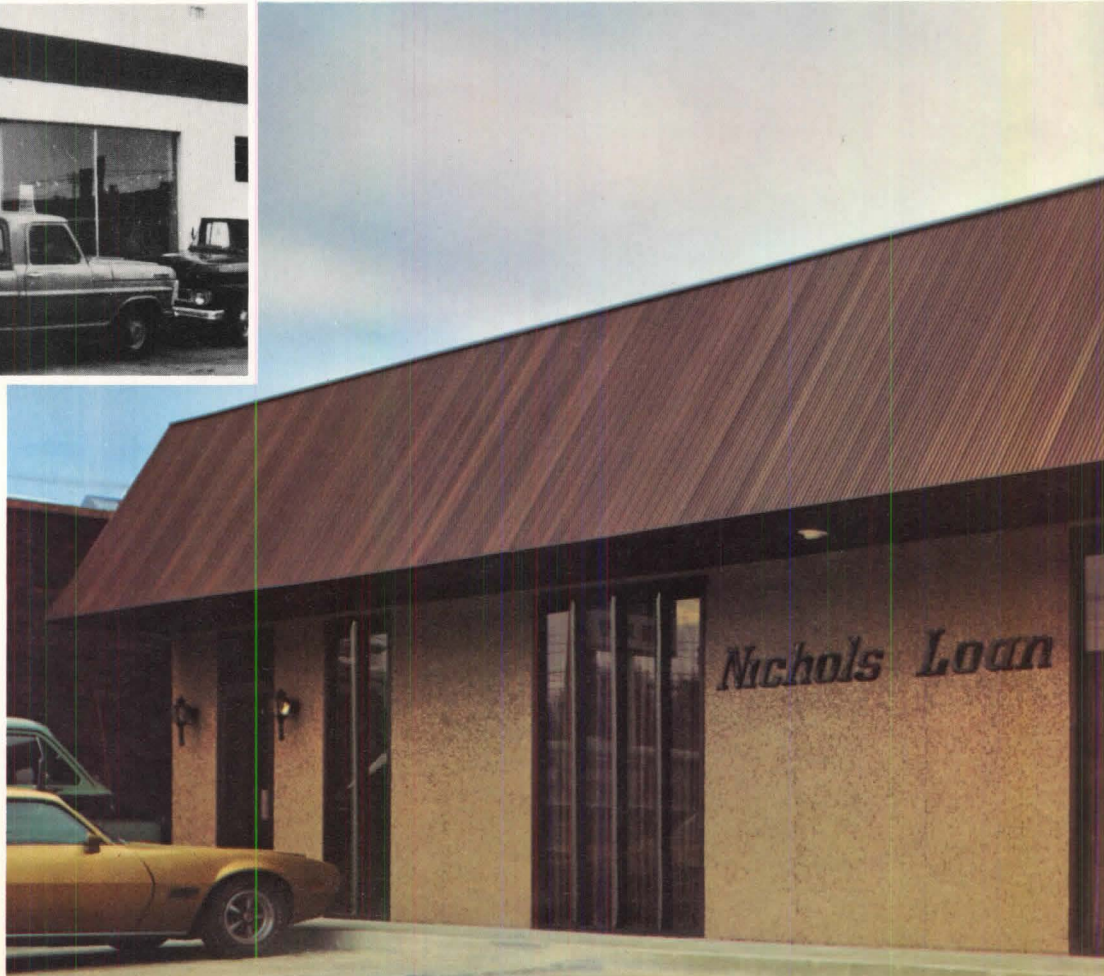
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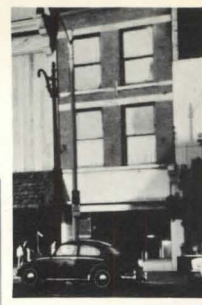


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*Books from page 64*

centers from concept to realization, with additional materials on the administration and modernization of older centers. The book covers such large topics as site planning and landscaping, HVAC systems, taxes and insurance and parking lots, but such details as customer fatigue, wheelchair ramps and vandalism are also considered. The book is certainly a "must" for the designer of shopping centers and malls.

**Bicycle Transit: Its Planning and Design.**

Bruce L. Balshone, Paul L. Deering, Brian D. McCarl. New York: Praeger, 1975. 165 pp. No price given.

Many people view the bicycle, say the authors of this book, as a recreational vehicle to be used in open spaces. The potential of the bicycle as a transit vehicle, however, is now being explored by planning agencies. This comprehensive book, then, should be read by those who are concerned with all modes of transit. It includes the history of bicycles and bicycle clubs; design considerations in the creation of bikeways and bicycle corridors; the use of plants in transportation corridors; engineering considerations of bikeways, bikeway signs, paving, parking facilities, etc., and legislation regarding bicycles and bicycle safety programs.

**Solar Energy Directory.** Phoenix, Ariz.: Centerline Corp. (401 S. 36th St., Phoenix, Ariz. 85034), 1976. \$7.50.

Listed here are domestic and international suppliers, builders and designers of solar energy materials and equipment. Information is given under 13 general categories, such as architects, engineers, associations and societies and manufacturers. There are 24 firms listed under the heading "architects." In the associations and societies category, AIA is listed as "promoters of efficient use of energy in buildings and distributors of information on conservation."

**Walking Tours of Old Philadelphia.** Paul Hogarth. Barre, Mass.: Barre Publishers (distributed by Crown Publishers, New York City), 1976. 154 pp. \$15 hardbound, \$6.95 paperbound.

Here's something worthwhile among the bicentennial trivia: a handsome and useful little volume of six walks through Philadelphia's city center and its southern tip, Southwark and Queen Village. Hogarth first maps a path for each trek and estimates total time required. Then follow succinct descriptions of the buildings and streetscapes frequented by Franklin, Jefferson, Madison, et al., interspersed with illustrations of the same. Finally, there are details of colonial hitching posts, foot-

scrapers and firemarks; a bibliography; a glossary of architectural terms, and an exhaustive index. Hogarth's style, in both words and illustrations, is a combination of detail and casualness that bespeaks sophistication.

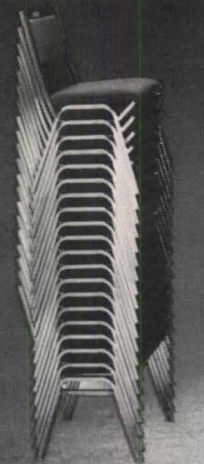
**New Haven: A Guide to Architecture and Urban Design.** Elizabeth Mills Brown.

New Haven: Yale University Press, 1976. 228 pp. \$15 hardbound, \$3.95 paperbound.

"Streets as well as buildings are made, and, like buildings, they embodied when they were first designed certain visions of art and order. If we can learn to read them better—to understand what they started out to be and how they have changed—much that is incoherent in the modern city becomes intelligible," says the author of this guidebook to New Haven. She believes that not only landmarks but also anonymous buildings make the urban fabric.

The guidebook offers 15 tours of the city, with descriptive notes and photographs of buildings and landmarks. There is a map for each tour, a chronological list of buildings and an index of architects, builders, planners and artists. Especially helpful is the general introduction which provides a historical background and architectural and typographical notes.

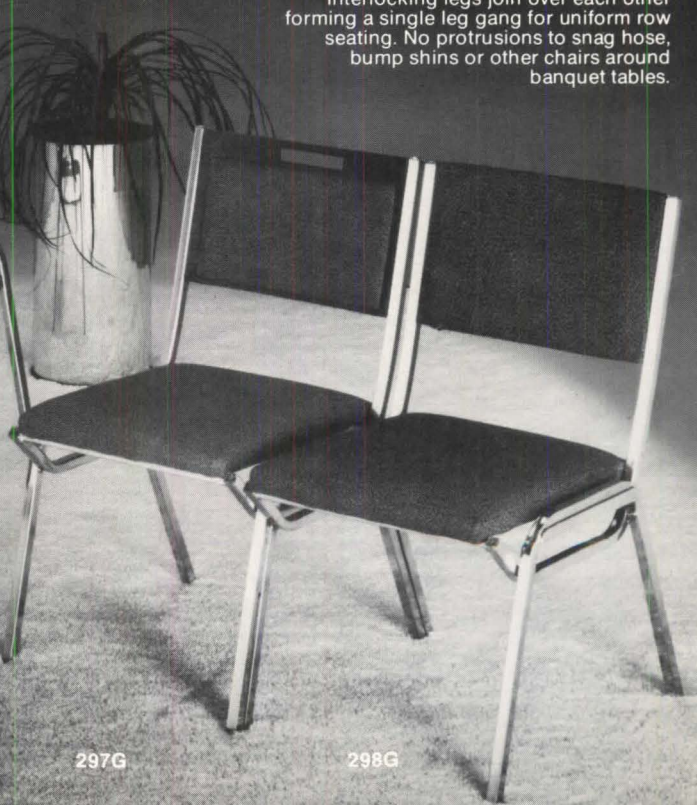
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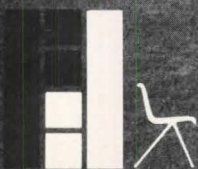


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**Martienssen and the International Style: The Modern Movement in South African Architecture.** Gilbert Herbert. Rotterdam, Holland: A. A. Balkema, 1975. 283 pp. \$36.

Rex Distin Martienssen had a profound effect upon modern architecture in South Africa. This book gives a detailed account of his life and his work, focusing on the architectural developments in the Transvaal from the end of World War I to the time of Martienssen's death in 1942. He was, says the author, "a fountainhead of strength, from which his colleagues drew."

For the exposition of his theory of design, Martienssen used the *South African Architectural Record*, for which he served as editor, "rigorously" selecting material that would support his thesis and using his own pen to weave a "fabric of ideas that skillfully related past and present, art and architecture."

Herbert also describes architectural education and the profession of architecture in South Africa during the period, the influence of Le Corbusier on Martienssen and the emergence of a South African architectural idiom.

**Arts and the Handicapped: An Issue of Access: A Report from Educational Facilities Laboratories and the National Endowment for the Arts.** New York: EFL, 1975. 79 pp. \$4.

Regardless of handicaps, no person should be deprived of the joy that art can bring to his life. This excellent booklet tells of ongoing programs throughout the country whose aim is to make the arts accessible to millions of handicapped people. There are, for example, "please touch" exhibits for the blind, museums for retarded and emotionally disturbed children, theaters for the deaf and arts programs for the elderly. The name and address where one may write for specific information is given for each of the many projects discussed. Also there are discussions of pertinent related topics, such as funding sources, legal implications and architectural design.

"Making the arts accessible to the handicapped is not simple," the report says; "it is not just a question of ramps and appropriate facilities, expanded staffing or more money. Rather, arts for the handicapped require many levels of affirmative action: law enforcement, removal of architectural barriers, utilization of available technology, dissemination of vital information and the invention of new programs and facilities."

There is no single agency that can open the doors of the art world to the handicapped. A particularly significant discussion in the report concerns cooperative interagency programs. Unfortunately, few such cooperative programs exist, and those that do are aimed at a selected con-

stituency, "leaving those outside with little opportunity to enjoy the beauty and the insights into human experience that only the arts can impart." This report may help open doors to those who are waiting on the outside.

**Analysis of Tall Buildings by the Force-Displacement Method.** M. Smolira. New York: Wiley, 1975. 299 pp. \$39.50.

The author of this technical book on structural analysis as applied to tall building frames and shear walls says that there is "no point at which a building can be considered as tall" and that the term is usually applied to a structure whose design is more affected by lateral than gravity forces. More than low buildings, he writes, tall ones can be affected by "instability forces in their broad form, and by 'secondary' effects such as changes of temperature, shrinkage and creep of concrete, settlement of foundations, dynamic action of loads, etc." It is to these problems that Smolira, a structural engineer, addresses his attention. The main subject of his book is about the "effect of these forces on stresses and deformations."

Because of the lateral forces to which a tall building is subjected, the designer must analyze the forces involved. Modern highrises require an ever higher degree of analysis, writes Smolira, in order to predict the response of a building to loads and environmental factors because of the "continuing tendency towards the design and construction of tall buildings of great slenderness and reduced mass, and the dependence on a high degree of continuity at joints."

The emphasis in this book is upon analysis by the force-displacement method. This concept, Smolira says, "offers the advantage of having a clear physical meaning at all steps necessary in setting out of a matrix, is straightforward in application and can provide a solution to a wide range of practical problems."

He presents the method and describes its practical application in the first two chapters. Chapters follow on the analysis of perforated cores, floor systems, thermal stresses and deformations, vibrations of elastic structures and trusses. There are also chapters on the secondary effects in the analysis of tall buildings, the elastic instability of frames and shear walls and volume changes in concrete.

**Art in Public Places in the United States.** Compiled by Emma Lila Fundaburk and Thomas G. Davenport. Bowling Green, Ohio: Bowling Green University Popular Press, 1975. 384 pp. \$30.

The subject matter of this book is important, and it is regrettable that the volume itself is not a more beautiful example of modern bookmaking. There are no color photographs, and the whole aspect of the printing is of a grayish cast.

The first major section of the book is titled "Artists and Architects," and it is a selection of writings by a number of people who are concerned about art in architecture, including Louis G. Redstone, FAIA, and Ada Louise Huxtable. The second part of the book is a selection of photographs of art incorporated in museums, schools, religious buildings, shopping centers, libraries, judicial and state structures, transportation facilities, etc.

**Living with Old Houses.** 2nd revised edition. Portland, Me.: Greater Portland Landmarks, Inc. (14 Exchange St.), 1975. 108 pp. No price given.

Want to know how to remove paint from old hardware? Simmer it gently in tomato juice or soak it a couple of hours in Coca-Cola; then scrub with water and steel wool. This is but one piece of advice given in this book that is packed with information for anyone who is restoring an old house.

The reader is told how to recognize architectural styles, how to "research" an old house, what records to keep, how to replace architectural details. There are chapters as well, written by various experts, on such things as fireplaces and chimneys, lighting, floors, wallpaper and window hangings. There are guidelines also on how to move an old house and how to finance restoration work.

Names and addresses are given for places to go for help and there are annotated bibliographies for more in-depth reading on the love and care of old houses.

**Da Capo Series in Architecture and Decorative Art.** General editor: Adolf K. Placzek. New York: Da Capo Press, 1975-76. Prices vary.

In recent months, Da Capo Press (227 W. 17th St., New York, N.Y. 10011) has been publishing in unabridged form many of the classics in 19th century architecture. Most of the volumes have brief introductions about the various authors and the value of the specific works in American architectural history.

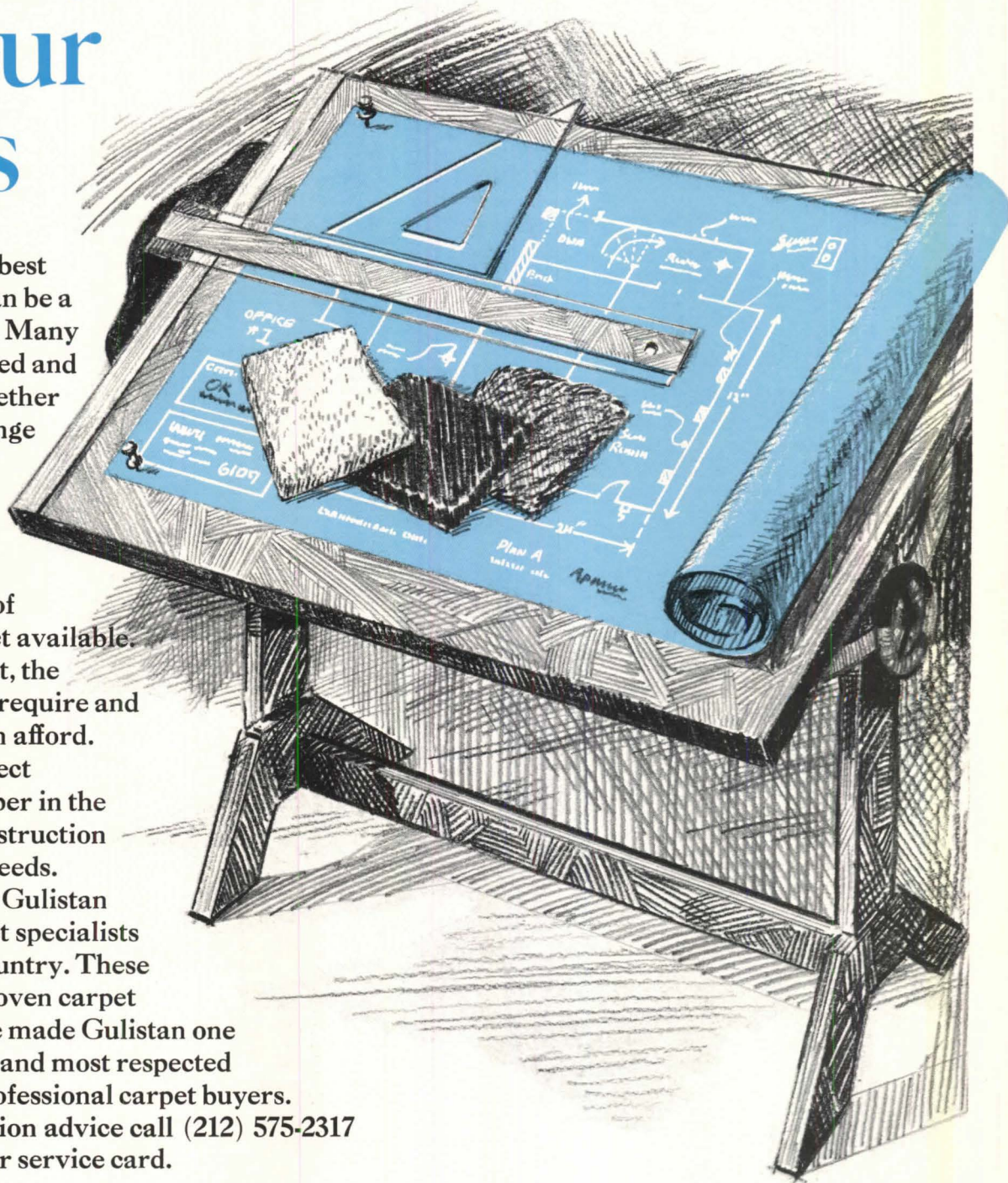
Among the reprints published to date are: Samuel Sloan's *The Model Architect*, in two volumes; Sloan's *City and Suburban Architecture*; William Burnett Tuthill's *Interiors and Interior Details*; George E. Woodward's *National Architect*, and Palliser, Palliser & Co.'s *New Cottage Homes and Details*.

The volumes being reprinted by Da Capo enable architectural libraries which own the older original works to now circulate the reprints to scholars; those libraries which do not possess these old treasures can now afford to have them. Because of his years of service as librarian of the Avery Memorial Library of Columbia University, Adolf Placzek is a splendid choice as editor of the Da Capo series. □

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Edited by Bruce G. Johnston

Underwritten by the Column Research Council, this is a summary of the research results in metal compression members and the application of these results to design criteria. 0 471 44629-7, 1976, \$32.50

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Going on from page 18

convention, the chairs will be displayed at several major art museums.

The panel of judges includes Warren Platner, FAIA; Cini Boeri, architect and furniture designer in Italy; Sherman Emery, editor of *Interior Design* magazine; George Nelson, FAIA, and Mildred Friedman, coordinator of design at Walker Art Center, Minneapolis.

For further information write: Walter Collins, Chair Design Competition, 654 India St., San Diego, Calif. 92101, (714) 235-6391 or 291-3894.

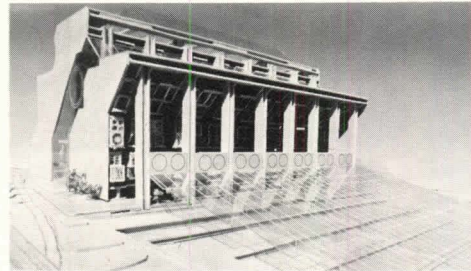
## International Recreation Congress Set for U.S.

The International Board for Aquatics, Sports and Recreation Facilities, a non-profit organization that works on behalf of European architects in the development of recreational facilities, will hold its first congress in the U.S. on Oct. 21-22. The congress, to be held at the International Convention Center in Niagara Falls, N.Y., is expected to be attended by several thousand architects from Europe, as well as by practitioners from this country and Canada.

Leading authorities on recreation facility building from eight countries will be among the speakers at the congress.

Topics for study and discussion include movable pool floors, wave-making machines, rolling bulkheads, 1976 Olympic facilities, swimming pool building and operation and heat recovery. English will be the official language used at the congress.

For further information, write: William Thomas, Chairman, IBA Congress, Olean YMCA, 130 S. Union St., Olean, N.Y. 14760.



## Solari's Solar City: Collector and Awning

Paolo Soleri, creator of "arcologies" (architecture and ecology), has a new vision of cities energized by the sun. An exhibition in Xerox Square, Rochester, N.Y., which will be open through June, shows models of eight hypothetical cities located in different climates. Infrared rays of the sun filter through the city and

the roofs of huge greenhouses adjacent to the city, increasing the entire city's temperature by as much as 50 degrees in winter, Soleri says. "The basic shape of the city itself acts as a sun collector in winter and a giant awning in summer." The greenhouses also could supply much of the city's food needs. The two suns "represent the physical and spiritual being of man," both of which are necessary for the survival of urban man, Soleri says.

## Institute Scholars Chosen

Four architectural students have been chosen as this year's Institute scholars to work on special projects at AIA headquarters throughout the summer. They are:

- Margaret Fahrenbach, University of Notre Dame, whose project topic is alternative careers to architectural practice.
- Bruce Forbes, Syracuse University, who has selected as his subject of study the survey of computer applications in architecture.
- Patricia L. Holtsclaw, Howard University, who will study research moneys in the construction industry for the architectural profession.
- Michelle Morgan, North Carolina State University, whose project is home modification and design for wheelchair users (see May, p. 50).

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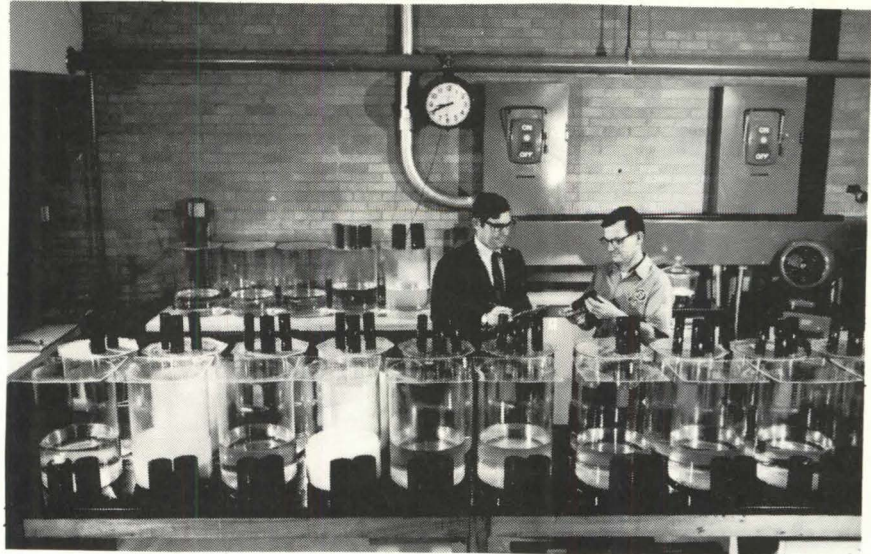
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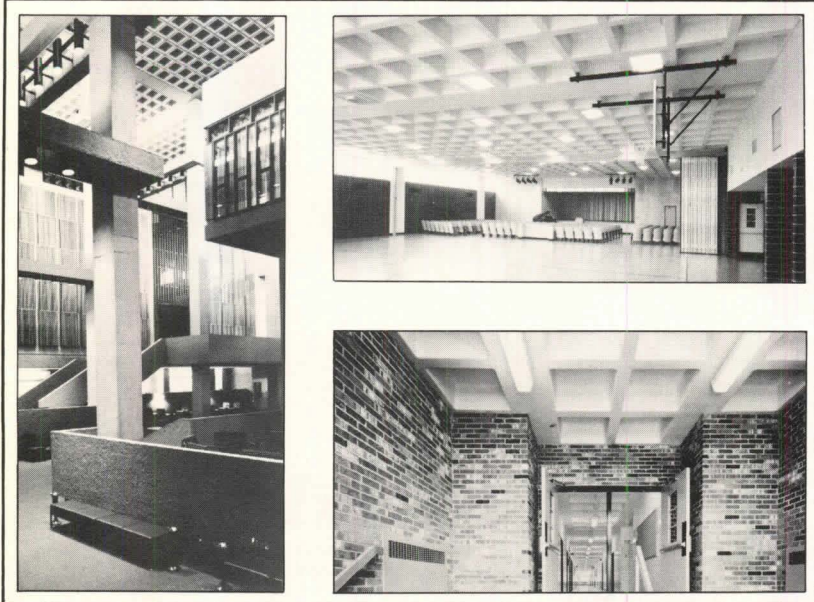
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## LETTERS

**From Another Point of View:** Save us from illiterate architects! It is obvious that the reviewer of *The Hospital: A Social and Architectural History* (Mar., p. 68) either did not read or comprehend the title of the book which he so unfairly criticized.

The book is intended to be a history of the development of the hospital and not an architectural handbook. In fact, the closing paragraph of the book recommends that architects become more involved in the design of institutional medical care systems rather than concentrating exclusively on building. To quote Santayana: "Those who cannot remember the past are condemned to repeat it."

I personally recommend the book highly and use similar material as the basis for my courses on planning which I give around the country at various seminars and workshops.

Bruce Porter Arneill, AIA  
New Haven, Conn.

**A Message to U.S. Architects:** As president of the Panamerican Federation of Architects, I have the honor of helping direct the destinies of this organization.

We have accepted our responsibility with modesty, in the understanding that the success of our labors will primarily depend upon the backing that individual architects give to their national sections and, in turn, to the FPAA executive committee. Participation in regional reunions, seminars and work commissions will culminate in our next congress to be held in 1979 in Caracas, Venezuela.

The FPAA executive committee, made up of distinguished architects from North, Central and South America and the Caribbean, is organizing a program of activities which it hopes will serve architects individually, as well as the national sections of FPAA and the International Union of Architects.

Although we may have differences regionally as to geography, climate, idiom and technology, we have common problems. In this last quarter of the 20th century, the architect has to reassert his position in society and become a leader in the pursuit of ideals for the achievement of the welfare and life quality to which we all rightfully aspire.

We will arrive at the solution of problems not only through modern technology and the efficient utilization of time, but also through the scientific use of natural and artificial resources in conjunction with the artistic expression which contemporary life demands. In this way, we, as architects, will be able to inculcate into

our differing cultures the ideals of liberty of our founding fathers.

To achieve this end, the individual and egotistical labor of the architect is not enough. It is in team work and in service to the community that we will be able to achieve the high place to which we, as architects, are entitled.

It is with these ideals and purposes that the FPAA executive committee proposes to work. It is our wish to reach every architect in the Americas through frequent communications related to our common tasks. The committee hopes to interest each architect in order to achieve his backing so that we can develop our FPAA activities in accordance with our responsibilities to the architect.

For our part, we assure you that in response to the trust placed in us, we will be at the service of the FPAA.

*Julian Ferris, Hon. AIA  
President of FPAA  
Caracas, Venezuela*

## EVENTS

**June 27-July 2:** American Society for Testing and Materials annual meeting, Palmer House, Chicago. Contact: ASTM, 1916 Race St., Philadelphia, Pa. 19103.

**July 3-31:** World Game Workshop, University of Pennsylvania, Philadelphia. Contact: Jack Marquette, Fuller Archives, 3500 Market St., Philadelphia, Pa. 19104.

**July 6-Aug. 13:** Harvard Graduate School of Design, Career Discovery Program. Contact: Patricia L. McManus, Harvard Graduate School of Design, Gund Hall L-37, Cambridge, Mass. 02138.

**July 7-9:** Course on Human Behavior and Housing Design, Harvard Graduate School of Design, Cambridge, Mass. (Other courses for "professionals who shape our environment" in July and Aug. Contact: Coordinator, Continuing Education Program, Harvard Graduate School of Design, Gund Hall L-37, Cambridge Mass. 02138.)

**July 7-9:** Seminar on Management of Construction Projects Using Network Systems, University of Wisconsin, Madison, Wis.

**July 9:** Applications deadline, Work Experience Internship program, National Endowment for the Arts. Contact: NEA, Intern Program Officer, Mail Stop 557, Washington, D.C. 20506.

**July 14-16:** International Seminar on Bicycle and Pedestrian Facilities, Harbour Castle Hotel, Toronto. Contact: Melvyn Wasserman, MAUDEP, P.O. Box 722, Church St. Station, New York, N.Y. 10008.

**July 14-16:** Seminar on A/E Practice and the Law, University of Wisconsin, Madison, Wis.

**July 26:** Entries deadline, Prestressed  
*continued on page 77*

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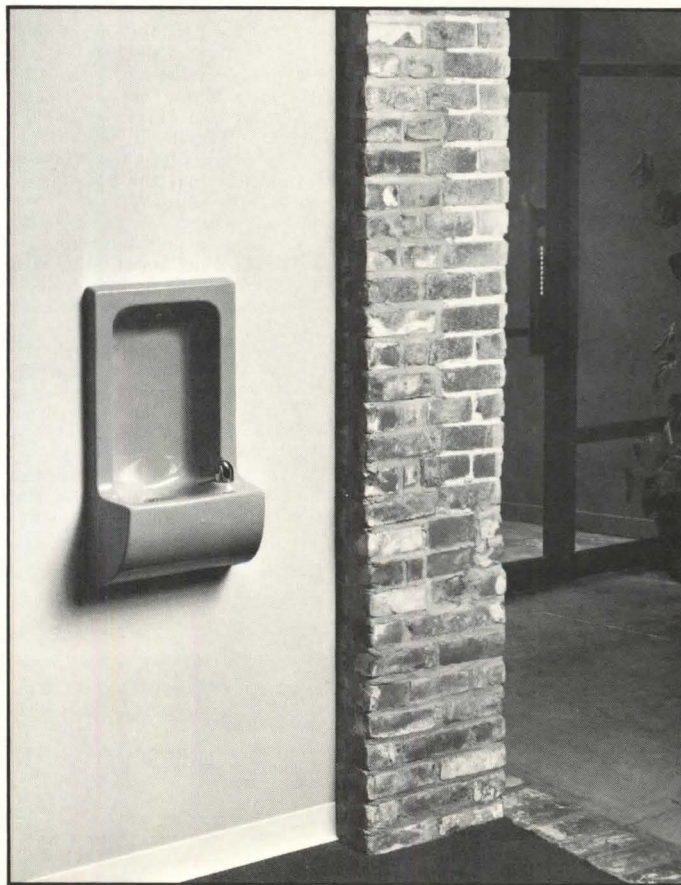
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about 65 percent of the total fee remains with the local firm.

The majority of associations are successful if they are well-organized, well-defined relationships between complementary firms. Some associations do fail for a variety of reasons: bad chemistry between associates, politics, a shotgun marriage of associates, inability to produce the job—the causes vary as greatly as the individuals involved in an associated project.

One of the many possible ingredients of a disastrous association, Blurock says, is the involvement of uncompromising individuals who are not team-oriented. He tells of one case in which a personality clash between team members in an association resulted in the removal of the individuals involved. If mutual respect exists between the associated firms, changes can occur for the benefit of the project without destroying the association itself.

However, relations between associates don't always work out so smoothly. Blurock mentions one case in which his firm had to choose between firing an associate or jeopardizing the quality of the job due to the associate's inability to produce.

"We very painfully had to fire him. It was either him or us, and we just laid it on the line," he says. "It is only the one- and two-man offices that know they can do a \$15 million job. The rest of us aren't sure."

At CRS, two experiences resulted in a major modification of the CRS association agreement. Both times our associates overstepped the boundaries of the responsibilities to the detriment of the project.

In one case, having been commissioned to design a large Southwestern hospital, we chose a local associate who had done previous work for the same client. We reasoned that the firm's knowledge of local building conditions, proximity to the site and familiarity with the client would be an asset to the project. But the associate's partner-in-charge felt from the beginning that his firm rather than CRS should have been commissioned for the job. The relationship with our associate became competitive rather than cooperative and just 14 months prior to completion we felt we had to dissolve the association. As the project proceeded into construction administration and the associate's responsibilities increased, the antagonism toward CRS made it impossible for the two firms to work together successfully.

A similar situation occurred on a college job in the Midwest. CRS had lead responsibility for design, design documents and working drawings while the associate architect was in charge of construction administration. During the working drawings phase, the associate disagreed with CRS's choice of structural systems and foundations. Representatives of the associate firm went independently to the col-

lege board and criticized CRS's design judgment. This forced us to defend our design decisions to the client. Although the client concurred with CRS, the associate demanded that an outside firm redo the work. This internal conflict, mutual distrust and embarrassment ended constructive cooperation and forced us to terminate the association.

Prior to these jobs, our association agreement allowed us to legally terminate an association only with cause. Both of the previously mentioned experiences were terminated because the associate failed to fulfill a contractual obligation, although that obligation was not necessarily the source of the conflict. These experiences taught us that a termination clause that permits either partner to end the agreement either with or without cause and be reimbursed for the work done was a vital part of an association agreement.

Because every association requires adaptation to specific circumstances, there are no absolutes. It is impossible to define the ingredients of an association which always succeed or always fail.

For example, the shotgun marriage in which the client rather than the primary architect chooses the associate architect is widely characterized as potentially disastrous. However, it has been our experience that this isn't always a problem.

An example of a mutually satisfying way for a client to arrange an association after the primary architect has been chosen occurred when CRS was commissioned to design a high school in Lynchburg, Va. The school board decided prior to the selection process that it wanted the involvement of both a national and a local firm. After commissioning CRS as the national firm, the board asked us to interview local firms and recommend three of them as potential local associates. From that list, the school board chose our local associate and we were reasonably assured of a relationship that would work harmoniously.

On an Illinois school project where CRS was hired as the national firm the school board also wanted national and local firms involved in the project. However, the board conducted its interviews for national firms and local firms separately. Afterwards, the client introduced the two firms it had chosen and told them to work out the details of dividing up the project responsibility. Although this is a shotgun marriage association, it can succeed if both firms respect each other, understand the division of labor and believe that each firm has important, essential strengths. A danger of this type of association is rushing into a contract for the sake of the job without getting to know each other's capabilities and clearly defining the division of responsibility, tasks and fee.

Parochialism by clients, communities

or local firms about hiring outside architects often means trouble. But no client wants less than the best for his project, and frequently larger outside firms can add multidisciplinary, building-type and managerial expertise not available locally. This can create a conflict: The local architect can offer a better package by combining his knowledge of local conditions with the complementary skills of an outside firm. But, depending on the client's commitment to quality architecture or his zeal to "buy at home," the addition of an outside associate can jeopardize the chances of a contract.

Al Hoover, AIA, of Albert A. Hoover & Associates, Palo Alto, Calif., pointed out a dilemma that an association may create for a local firm: Many national firms want to maintain control of design even though the local firm is design-oriented. In many cases, this is a deterrent for the local firm to get involved in an association.

"This is a problem, but one that each association has to find an answer to," Hoover says. "The design responsibility in an association can't be a two-headed entity. Somebody has to take the lead. But within that leadership, there has to be enough freedom to enable people on a specific job to handle it in an unconventional way to achieve the results that everybody eventually wants."

The most important ingredient to a good association in Hoover's eyes is mutual respect. "I'm not nearly as worried about the organizational aspects of another firm's association with mine as I am about the people involved. There has to be a quality of people involved in the project who can have disagreements without losing their respect for each other."

The key to a successful association or joint venture is the combination of strengths, experience and qualifications that a team of firms can offer. A small firm can go after jobs in new areas of practice that are larger and more complex than the firm could produce alone.

What the members of an association or joint venture learn both from the experience and from their associates' techniques of practice can be applied to any job they might be working on.

Simultaneously, the larger, multidisciplinary firms stand to gain much from an association. Without a local associate, a firm working on a national scale might never hear of the job or have the comprehensive understanding of the community required to get the job. With a local associate's involvement, the client is assured of continual and close construction administration.

One associate remarked that in addition to getting a fine product for the client, it was also better to have most of a successful job than all of one that he didn't get. □

*Events from page 75*

Concrete Institute 1976 awards program. Contact: PCI, 20 N. Wacker Drive, Chicago, Ill. 60606.

**July 30-Aug. 2:** American Society of Interior Designers annual convention, Atlanta. Contact: ASID, 730 Fifth Ave., New York, N.Y. 10019.

**Aug. 2-4:** Seminar on Solar Energy for Domestic Heating and Airconditioning, Los Angeles. (Repeat seminars: Aug. 23-25, Washington, D.C.; Sept. 13-15, Chicago; Oct. 18-20, Houston.) Contact: Heidi E. Kaplan, New York Management Center, Department 14NR, 360 Lexington Ave., New York, N.Y. 10017.

**Aug. 8-21:** Women's School of Planning and Architecture, Santa Cruz, Calif. Contact: WSPA, Spring Lane, Farmington, Conn. 06032.

**Aug. 9-11:** Seminar on Project Management, Copley Plaza Hotel, Boston. Contact: Heidi E. Kaplan, New York Management Center, Department 14NR, 360 Lexington Ave., New York, N.Y. 10017.

**Aug. 15-20:** U.S./Canadian Conference on Solar Technology in the '70s, University of Manitoba, Winnipeg, Canada. Contact: Karl W. Boer, Institute of Energy Conservation, University of Delaware, Newark, Del. 19711.

**Aug. 15-20:** Design and Performance of Structures Exposed to Fire Conference, Franklin Pierce College, Rindge, N.H.

Contact: Engineering Foundation, 345 E. 47 St., New York, N.Y. 10017.

**Aug. 16-17:** Institute on Energy Conservation: Research & Development, University of Wisconsin, Madison, Wis.

**Aug. 31:** Entries deadline, Keep America Beautiful awards program. Contact: KAB, Awards Program Coordinator, 99 Park Ave., New York, N.Y. 10016.

**Aug. 31:** Entries deadline, Owens-Corning Fiberglas energy conservation awards program. Contact: G. S. Meeks, Building Products Operating Division, Owens-Corning Fiberglas Corp., Fiberglas Tower, Toledo, Ohio 43659.

## Deaths

**Harold F. Andrews**, Albany

**Pero Brandt**, Manitowac, Wis.

**William T. Braun**, Louisville, Ky.

**Leo A. Brielmaier**, Milwaukee

**Paul E. Crider**, Columbus, Ohio

**E. Kenny Crothers**, Monroe County, Pa.

**Oresto Di Saia**, Providence, R.I.

**Carl F. Eschweiler**, Milwaukee

**Junior W. Everhard**, Clearwater, Fla.

**Harry R. Gilbert**, Kirkwood, Mo.

**Alvin Grellinger**, Elm Grove, Wis.

**Ray A. Lillard**, Spartanburg, S.C.

**Roy Marvin**, Green Pond, S.C.

**James Earle Miller**, Silver Spring, Md.

**Paul L. Murphy**, Tulsa, Okla.

**Claude D. Sampson**, Jackson, Mich.

**Harry G. Stewart**, Philadelphia

**Per Stiko**, San Diego

**Julius E. Tarling**, St. Louis

**James Whitford Jr.**, Staten Island, N.Y.

**Alvar Aalto, Hon. FAIA:** Like Louis Kahn, Aalto was a poet among architects. He was one of the world's greatest architects because his art was of its time and yet timeless. Aalto, who died on May 11 at the age of 78, left his mark on the architecture of this country, not because of the buildings he designed here, but because of his worldwide influence. His only structures in this country are Baker House at the Massachusetts Institute of Technology, designed while he was teaching there briefly, and Mount Angel Abbey in Oregon.

The Finnish architect, who designed everything from cities to textiles, was a revolutionary, but a gentle one who himself said that "in human life continuity is a vital necessity." Critic Leonardo Mosso wrote that Aalto's work "is a protest against everything stupid, unnatural and impoverished that goes under the name of 'modern.' . . . It is the contradictory and coherent work of a genius who does not adapt himself to the conventions of today or yesterday, because he is one of the men of our time who understands with the greatest clarity what the word tradition really means. . . ."

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## Newslines

**The "Directory of Architectural Firms"** has just been published by AIA, a project which has been under way since early 1975. The price for members is \$5; for nonmembers, \$100. The directory may be ordered from AIA's department of publications. If a member's organization is not included, AIA would like to have the information for the next edition of the directory and requests that it be notified of any omissions.

**The Associated General Contractors of America** recently installed highway general contractor Ben M. Hogan of Little Rock, Ark., as its president. Gerald F. Collyer, principal and director of the New York City contracting firm of Collyer Associates, Inc., has been elected president of the American Subcontractors Association.

**Albert A. Dorman, AIA**, president of the Los Angeles-based firm of Daniel, Mann, Johnson & Mendenhall, was the recipient of the University of Southern California's 1976 distinguished civil engineering alumnus award. He received the award for "distinguished service and professional contributions in the field of civil engineering, and for the advancement of engineering in the realm of urban and regional planning."

**"Building Energy Authority and Regulations Survey: State Activity"** is the title of an updated report of the Department of Commerce's energy research and development administration. It documents the status of building energy regulatory authority in states as of late Nov. 1975, listing bills relating to programs involving tax incentives and installation of non-fossil energy supplying devices and systems. For information, write: Energy Research and Development Administration, Division of Buildings and Industry, 20 Massachusetts Ave. N.W., Washington, D.C. 20545.

**The Harvard Graduate School of Design** is offering 15 short courses for professionals in the design and construction fields this summer. Ranging from two to seven days in length, the courses are on such topics as building underground, human behavior and housing, interior design for hotels and evaluating solar heating systems. For information write: Patricia L. McManus, HGSD, Gund Hall L-37, Cambridge, Mass. 02138.

**Robert W. Woodruff**, the Coca-Cola Co., has been made an honorary member of the Atlanta chapter/AIA "in recognition of his dynamic leadership in the civic, political, cultural and humanitarian affairs of the city of Atlanta."

**Gerald M. McCue, FAIA**, professor of architecture and urban design at the University of California, Berkeley, has been named associate dean of the Harvard Graduate School of Design and chairman of the department of architecture. In 1971, he was awarded AIA's Kemper award, which is given annually to a member who has contributed significantly to the Institute and to the profession.

**The first "Illinois Architects' Reference Manual"** has been published by the Chicago chapter/AIA. Edited by Wilbert R. Hasbrouck, FAIA, the manual contains information for the architect's daily use, including a roster of firms, Chicago chapter bylaws, honor award buildings and advertising from contractors, bidders and suppliers. The cost of the manual is \$25 per copy, and it may be ordered from the Illinois Architects' Reference Manual, 1900 S. Prairie, Chicago, Ill. 60616.

**Fully automated people-mover systems**, such as those which have proved to be effective in airports, will be installed in the downtown of three cities under a demonstration project sponsored by the Department of Transportation's urban mass transportation administration. The aim is to test whether such systems can provide a reliable and economic solution to circulating people in congested downtown areas. Interested communities must submit proposals by June 20 to the UMTA Office of Research and Development, AGT Application Division, Washington, D.C. 20590.

**"Color Research and Application"** is the title of a new quarterly journal endorsed by the Inter-Society Color Council in the U.S., of which AIA is a member. The normal subscription rate is \$35 per year, but because of AIA's affiliation with ISCC, Institute members may subscribe for \$15. Write: Allan Whitman, Manager, Wiley-Interscience Journals, 605 Third Ave., New York, N.Y. 10016.

**The Royal Institute of British Architects' library**, located at 66 Portland Place in London, will be closed to personal users until Sept. 1. Major alterations will be undertaken, including the installation of rolling stacks.

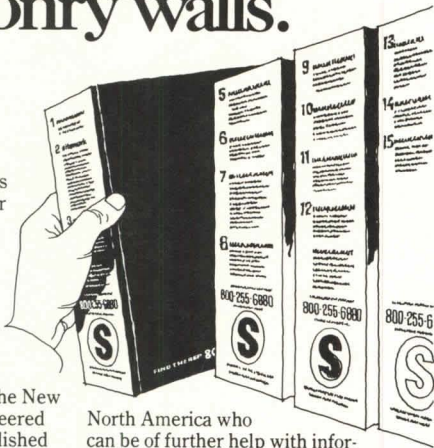
**"The Houston Coloring Book,"** designed by architectural illustrator Gregory Cook and published by the Houston chapter/AIA, depicts buildings, parks and other significant landmarks in and around the city. Profits from sale of the booklet will go to the creation of three parks in downtown areas, Houston's "bicentennial gift to America." The publication, which sells for \$2, is available from the chapter office, 3121 Buffalo Speedway, Suite 404, Houston, Tex. 77098. □



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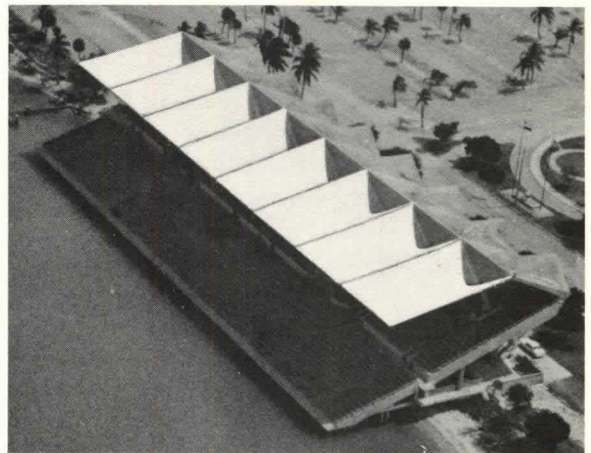
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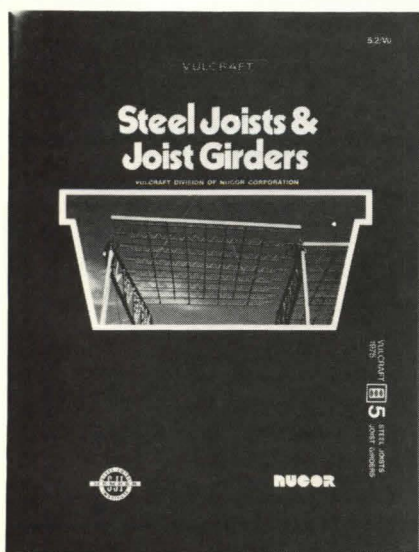
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