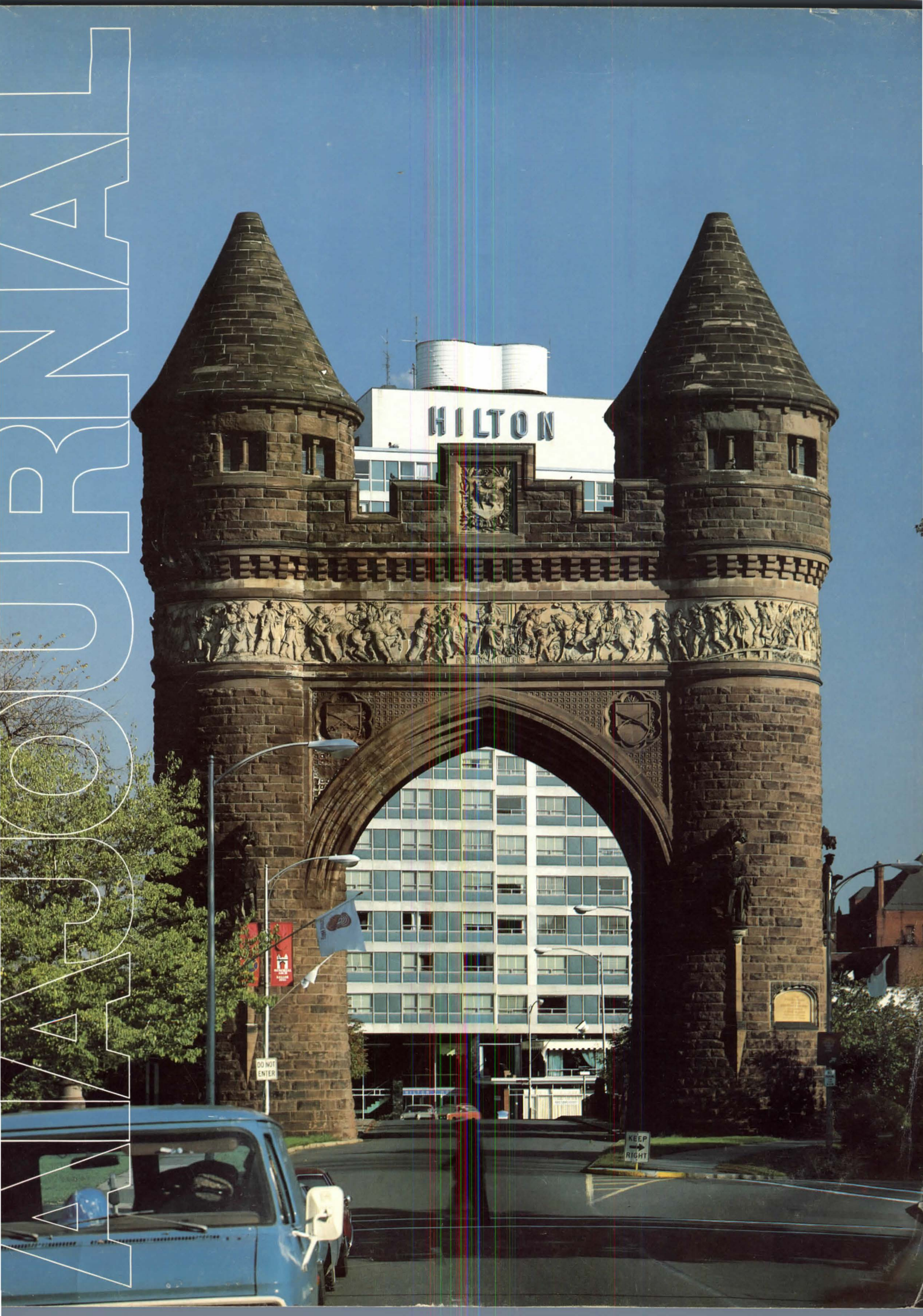
JOURNAL



How to put a room in the right light for 40% less energy—at only 1.84 watts/ft²

Responding to a need to conserve energy while maintaining effective illumination, the Armstrong C-60 Ceiling System delivers handsomely. It provides lighting of a quality superior to that of a widely accepted 4-lamp 2′ x 4′ troffer installation but uses 40% less energy year after year.

The performance comparison shown below is keyed to the growing recognition that the classical footcandle is an incomplete measure of lighting effectiveness. In practical office situations, light rays strike the work surface from many angles. At any given point, some fixtures are providing high-quality illumination without glare. But other fixtures are projecting light at bad angles, producing "veiling reflections" that hinder the visual task instead of aiding it.

Classical footcandles measure only the amount of light reaching a point without attempting to identify how much of it is really useful. But there is a more sophisticated measure of lighting efficiency that does. Called Equivalent Sphere Illumination (ESI), it determines the *quality* as well as the quantity of light being supplied. It far more precisely measures how well the viewer can see what he is doing in every square foot of a specific room for a specific type of visual task.

With just one lamp per five-foot-square coffered module, the Armstrong C-60 assembly provides ESI levels greater than the conventional 4-lamp troffer arrangement but uses far less wattage.

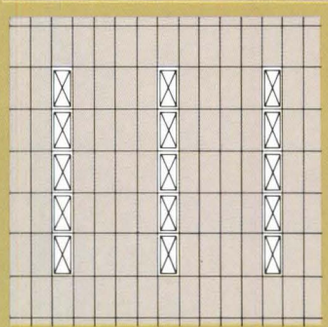
A brief comparison of the two systems is shown in the table below. That data is part of our informative new "Light Wars" show. "Light Wars" is a highly entertaining 30-minute program that includes a filmed explanation of ESI and documents how the C-60 System, in a 100,000-square-foot installation, can save as much as $29,000 per year at today's energy costs. To see "Light Wars," or receive a free booklet on ESI and the C-60 Ceiling System, mail the coupon below.

FROM THE INDOOR WORLD® OF

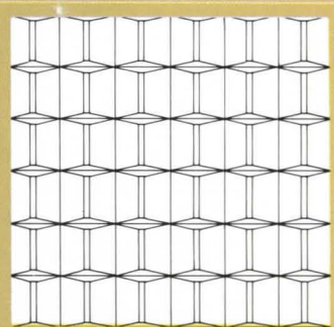
Armstrong

Circle 33 on information card

Systems Performance Comparison*



2′x4′ Recessed Troffer



Armstrong C-60 Luminaire

Prismatic	Fixture lens	Prismatic
4	lamps/fixture	1
15	no. of fixtures	36
	classical footcandles	
127	initial	90
95	maintained	70
40	ESI level	44
3.07	watts/sq. ft.	1.84

*30′x30′x9′ room; task—ESI pencil. All test data was supplied by independent laboratories; complete information available on request.

Armstrong
4201 Sage St.
Lancaster, PA 17604

____Yes, I would like to see your 30-minute "Light Wars" presentation. Please call for an appointment. Phone:_____

____Yes, I would like a free copy of your booklet on ESI and the C-60 Ceiling System.

Name_____

Title_____

Firm_____

Street_____

City_____ State_____ Zip_____

EVENTS

Jan. 29-Feb. 2: American Society of Heating, Refrigerating and Air-Conditioning Engineers semiannual meeting, Atlanta Hilton Hotel, Atlanta. Contact: ASHRAE, 345 E. 47th St., New York, N.Y. 10017.
Jan. 30-31: Construction Industry National Legislative Conference, Hyatt Regency, Washington, D.C. Contact: CINLC, 815 15th St. N.W., Suite 902, Washington, D.C.
Feb. 2-3: National Conference on Solar Energy Business: Opportunities and Outlook, Adams Hotel, Phoenix. Contact: Energy Bureau Inc., 101 Park Ave., New York, N.Y. 10017.
Feb. 2-4: North Carolina chapter/AIA winter convention, Winston-Salem Hyatt House and Convention Center, Winston-Salem, N.C.
Feb. 2-4: Conference on Design and Planning of Psychiatric Facilities, sponsored by the Psychiatric Institutes of America, Hyatt Regency, Washington, D.C. (Originally scheduled for Dec. 1-3.) Contact: PIA, 1825 K St. N.W., Washington, D.C. 20006.
Feb. 4-8: National Solar Heating & Cooling Workshops and Solar Products Exhibition, Phoenix Civic Plaza, Phoenix. Contact: Solar Energy Industries Association, 1001 Connecticut Ave. N.W., Suite 632, Washington, D.C. 20036.
Feb. 6-7: Seminar on Cost Reduction Techniques in Housing Construction, Los Angeles, sponsored by New York University (repeat seminars in Chicago, May 8-9, and Atlanta, Aug. 7-8). Contact: New York Management Center, 360 Lexington Ave., New York, N.Y. 10017.
Feb. 6-11: Course on a Systematic Approach to Building Material Evaluation and Selection, University of Wisconsin, Madison.
Feb. 8-9: Seminar on Budgeting and Effective Cost Analysis, New York City, sponsored by New York University (repeat seminars in San Francisco, Apr. 13-14, and Chicago, June 14-15). Contact: New York Management Center, 360 Lexington Ave., New York, N.Y. 10017.
Feb. 8-10: American Society of Consulting Planners annual meeting, New Orleans. Contact: ASCP, 1750 Old Meadow Road, McLean, Va. 22101.
Feb. 9-10: Institute on Facilities Compliance with Section 504 of the Rehabilitation Act of 1973, Washington, D.C. Contact: American Hospital Association, 840 N. Lake Shore Drive, Chicago, Ill. 60611.
Feb. 13-16: Course on Summer/Winter Airconditioning, Oklahoma State University, Stillwater.
Feb. 14-15: Construction Coordination Workshop, Iowa State University, Ames.
Feb. 15: Applications deadline, scholarship for graduate study in the field of concrete. Contact: American Concrete Institute, P.O. Box 19150 Redford Station, Detroit, Mich. 48219.
Feb. 22-24: Course on Project Management for Concrete Construction, Skokie, Ill. Contact: Portland Cement Association, 5420 Old Orchard Road, Skokie, Ill. 60076.
Feb. 23-24: Seminar on Foreign Market Entry Strategies, Chicago, sponsored by the Wharton School of the University of Pennsylvania (repeat seminars in Los Angeles, Apr. 13-14; Houston, June 1-2; Washington, D.C., Aug. 3-4). Contact: New York Management Center, 360 Lexington Ave., New York, N.Y. 10017.
Feb. 27-28: Seminar on Doing R & D Business with the Federal Government, Washington, D.C., sponsored by the University of Chicago (repeat seminars in Los Angeles, Apr. 13-14; Chicago, June 21-22; New York City, Aug. 17-18). Contact: New York Management Center, 360 Lexington Ave., New York, N.Y. 10017.
Feb. 27-Mar. 1: Energy Technology Conference & Exhibition, Sheraton Park Hotel, Washington, D.C. Contact: ETC&E, 4733 Bethesda Ave. N.W., Washington, D.C. 20014.
May 21-24: AIA annual convention, Dallas.

LETTERS

Consultants, Not Counselors: One problem in the very beautiful October issue is on page 28 which tells about the appointment of Alfred Russell Marane as a HUD regional administrator. His former firm, Hensley-Schmidt, Inc., engages in consulting engineering, not counseling.

I am sure they are sensitive and thoughtful. I'm just not sure they engage in counseling as well. *Connie Neuman*
American Consulting Engineers Council
Washington, D.C.

GSA Requests Information: The situation room is a special setting that should be considered when new federal office buildings are planned or older ones are redesigned.

A spin-off of the military war room used for briefings, the special equipment and arrangements of a situation room change the traditional conference room into a center planned for problem solving.

Visual displays—some provided by computer graphics and others by maps, charts and films—are used to present complicated information to diverse audiences. These displays make it easier to understand the many interrelated considerations that should be studied and discussed before a problem can be resolved.

To aid discussion of such complex materials, spatial arrangements should be carefully designed to enhance dialogue with others. For that reason, designers should be involved in the planning of the space and in the selection of the furnishings for these decision-making settings.

At present, no effort has been made to assemble information concerning the design and operation of existing situation rooms in federal buildings.

This information would be valuable for the planners of federal buildings who want to include situation rooms in buildings that they will be designing or renovating.

The design action center is now in process of developing resource material on situation rooms. If you have any unclassified information that you can forward, contact: *Erma Striner, Director*
Design Action Center
Public Buildings Service
General Services Administration
Washington, D.C. 20405

'Enduring, Simplistic Beauty': I have just read the article by Robert B. Riley entitled "Grain Elevators: Symbols of Time, Place and Honest Building" in the November issue.

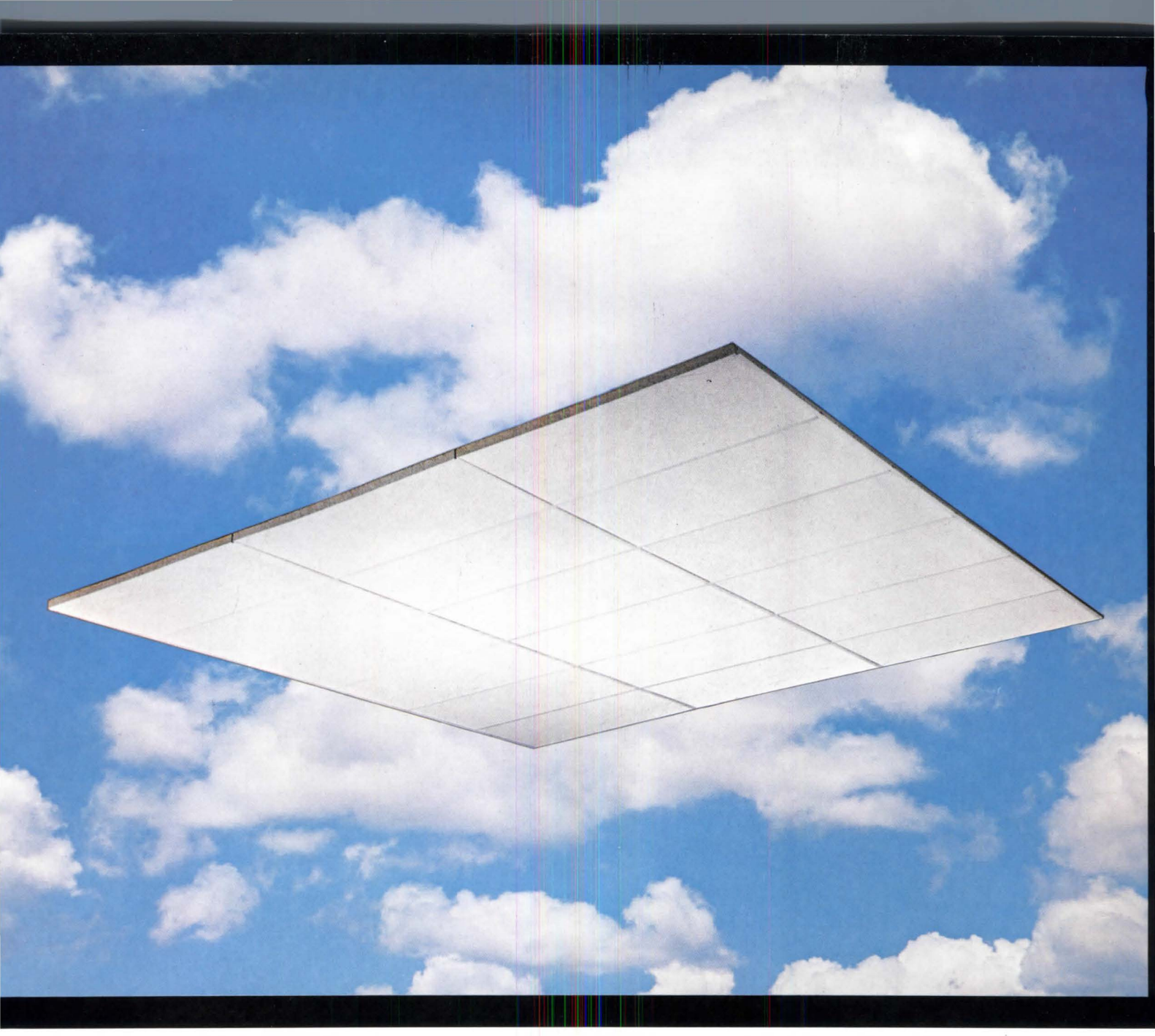
It is refreshing to read such a well-developed study of a little-known aspect of building. Honesty and integrity of form certainly produce architecture of enduring, simplistic beauty. Thanks for noticing these things in our environment and telling us about them. *W. R. Arnquist*
Dallas

Selection Committees: The article "What It's Like for a Client to Have to Deal with Architects" in the November '77 issue is unquestionably one of the best-written articles recently published by the JOURNAL. Also, its publication somehow is a credit to the old American tradition of self-criticism. As an architect, I have often felt sorry for some things selection committee members have to face—and suffer through—such as professional PR and promotional barrages of the type so aptly described by Judith Martin.

It should be noted, however, that our profession is truly unique in some aspects. When was the last time anybody heard of a committee being formed to select a dentist? And how many attorneys or scientists have to go through the pains of self-promotion? And would the same sarcasm, however humorous, benign and well-intentioned, that this article displays be used with reference to a physician or surgeon?

By the way, are Judith Martin and Judith A. Martin (p. 26) one and the same? *Nelson Fay, AIA*
Encino, Calif.

In response to the last question, the two Judith Martins are two Judith Martins. Ed.



You are looking at two of the world's quietest open plan ceilings. One is made by Armstrong.

Measured by the newest noise-reduction rating system, called Speech Privacy Noise Isolation Class (NIC[1]), the open sky—with an NIC[1] of 23—would make the ideal ceiling for the open plan.

But since the sky is hardly practical, Armstrong has developed a new ceiling product that comes remarkably close to this ideal. A new super sound-absorbing ceiling specifically designed to meet the critical demands of open plan spaces.

Known as Silok™, this new ceiling has an NIC[1] of 20 in 1½" thickness—only three points below the near perfection of the open sky. And that means that Silok can combine with screens and background masking sound to produce confidential speech privacy at normal voice levels.

What's more, Silok has an attractively textured white surface that results in a light reflectance of LR-1 (over 75%). And its standard 2′ x 4′ lay-in panels provide easy access to the plenum and can be replaced with standard light fixtures.

So when you want an open plan with the speech privacy of the open sky, you'll find that no man-made material can come closer than Silok. To learn more, write Armstrong, 4210 Sage Street, Lancaster, Pennsylvania 17604.

FROM THE INDOOR WORLD® OF

Armstrong

Circle 34 on information card

Veston Geophysical Inc., Westboro, Mass. Architects: Designs For Building

Red cedar shakes create a modern pyramid.

This contemporary pyramid of red cedar handsplit shakes is the architect's natural solution to meet unusual space requirements.

"The client asked for a roof structure that would permit generous storage capability on the second level. This would require a rather steep and visible roof.

"So we wanted a product that would be beautiful, natural to the environment and weather handsomely. We specified red cedar handsplit shakes."

Red cedar's beauty and versatility not only gave the architect the option to make a roof almost a wall . . . but also provided an enduring, weather-resistant surface with low maintenance requirements. Plus, it's one of the best insulators a roof can offer.

For your next project, consider the advantages of products with the potential to build new wonders of the world.

Consider red cedar shingles and handsplit shakes.

For information on "How to Specify," write

Red Cedar Shingle & Handsplit Shake Bureau
Suite 275, 515-116th Ave. N.E., Bellevue, WA 98004
In Canada: 1055 West Hastings St., Vancouver, B.C. V6E 2H1

These labels on red cedar shingle and handsplit shake bundles are your guarantee of Bureau-graded quality. Insist on them.

Circle 35 on information card

AIA JOURNAL

Cover: Photo by John Waggaman of George Keller's Civil War memorial arch, Hartford (*see* p. 24)

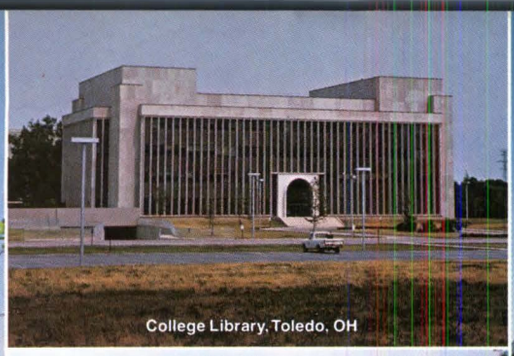
Departments

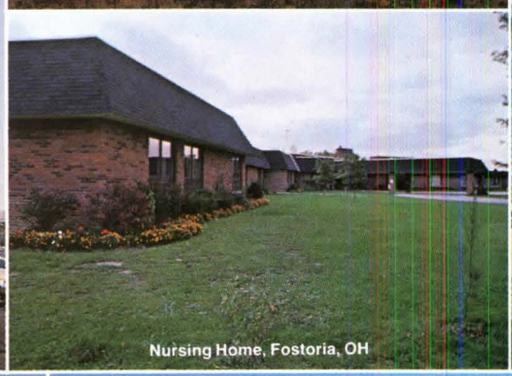
AIA JOURNAL, official magazine of The American Institute of Architects, published 14 times yearly at 1735 New York Ave. N.W., Washington, D.C. 20006. Telephone: (202) 785-7300. Subscriptions: for those who are, by title, architects, architectural employees, and to those in architectural education (faculty and schools), and to libraries, building construction trade associations and building product manufacturers: basic rate $12 a year; $20 two years; $8 to architectural students in the U.S., its possessions and Canada. For all others: $18 a year in the U.S., its possessions and Canada; other countries to those who are by title, architects: $18 a year. All others outside the U.S., its possessions and Canada: $30 a year. Single copy: $2, payable in advance. Publisher reserves the right to refuse unqualified subscriptions. For subscriptions: write Circulation Department; for change of address: send Circulation Department both old and new addresses; allow six weeks. Second class postage paid at Washington, D.C. Quotations on reprints of articles available. Microfilm copies available from University Microfilm, 300 N. Zeeb Road, Ann Arbor, Mich. 48106. Referenced in *The Architectural Index, Architectural Periodicals Index, Art Index, Avery Index to Architectural Periodicals.* VOL. 67, NO. 1.

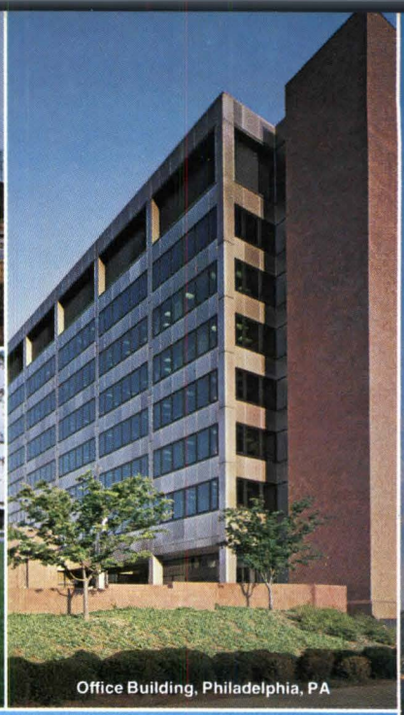
Copper fire sprinkler systems provide economical protection for people and property.

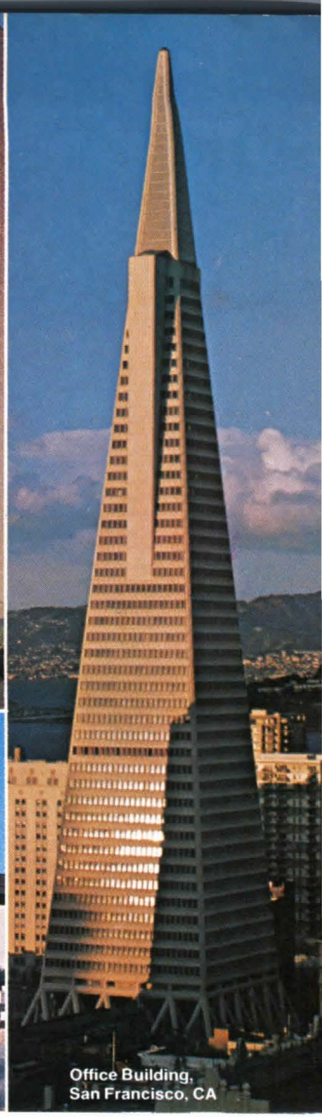
The easily installed copper fire sprinkler system improves protection by quickly suppressing fires within limited areas.

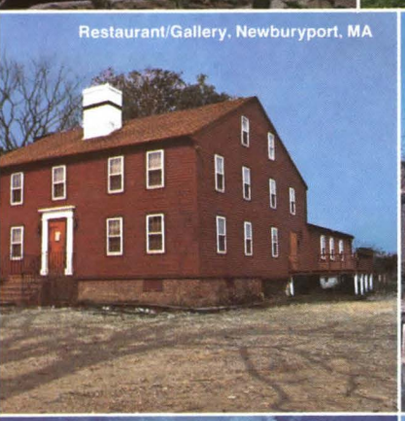

Apartments, Los Angeles, CA

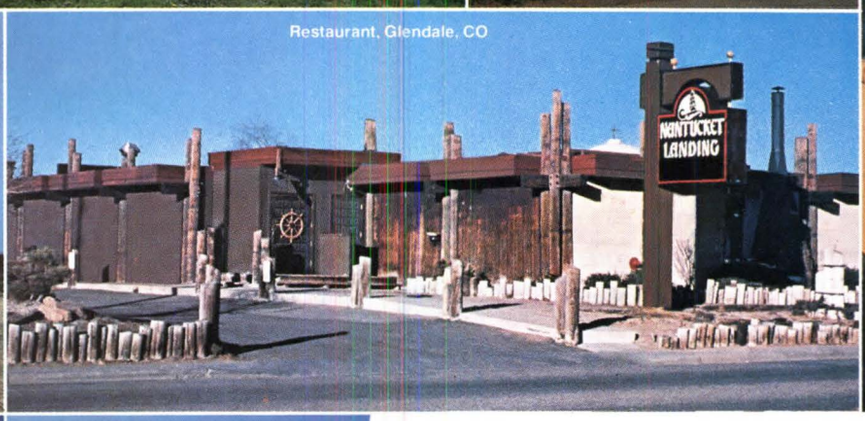

College Library, Toledo, OH


Nursing Home, Fostoria, OH


Office Building, Philadelphia, PA


Office Building, San Francisco, CA


Restaurant/Gallery, Newburyport, MA



Restaurant, Glendale, CO


Office Building, Chicago, IL


Condominium, Ventnor, NJ


Renovated Apartments, Worcester, MA


Bank, Charlotte, NC

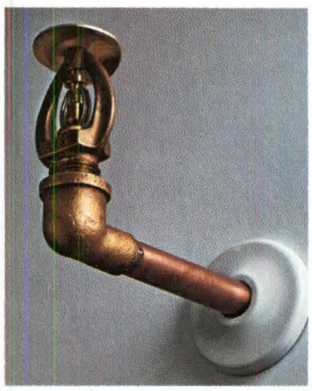
Copper fire sprinkler systems now provide dependable protection in all types of buildings from coast to coast. Before economical copper systems were developed, tested and approved, sprinkler protection was too expensive for many compartmented buildings.

Lightweight copper systems are quickly and easily installed in both new and existing buildings. And soldered assembly allows easy fabrication and alteration to provide system flexibility and lower installed cost.

Copper's corrosion resistance eliminates the need for oversizing and also keeps tubes clear of scale buildup for long-term dependability. Copper is a time-proven material.

Copper fire sprinkler systems, installed in buildings nationwide, show clearly sprinkler systems are affordable. And copper is readily available. Natural abundance plus recycling make the U.S.A. essentially self-sufficient in copper, assuring a plentiful supply for tomorrow's needs.

For more information on copper fire sprinklers and copper supply, please write to: Copper Development Association Inc., 405 Lexington Avenue, New York, N.Y. 10017.



Copper alloy sprinkler heads are the visible evidence of dependable life and property protection in a building.

Count on Copper

Circle 36 on information card

Botsai and Mitchell Take Office for 1978; Appointments Announced

Elmer E. Botsai, FAIA, chairman of the department of architecture at the University of Hawaii and partner in the San Francisco firm of Botsai, Overstreet & Rosenberg, was installed as president of the Institute on Dec. 9 (*see* p. *20*). He succeeds John M. McGinty, FAIA, a member of the Houston architectural firm, The McGinty Partnership.

Botsai, who is nationally known for his expertise in the design of earthquake-resistant structures, often acts as consultant on the problems of building in earthquake-prone areas. In 1976, he was a member of a team called upon to inspect earthquake damage to structures in Guatemala. The findings of the team were incorporated into a report issued by the AIA Research Corporation under a grant from the National Science Foundation.

Botsai, who was graduated with a bachelor of architecture degree from the University of California, Berkeley, has served AIA as first vice president and as treasurer. He has been a member of various committees and task forces, and was chairman of the finance committee and of the dues structure committee. He also has been treasurer of the AIA Foundation and chairman of the AIA Research Corporation.

Long active in component affairs, Botsai was director, treasurer, vice president and president of the Northern California chapter/AIA and chairman of its codes committee and its bylaws committee.

In addition to Botsai, five other officers were installed: Ehrman B. Mitchell Jr., FAIA, Philadelphia, first vice president (president-elect); Herbert Epstein, FAIA, Brooklyn Heights, N.Y., Sarah P. Harkness, AIA, Cambridge, Mass., and Charles E. Schwing, FAIA, Baton Rouge, La., vice presidents, and Joseph T. Thomas, FAIA, Pasadena, Calif., treasurer. Robert M. Lawrence, FAIA, of Oklahoma City continues in the second year of his two-year term as secretary.

Also, 12 new board members have assumed their responsibilities. They are: Harry W. Harmon, FAIA, and Donald L. Hardison, FAIA (California); Roy K. Parker, AIA (Gulf States); Paul D. Bowers Jr., AIA (Michigan); David A. Holtz, AIA (Middle Atlantic); George M. Notter, AIA (New England); Harold D. Gulcksman, AIA (New Jersey); William H. Trogdon, AIA (Northwest); Michael Newman, AIA (South Atlantic); Derek Martin, AIA (Pennsylvania); Harold C. Fleming, Hon. AIA (ex officio, public director), and Des Taylor (ex officio, Council of Architectural Component Executives).

Incoming (left) and outgoing presidents.

President Botsai has announced his appointments to the 1978 commissions and major committees. Chairmen are: Henry N. Silvestri, AIA, community services commission; James M. Harris, AIA, component affairs commission; Robert C. Broshar, FAIA, education and professional development commission; R. Randall Vosbeck, AIA, government affairs commission; Frank R. Mudano, AIA, practice and design commission; Robert B. Marquis, FAIA, public relations commission; Joseph F. Thomas, FAIA, finance committee; Robert M. Lawrence, FAIA, secretary's advisory committee; David L. Perkins, FAIA, Production Systems for Architects & Engineers, Inc.; Eugene C. Swager, FAIA, AIA Research Corporation, and Kenneth Klindtworth, AIA, AIA Foundation. The council of commission chairmen consists of the president, the president-elect, the chairmen of the six commission, the chairmen of the three related corporations and the executive vice president.

Board Confirms Meeker; Johnson Is Gold Medalist

At its December meeting, the AIA board of directors awarded the gold medal to Philip Johnson, FAIA, and named David O. Meeker Jr., FAIA, executive vice president.

Meeker, a former assistant secretary of HUD (*see* p. 22), currently divides his time between a consulting practice in Washington, D.C., and serving in the first endowed chair of urban studies and public service at Cleveland State University. He will assume his responsibilities at AIA in April. Meanwhile, James A. Scheeler, FAIA, group executive for program development at the Institute, will be executive vice president.

Among the other actions of the board was the formal adoption as AIA policy of the "Guidelines for Environmental Aspects of the Practice of Architecture," prepared by the regional development and natural resources committee. The purpose is to direct "the efforts of architecture and their observance of the AIA's land use ethic and other Institute policy," helping them "in the conduct of their practice in matters concerning the natural and cultural environment."

The term "environment" is declared to mean "the totality of human settlements, communities and works and the physical places and natural systems which they interact. More particularly, the term shall be applied to the physical and cultural as distinct from the economic or political environment."

According to the guidelines, the architect should:

- ". . . Maintain professional standards in concern for the architectural, historic or cultural significance, the engineering uniqueness or archeological, geological or worth of sites. . . .

continued on page 10

Why restaurant chain designers are turning to Marlite® brand interiors

Because it makes things a whole lot easier. Including their job. Creating a unique decor. Maintaining a national image and theme. Assurance that the store out in Dubuque is going to look like the store in downtown Burbank. But, at the same time, meeting and exceeding industry standards for durability, maintenance and sanitation.

Because Marlite brand products are designed to be used in combination with each other. In coordinated product packages. For the dining room. The kitchen. Lounge. Serving area. Even the restroom. Interior decor packages that

reflect the design leadership of Marlite Division. That are always available when and where you need them. Delivered to your door. On time. From five regional distribution centers.

Because the products are unusual. Sometimes unique. Like Marlite Brand Plank. It's not wood. It's not paneling. It's better. Superior to wood on commercial applications. Then there's Fiberglass Reinforced Polyester Panels with USDA approval. Toilet compartments and vanity tops. Doors and Frames. And a dozen other products. Each with something special to offer.

Management is turning to Marlite brand products because they're concerned about service. The Marlite Division specializes in service. Before, during and after the sale. We're firmly committed to serving the restaurant industry.

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MEETING THE CHALLENGE OF CHANGE

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DIVISION OF MASONITE CORPORATION
DOVER, OHIO 44622

Circle 37 on information card

Going On from page 8

- ". . . Be aware that there can be secondary effects of his proposed work, particularly processes of incremental and cumulative environmental degredation.
- ". . . Be concerned with the preservation of high quality, unique and rare natural systems and natural areas and should disassociate from actions which are considered by a reasonable, informed consensus to be detrimental.
- ". . . Be reasonably knowledgable and/or seek professional advice relative to prediction and avoidance of peril or loss from nature's catastrophic events.
- ". . . Be aware of and try to follow the letter and the spirit of appropriate environmental laws and standards.
- ". . . Seek to conserve both renewable and nonrenewable natural resources, particularly those perceived to be of short depletion time and those which should be husbanded for their particular or unique characteristics.
- ". . . Be aware of the relationship between the consumption of energy, alternative energy sources and nonrenewable resources.
- ". . . Carefully consider the adaptability for altered use or economic recycling of existing structures prior to recommending their demolition.
- ". . . Support the preservation of structures on the legally designated list of registers of historic preservation authorities."

The board appointed a 12-member task force to produce a draft statement on AIA urban policy. A progress report is to be submitted to the board in May, following a preliminary four-day charrette in March for preparation of a first draft to be reviewed by appropriate commissions and committees. With the aid of a consultant editor, it is anticipated that a final comprehensive draft will be ready in July. If approved by commissions and task force members, the draft would be submitted to the board in September.

The task force, to be chaired by John P. Clarke, AIA, will be composed of commissioners of community services and of practice and design, four representatives of the urban planning and design committee's urban policy statement subcommittee and representatives from the housing, minority affairs and regional development and natural resources committees.

Among other business conducted by the board was the passing of a resolution which approves, by a two-thirds vote of the entire membership, changes in chapter 14 of the bylaws "revising the national judicial system, re-establishing the national judicial board as the national judicial committee and abolishing the national inquiry committee, as proposed and amended, effective Jan. 1, 1978. . . ."

Any final decision of the national judicial committee can be appealed to the executive committee only on the basis of a policy consideration of importance to the Institute or the profession. If the executive committee determines that the case should be reviewed or reheard, it will be referred to a five-member panel of the board of directors, appointed by the president.

Carl Bradley Honored With '78 Kemper Award

Carl L. Bradley, FAIA, president of Archonics Corporation in Fort Wayne and Terre Haute, Ind., has been named recipient of the Edward C. Kemper award for 1978. The award is given annually to an AIA member who has made an outstanding contribution to the Institute and to the profession. Bradley has been active over a 24-year period at all levels of Institute work. In 1971, he was made a regional director for the East Central states for a three-year period, and he was elected vice president of AIA for the 1975-76 term.

Bradley has been chairman of the commission on professional practice, the A/E liaison committee, the AIA research council, the liability review task force and Production Systems for Architects and Engineers, Inc. He has also been a director of the AIA Research Corporation.

Among his many other contributions have been his work as special commissioner for AIA's survey of the profession, director of the Man Hour Data Bank, Inc., AIA representative to the National Construction Industry Council, a member of the AIA board's energy committee and of the AIA/American Society of Heating, Refrigerating and Air-Conditioning Engineers liaison committee. Currently, he is a member of the architect's liability board, AIA representative to the national construction industry arbitration committee of the American Arbitration Association and a member of the AIA Research Corporation's project management group for the development of energy performance standards under contract with HUD.

In addition to serving as president of the Indiana Society of Architects, he has been a director of the Association of Collegiate Schools of Architecture and on the board of the Council of Educational Facilities Planners. Since 1974, he has been architectural consultant to the Department of State on foreign buildings.

Bradley, who earned a B.A. degree from Yale and a bachelor of architecture degree from the University of Michigan, has been active in educational affairs, having lectured at Purdue, Ball State and Pennsylvania State universities. Among his award-winning buildings are the Fort Wayne public library and the Trinity United Methodist Church in Berne, Ind.

McGinty Stresses Energy Conservation in Farewell

The future of professional architecture has never been brighter, said John M. McGinty, FAIA, in an address to the Institute board of directors as one of the final acts of his presidency of AIA. He emphasized what he called "architectural imperatives" for the U.S. in the immediate future, saying that future design must be energy-conscious, relating energy supply to actual needs, using renewable resources where possible and adapting to the climate.

"A future of limited resources does not need to be a future of limited options," McGinty told his colleagues. "Recycled buildings can possess a warmth, a scale, a touch of humanity that is difficult to achieve in new structures. Rebuilt inner cities can provide convenience, maturity and relationship to neighbors and people, and a variety of uses that is seldom found in new suburbs."

The Houston architect also pointed out that energy conservation should result in a "beauty that comes from the natural harmony between the built and natural environment, between man and his natural origins."

The response on the part of architects to this issue alone, he said, "will be as significant an architectural design determinant as was the Industrial Revolution. If we can succeed in meeting this design challenge, the future of our profession is secure. From my perspective at the end of this year, I see the capability and commitment to do it."

Owings-Corning Winners Called Energy Pioneers

The seven winners of top honors and honorable mentions in Owens-Corning Fiberglas Corp.'s sixth annual energy conservation awards program were called "modern pioneers making fresh tracks on untraveled ground" by Charles E. Peck, OCF vice president. In his keynote speech at a ceremony honoring the 1977 award winners, Peck said: "As a result of their pioneering efforts, and of those who design and build to high standards of energy efficiency, new kinds of building, with discernible style differences, are emerging. The new architectural styles for this new generation of buildings should turn out to have a freshness and honest appeal since the basis is a closer fit between the building's physical performance and the user's real needs."

There were two top winners in the special category. The New York City firm of Pomeroy, Lebuduska Associates was

continued on page 12

Model 3352–Photographed at the Hyatt Regency, San Francisco.

Deftly executed in polished stainless steel, this drinking fountain by Haws was designed in the tradition of elegant simplicity to complement the most resplendent interiors that can be created by man. The columnar pedestal is pure, of classic proportions, and atop, the sculpted receptor is ridged to prevent splashing. Model 3352 is true perfection in a metallic alloy that is timeless.

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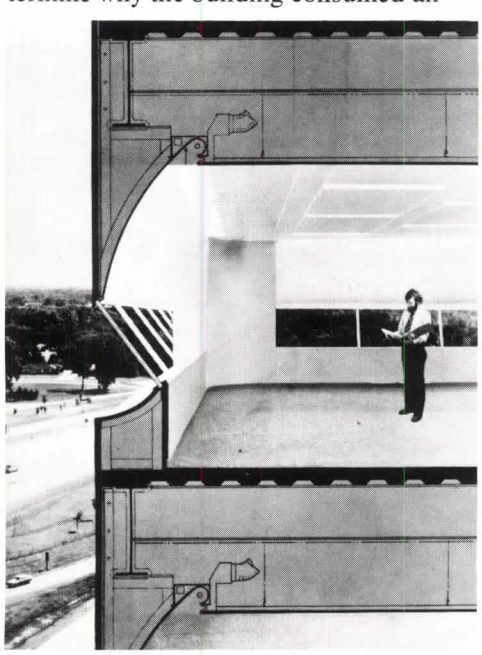
Going On from page 10
cited for its design of Bedford Mews, a townhouse condominium development in Bedford, N.Y., and the Johnstown, Pa., consulting engineering firm H. F. Lenz Co., for its energy audit of Carnegie-Mellon University's science hall.

The jury praised Bedford Mews (model bottom) for a special energy efficiency package (produced by ECSOL, Ltd., of New York City) to be placed in 28 of its 160 units. Each unit will have its own solar collectors, water-to-water heat pump, energy recovery system, hot water storage and reduced rate, off-peak electric service. The package will lower heating costs in winter and provide airconditioning and year-round hot water service for the 1,200-square-foot townhouses. Also, the development's outdoor swimming pool and clubhouse will be solar heated. The pool will serve as a hot water storage facility. Although the cost of all energy saving products will be about $155,000, the payback period is estimated at only 7.05 years, based on 10 percent fuel escalation rate.

The energy audit of Carnegie-Mellon's eight-story science hall, part of a five-building complex and site of many scientific experiments, was conducted to determine why the building consumed an excessive amount of energy. The structure is one of the largest educational computer facilities in the U.S.; 212,540 square feet of the total 335,588 square feet are climate controlled.



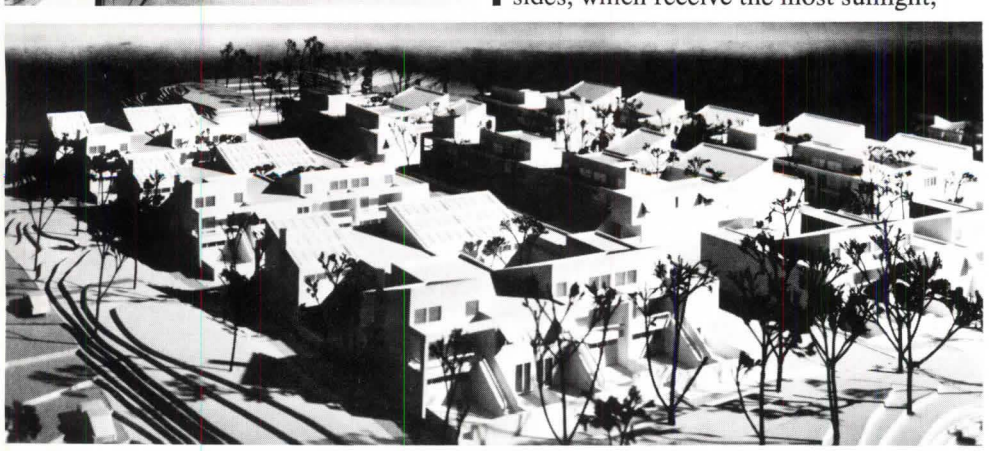
The audit found that the air- and water-side systems used for heating and cooling were the culprits in a large amount of the waste. The system then in use was using 100 percent outside air, requiring costly preheating.

Based on this research, the consultants developed a modified system which exhausts contaminated air emanating from experiments conducted in the laboratories out of the building and recovers heat from noncontaminated air. The recycled heat helps warm the five buildings connected to the system by means of a cascade arrangement of existing refrigeration machines.

When the plan is fully implemented, it is estimated that the university will save the purchase of about 138,000 BTUs of steam per square foot per year. Steam and electricity use will be reduced to 500,900 BTUs per square foot per year, from 988,100 BTUs for the five buildings. Based on 1976 costs, the annual savings is estimated to be about $300,000, with payback in three years.

Top winner in the commercial category was Gunnar Birkerts & Associates of Birmingham, Mich., for its creative use of architectural/engineering energy saving techniques in IBM's Southfield, Mich., office building. Also Ellerbe Associates, Inc., of Bloomington, Minn., won honorable mention in this category for its energy conserving design of Western Life Insurance Co.'s corporate headquarters building in Woodbury, Minn.

The new 14-story, 263,000-square-foot IBM office building has an energy-saving "skin" comprised of metal insulated panels with about 20 percent glass area. The heating load contributed by the exterior envelope is a low 5.49 BTUs per square foot. Color is also used for energy conservation. The two-color exterior increases energy efficiency by reflecting and absorbing heat. A light, natural aluminum color on the building's south and west sides, which receive the most sunlight, reflects heat; the north and east exposures are a darker gray color to absorb warmth.



A curved stainless steel sill reflector, installed just below the exterior window line on each floor (photo-drawing below left) bounces sunlight from a lower to an upper reflector into the interior, supplying a great deal of natural light to the office space. The architects say this reduces the lighting load by one-half. If the day is gloomy, or when the sun's angle is very low or very high, the interior reflector is lighted with a perimeter parabolic cove lamp, serving as "artificial sunlight." The cost of the energy-saving features is $441,000, which will be paid back in energy savings in six years.

The corporate headquarters of Western Life Insurance Co. is set on a northeast-southwest axis to receive maximum solar exposure. There are no windows on the east and west sides to cut summer heat gain. With the exception of the top level, each floor on the southeast side is cantilevered above the next to create a shading effect to cut summer heat gain further. A sun louver is installed above windows on the top floor to reduce heat infiltration through the windows in summer and permit heat gain in winter. On the northwest, where such a louver is not required, an overhang is used above all floors to serve both as a solar "visor" and a screen against severe winds.

The heating load, say the architects, is only 6.5 BTUs per hour per square foot; the cooling load is a low 25.03 BTUs per square foot.

Winner in the governmental category was a team of architects, engineers and space planners (McGaughy, Marshall & McMillan, Norfolk, Va., Arthur Cotton Moore/Associates, Washington, D.C.; Stewart Daniel Hobas Associates, Washington, D.C., and Associated Space Design, Atlanta) for the proposed renovation of the old post office building in Washington, D.C. (*see* July '77, p. 48). The proposal calls for reglazing the cortile skylight. The see-through roof will visually unite the clock tower and cortile, as it was originally in 1899, and also accommodate a thermal control system estimated to reduce annual energy costs by as much as 25 percent.

The proposed thermal control system's plan calls for thermal louvers, solar collectors and a heat pump. The design team proposes thermal louvers (flattened, water-filled, extruded aluminum tubes that could be installed below the skylight, facing east, west and south) to work as a small solar collector. In summer, the louvers would transfer heat gain from the skylight to an underground reservoir; in winter, the louvers would heat the skylight radiantly. The solar-heated hot water would be used to warm the building. Ac-

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Georgia-Pacific introduces wall paneling with the rustic, mellow look of weatherworn barn board. New Barnplank paneling is a 5/16"– 4' x 8' panel with a face veneer of real Ponderosa pine. All natural markings in the veneer, such as knots, splits and worm holes, have been retained. Irregular-width grooves, approximately 12" apart, also contribute to the look of authentic barn boards. What's more, Barnplank paneling comes in three subtle but distinct shades of weathered brown, grey and white to give you design flexibility. And it's readily available across the country. Write today for a free brochure and samples of all three shades of Barnplank paneling.

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Going On from page 10
cording to the team, the heating load would be 3.66 BTUs per square foot per hour. It is estimated that the cooling load would be reduced by as much as 22 percent.

Moore, May & Harrington, Inc., of Gainesville, Fla., won honorable mention in the governmental category for the energy conserving design of the Gainesville Municipal Airport's terminal building. Solar power will be used to meet about 60 percent of its heating, cooling and service hot water needs. Flat plate solar collectors, with a total area of 16,000 square feet, will be installed on the one-story building. The collectors will shade glass walls at some locations and form clerestories at others, allowing north light and ventilation to enter the building. Water will be heated by the sun and transmitted into the heating or cooling functions of the main air distribution system. Excess hot water will be sent to an insulated tank for storage. Energy costs for the first year's operation in 1978-79 are expected to be $25,102, a savings of $16,873 over a conventional electrically powered system.

There was no top winner in the institutional category, but Rowe Holmes Associates of Tampa, Fla., won an honorable mention for the design of the business administration building at the University of South Florida in Tampa. The 104,492-square-foot, three-story structure makes use of the earth's insulating qualities in combination with heavier than usual man-made insulation to make roof, walls and window areas as airtight as possible.

The first floor is buried entirely underground; the second floor above ground is completely covered by an earth berm pushed up against it; the third story, with about 30 percent window area, is shaded by the building's perimeter fascia design. The building is so well insulated that payback for materials is expected in about two years. The envelope heating load is 5.44 per square feet; the cooling load is 3.78. The first year's estimated energy costs are put at only $0.56 per square foot.

The jury for the competition consisted of Charles C. Law, acting assistant commissioner, office of construction management, public buildings service, GSA; Robert C. Metcalf, FAIA; David A. Pugh, FAIA; Walter R. Ratai, president of Walter R. Ratai, Inc.; Jack E. Tumilty, president of Jack E. Tumilty & Associates, and Jack D. Train, FAIA.

Two Design Competitions Open for Students' Work

Two competitions for students are now open: the Prestressed Concrete Institute's second annual architectural precast concrete students' design awards program and a competition sponsored by Owens-Corning Fiberglas Corp. and E.I. duPont de Nemours & Co., Inc., for the design of an energy efficient permanent fabric structure. The PCI program carries awards of $2,000, $1,000 and $500 for winning students; the Owens-Corning/duPont de Nemours competition has prizes of $7,500, $3,500 and $1,500.

The purposes of the PCI program are to "promote high quality architectural design and to offer practical support to architectural students of exceptional merit." Deadline for the 1978 program is June 1.

Through its producer members and state associations, PCI will assist students with manufacturing or design considerations. Information may be obtained from: PCI, Student Awards Program, 20 N. Wacker Drive, Chicago, Ill. 60606.

The Owens-Corning/duPont de Nemours program will run from January through May. Teams of fourth- and fifth-year students at accredited architectural and engineering schools are eligible to compete.

This competition resulted from a GSA feasibility study of the use of permanent fabric structures as a low-cost, energy efficient way to house government workers. The study, however, raised many questions which must be answered before construction can proceed, and the competition is being used as a point of departure in finding some of the answers. Many complex issues are involved, such

as engineering, energy, habitability and design and construction, and each student team will require representation from several disciplines.

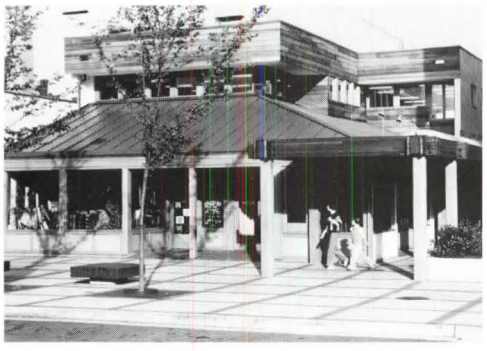
Details may be obtained from: Robert Mulligan, Fabric Structures Unit, Owens-Corning Fiberglas Corp., Fiberglas Tower, Toledo, Ohio 43659.

Downtown Revitalization Efforts Receive Awards

The first annual downtown development awards were given by the Downtown Research and Development Center to five cities for "outstanding projects in central business district revitalization." Projects were evaluated on the basis of benefitting cities in economic, esthetic, environmental or functional terms. The Downtown Research and Development Center, an independent organization based in New York City, studies and reports on problems and solutions of recycling American cities.

The award winners in five population categories are:

- Frederick, Md. (population 23,000), for its revitalization and restoration of its downtown historic district (planners: Frederick City Planning Commission).
- Middletown, Ohio (population 50,000) for revitalization of 300 acres downtown including a $45 million mall—the Civic Centre Plaza (architect: Daniel T. Meehan).
- Eugene, Ore. (population 79,000), for revitalization of the central business district core (photo below; architects: RTKL Associates Inc.).



- Portland, Ore. (population 382,000), for converting a vacant department store into a shop/office environment, the Galleria, (architects: George Sheldon, AIA, and Don Eggleston).
- Philadelphia (population 1,948,000), shopping mall in the Market Street East urban renewal project (architects: Bower & Fradley and RTKL Associates Inc.)

In addition, eight cities received merit awards: Loudoun Street Mall, Winchester, Va.; Boulder Downtown Mall, Boulder, Colo.; Port Plaza Mall, Green Bay, Wis.; Gordon's Alley, Atlantic City; Quaker Square, Akron, Ohio; Williams Center, Tulsa, Okla.; the Atrium, Lincoln, Neb., and Gastown Rehabilitation Project, Vancouver, B.C., Canada.

The judges were Laurence A. Alexander, director of the Downtown Research and Development Center; Luciano Miceli of Miceli Weed Kulik; John W. Calistra Jr., director of community development, Pawtucket, R.I., and Peter Kory of the John W. Galbreath development firm.

FHA Commissioner Cites Housing Project Troubles

Many of HUD's subsidized multifamily housing projects are deteriorating due to inadequate project income, inadequate repairs, poor HUD management and unsatisfactory on-site project management, Federal Housing Administration Commissioner Lawrence B. Simons told the Senate banking, housing and urban affairs committee.

Multifamily subsidized projects account for roughly 40 percent of the 14,000 FHA-insured projects and about half of the 2,600 projects that are now in financial difficulty. An estimated 154,724 families live in these projects. Tenants in HUD projects pay up to 25 percent of

continued on page 64

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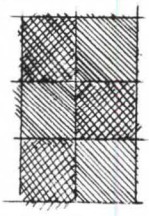

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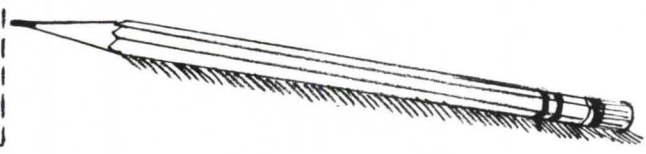

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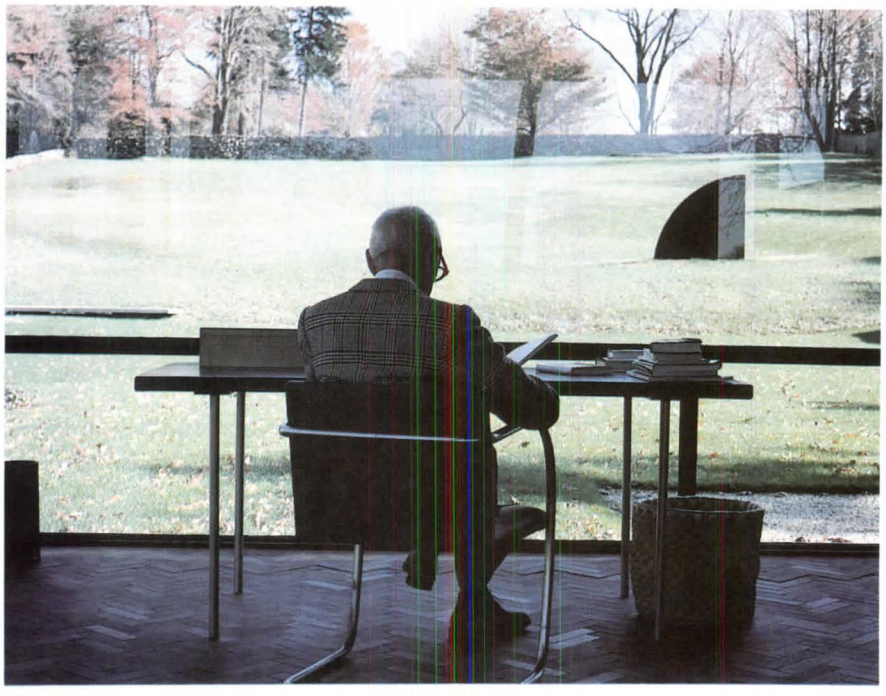
Hail and Farewell

The hail, of course, is to David Meeker, the Institute's new executive vice president. Reviewing Meeker's career, summarized five pages hence, one is struck by the thought that it could not have been better designed if he had known decades ago that he was destined for his new post: Some 16 years in practice and 20 in public service at the local and national levels, including three as the highest ranking architect in goverment.

The farewell, to Bill Slayton, is nevertheless a poignant one. We cannot assess his tenure in the executive office objectively: He has been a friend to all of us at the JOURNAL and a supporter of the magazine in good times and bad. Yet, in looking back over those eight years (at their beginning AIA had no continuing education program, no research affiliate and scant presence in the national discussion of urban growth policy, among other things), it seems safe to say that no single individual in the modern history of the Institute has made a larger contribution to it. *The Editors*

Philip Johnson, AIA Gold Medalist, 1978



Glass House, New Canaan, Conn., 1949. Seagram Building (with Mies van der Rohe), New York City, 1957. Museum of Art, Munson-Williams-Proctor Institute, Utica, N.Y., 1960. Amon Carter Museum of Western Art, Fort Worth, Tex., 1961. Wing for Robert Woods Bliss Pre-Columbian Collection, Dumbarton Oaks, Washington, D.C., 1963. New York State Theater, Lincoln Center (with Richard Foster), New York City, 1964. East and Garden Wings, Museum of Modern Art, New York City, 1964. Kline Science Tower, Yale University, New Haven, 1964. Henry L. Moses Institute, Montefiore Hospital, New York City, 1965. Elmer Holmes Bobst Library, New York University (with Richard Foster), New York City, 1973. I.D.S. Center (with John Burgee), Minneapolis, 1973. Addition to the Boston Public Library (with John Burgee and Architects Design Group), Boston, 1972. The Art Museum of South Texas (with John Burgee), Corpus Christi, Tex., 1972. Pennzoil Place (with John Burgee), Houston, completed 1975. Niagara Falls Convention Center (with John Burgee), Niagara Falls, N.Y., 1974. General American Life Insurance Co., National Headquarters (with John Burgee), St. Louis, completed 1975. Master Plan, Roosevelt Island (with John Burgee), New York City, 1975. (*See also* page 49.)

Elmer E. Botsai, FAIA: An Interview with AIA's New President

'If we are more competent, I think our self-esteem will automatically go up and be transmitted to the public.' By Andrea O. Dean

Q: I understand that one of your principal goals as president is to have AIA come to grips with the issue of architectural competence and to strengthen the role of architects in the construction industry and society. Can you explain?
A: In the past few years, I think partly because of the economic crunch, architects' opinions of themselves have not been as high as they should be. Some of this is due perhaps to a lack of self-confidence, and one of the ways to improve self-confidence is to improve professional capabilities. I believe that the profession, by and large, has done a fairly good job, but there is no question that in certain areas it has not been adequate. I think that the public is demanding more and more of all professionals, and the level of care that must be obtained by any professional has got to improve. I don't know any other way to do that than through a professional development program that has some organization, some structure.
Q: In what particular areas do you think architects have had problems of competence?
A: There is a certain segment that is not doing a sufficient job in just plain technical aspects. We all see articles about the buildings that leak, sections that fall off, all that nonsense. It's not nonsense; it's a very serious problem if our buildings don't function for people. I think people are the ingredient that I'm concerned with. I guess I have a small one-man crusade to change the definition of architecture to include the creation of all spaces that people live in, work in, play in and move through to get from one place to another. And if we do not include people and the effects of architecture on people, we are not going to satisfy society's needs. Nor are we ever going to be in a position to influence society's needs.

I would like us to be able to offer society better choices. I think this is an area that we haven't really come to grips with. And one of the building blocks for doing so will be a higher level of professional competence in all aspects of architecture. I'd even like to see the word architecture used a bit more and stop using the word environment. I mean, architecture is a very proud word; it has a very broad connotation.
Q: Your firm specializes in investigating and trouble-shooting architectural failures. How has this experience influenced your ideas on the subject of competence?
A: It sure as hell has been a liberal education in what not to do. It has given me a tremendous technical background. And I suppose it has unfairly warped my perception of architects' technical competence, because I have seen the worst of it. But it has also shown me another point of view, that of the consumer, which in all candor I was somewhat insensitive to before.
Q: We've been told that the 1978 convention will focus primarily on professional competence. Can you tell me about your ideas or plans for it?
A: The format will be quite similar to many previous conventions. The main difference will be that professional development programs will not be the usual 20 or 30 minute operations, where somebody stands up and gives what I call a sensitivity session. Each session will be about four hours in length.
Q: What kinds of subjects will be covered?
A: I can read you a list of what we're considering: energy, business planning, production improvement, land development, legal aspects, urban design—here I'm hoping we'll be able to show how young people can get into the private aspects instead of the usual government route—water infiltration, ambulatory health care, solar design, marketing services, construction management, environmental (damn, I told them to keep that word out of there) graphics, research services, improving interior architectural services. . . .
Q: What other ideas do you have for improving professional competence?
A: We have put the major thrust of this year's program and budget into the continuing education and professional development commission. We added staff who are charged with increasing the flow of available knowledge sources, providing better programs, programs that are more accessible on the grass roots level, less expensive programs.
Q: What is your thinking on recertification?
A: I haven't seen a program, including our own, that I feel could offer the public any more protection than it now has. Nor do I believe that our current licensing endeavors offer the public any real protection. At best, I think it's a gate you pass through. I'm certainly not knocking the National Council of Architectural Registration Boards, because I think it is tremendously improved, but I'm not sure it really has addressed the issue of minimal level requirements for entry into the profession. I'm not sure that you can do this in something as broad and varied as architecture.

I think that in the long range we have to have a continuum of professional development. I think the next logical step is to accept and endorse the concept that continuing education is a requirement for membership in AIA. Then, I'm sure that in the more distant future, the public will decide that the profession has taken enough care about its own membership, and that license renewal is not needed.
Q: In your election statement, you set other priorities for your term as president, namely improving communications, strengthening energy programs and improving the self-image of members as architects. Can you elaborate on each of these points?
A: Communication is without question, in my mind, the most difficult one we will face. My method of attack, right or wrong, is first to try and get the rhetoric out of some of our statements this year and say what we think—good, bad or indifferent. I don't frankly mind being a damn fool as long as everybody understands it's only a temporary condition. If you don't know about something, you can talk for two hours on it. If you know something, you talk for three minutes and the information is there. I would hope that we could talk for three minutes and say something; if we do that, maybe then our members can respond.

I would like to see if we cannot turn professional committees into a delivery system for knowledge; this is where our real resources lie, in our individual members, their skills and knowledge. But we don't have any mechanisms for the lateral transfer of that knowledge. If we can expand the scope of these committees—I use the word academy which is improper and *illegal—but* I use it anyhow, because I think it expresses my concept of what I would like to see happen. If we can use these academies and set some sort of standards for membership in them, then this becomes a place where anyone can come to obtain comprehensive knowledge about a given subject. I can see these academies as holding seminars, workshops, programs all across the country.

On the issue of self-esteem, that's harder to attack. If we are more competent, I think our self-esteem will automatically go up, be transmitted to the public and reflected back to us and in glory. Also, I think that those of us that feel good about our profession should say we feel good about it and express it at every chance we get. I've been accused of making a damn fool of myself by saying that I think we are God's chosen profession. Well, I believe this. I'm not the least bit shy of a contractor or labor leader or lawyer who thinks I'm an idiot for making that statement. My profession has been good to me; just tremendous. I was pleased as hell when I went to the Florida convention and the newly elected president got up and said he had caught Elmer's evangelistic spirit.

Q: Is increasing AIA's membership going to be a major objective during your term?

A: It will possibly not be as major as many people would like, because I think that to attract new membership we have to establish proof that it is in their interest to belong to AIA. I think we are rapidly, but not as rapidly as I would like, accepting the concept that architecture is an ever-expanding area. As you know, I was most vocal at the San Diego convention on the subject of design/build. I do not believe that we can cling to a past no matter how magnificent. Because the public will be served and if they can't get it from us, they will get it from someone else. The challenge in my mind—and this has to do with our ethics—is how we do that and remain a total profession. I think we should deal with how we do things, not what we do, except I wouldn't want our ethics to condone murder if you do it in a professional manner or anything stupid like that.

'At no time in our past history have we had a public that needs our expertise as much.'

Q: Are there any changes, aside from better communications, that you feel should be made in the committee system?

A: I think there are some committees that aren't productive, but I'm not sure that having a forum for people who have a common interest to get together isn't productive in itself. We have cut a couple of committees and created some new ones. I think evolution is good, but, again, we hold on to the past and we're quite human in this. The unknown is frightening. But I'm firmly convinced that the future for this profession is as bright as it has ever been, and all we have to do is aggressively search it out, equip ourselves for it and do it. At no time in our past history has the public, for example, been as concerned about our physical envelope as it is today. At no time in our past history have we had a public that needs our expertise as much as it is needed today. The young people coming out of school today have a scope of opportunity that boggles my mind. We need to encourage the rest of our membership to expand their horizons.

Q: Are you thinking particularly of nontraditional forms of practice?

A: Both traditional and nontraditional. I think there is plenty of opportunity for the traditional-minded firm to expand its horizons. My firm has gone into building pathology, and I think we're a traditional architectural firm. There is more business in our small location than our firm can possibly handle; Lord knows what the potential is across the country! In the area of research, the potential is fantastic. Our little firm has created a research corporation, and we're going to capitalize on that if just to make money; but in doing so, we're going to gain knowledge, whether we want to or not. In the nontraditional area, there's education, among many other things. My going "back to college" and becoming involved in architectural education has been a great experience for me. I would like to see more practitioners do this. It's expanded my own horizons; I'm willing to listen where before I said "no."

Q: Do you foresee any changes in budget or staffing of AIA during the coming year?

A: Yes. Assuming that our projections are correct, we have a larger budget than we had last year. Everybody that comes on the board, myself included, says that we should cut the staff down, stop spending money, reduce dues. I have yet to see a program come in that didn't require more staff. Until we find volunteers that are willing to quit their profession and donate their lives to AIA, we're going to have to come up with the bucks to hire competent people to do the legwork, the gut work, the research, the thinking, to give us the choices so we can say yes or no. We are increasing staff and I'm not the slightest bit ashamed of it. And I suspect that we will continue to see the staff increased and a few new positions added every couple of years. If we start to retrench and reduce staff, that says the profession is in trouble.

Q: How is this going to be financed?

A: Through outside income sources that are slowly growing, not fast enough. I think there has been a slow increase in the number of members. I don't think our dues have increased in relationship to the cost of living, and that's something that can easily be documented. I would personally, right here today, vote to double my membership dues because I know it would deliver me at least three times the service.

Q: In view of the fact that a lot of architects are still having a tough time, do you think this is going to sit well with the membership?

A: I think we will lose members in certain areas, but we will gain members in others. It's a cold-hearted thing to say, but in establishing Institute policies and programs we must work on the basis of the membership as a whole. I think in addition we should do everything we can to assist individual areas. Right now I suspect there is probably very close to an even supply and demand for architects in this country as a whole. I'd also add that most of the expanded practices have not been hurting, even through these tight times.

Q: Are you satisfied with the role being played by components? With their relationship to the national organization?

'I can't understand belonging to something and not wanting to have a say about it.'

A: Not at all. I don't think they are fulfilling their proper role of making input into the national system. And the tragedy is that the mechanisms are there, but they are not being used. I find it difficult to understand why we don't have 60 to 80 percent participation. I can't understand belonging to something and not wanting to have your say about it. This Institute is not a club. If it ever has been, it was before my time. If it were a club, I sure as hell wouldn't be in this office now. I was not born to the profession, was not raised in it, and our small office has been struggling through most of my activity in AIA.

Q: What effect do you think David Meeker as executive vice president will have on AIA?

A: I believe that Dave, as an architect, has an advantage over Bill Slayton. I think that Bill idolized architects. I think that Dave, because of his license, or his upbringing, will have an advantage here. I think that Dave will obviously have the new broom value, and I'm personally very impressed with the man, his background, his capabilities, his quiet confidence. His style will be different from Bill's. I don't think it would have been a good thing for the Institute to try to find a carbon copy of Bill, because there are no carbon copies of Bill. He's a unique, remarkable gentleman. I think we will enter into a new and different thrust, which may possibly be more a matter of style than substance. I think that Dave's contacts with the middle management of government are probably more extensive than Bill's are now. But, I think Dave's basic concerns are quite similar to Bill's, and that's good. □

David O. Meeker Jr., FAIA: A Profile of AIA's New Executive

'The value in today's society of architects is that we are the last of the specially trained generalists.' A.O.D.

On July 27, 1973, confirmation hearings were being held for David O. Meeker, FAIA, as assistant secretary of HUD for community planning and development in Washington, D.C. Just down the hall, in the same building, the Watergate hearings were in process, and Richard Nixon had recently imposed a moratorium on many HUD programs. It was hardly a propitious time for Meeker, an activist, to join the Administration as its highest ranking architect and planner.

At the confirmation hearing, the acerbic Senator William Proxmire (D-Wis.) began his interrogation in fairly predictable fashion: What does HUD have to do with architecture? And why should some fellow with a master's degree in religious architecture be interested in coming to HUD? In his own characteristically low-keyed but self-assured manner, Meeker replied that HUD had everything to do with architecture, and if the senator would turn the page in the vitae in front of him, the senator would see that in Indianapolis Meeker had been involved, either as a private architect or as a public official, in every single housing and community development and planning program HUD ran. "In the end," recalls Meeker, "Proxmire was kind enough to recommend unanimous confirmation and the committee complied."

When Meeker appeared before Proxmire for the last time, 37 months later to the day, after he had resigned from HUD but before his resignation had been made public, Proxmire went on record to say that he now fully understood the need to have architects in government and would look forward to seeing more of them there.

David Meeker, who takes office as AIA's new executive vice president on April 1—"April fool's day," he chuckles—has demonstrated through his service at HUD and elsewhere that there are almost no boundaries to the role of architect, a significant contribution at a time when the present and future functions of the profession are everywhere in question. This coupled with an intimate knowledge of the workings of government and extensive contacts with policy makers in and outside the federal bureaucracy are two of the more significant things that Meeker will bring to the Institute.

As Ehrman B. Mitchell Jr., FAIA, first vice president, puts it, "Dave gives us an opportunity to put ourselves forward on the government level in a way we've never been able to do. If we didn't need to have influence on public policy, AIA could as well be headquartered in Kansas City."

Mitchell, AIA's past President John M. McGinty, FAIA, and incoming President Elmer E. Botsai, FAIA, comprised the search committee which selected Meeker.

David Meeker was born 53 years ago to a family which began homesteading in Indiana as early as 1831. And although raised mainly in New York City, he returned to Indianapolis in 1950 after completing military service and having been graduated from the Yale school of architecture.

After working on his own for a while, Meeker joined James Associates in 1956, which 10 years later had grown from a seven-man firm to the 25th largest A/E firm in the nation. In the early years, he specialized in the design of churches, and in 1960, "having become somewhat restless," in his own words, was offered a sabbatical by his firm to study for a master's degree in Copenhagen, with help from a Fulbright fellowship and a Royal Danish grant. For a thesis subject, Meeker chose the relationship between the development of architectural form and the liturgy of the church. He chose Copenhagen as a place to study "because of the total quality of Danish design. The Danes tried to achieve design excellence not only through encouraging it in professionals, but through public understanding. I was curious about how you could bring that off, even in a small nation of four million," he says.

Having satisfied his intellectual curiosity about religious architecture through his studies and wanderings in Europe, Meeker stopped designing churches after returning to Indianapolis and found himself master planning a number of large structures for universities. This led to an interest in building technology and to his teaming up with Ezra D. Ehrenkrantz, FAIA, and directing the Indiana portion of a survey, funded by the Department of Health, Education and Welfare and the Ford Foundation, of academic building systems on 16 campuses in Indiana and California. Out of it came recommendations to use standard construction components to reduce costs, increase flexibility and speed construction.

Meeker emerged from this experience intrigued "not with standardizing things, but with the interrelationships between physical and social processes and products" and a firm belief that "grand solutions must have tolerance for individual idiosyncrasies and uniqueness." A view was beginning to take shape, one to which he adheres today, that the journalist's generic use of the word architect—the architect of the North Atlantic Charter, for example—best describes a designer's most appropriate role. It was reinforced and assumed clearer form as Meeker became involved in Indianapolis politics.

The trigger for his civic involvement was renovating and moving into an old house in 1967. It was located 12 blocks from the business district of Indianapolis in what was soon to become the model cities neighborhood. The Meekers were

the only professional family in this predominantly black and poor section of the city, and living there helped him develop "a new level of understanding about social pathology." He soon became involved as a citizen advocate and model cities advisory board member. At about the same time some members of the Indianapolis chapter/AIA—with Meeker at the forefront—decided "to approach the candidates in an upcoming mayoralty election about increasing the participation of architects in government. "We decided just bitching about what we didn't like was not very satisfactory," says Meeker. Although the incumbent shared the long-held view that "architects were an awful nuisance, and preferred not to have anything to do with them," according to Meeker, the other candidate, Richard Lugar, a former vice president of the school board who had actually dealt with architects, recognized the potential importance of their involvement in government and was willing to make a commitment to it.

During the campaign, Meeker bombarded Lugar with mailings of publications on planning and architecture, "not expecting that he would read them, but to keep his commitment alive." Lugar won the election, and not long afterward, Meeker received a call. "This is Dick. Can you come down and visit?" The "visit" lasted three hours and more, and "it turned out," says Meeker, "that Lugar had actually read the material I sent him." The same evening Meeker received a call from the mayor asking him to become a planning commission member and president of the zoning appeal board "to make it more responsive," in Lugar's words. "So, suddenly, success had come in a way that I hadn't expected, and the involvement grew and grew," recounts Meeker.

In short order, Meeker became director of the Indianapolis model cities program, "writing a model cities application in six weeks—a very unprofessional-looking document, rough and ready. But I think HUD was intrigued by the fact that it was done on different typewriters and had nonstandard technical (real English) phrases and so on. So they granted us the money," says Meeker. By 1970, he was appointed interim director of metropolitan development for the City of Indianapolis, after working closely with the mayor to design and coordinate a metropolitan form of government.

"All that time," says Meeker, "I believed I was practicing architecture. I'm not certain that others in the profession thought I was, but I consoled myself with the idea that the design of a government is not dissimilar to the design of anything else." As director of metropolitan development, Meeker had what he calls "the lively experience" of having three days to prepare a total consolidated city budget, never having prepared one before. It was around this time that Meeker first began to think of quitting government, "because I was rapidly burning out under this pace." Before leaving the city government of Indianapolis, he would accede to joining Lugar's cabinet as first among six equals, with authority over all city budgets and plans. "At the end of two years of that, I announced that I was going to return to my practice," says Meeker. His plan was foiled by an almost simultaneous announcement by the mayor that he was appointing David O. Meeker his deputy. In this capacity he served for two years as principal adviser on urban affairs to the mayor of the country's 11th largest city and coordinated the activities of six cabinet agencies of a metropolitan government with 4,000 employees and a $396 million annual budget.

Having again just finished announcing to the mayor that he was going to leave government to return to practice, Meeker received a call one morning in May of 1973—this time from the White House: Would he consider becoming an assistant secretary of HUD? "Everybody was turning down offers from the federal government, with the moratorium in effect and Watergate about to happen. But the more I thought about why I got into government in the first place, the more it seemed I should accept the appointment," says Meeker.

While at HUD, Meeker's principal executive responsibility was to develop policy and legislation for the community development block grant portion of the Housing and Community Development Act of 1974, and to administer it. Within three months of the time Meeker took office, his staff had reduced HUD regulations from 6,200 pages to 50 and diminished HUD application review time from 31 months to 49 days.

Meeker was also appointed director of urban program coordination, which he describes as "a sort of loose rocket within the federal establishment." As such, he served as chairman of several domestic council task forces, was a permanent delegate to Habitat and chaired five committees on the urban environment and one on construction. "So I had a kind of nonstandard HUD job," says Meeker. "If there was a vacuum and I wanted to fill it, I could go fill it, which is very satisfactory from the point of view of self-expression. But it's very wearing."

It was so wearing, in fact, that Meeker began having what he calls fairly substantial health problems. "About every September, they would haul me off to George Washington University Hospital and pump me back up again, until finally, in October of 1976, about a week before I was to leave officially, they carried me out of the building for the last time, and I had open heart surgery and disappeared from sight for a while."

One of the first things he saw upon returning from surgery was an issue of *Impact,* a newsletter put out by HUD employees, which had gone to press before Meeker's physical collapse, but after his resignation had been announced. Among the pronouncements on Meeker in *Impact:*

- "Meeker built warm and open interpersonal relationships with his staff, with his peers and with outsiders.
- "He rapidly became adept at working within the Washington institutional networks of lobbyists, Congressional committees, their staffs and the interagency web.
- "He was an able manager and decision maker, but was not challenged much by merely 'running' the day-to-day aspects of a large grant program and delegated much of that. . . . Meeker's source of power was 'power with,' rather than 'power over.' He was a pro . . . who brought with him a bias favoring the rights of local government to both make decisions and to make mistakes. . . . Another of his plus marks has to come from the way he saw the irony and the humor in situations and people, including himself. Yes, he was a man able to smile at his own gaffes as well as those of others." *continued on page 62*


SAGE-ALLEN

Evaluation: A New Spirit in the Stolid Old City of Hartford

It is symbolized by a gleaming tower and has brought fresh attention to preservation and urban design. By James Britton III

Architecturally, the Connecticut capital of Hartford offers nothing illuminating—except a glowing new spirit. A region settled by rock-hard Puritans (one of them named Stone) still has severely paternal types in high places who feel they know what is best for people generally, an example of their fatherhood being Constitution Plaza, about which more will follow. But the town's most potent architectural client is a refugee from Hitler's persecutions, David Chase, who, as the local acid has it, turns everything he touches to gold.

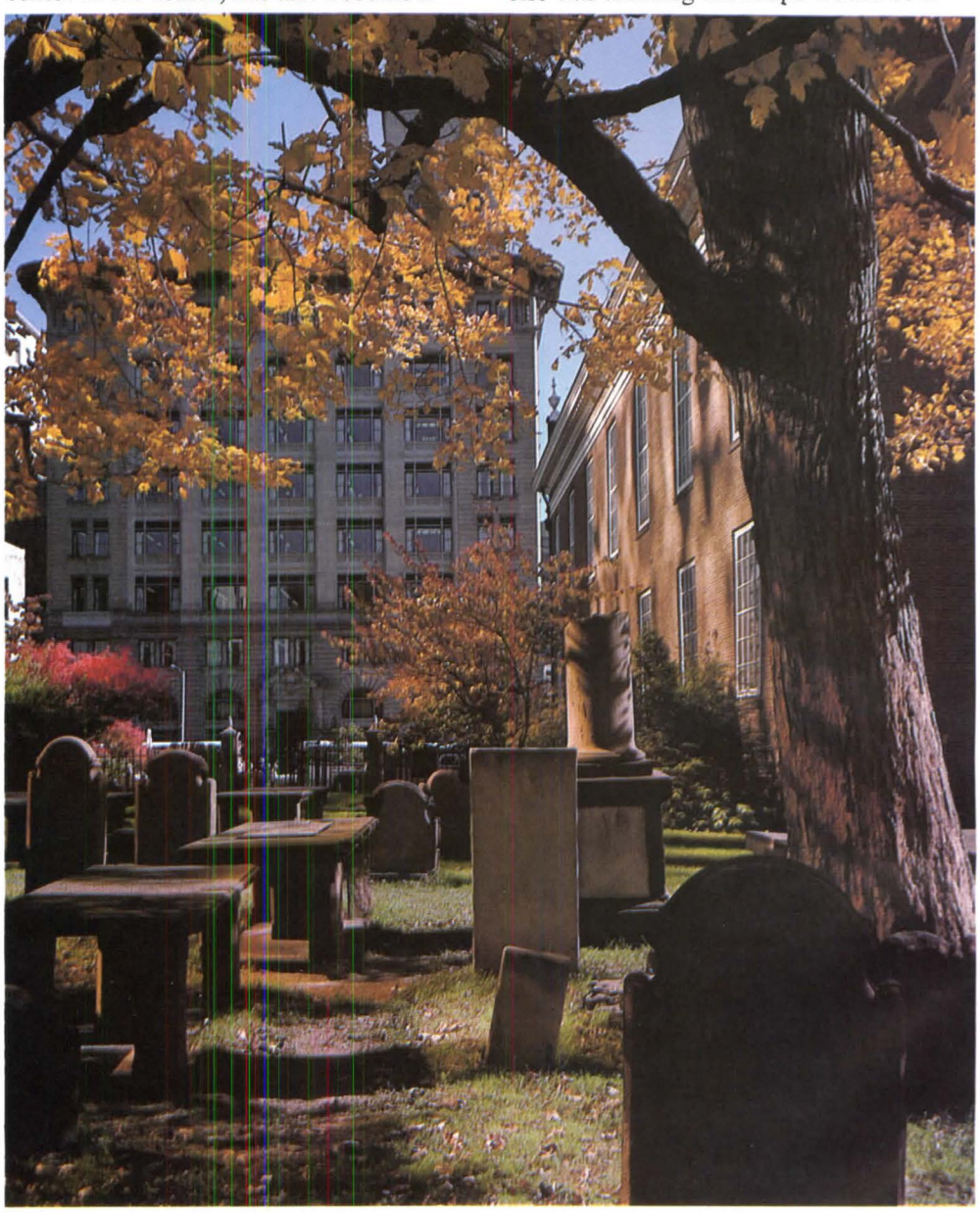
Chase literally visited gold on Hartford in the form of a highrise clad in gold-toned glass. It isn't the first such structure in America, of course, but the effect of the gold on the particular urban scene of Hartford is unique. It has transmuted the downtown into a magic place worth traveling to see. Largely because of the one building, Hartford is a perpetual light show (photo across page).

The "gold building," as townspeople commonly call it (officially the Financial Center), is in form just another boxy highrise set tightly among similar boxes. The tight setting has a great deal to do with its marvelous effectiveness as a scene-maker. It mirrors everything in sight, and the reflections it sends back are always gilded. The color splashes in all directions for blocks as though Hartford had invented a second sun. Even on rainy days there is the illusion that a sun is shining. On sunny days some indoor neighbors have to close blinds to shut it out, but the ever-changing patterns of second-sunlight wash over the people in the street and dapple the asphalt so that the drab seems touched by alchemy. All this in the town bulging with insurance company home office vaults.

The reflected light carries heat too, and, except when it compounds the humid misery of summer, it is as welcome as a blazing fireplace. Unquestionably its most entrancing effect is that it brings new life to the old burying ground which snuggles up to the gold building (photo below.) The entablatures above the graves of Samuel Stone, Thomas Hooker, et al., are warmed with such a kindly light that visitors are led as never before to read the injunctions carved there centuries ago. The headstones, if not the bones, are forever posing for cameras, for this place is newly popular with shutterbugs. The burying ground, stubbornly holding its turf in the very center of the center, has also become a favorite place for brown-baggers at lunchtime.

I go on so about the one building because it seems to me that here is modern commercial architecture justifying itself beyond the dreams of Robert Venturi, AIA, who would appreciate the fact that the effects are largely accidental, and unexpected by the designers (Neuhaus & Taylor of Dallas).

Accidental felicity also attended the arrival in town of the Phoenix Insurance Co.'s highrise as long ago as 1964. In this case Harrison & Abramovitz generated the plan of a sharp-pointed oval simply by following logically, and with sufficient wit, the space demands of the company. Fat space was needed around the central core, but the old cachet of corner offices was not much in demand; instead the few chiefs on each floor could be housed at each end, which fact led to the oval. The points came because they computed less costly than rounding the ends. Thus an unforgettable design was actually a bargain. Neither the architects nor anyone else was thinking the shape would be a



Mr. Britton, who grew up in Hartford, is a writer and editor based in San Diego who specializes in architecture and urban planning.

mystical evocation of the shipping that once provided Hartford's lifeline. Yet the building gives an illusion of floating at the end of a highrise canyon as a sort of monument to all the hulls that once rode at anchor in the river just beyond.

Put that in your Venturi and smoke it. Like the "gold," the "Phoenix" is all glass, this time blue-green, an effective cooler in the color composition of downtown Hartford. A third potent color factor in the dynamic urban palette is the orange-red of a giant stabile by Alexander Calder. The late great "Sandy" called this one Stegosaurus, so it carries its own symbolic overtones. It is a remembrance of obsolescence and, at the same time, celebration of the free range of modern construction.

Thus downtown Hartford is already a work of high art somewhat occultly arrived at, thanks to those three contributions not consciously planned together—the whole being a "found object" deserving a prime place in any connoisseur's collection. Photographer John Waggaman fell in love with the embraceable place while shooting for this article.

Speaking of found objects, artist Carl André "found" three dozen boulders, averaging perhaps four feet through and weighing up to 11 tons each, and brought them to rest in a patch of grass adjacent to the old burying ground. He was making a metered poem, though he didn't put it in words, about the rock-bound soil of New England from which the pioneers in the burying ground had wrested sustenance. True to the cosmic spirit at work in Hartford, André did not make this association consciously. The townspeople—living or dead—were not to be amused by this, for the most part. André had been paid $87,000 for his project by the Hartford Foundation for Public Giving, which in turn got its money from old families (whose ancestors may or may not have sold the wooden nutmegs for which Connecticut was dubbed the Nutmeg State). Since the André experience, fewer families have been willing to support that foundation.

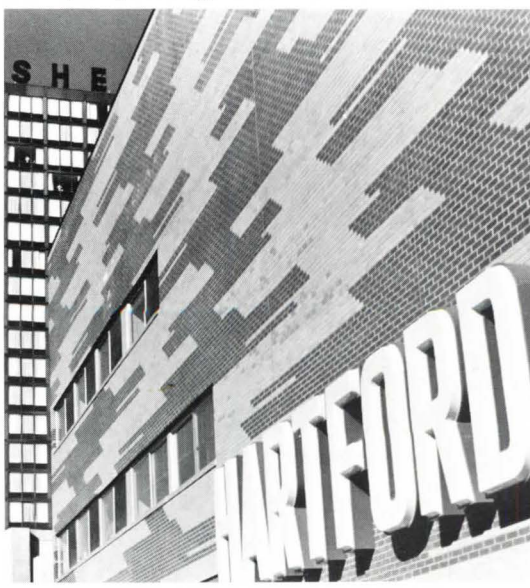
Into this environment of happy esthetic chance and Yankee bewilderment came himself, Robert Venturi, as designer of a theater for the Hartford Stage Co. His thrust-stage interior is well accepted by both performers and audience, though the building is not one of the more ingratiating surprises in the townscape. It seems indeed to be only an appendage to a municipal garage, which is shrewd deployment because it guarantees ready access to the entertainments. Venturi gives bricky Hartford another brick building but makes no effort to match old-time brick craftsmanship. Instead, he introduces a pattern all his own, like a linoleum designer, and, true to himself, uses the pattern on only one and one-half walls, thus echoing the incompleteness typical of city elevations expected to be wiped out by neighbors.

Among the consciously esthetic souls exerting themselves in Hartford is the town's young and well-bristled chief of planning, Jonathan Colman. No architect is he but a graduate of Clark University in geography. I asked his opinion of the gold building.

Colman: "I have mixed emotions. When it first went up I didn't like it at all, and I guess I still don't as an architectural statement from the outside. My sense is that it came out of a computer and a book; that I don't like. At sunrise and sunset it's a beautiful building, with the reflections and the changing moods of the skin.

"The unique thing I find is that when I'm inside the lobby it's the only building in Hartford that gives me a New York feeling, and that's not bad. It's the kind of sense we should have here, a metropolitan sense. We're not a one-horse town, we're a financial capital. As an economic statement, the gold building speaks for the growth of the city. It has 600,000 feet of rentable floor space, just about rented up. United Aircraft has the top five floors, with a helipad on the roof constantly in use."

Colman's frank manner prompted a discussion of little Lewis Street, which stretches just one short block behind the behemoths of Main Street. I remember Lewis Street as looking better, and feeling better, 40 years ago when the center of its



Harrison & Abramovitz's shipshape Phoenix building (left), Calder's stabile (below) and Venturi's Hartford Stage Co. (right).

civilization was Edwin Valentine Mitchell's bookshop, supported by enjoyable restaurants nearby. The bookshop has disappeared long since, but a new restaurant with the old look (the key being well-handled brick and wood) maintains the tradition. An out-of-scale highrise garage is overbearing on the block now—serving, yes, the gold building.

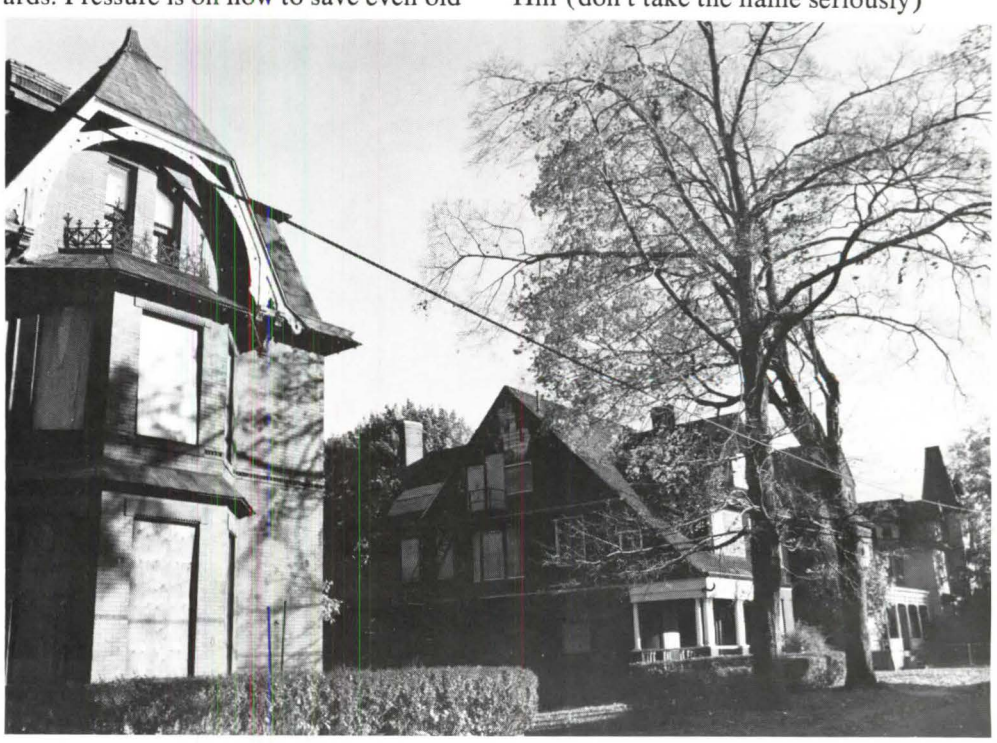
Colman: "The city has to take the blame for the garage because we gave a tax break on it. In retrospect we should have found another solution for the parking. . . . Lewis Street is trying to come back. There's a move to 'mall' it, maybe cobblestone or brick the asphalt, and get the autos off."

The David-and-Goliath confrontation of Lewis Street versus the emerging metropolitanism (actually little Lewis against big David Chase) sums up the present development prospects of Hartford, not only downtown but throughout the rather compact city. An epidemic love of brick broke out after an old YMCA was torn down a few years back. Since then, a Hartford Architecture Conservancy (HAC) has sprung up with the fervor of Carrie Nation, though not swinging an ax. The principal is young architect Tyler Smith, a Columbia University grad who did not study under preservationist James Marston Fitch there but called on him to prime the guns for the long battle in Hartford.

Above, Lewis Street. Below, houses saved in newborn restoration spirit.

HAC set about identifying buildings, usually brick, that ought to be saved because of intrinsic merit. HAC also raised a revolving fund of $250,000 (for starters) to buy threatened properties and sell them at cost to rehabbers meeting HAC standards. Pressure is on now to save even old brick schoolhouses and convert them to new usage. A really big one got away just last year and met the bulldozers because all duchies of the city bureaucracy do not have the message yet. However, enough rehabbing has already occurred, with enthusiastic reception, so that the process is assured a future.

A particularly glaring shame is Asylum Hill (don't take the name seriously)



where many handsome brick houses were knocked down for insurance company parking. Planner Colman observed of Asylum Hill: "Many of those great brick bearing-wall houses were replaced by brick veneer boxes—three-story apartments. Some of these are in very sad deterioration after only 10 years. The Hill was raped. We finally stopped it with zoning."

From Asylum Hill many commuters get a daily dose of unshapely skyline that belies the adventure of entering the central city. In the foreground of their way-to-work picture is a hopeful piece of bronze sculpture showing a pair of hands raising a deaf child (education of the deaf being a specialty in Hartford). But the bronze girl must be blind too, for she gazes at this ungratifying view and still smiles.

In fact the highrise skyline of Hartford fails to fall into attractive patterns from any direction. Entering town on I-91 or I-84 is a remarkably ugly experience, thanks to a state highway department delinquent in design sense. The ramps are horrendous and the intersection of the two interstates is a triumph of awkwardness. Colman acknowledges: "The highways are our worst mistake, cutting off the town from the river. We'll have to figure ways to reconnect our greatest natural asset." But historian Melancthon Jacobus can't see feeding pedestrians across that hectic highway scene. He urges mass transit to abate the auto-made mess.

The skyline stubble of upended shoebox highrises, so conspicuous here as in many cities, does manage to make one appreciate the Travelers Tower more than when it stood alone (for many years the tallest building in New England), though it be an improbable stack of classical derivatives. The other notable standout on the horizon, when visible, is the intensely Victorian state capitol of 1878 (Richard Upjohn, architect). Though shoeboxes come too close, the capitol shows as a bonus to the downtown walker, thanks to the very gaps caused by excessive demolition.

Insurance money accounts for both success and failure in Hartford's present makeup. The Aetna empire built in the '30s what they used to call, without intended irony, the world's largest colonial building; lately they added a handsome wing by Kevin Roche, AIA, totally at odds with the original pile (and badly compromised by nearby elevated roadbeds). The Travelers leadership clotted a large portion of downtown with clumsy buildings, yet provided the backing for Constitution Plaza, which got a good press in the '60s when it appeared as a pioneer venture in keeping pedestrians above the battle of the city streets.

There are several layers of parking surmounted by a handsome mall, with a hotel and office towers rising above it. A number of mall-fronted shops and a restaurant started up and soon folded because the pedestrians forgot to come.

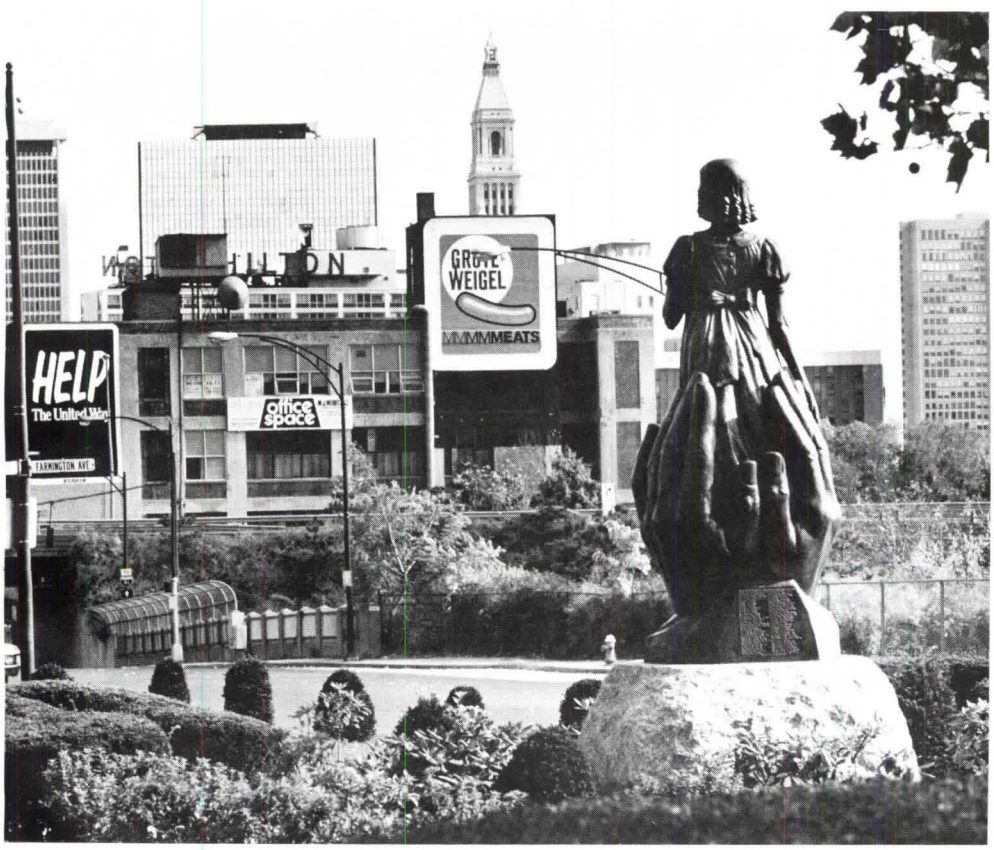
"It was a disaster," said Colman. "The mistake was in failing to provide a second-level pedestrian connector to Main Street."

How came such a mistake? It may not have been openly discussed in gentlemanly quarters, but Main Street had begun filling up, as had Hartford generally, with more and more of the poor. Clearly, Constitution Plaza was to be a place of class distinction—though any poor soul was free to climb the steps, and the decorations there at Christmastime were to be a delight for all.

"It's not a disaster that can't be overcome," said Colman. "The concept makes sense. The former owner of the main department store, G. Fox, did not create outlying stores but tried to keep her downtown merchandising momentum, and she objected to any connection between Main Street, which fed her store, and Constitution Plaza. But G. Fox is now a division of the May Co. which is very firm about joining with others in the city to develop a whole second-level pedestrian system in downtown Hartford. They've added the historic Cheney Block [Henry Hobson Richardson, architect] to their holdings. The pedestrian connector will go through the Cheney Block, which actually started life as something of an enclosed pedestrian mall, with shops on the ground floor and studios and offices above, around a great court. So we will be restoring that situation, getting something 'new' while retaining something old and distinguished.

"If it comes off the way we hope, the pedestrian—always under cover—will be able to proceed from Constitution Plaza west across Main Street, having traversed the Cheney Block or the G. Fox store,

Bronze deaf girl and her view of downtown (below left) and H. H. Richardson's Cheney Block across from Christ Church (below).



Connecticut's state capitol (above) and Vincent Kling's Civic Center (below).

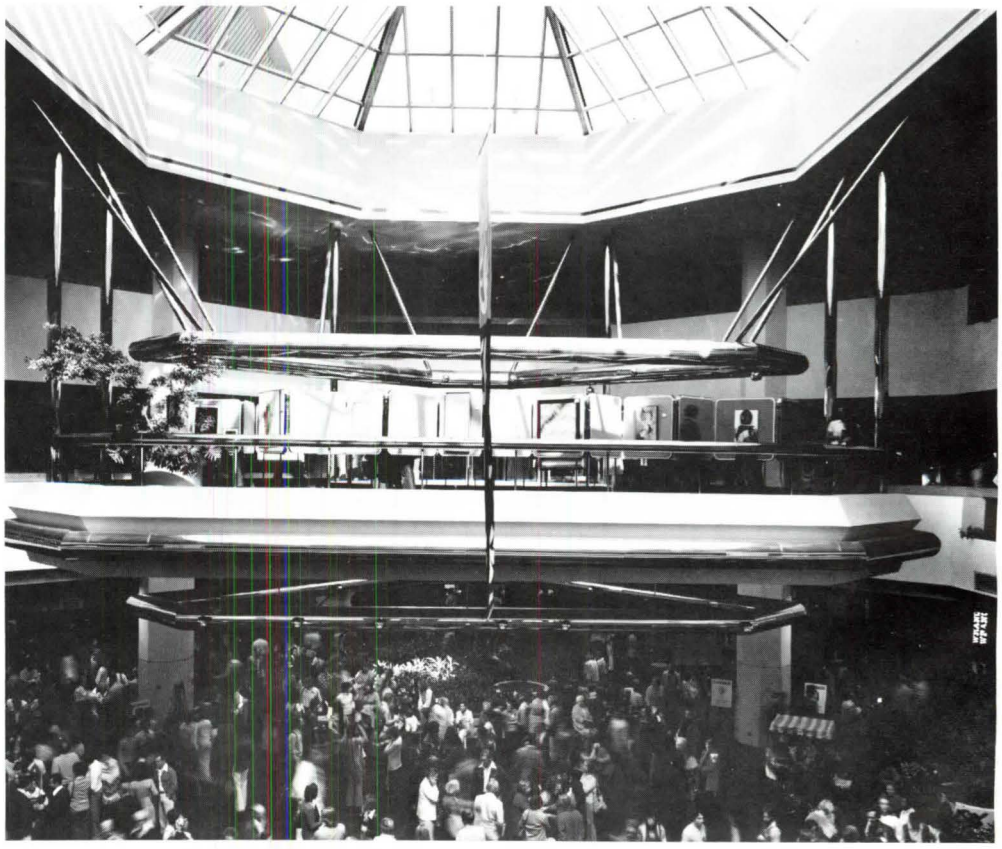
through the American Airlines Building [another rehab], into the Civic Center and, eventually, as far west as the Transportation Center [now the usual moribund railroad station].

"Totally climate controlled, this has to be exciting, attractive, convenient, a place you want to be in, you feel safe being in, and where you can negotiate the full stretch of downtown comfortably even when it's raining or snowing or the outside is 95 degrees and humid. This downtown is scaled beautifully for walking. It can be crossed in any direction in 10 minutes."

The biggest piece of the action is already in effect, the somewhat misnamed Civic Center, designed by Vincent Kling, FAIA, on a superblock cleared midway between Main Street and the railroad station. This is not a city hall or anything else government. Instead, it is a complex of covered malls, jointly financed by Aetna and the city, with shops ranging from a cafeteria cluster—a favorite talking spot—to a high-fashion department store, which had to scale down its lines of goods because the more affluent element of the Hartford region does not much patronize what is really a populist center. The "common people," from the very poorest, the black and the old to the young-employed, frequent and/or patronize the center in great numbers along with visitors attracted by the convention facilities built in, along with a hotel and a capacious if cold and forbidding parking structure. Planner Colman reports that after only two years the center has lined up enough convention business to rank eighth in the country. The facilities have also brought huge success in spectator sports. Rock 'n' roll was allowed at first as a moneymaker but shortly disallowed as a messmaker.

The Civic Center is an architectural success not as something to look at but as a complex that works. Though new people often get lost in it, those who have mastered its intricacies tend to act at ease like members of a select club, even if anyone may join. Of particular portent is the light of anticipation that descends on most persons entering the premises, especially young black people who very likely come from the extremely depressed ghetto that now extends over much of Hartford. The center is a mixmaster, bringing all people together with a reasonable chance of enjoying the fruits of the American way, if only vicariously. The mix of people, and security forces, has crime under control.

A curiosity of the Hartford scene is that



every one of the old downtown movie houses has disappeared bodily, and I'm not sure there is one left open in all of the incorporated city. The one place for movies downtown now is the Wadsworth Atheneum, which became famous in the 1930s for avant-garde productions and is today the only significant multiple arts center in Hartford, except for the several colleges and the Mark Twain Memorial, whose master would haunt you if you called it a "culture" center.

Lately, the prestigious Atheneum has been on a losing money curve, the old families having largely deserted because they don't like to come to town anymore, especially when art cuts figures they can't follow. Present director Tracy Atkinson says that from his point of view Hartford has no suburbs, no commuters. People of means tend to identify with their outlying towns as though Hartford didn't exist—except when a well-paying job beckons.

Meanwhile, across the street, a subsidiary of Reynolds Metals has built a highrise apartment tower designed by I. M. Pei, FAIA, as part of a mixed-use Bushnell Plaza. Advertised as near "one of the country's top 10 museums," the Pei tower is fully occupied, with a waiting list.

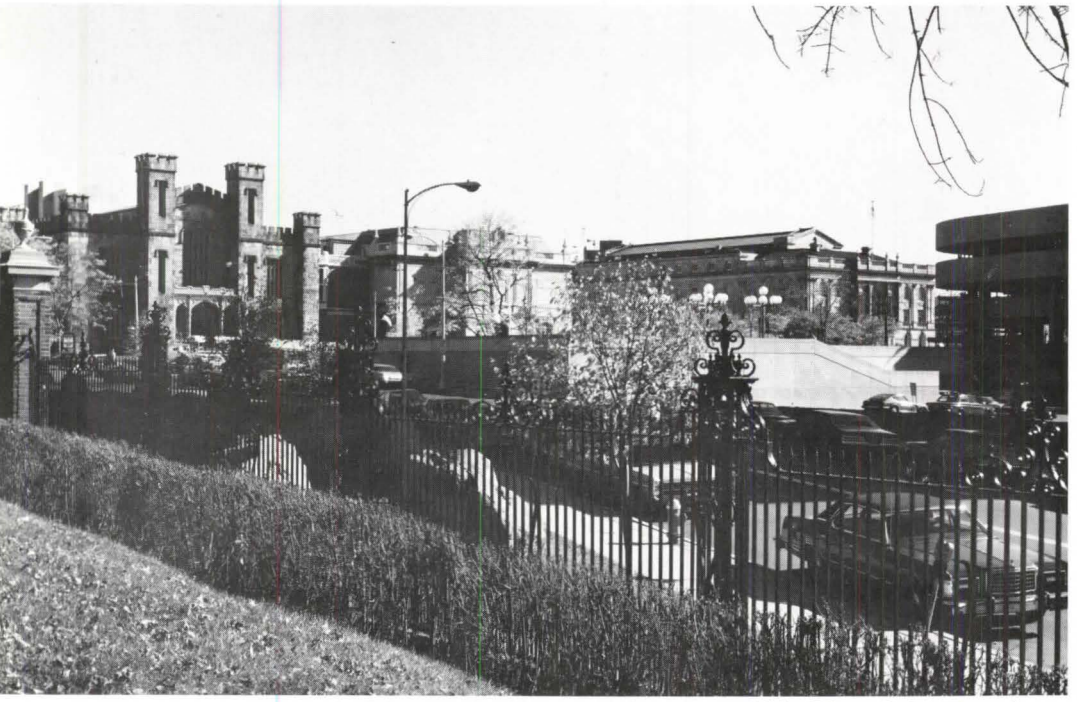
One tenant of Bushnell Plaza is architect Jack Dollard, himself something of a mixmaster and pedestrian connector in that he is forever on the go bridging the psychic distance between the haves and the have-nots. He may be found in momentary pause at the Civic Center cafeteria, or he may be sitting with the powers of the Aetna insurance enterprise to plot new advances for Hartford. And he is director of the Knox Foundation, using money left by one old-family widow who did believe in continuing the quality she had known in Hartford.

The late Elizabeth Knox had been a Republican councilwoman, yet Dollard has put her money to work in a political climate fully dominated by Democrats. Scratch any local Republican and you're likely to find him or her gushing angry blood over the tactics of the town's present "dictator," Nick Carbone. Marion Grant (a sister of Katharine Hepburn and, like Kate, both socially "in" and socially aware) feels that Carbone is determined to keep the poor poor as a power base, but Dollard says: "The *Washington Post* called Carbone the strongest councilman in America, and he is so because he is honest and wants to work 48 hours a day for his city. Art is not part of his life, but he believes it has a place. He may not go to the theater, but the Hartford Stage Co. got its deal with the city because he went to bat for it. Sure, he's not reflective like the gold building. He's a man of action."

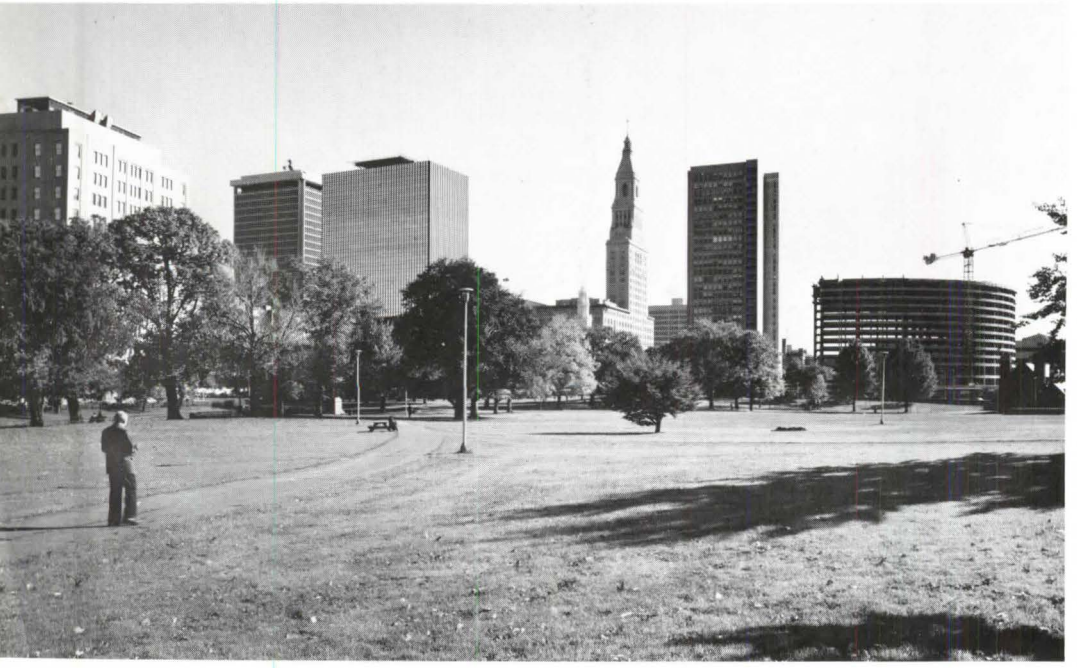
Dollard spent his first million of Knox money on the outlying poor neighborhoods, which didn't get much better. The second million went into sparking downtown projects. A council was set up with young designers ready to help anyone free of charge who was prepared to "do something positive for downtown." Knox money was behind first studies for the pedestrian connectors that are to link all downtown, including aloof Constitution Plaza.

Dollard admits to being hooked by the gold building. He says: "I live in Bushnell Plaza where I see it all the time. It has been good for Hartford. It's the only really sophisticated office building we have downtown, even if the architects have produced 40 like it around the country. It's given us aura."

Dollard himself glows like gold when he warms to his favorite subject (all the time): "Hartford is one of the best places to live. We have 12 of the best suburbs. We're about an hour away from the best city, Boston; two hours from the center of the universe, New York; an hour from good skiing, an hour from good surf. People come here because the region has probably the highest per capita wealth in the nation. Of course, the wealth is in the outlying towns; the city itself has 60 percent of its people on subsidy, probably a record. We have to break the isolation of the minority communities. We have to make downtown fun for everybody at the same time we give it an urban possibility for living. . . . Our biggest need is spirit, and we've got spirit working for us now."□



Above, the Wadsworth Atheneum multiple arts center (left) and the neighboring neoclassical city hall (right).



Below, the gold building (left), Travelers tower (center) and highrise apartment tower designed by I. M. Pei & Partners.

Practicing architects

today face many challenges. Professional credibility is falling while accountability is rising. Architects' competency is being questioned, mainly by others involved in the building industry, as claims and lawsuits grow. Architects must continually acquire new expertise to deal with stringent and complex building requirements. Increased government regulation and procedures, uncontrollable building costs, conflicting environmental and energy demands, severe time constraints and scarce resources dominate the construction process. . . .

Inflation and recession plague the profession. The cost of both construction and financing have become exceedingly high, resulting in periodic swings in building activity and, concurrently, in work for architects. This has produced an oversupply of architects, cutthroat competition and widespread unemployment. Inadequate compensation, expanding accounts receivable and difficulty in fee collections further exacerbate the architect's plight. Many architects are themselves confused or unclear about their role and status as professionals, and some are seeking to expand into new areas of business activity.

So begins a report entitled "An Assessment of Architectural Practice" published last fall by the University of Maryland school of architecture and excerpted here. The report is based on a survey conducted in the spring by graduating students at the school, supplemented by additional research and experiences of the authors, associate professor Roger K. Lewis, AIA, and Sirkku Fisher. The survey covered, through questionnaries and personal interviews, 110 persons in the Baltimore-Washington-Maryland region including architects, engineers, developers, contractors, property managers, lenders and public officials of lending institutions and of state and federal agencies.

We present these excerpts because we believe the report to be a forthright and comprehensive statement of the most critical issues currently facing the architectural profession (not, it should be emphasized, because we agree with all of its conclusions). Reader comment is invited.

The excerpts constitute about half of the report. Entirely omitted for reasons of space are sections on contract documents, legislation and government. The full report is available for $1.50 from the School of Architecture, University of Maryland, College Park, Md. 26742. Ed.

The role of the architect in society appears to be well defined and understood. He is viewed as a technologist and as an "artist" whose design talents provide buildings with strength, dignity, utility, drama, subtlety, monumentality and other positive attributes. His functional and legal responsibility is to prepare drawings and specifications accurately and precisely showing what to construct and to then inspect construction work in progress to verify conformance with the design. To be successful, the architect has to have extensive technical and engineering knowledge, organizational and managerial ability, sociological and political expertise, legal acumen, selling and marketing skills, economic and accounting know-how, social and business connections and financial resources—not to mention a commitment to hard work.

AIA standardized contracts provide a description of basic architectural services to which the client is entitled. These basic services are divided into five phases: schematic design; design development; construction documents; bidding and negotiation, and administration of construction.

The architect, although cognizant and protective of the public interest, is, in effect, *employed* by the client who is looking for all the above-cited professional skills. Thus, architect and client collaborate, with the architect acting on behalf of and in the best interest of the client, consistent with professional standards and ethics. It is when the client becomes an "adversary," feeling distrustful or skeptical of the architect's work and capabilities, that problems arise. It is then that the architect's role becomes redefined, with or without his or her consent. And it is then that many architects see themselves becoming or being treated as something less than "professionals," unable to reconcile the conflict between their image of themselves and their image in the eyes of others.

The description above of traditional architectural services seems clear and straightforward. Why, then, should this conflict in image arise, and from where do skepticism and lack of credibility spring? First, the fact that there exists an image and credibility problem is confirmed by our survey responses. Half of those questioned, including architects, felt that the architect's function in society is not widely understood by the general public. Almost half thought the profession of architecture was changing for the worse. One out of four stated that architects do not render sufficiently competent services, citing finance, cost estimating, architect-client communication and construction practicality as areas of competency generally lacking. Of the nonarchitects interviewed, one fourth did not receive, in their view, the degree of complete service expected from architects they worked with.

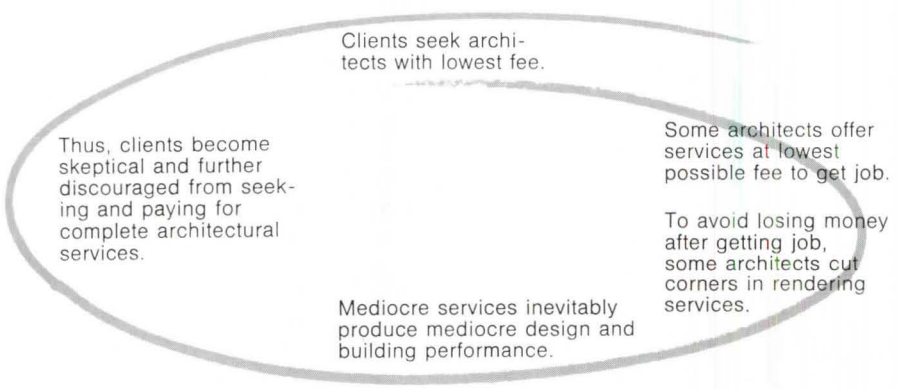
Compensation

The architect faces increasing responsibilities and demands for accountability, but without a corresponding increase in fees or profits. The result can be the 'vicious circle' shown in the diagram below.

Few issues are as sensitive for professionals as those revolving around money, and architects are no exception. The architectectural profession probably spends more self-examination time and energy on the topic of fees than on any other topic, and with good cause. Our studies lead to the conclusion that virtually no one is satisfied with the fee structure in architectural practice. However, the reasons for the dissatisfaction vary widely.

To fully assess the issue of fees and payment, we should first identify the components of any architectural fee. Fees for services rendered must cover: the direct cost of performing work, i.e., the salaries and benefits of principals and employees; the firm's overhead, or indirect costs (i.e., rent, telephone, supplies, secretaries, etc.), and profit, the firm's compensation and incentive for the incurring of certain risks. Second, fees are determined in the context of the competitive marketplace on the one hand and the scope of work required for the project on the other. Third, once having determined the amount of a fee, the architect and client must then agree on how it is to be paid, and, subsequently, the architect must collect it from the client when it becomes due.

It is not surprising to find many clients who believe architects' fees to be excessive and many architects who believe their fees to be inadequate. Part of the fee problem can be thought of as a vicious circle which might look like the following:



The fees which the marketplace will bear for design services are generally determined by the low bidders, whether or not bidding formally occurs.

Some contractors, owners and other participants in the building industry have an attitude characterized by:

(1) the *assumption* that most architects are equally talented and possess some technical knowledge;

(2) the *notion* that most architects' fees are too high;

(3) the *feeling* that many architects are impractical and unrealistic, and tend toward ephemeral and "kooky" designs;

(4) the *belief* that the architect is an unavoidable necessity, the person from whom one buys a set of "blueprints" to build a building;

(5) the *conviction* that most architects have no understanding or appreciation of construction costs;

(6) the *assumption* that most architects' drawings and specifications will be rife with errors, omissions, discrepancies and unbuildable details.

To what extent has the profession itself generated or reinforced these attitudes, and how widely are the attitudes held? Our survey addressed this issue with regard to fees. Of the architects queried, more than half felt that fees are *not* generally commensurate with the architect's risks and responsibilities. Two-thirds said they based their fees on "what the market will bear." Architects and non-architects were also presented the following statement:

"Architects argue that fee-cutting, competition and undercapitalization in the building industry often prevent them from rendering the kind of complete, thorough, in-depth services they would like to perform and which clients need, but which require higher fees."

Ninety percent of the respondents *agreed* with this statement, while 80 percent agreed that fees should therefore be higher! This suggests that the vicious circle described above must be broken to increase both fees and quality.

Generally, many architectural practitioners believe they are trapped, as the vicious circle metaphor suggests. On the one hand, they feel that they are true professionals, that their clients have commissioned them because of competency and talent and ability to solve the client's problem. They would like to invest all of the time and resources needed to thoroughly research, discover and describe the optimal design solution, and to see that it is properly implemented.

This perception implies that the client must share the architect's vision, must view architects as indispensable and creative problem-solvers and must be willing to compensate architects fully for the value of their services. On the other hand, many architects' real world experience tells them that they are viewed by many as just another "vendor" among competing vendors, that their fees are an up-front, at-risk expense often considered excessive, that they must cut or restrict their fees to the bare minimum in order to get the job and that after getting the job, they must perform the work less rigorously and completely than they should.

The alternative to this situation relates to the need to define, with great precision and thoroughness, the responsibilities and scope of work involved in any project. Thus, the fee would accurately reflect the effort which should and must be expended. The architect can invest the time required to perform complete, error-free, inspired work without undue financial risk or hardship. . . .

To complete our consideration of fees and payment for architectural services, we must explore the risks taken by the practicing architect, for therein should lie his right to make a profit. Several times above, we have mentioned risks as they relate to fees. Architects see themselves, in fact, as incurring far more risk than their clients or the public realize. Over 90 percent of the architects surveyed felt that their "responsibilities, accountability and liability" are increasing.

The architect's risks fall into two categories. First comes professional risk, the risk of liability from errors or omissions in performing work. Second are the usual business risks associated with hiring employees, renting and occupying space, financing office operations and staying "afloat."

Like other businesses and professions, industry and government, the architectural profession has encountered the age of consumerism unprepared. There seems to be an increasing demand for perfection and accountability, with no shortage of willing attorneys ready to litigate on behalf of the injured client. Our survey of attitudes on the question of liability produced unequivocal results. Two-thirds of the architects responding agreed that "the cost of malpractice insurance is making it almost impossible to operate a small architectural firm," and that fees are not adequate to cover the costs of professional liability insurance. Two-thirds of all respondents felt that "architects should always be *personally* liable for their work," and a majority said that "the architect should be *held responsible* for meeting construction budgets."

Unfortunately, as stated at the outset of this report, the marketplace, demanding greater accountability and perfection,

seems unwilling to pay for it. It is unreasonable, in fact, to expect architects to shoulder increased risks and responsibilities with no increase in compensation and profit.

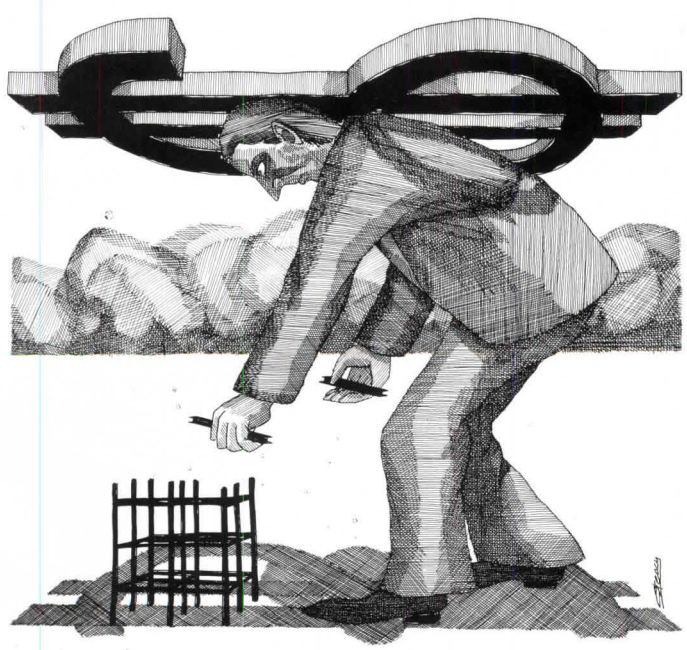
Most architectural firms can adequately protect themselves against liability arising from errors and omissions in their work by means of professional liability insurance. While this insurance is expensive and requires large deductibles, e.g., $5,000 per claim, it nevertheless guards the architect against most major claims, including third party injury claims, with coverage available up to several million dollars per claim. According to insurance underwriters, the high cost of this insurance is attributable to the thousands of smallish claims (under $25,000) each year, not to the few large, spectacular losses which receive disproportionate media attention.

Perhaps the greatest risk for the architect may *not* be professional liability for acts of negligence, but rather the risk of receiving payment for services rendered or work completed. The architect has very little protection against the client who fails or refuses to pay his bill. Architectural services are labor intensive, involving the weekly or biweekly outlay of funds by the architect for payroll, along with normal office and overhead expenses. In 30 days of intensive work, a firm could expend tens of thousands of dollars for payroll and expenses with associated fees accruing and billable.

Unlike the case in other professions, an architectural firm's income is characterized by large fees per client or per project. The architect often works on a relatively small number of projects at any time. The architect's work on a single project can continue for years, since a project, from design through construction, will range under normal circumstances from one to three years in duration.

Therefore, the architect is very much at the client's mercy, and, in some cases, nonpayment by only one client can be devastating. The architect is thus forced into accounts receivable financing and unwillingly gets into the banking business, lending money and extending credit while going deeper into debt to fund operations. Should a client or clients continue to defer payment, or refuse or contest payment, the architectural firm can quickly run out of credit and be forced out of business. This, in fact, occurred frequently during the economic recession which began in 1974. Further, there is often no security or effective recourse available to the architect other than costly and protracted legal proceedings to enforce a contract.

The result of all of this is clear—architects' fees occasionally oblige them to take short cuts, to limit consideration of design options, to occasionally do the same things, even the wrong things, over and over, and to inadequately research and describe their design intent. In turn, architect and client may experience unhappy consequences: bids frequently over budget, extras and claims for work not shown or anticipated and buildings completed behind schedule which are sometimes defective even before occupancy (leaks, cracks, faulty HVAC performance, acoustical problems, poor materials and workmanship). In this situation, the owner may blame the architect for providing poor services and the contractor for poor workmanship. The contractor may blame the architect for inadequate and incorrect construction documents. And the architect may finally blame both the owner for scrimping on the fee, compelling the architect to do less than could and should have been done and the contractor for lack of craftsmanship. While this scenario is the exception rather than the rule, it nevertheless occurs sufficiently often to be of great concern to all.



Selection

Unprecedented competition is bringing an increased emphasis on marketing and a broadening of services that could make architecture 'look less like a profession and more like a business' as time goes on.

Competition among architectural firms for available commissions has become very intense in the last few years. Although architecture has always been a competitive profession, never before has there been such great disparity between the number of architects looking for work and the number of projects for them to work on. This results primarily from the tremendous fall-off in construction accompanying the 1974 recession and the continuing depressed rate of real estate development. It takes much longer to develop a project today because of complex governmental regulations and more stringent financial requirements, further decelerating the rate of building, and, therefore, the number of active projects available at any one time.

The lack of work for architects, the scramble by architects for any and every job, has introduced "marketing" into the architect's everyday glossary. Marketing has always existed, but in subtle forms. Today, it is no longer subtle. It has become a matter of survival, and, in our opinion, involves serious legal, economic and ethical questions which affect how architects work and what they produce. The methods by which architects are selected to design projects must be examined to understand how the profession is changing.

Generally architects are selected to do a single project. Unlike doctors, lawyers or accountants who usually have continuing relationships with clients over extended time periods, the architect may do only one project for a particular client. If he is hired again by the same client, it is nevertheless on a project-by-project basis. Clients find and select architects by several means, summarized as follows:

(a) through personal contact, either social or professional;
(b) through referral, based on reputation and qualifications;
(c) through client-sponsored competitions, based on professional and other qualifications;
(d) through client-sponsored competitions based on fees, and
(e) through client-sponsored design competitions.

Traditionally, most architects prefer to obtain work by methods (a) and (b), for obvious reasons. These seem more "professional" and represent the primary

method by which people select attorneys, accountants or physicians. The architects interviewed in our survey, in answer to a question about the components of their marketing approach, overwhelmingly agreed that "referrals," "personal contacts" and "ongoing contacts with clients" where their major sources of business.

However, times are changing. A larger and larger share of building projects are either supported or built directly by governmental entities, either federal, state, county or city. Of our survey respondents, almost 75 percent felt that "government work will become an increasingly larger share of the architect's market." Under most existing statutes, some recently adopted, government agencies may no longer negotiate with agency-selected architectural firms behind closed doors. Instead, the agency must publicly announce and advertise the project, solicit expressions of interest from any and all qualified firms, review qualifications submitted by such firms, and then, by process of elimination, select the "best qualified" architect for the project. Although this appears to be fair and reasonable, in practice it can be costly and highly inequitable.

Agencies tend to consider architectural firms' track records of projects, technical expertise, cost control methods, size, office organization, geographic location and, occasionally, proposed fees as the critical parameters. In addition, a firm's "image," as conveyed through its brochures, presentations and public relations efforts, is often implicitly crucial to selection. However, it should be clear that all of these evaluation criteria tend to favor larger, more established, high-overhead, well-financed architectural firms.

Our survey questionnaire focused on this area of competition. On the issue of firm size, over 95 percent of the architects queried believed that "small firms are often unable to compete with large firms for prestige projects even though qualified." Almost 80 percent agreed that "large architectural firms have a decided advantage over small firms . . . because of their marketing efforts and capabilities . . . built into their overhead structure." Over half felt that "small firms would become unviable" except for very small projects. Ironically, four out of five said that, individually, they would prefer working in a small firm, mainly because of "flexibility" and "variety of experience."

In reality, firm size is extremely misleading and inappropriate as a basis for selecting an architect. For any project, there is a team which may never exceed a few individuals at any one time. In a large office, the same number of team personnel will be required as in a small office, and the large size of the firm in no way guarantees that the team personnel will be any more competent. In fact, the smaller office may perform better services for the client by virtue of its size in relation to the project, with more attention from the principals of the firm. More is at stake for them than for the principals of a large firm, most of whom might never be involved with the project. Often, smaller firms have lower overhead costs than larger firms, which means a larger share of the fee would go toward direct project work. Our survey showed that most respondents, in fact, believe that the quality of services differs little between small and large firms.

Regarding the other evaluation criteria mentioned above, survey respondents, including architects, were asked to identify the most important considerations in choosing an architect. Following are the frequencies of response: design talent and creativity, 50; prior experience in similar work, 33; organization and management skills, 29; knowledge of practical aspects of building (time scheduling, economics, construction), 25; fees (cost of services), 15; reputation, 6.

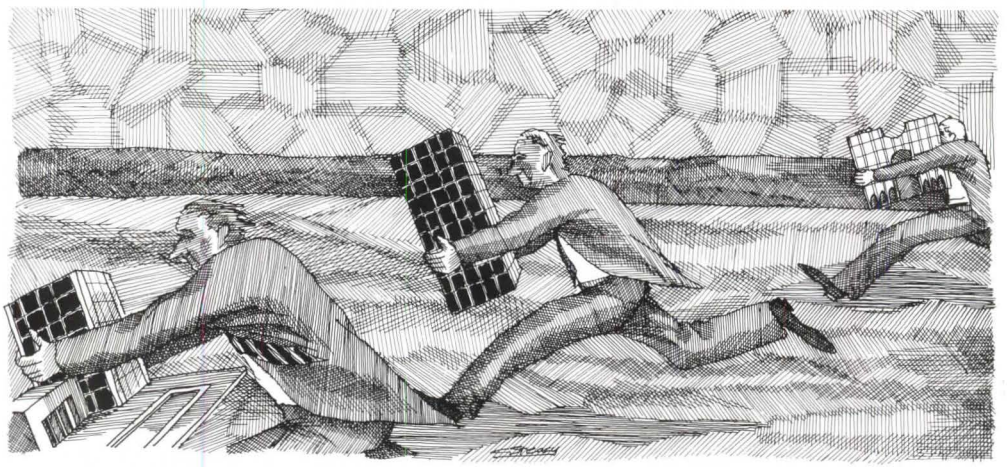
It is interesting to note that architects, when asked to rank those architectural products which "sell" best, or are most in demand, gave highest ranking to "functional design," "competitive fees" and "economy/cost control," and lowest ranking to building "image," "esthetics" and "innovation/novelty."

Competitive fees, or competitive fee bidding, as a basis for selecting architects present both an ethical and legal dilemma. Our earlier discussion of fee determination pointed out the obvious pitfalls of fee-cutting, the cutting or compromising of services. Nearly 85 percent of the architects interviewed opposed using fees or bidding as a basis for selection. Yet, the profession must operate in the context of the law, which promotes and protects competition and unrestrained trade.

Partial resolution of this dilemma is tied to the methods by which fees are computed and to project workscope definition discussed earlier. Currently, a client, if presented several fee proposals from different architects, must normally assume that each proposal covers exactly the same set of tasks and services, i.e., that he is comparing prices for the same product. Actually, this is frequently not the case. If fee proposals could be solicited and prepared based on detailed workscope statements, then there is greater likelihood (1) that services proposed would be comparable, and (2) that fee differences between proposals would reflect *differing billing rates* (relating personnel costs to overhead and profit) rather than differing quality and amount of effort.

Design competitions are seen by many architects as inherently inequitable. Of those surveyed, 60 percent did not consider competitions to be a good method for selecting an architect. There are two kinds of design competitions, one being limited by the client-sponsor to a few selected firms who may or may not be paid for their designs, the other being open, public competitions (often national or international) in which the winner receives a prize and/or the architectural commission to complete the project. Again, an overwhelming majority, 85 percent, of the architects surveyed felt that they should *always* be paid for their work.

Some point out that competitions are unfair because they ultimately reflect the bias of the jury which selects the winner and do not necessarily provide the client with the best design. They favor firms with greater financial and staff resources, allowing such firms a competitive edge in presentation. On the other hand, open competitions offer small firms or unknown, young (or old) architects an opportunity to "hit it big." Whatever one's attitude, there is no question that competitions, like any speculative work, demand an investment of time, energy and resources which could detract from the architect's other work. Most firms enter competitions seriously when they are paid or when there is no other work to do. And all competitions, that vital interaction between architect and client in the schematic and design development phases is missing. In terms of both design results and economy of means, even paid competitions do not seem good investments. . . .



To cope with the realities of the marketplace, architects have begun to change their ways of approaching clients. More accurately, they have been *forced* to make changes. Approximately 80 percent of the architects interviewed agreed that "the marketing of architectural services is becoming a major and indispensable part of a firm's activities and overhead," while only half felt it *should* be a major part. One-fifth indicated that they had actually "hired personnel specifically for marketing purposes."

In this climate of heightened competition, the profession has become very market-concious. The vast majority, 80 percent, of architects surveyed said they believed that there is an *increasing* market for *other* than traditional design services, and almost all (over 90 percent) believed that architects should offer services beyond traditional design services. The role most cited for the architect to play was that of contractor and/or developer.

Only one-third of the respondents agreed that architects should be able to advertise their services. Notwithstanding the diversity of attitudes about advertising as part of marketing, it is apparent that architects are and have been engaged in advertising of a sort. . . .

To expand their geographic base and to broaden their base of expertise, architectural firms are increasingly forming joint ventures to be more competitive in seeking new commissions. These are marriages of convenience. They transform small firms into big firms and big firms into bigger firms. They turn architects into engineers or economists or social scientists, and vice versa. They turn "Boston" firms into "Baltimore" firms and "California" firms into "Virginia" firms. Of the firms polled, we found that 80 percent had participated in one or more joint ventures. The most frequently cited purposes for such joint ventures were to acquire a "regional" or local base, "additional manpower" or "special expertise." Many joint ventures are formed by telephone and often no joint venture agreement is actually made unless and until the venture receives the commission it is seeking. Thus, joint ventures which offer services basically have agreed to make an agreement.

As in the case of small firms versus large firms, the joint venture ultimately boils down to a project team. Joint ventures may be advantageous from the client's point of view, but they may also pose two problems: management and decision making by a team of people from different firms, and division of liability and responsibility between firms. These problems can be solved, but the potential conflict can never be completely eliminated. It is also worth noting that professional liability insurance covering individual firms' work does not cover joint venture work. The joint venture must itself obtain separate professional liability insurance.

Another increasingly prevalent method for architects obtaining work is through participation in design/build, or turnkey, competitions. However unpopular with architects, it appears that the design/build or turnkey method is here to stay. In response to the statement, "Turnkey (design/build) projects represent a generally desirable method for architects to compete," two-thirds voiced disagreement. The disadvantages cited most often by architects are:

Architects involved usually do not receive compensation (they work "on the come") unless the design/build bid is accepted. Manpower is wasted because many architectural firms work on the same turnkey proposal, while only one is selected. The least possible amount of time may be spent on design to minimize the architect's risks and costs; thus, turnkey competitions rarely produce quality architecture.

Also, direct, vital client-architect relation and communication are eliminated; and potential conflict of interest is increased, since the architect is employed by, or is in partnership with, the contractor.

The advantage to the owner is that he buys a whole package, usually at a fixed cost, and he may save time. The cost in some cases may be lower than that of the traditional approach, but not always. Again, the central issue revolves around how and by whom the architect is employed.

All of the above discussion of methods of selecting architects, or, conversely, of how architects obtain work, leads us to conclude that:

(1) getting work is becoming an ever-larger and rapidly expanding part of the architect's efforts;

(2) getting work is becoming *increasingly* costly for architects;

(3) the chances of being selected for any given project are *decreasing* as the competition quantitatively increases;

(4) the process of selecting architects is frequently inequitable, tending to favor certain kinds of firms over others, irrespective of inherent and potential capability to perform;

(5) to keep ahead, architectural firms are offering nonarchitectural services, are entering fields clearly outside the field of architecture (in which they may ultimately be unable to compete) and often attempting to play roles for which they may or may not be prepared in order to survive;

(6) marketing services are becoming less "professional" and more "commercial" in nature, with paid advertising just around the corner.

It seems that the profession is at a crucial turning point. Should these trends continue, architecture may well look less like a profession and more like a business or trade. On the other hand, architects could return to so-called basics, focus their talents on *their* unique area of expertise and do a better job of rendering "architectural" services. The profession could bid itself into mediocrity, or it could convince the public, its clientele and itself that "you get what you pay for."

Institutions

An assessment of how the schools of architecture and AIA are performing in relation to the changing nature and status of the profession, and proposals for reconsidering the basic orientation of both.

The architectural profession's institutionalized footings are, first, the nation's schools of architecture and, second, The American Institute of Architects. How is the status of the profession, as discussed here, related to these institutional supports?

We have already made an observation about the lack of clarity and consistency in architectural education. This was not always the case. Prior to the 1960s, architectural education was relatively uniform in its overall objectives. The primary concern of both educators and students was building design, accompanied by diverse theories and philosophies of style and method. The basic elements in almost every architectural curriculum were building engineering, architectural history and theory, and construction, as well as design and drawing. Therefore, pre-1960s graduate architects shared a common notion of architecture's purpose and techniques, despite differences in approach and esthetic values. Architecture was unquestionably a profession, similar to law or medicine, and the path that one followed was clearly defined: school, apprenticeship, registration and practice (and/or teaching) as a member or principal of a firm or a government agency.

The 1960s, however, was generally a period of reassessing and reshaping of social values and norms. It was also a time of change in architecture. New economic, social, political and legal realities influenced architectural practice and education. Questioning of "old" standards manifested itself in student unrest on campuses across the country. In reaction to this, architectural schools often pursued expedient compromises to avoid confrontation and began offering "smorgasbord" education.

In recent years, much discussion has taken place on the subject of architectural education and architectural curricula. Two basic issues are being addressed: (1) the inadequacies of some current programs, in particular the relevance of architectural education to "real world" conditions; and (2) the oversupply of architectural graduates. Our survey results confirm this, along with those of the 1974 AIA survey of membership. One-half of those surveyed in the Baltimore-Washington area believe that "current architectural education" does not provide a "sufficient basis on which to build a practical framework of skills." However, it is interesting to note the frequency of response to the specific question:

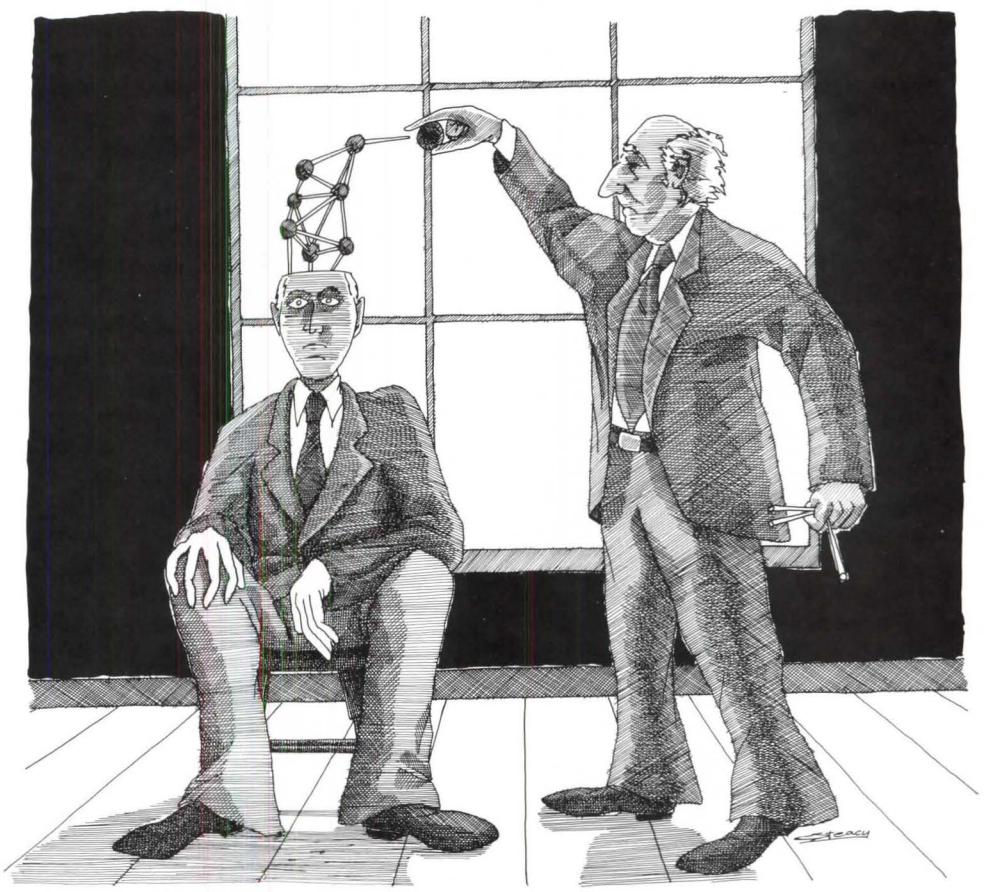
"What areas of knowledge or skill should be emphasized in an architectural school curriculum?": design (42); construction techniques (31); structures (20); economics and finance (14); construction experience (10); mechanical systems (6), and production (6).

Survey respondents also considered recent graduates strongest in design (56 percent) and weakest in construction details (54 percent). This supports the enduring notion that the architect's primary responsibility and authority is for design.

Another major criticism of current architectural programs cited reluctance on the part of some schools to adjust to or accept the changing role of the architect, mainly in the areas of business management and methods. Most design projects in school are still executed by individual students, whereas in practice, teamwork and interdisciplinary collaboration have become increasingly important and indispensable approaches to architectural work.

Traditionally, universities have been the leaders and forerunners in predicting and adjusting to changes. This is true in architecture to a limited extent. The schools of architecture anticipated a decade ago the need for additional expertise in matters of population, energy, ecology, historic preservation and computer sciences. However, the schools have been slow in acknowledging the growing importance of nondesign aspects of architectural practice, such as management, economics, cost analysis, marketing and legal concerns.

The second basic issue noted above, the oversupply of architectural graduates, is partly a result of the problems of our national economy in general and the building industry in particular. Many practitioners feel that there are too many underqualified students entering a field which is already saturated and overly competitive. This comes about because schools accept a steady level of applicants into their architectural programs, despite conditions in the marketplace.



Further, today's students have become far more career- and job-conscious than in recent years and are seeking admission to professional schools in ever-increasing numbers. Given the number of years which elapse between the beginning of study and entry into practice, it is not surprising that most students remain unconcerned about current economic conditions. Nevertheless, many young architects have abandoned, or thought about abandoning, traditional architectural

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The Madisons' Montpelier: Little Known Neighbor of Monticello

The fourth President's mansion was the product of more than a half century of building and remodeling. By Mary E. Osman

James Madison, the fourth President of the U.S. (1809-17), spent much of his 85 years at Montpelier, his country home in Orange County, Va., northeast of Charlottesville. His gregarious Dolley loved the house and its gardens, too, and Montpelier became the "center of their lives and the storehouse of their treasured possessions" after Madison's retirement to his estate, says Conover Hunt-Jones in a most entertaining account of the lives and homes of the Madisons. His comments are contained in a book for the AIA Foundation exhibit on "Dolley and the 'Great Little Madison.' "

In preparation of the exhibit and book, the foundation was permitted by the present owner of Montpelier to photograph some areas of the mansion for the first time. Unlike Monticello and Mount Vernon, Montpelier has always been privately owned and has never been open to the public.

Built by Madison's prosperous planter father between 1755 and 1765, the brick mansion affords insights into Madison's life style as well as his abiding interest in architecture, a propensity he shared with his good friend Thomas Jefferson, from whom he borrowed both ideas and workmen in his extensive alterations to Montpelier.

In Madison's childhood, Montpelier was probably a "tall, rectangular building with rooms on either side of a central traverse hall," Hunt-Jones says, but later changes in its design make it almost impossible to identify room sizes and configurations. Madison recalled that in his youth he watched the house being constructed, and this "may have inspired the future President with an interest in architecture that he pursued as a gentleman's hobby in his own maturity."

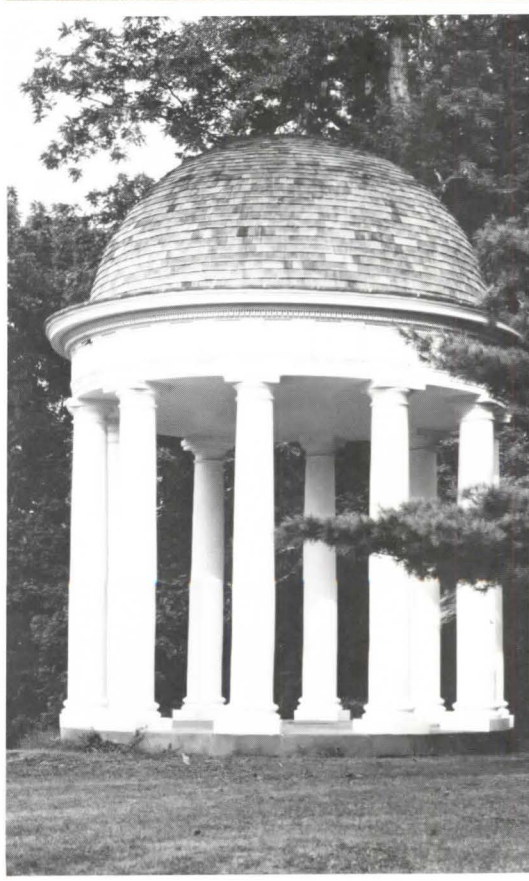
As were other gentlemen architects of the day, Madison was greatly influenced by Andrea Palladio's architectural treatises. Indeed, Jefferson borrowed Madison's copy of a Palladio book for his University of Virginia designs, as well as other architectural tomes from the Montpelier library. In 1820, Jefferson wrote Madison from Paris asking, "Have I returned your Vitruvius to you?"

Madison turned to Jefferson for advice when he began to plan extensive renovations for Montpelier. And Jefferson would "continue to advise Madison on the principles of building for the next 20 years," says Hunt-Jones. Not only did Madison benefit from his friend's counsel, but he also relied extensively on the talents of Jefferson's brickmason Hugh Chisholm and house joiners James Dinsmore and John Neilson.

Renovations over the years transformed Montpelier from a Georgian house into a neoclassical federal style mansion. During the late 18th century, Madison had added about 30 feet to the southern end of the house and had erected a Palladian portico on the west front and made a passage across the rear of the house.

Between 1809 and 1812, Jefferson's workmen added two wings, each with a basement kitchen. They also erected a rear collonade, rebuilt the front portico and stabilized the older central block. Interiors were remodeled as well; for example, triple-hung windows, which may have been Jefferson's invention, were added to the drawing room. Other changes included the construction of Venetian doors, fan and sidelights for the front door, arches for the passages off the drawing room and new woodwork and trim.

Letters from Jefferson and from his "best" house joiner James Dinsmore indi-



In late 1797, Madison started renovating Montpelier, an avocation he pursued for many years. The house 'grew with his fame.' By the time he finally retired to his Virginia estate in 1817, it was worthy of his pride. One-story wings were added in 1811; the second story to the wings (top) were an addition by William duPont at the turn of the century. The garden temple (lower left), built in 1811, ranks 'among the finest early examples of garden architecture in America.' The design, based on the Temple of Venus at Versailles, was probably the work of James Dinsmore, a Jefferson workman on loan from Monticello. Although Madison did not have Jefferson's passion for gardening, he turned the grounds surrounding Montpelier into an English park. The garden's original outlines are still seen (lower right).

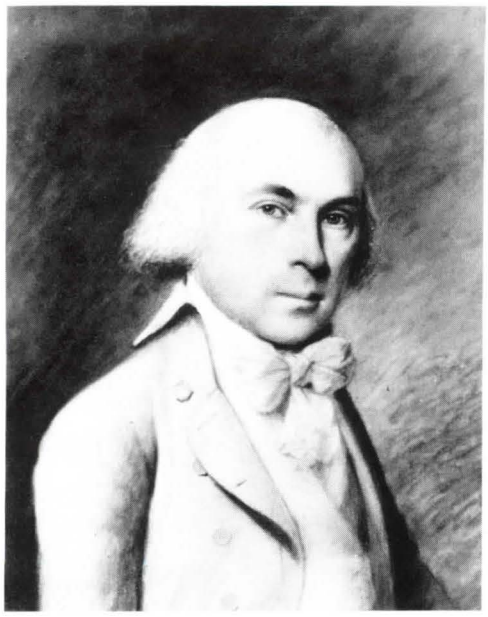
On these pages, part of the first full photographic record of Montpelier's interiors.

cate that Dinsmore was architect for the changes. "Just how many of the designs received Jefferson's approval is not known," says Hunt-Jones, "but it is certain that Madison withdrew from his role as amateur architect and left this phase of Montpelier building to a more experienced team."

Madison lived in the house until his death in 1836, and the estate was sold by Dolley in 1844. In this century, a second story was added on the wings, making the house appear more massive than it did in Madison's day.

"Madison's Montpelier, in all of its 158-foot glory, was not put up in the course of a few years; quite the contrary, the mansion was the product of nearly 57 years of building, remodeling and expansion," Hunt-Jones says. "Just as Jefferson's Monticello is a monument to the Albemarle architect's passion for 'putting up and pulling down,' so Madison's country home changed and grew with his knowledge and his needs."

Although Madison was impeded in his desire for constant improvements by his heavy responsibilities to his country and by his lack of money, he made Montpelier into a home that filled his Dolley with pride. "I wish you had just such a country home as this," she exclaimed to a friend. Montpelier became the meeting place of America's great personages and a cause for contentment in Madison's last days. □



Alterations between 1809 and 1811 included remodeling the drawing room; several rooms in the south end also received new woodwork. Most of the original surviving woodwork is in two connecting rooms on the main floor in the northern end of the present house. Georgian architectural details are still in evidence.

A Hidden Baltimore Landmark With a Past Full of Secrets

It is the country's oldest anatomical theater and has remained in continuous use. By W. Boulton Kelly, AIA, and Ella Whitthorne

Hidden by the campus which it spawned, Davidge Hall sits, a diminutive brick, neoclassical gem. It is the oldest existing anatomical theater in this country, and it is in continuing use. Squeezed and obscured by the larger buildings of the University of Maryland's downtown Baltimore campus, today it seems a modest building, but with its octastyle portico and low-domed roof, it was conceived as a grandiose, symbolic expression to dignify and elevate the medical profession.

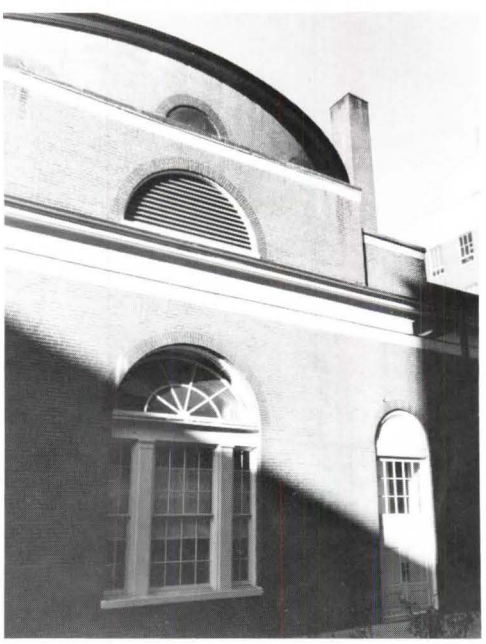
At the same time, this neo-Roman temple contrived to conceal its true identity from the public. For 70 of its 166 years of existence, the building operated in a cloak of secrecy. It was a place of hidden passages, possibly still undiscovered tunnels, masked exits, a clock with eyes but no hands, whisky barrels that contained more than whisky, adjoining graveyards and even a burking murder. The nearby populace was filled with horror at the prospect of the men in white coats; children were warned not to roam the streets at night for fear they would be impressed and dissected alive. Today, 96 years after dissection was legalized, the secret is the building itself.

It was the first building of the College of Medicine and the first building of the University of Maryland (its name changed by subsequent charter) which makes it the fifth oldest medical school in America still extant. Many other landmarks have fallen victim to fires, or to demolition for civic and functional improvement, or to emasculation by adaptive use. Davidge Hall has not only survived, but has been used for essentially the same purpose: to perform scientific research and to teach medical students, and now nurses. It persists, fortunately, the only building of its kind, little changed from its original "chaste form." Its quantitative status alone is enough to give it qualitative value.

A perusal of this building's bones uncovers not just remnants, but a record of two important simultaneous trends in early 19th century America: The art of architecture was emerging from the pure act of building, and the art of medicine was evolving from the practice of healing. Two American professions were emerging and their aspirations met in the formation of Davidge Hall.

The difference in attitude between young America in the 19th century and the approach during the last quarter of the 20th century centers on a fundamental shift of emphasis from so-called material projects to projects of the spirit or those employing human resources. Legislators are addressing themselves to such ideas as "people projects . . . not bricks and mortar." Monumentality is out and vernacular is in.

Not so for the creators and early users of Davidge Hall. They fervently held to the principles of Sir William Chambers, architect to the king, in 1759 when he wrote: "The productions of Architecture are lafting monuments command univerfal attention and record to later pofterity the greatnefs wealth dignity virtues and atchiements of thofe the commemorate."



Davidge Hall is a monumental building, an ideological umbilical cord bridging the power, tradition and scholarship of the ancient world, and it is a statement of independence of the new American world. The use of the amphitheater and the dome reflects the ancient medical world derived from Greece and later Italy. Some of the simplicity of the oldest anatomical theater in the world in Padua unwittingly was captured in this American anatomy hall begun in 1807, a time when Vesalius's theater was undergoing its fourth reconstruction restoration. A more sophisticated culture still used primitive technology, because of geography. Davidge Hall can be considered a poignant example of a provincial American architectural statement.

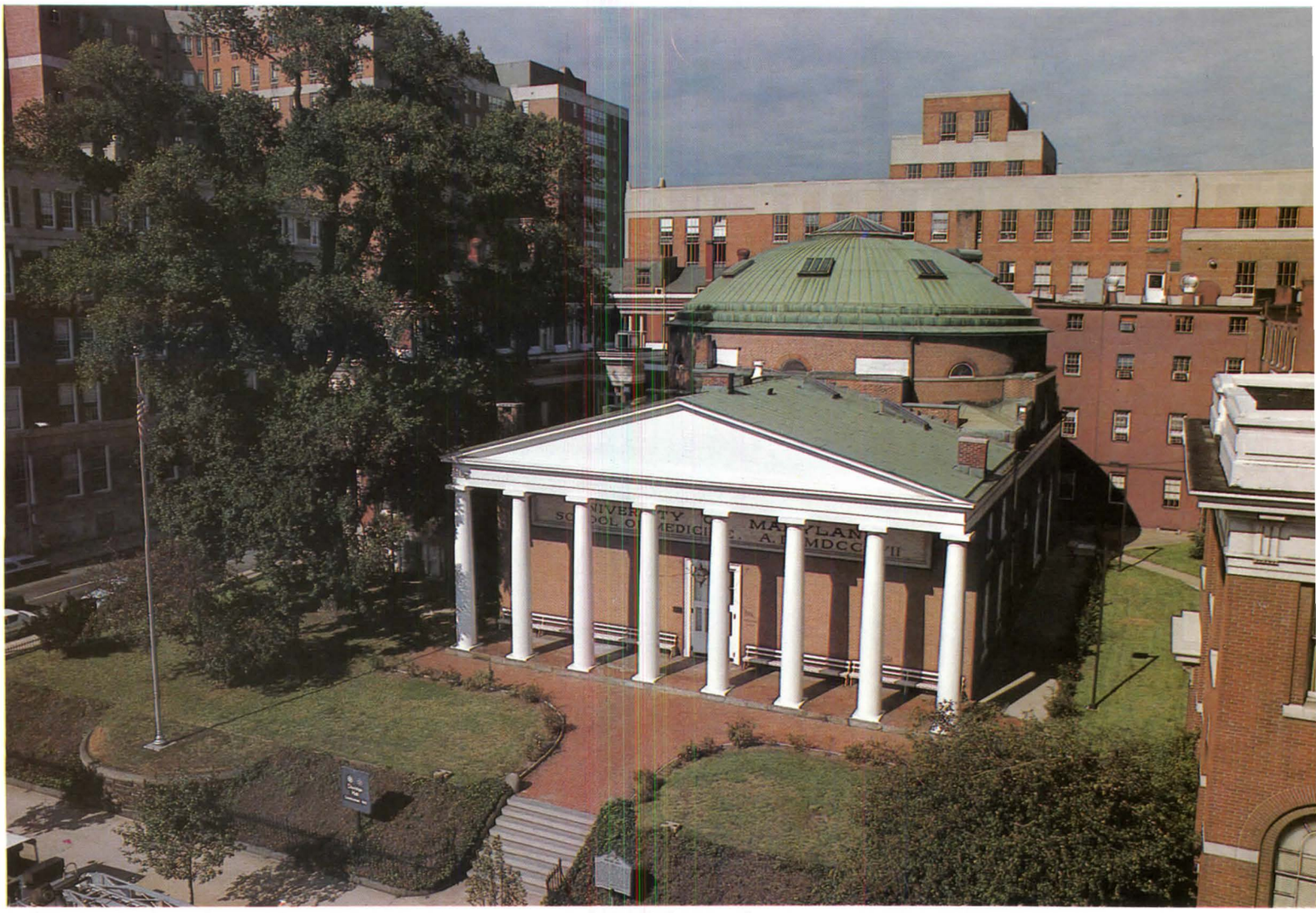
Why would an honored citizen, revolutionary hero, ex-governor of Maryland —John Eager Howard—give land with a vista of a river on which to build a medical school? Why would doctors and legislators courageously pass legislation to allow the building of a medical school, particularly when other higher education attempts had failed and when two previous doctors' laboratories had been burned to the ground by angry mobs who rebelled against dissection? The fact is that the profession at that time was unrewarding and held in low esteem. A medically aspiring son was admonished by his father: "It is a profession for which I have utmost contempt . . . there is no honor to be achieved in it, no reputation to be made . . . to think my son should be going around from house to house with a box of pills in one hand and a squirt in the other . . . is a thought I never supposed I should have to contemplate."

Despite these negative factors and also because of them, there was an earnest desire by men in and out of this lowly profession to shuck medicine from the shells of quackeries, illegitimacy and superstitious mob rule. The yellow fever epidemic of 1798 scared Maryland into establishing a health committee, predecessor of the longest lived health commission in the U.S. In the minds of the state leaders was the continual threat of an unpredictable force killing entire families and villages. The fear, combined with the influence of an avid band of European-educated medical men who believed they *could*, if there were enough trained, qualified physicians, find the cure and prevention of these diseases, helped galvanize the decision of Maryland leaders.

For that reason Robert Cary Long, the

Above right, a Parthenon-inspired portico and Pantheonesque dome. At left, large side window opens under chemical hall, its fanlight serving the hall. Lunettes high on drum facade light anatomical hall.

Ms. Whitthorne is chief of research and **Mr. Kelly** is president of Architectural Conservators Ltd. in Baltimore. This article is drawn from their "Architectural and Historical Sketch of Davidge Hall" and a forthcoming study which will compare Davidge Hall with anatomical theaters of western Europe.

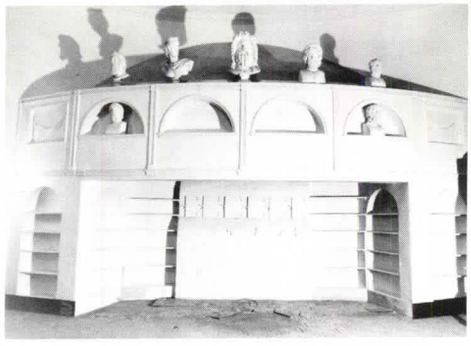


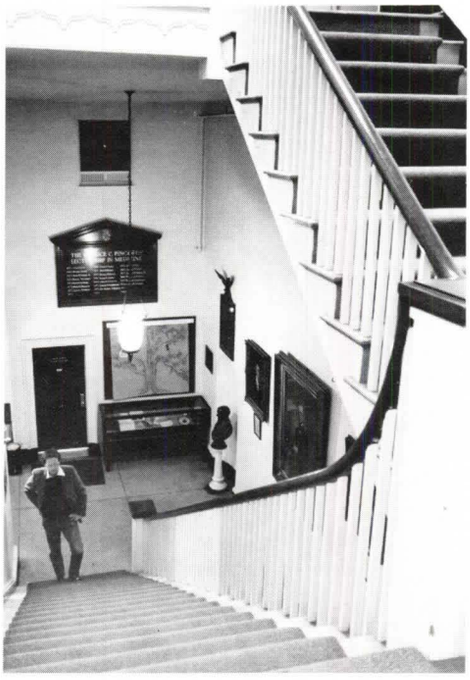
architect, was given the mandate to create a neoclassic monument to medical professional training. The elite aspired to create honor for the profession by dignifying its building. It was to be a new symbol of hope for mankind.

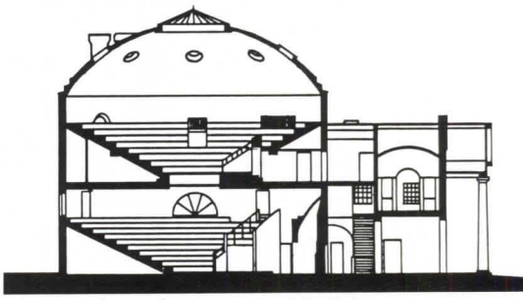
The promotion of the College of Medicine in the press lasted over 20 years. In 1820, when there were modifications and probably completions to the building, the *Daily Advertiser* (Oct. 25, 1820) pictures Davidge Hall: ". . . among the beautiful edifices [which gives us honorable pride in our city] . . . there is none that combines [so much] ornament and utility as the University of Maryland. . . . The site is commanding and the design [is] a sample of Grecian architecture as chaste and pure as any in the country. . . . The lot is nearly 300 feet square . . . surrounded by a high substantial wall [the part fronting on the street will be iron railings on a low coping so it can be distinctly seen from the street]. . . . The main building 64 feet by 90 feet arrests the attention by a colonnade of massive pillars of Grecian Doric supporting a triangular chaste pediment. The frize [their spelling] is yet deficient in its appropriate tryglyphs and motto, and the tympan in its bas relief designs which are . . . omitted for want of time. . . . At the right of the grand entrance is a room handsomely fitted up for . . . [a library for students] . . . on the left is a room of considerable size formerly used as a classroom [but now awaiting the reception of . . . the . . . "magnificent" . . . "modern chemical and philosophical apparatus"]. . . . The walls of this room are green, chastley ornamented . . . displaying medical apparatus and . . . busts which have a fine classical effect. The chemical theater [a semicircular theater which is at the end of the "grand entrance hall" but which now is entered off to the side] so often filled with learning tastes and beauty is too well known to need description . . . but . . . no room for similar purposes in any country surpasses it. The staircase leading to the 2nd floor [off the entrance hall] [has a landing off to the right] leading to a suite of anatomical rooms. [Further up on the left] . . . is the anatomical theater [directly above the chemical theater] the largest classroom in the world . . . admirably arranged . . . so . . . as . . . to accommodate at least 1,500 persons. This vast room has four entrances, is supplied with light from a skylight which crowns a dome, after that of the New Exchange, the most extensive in the country. It is contemplated to add to this excellent building entensive wings." (The brackets contain paraphrased portions. The rest is quoted directly from the article authored by a man calling himself Omega.)

The author calls on Americans to develop their own talents and not to rely on Europeans. He describes what for a time became a very popular adjacent building to Davidge Hall, a museum. Except for painting, flooring, window changes and changes in room partitions, the building is virtually the same as Omega described it, even to the deficiency of the tryglyphs and metopes. A fire did require a new roof of tin, then copper, and with this change came the inevitable, intruding sprinklers. Among Omega's claims about the greatness of Davidge Hall, the auditorium (unless people were a third the width they are today) cannot under any stretch hold 1,500 people. However, there is still something about the dome-capped amphitheater interior of anatomic hall that fills the jaded 20th century man, as it did the 19th century man, with awe.

Notwithstanding their overexaggerations and disregard for inconsistencies, these aspiring leaders of the 19th century, after some 80 years, achieved their purposes. The U.S. has become the world







Arena-shaped anatomical hall (upper theater in section above) at the turn of the century (far left) and today (right). Chemical theater (top photos) is semicircular, with chemical retorts incorporated into the neoclassical south wall. Entrance hall (left) has a clock with no works and a peephole in the center for surveillance from the room beyond.

leader in the art of medicine, and Baltimore, home of Johns Hopkins as well as the University of Maryland medical school, is among the important medical centers.

One of the accepted inconsistencies of the translation of political Greek principles of democracy to the Roman form in early American architecture was propounded by Jefferson. His espousal of Greek principles allowed chronicles of the day to refer to chaste Grecian forms. At the same time, they praised—a Jefferson must—the low Roman dome as being modeled after the Pantheon. To this day, devotees of Davidge Hall persist in a search for exact Greek or Roman prototypes, sometimes in understandable confusion. The proportions of Davidge Hall's octastyle portico in number of columns and in angle and geometry of the pediment are very similiar to the Parthenon, while the segmented hemispheric dome is derived from the Pantheon at Rome. Further, the medical world interprets the building as having a relationship to Aesculapius's temples; others revel in the limitless sense of a hemisphere which expresses the lofty desires and aspirations of the building's initiators.

Jefferson's early interest in Palladio's work using Roman architecture as a model was subsequently rekindled by direct experience with Roman excavations in southern France. The new interest in classic architecture, fortified by new scholarship and archaeologic information, swept all of Europe. Jefferson was the fervent ambassador of these concepts to America.

After returning to Philadelphia from France, Jefferson was recorded as having exercised his influence on members of the Bank Board when London-born architect Benjamin Latrobe was designing the Bank of Pennsylvania in Philadelphia in 1798. This building above all others was to be recognized as the immediate and most complete prototype for Davidge Hall.

By 1812, in America, the quintessence of lofty architectural expression was a Pantheonesque dome. In a 1785 letter to James Madison from Paris, Jefferson wrote: "You see I am an enthusiast on the subject of the arts. But it is an enthusiasm of which I am not ashamed, as its object is to improve the taste of my countrymen, to increase their reputations, to reconcile to them the respect of the world and to procure them its praise."

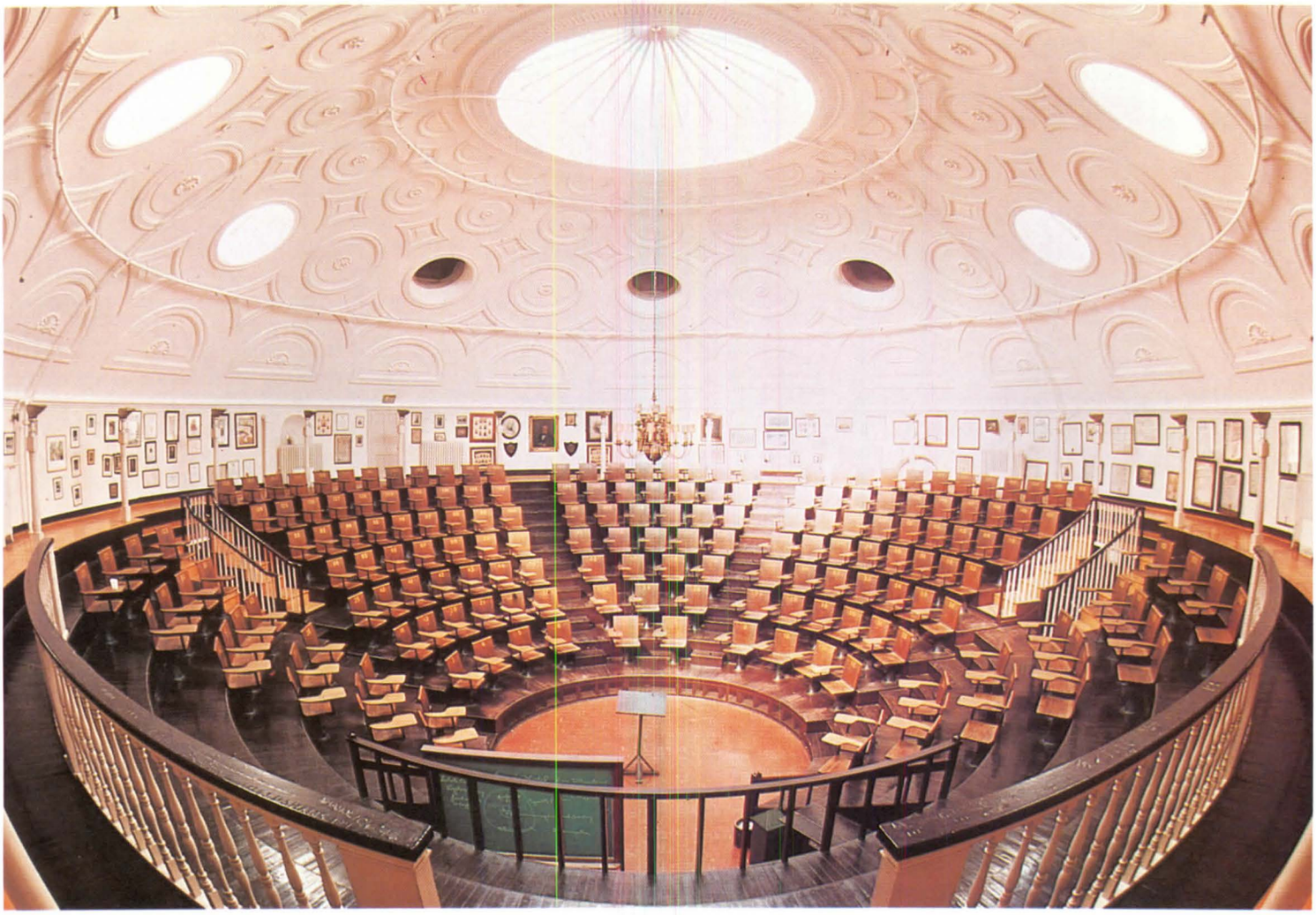
While the shape of the domes may have been changed from hemispherical to elongated (higher profile shapes), the enormous number of domes capping state capitols all over this country bear strong witness to the "Jeffersonian imperative."

Robert Cary Long, a carpenter architect and civic-minded citizen of Baltimore who served on commissions with many of the donors and legislators of Davidge Hall, was given the commission to design it. He read about and observed buildings reflecting the evolving concepts of Jeffersonian-influenced architecture, and he built upon their model. Chosen in 1807 over a more talented, Latrobe-backed architect, Maximilian Godefroy, Long was strongly influenced by Latrobe's cathedral under construction nearby.

Long was a straightforward architect-builder; while he may have borrowed classic garb, he produced a fresh building with the clarity and spaciousness of a true primitive. Though the building lacks the gravity, clarity and precision of proportion that Latrobe or Robert Mills might have given it, there is a fresh experimental quality of the constructor at work.

The most striking aspect of the building is that behind the dignified, quiet facade were two superimposed, circular, 60-foot diameter, wooden amphitheaters, one on top of the other. In addition, he joined two brick masses together, one with three levels (front portion) and the other with four levels (two theaters with podium and top stadia levels), managing to introduce light at each of the four levels while maintaining classical balance in elevation. Actually, one window frame is shared between two floors.

The juxtaposition of a chemical theater



(lower) to an anatomical theater (above) was a model of use borrowed from England and used by Latrobe in Philadelphia (no longer extant). It appears that the chemical retorts (ovens) played an additional role in disposing of bones left over from dissection.

The composition of volumetric elements in the south end of chemical hall represents a truly innovative combination of functional and traditional classic form reminiscent of Jefferson's remarkable ability to assimilate simple forms created by new technologies into an overall, neoclassic ambience.

Anatomical hall itself is a triumph of interior spatial excitement, simple and provincial, yet elevating and graceful. The ambience created then, here, still moves the people who see and use it. One hundred years of watchers, mostly students, had riveted their attention with awe and a touch of horror or wonder on the human dissection being performed in their midst.

The dome, spanning 60 feet, is punctuated by light through a center oculus and eight additional circular skylights ringed around the dome surface. The dome itself is constructed of twin radial wooden ribs, each made of short curved four-foot segments, alternately joined, spaced about two feet apart on centers around the circular wood plate. This structural method was thought to be adopted from de l'Ormes' principles of wood dome construction. One of three such wood domes constructed in the early 19th century still extant in Baltimore, it is believed to be America's oldest wood dome punctured by peripheral skylights. This was a daring feat by a fledgling architect, considering the disastrous attempt by Latrobe to perforate the dome of the U.S. House of Representatives with skylights. Apparently when the British burned the Capitol in the War of 1812, they rectified an architectural problem of monumental proportions. (Skylight technology is not to be confused with the placement of vertical windows surrounding either a lantern tower atop or the drum at the base of a dome.)

The plan, a circle (brick drum) inscribed within a square (brick cube), leaves triangular spaces given over to some of the secretive events—circular stairs, passageways, storage areas for cadavers and other anatomical appurtenances. In section, one sees the "found" space created in the triangular vertical spaces under the theater seating which was well used by the janitor (the broker for dissection subjects) where card games ensued and whisky left over from cadaver storage was sold to the students.

It was in this building that the Marquis de Lafayette, making his historic return trip to America in 1824, was given an honorary degree from the University of Maryland. Dr. Eugene Cordell, the building's official centennial historian, reflected the feelings of hundreds of alumni and renowned medical men when he said in 1907 that Davidge Hall was "the finest structure devoted to medical education in the New World."

Today, doctors and loyal alumni follow in the long tradition of stewardship by continuing to monitor Davidge Hall's use and maintain its fabric. For example, they have attained placement of the building on the National Register of Historic Places. However, they have never fully understood that the impact of preserving this building could reach beyond the medical community, that there is a potential for renewal outside the walls of Davidge Hall itself.

The doctors have chosen to forego solicitation of public developmental funds, which, combined with their own fund-raising efforts, could have tripled the import of a restored Davidge Hall on the surrounding buildings. A new faculty club, a public eatery, a museum and greatly needed enlarged offices for the medical alumni could have created a setting with appropriate compatability of use and treatment that would bring activity and continued life to this little building for many years to come. □

An Architectural Family Tree That Traces the Paths to Fame

Architecture's leaders are 'loners, men of solitary genius and legend, but their names interconnect.' By Roxanne Williamson

The architectural profession is echoing America's recent antielite, antihero mood swing. Many positive changes are occurring in the process of creating new societal values, and the rational appraisal of previously sacrosanct famous architects is just one of these responses. Former idols are being taken from their pedestals as revisionist architectural critics attack earlier heroes with the anger of disenchanted teenagers. A careful look at the processes involved in the creation of architectural heroes is needed—and there has been a consistent pattern in American architectural history. A formula for fame developed that is still operative today.

Famous architects have acquired something of the aura of martyrdom; they are loners, men of solitary genius and legend. But their names interconnect, and they work at their fame.

There is a significant point of contact that repeatedly occurs in the development of the architect who seeks and finds acclaim. Usually, this happens during an apprenticeship, but a strong student-teacher bond occasionally produces the same result. In some instances, the relationship is as informal as a friendship. Such a connection generally occurs when the older architect is designing his first significant building and not at a later stage when he is fully established.

Sometimes more than one apprentice responds to the contact at this given moment. In addition, a cross-pollination often occurs. Not only is the younger person stimulated in the pursuit of his own fame, but the older one responds as well, with a surer and more dramatic commitment that marks a significant step in his own career. Very few architects became famous without this double connection—first with someone just emerging into success and second with a younger person who eventually reaches the same goal. This interconnection has been so regular in American architectural history that it can be charted; the number of prominent architects on the chart is stunning. The famous in architecture have formed dynasties.

The intensity of interaction between the younger and the older architect differs with each pairing. Some proclaim a lifelong debt to their mentor, as Louis Kahn did to Paul Cret. But Kahn also should have stressed the role George Howe played in bringing him to the fertile soil of Yale in the '50s, where he would finally secure his first major commission.

Other architects hardly seem to remember the meeting that was ultimately significant. Louis Skidmore's debt to Raymond Hood is not even mentioned in books about Skidmore, Owings & Merrill, and reference to it is found in only one sentence in a biography of Hood. Skidmore was on a Rotch traveling fellowship and "one of Hood's boys," who were hurriedly collected in Paris to solve the problem of a master plan for the Century of Progress exhibition that would take place in Chicago in 1933. From this contact Skidmore became assistant general manager of the World's Fair design, found employment when most other young architects were without work during the Depression, found his partner, J. O. Merrill, and gained enough valuable experience and confidence to create a firm that could gain world renown.

There are a few weak links in the dynastic lineage of 130 architects (*see* diagram across page). A notable one is the apprenticeship of Richard Neutra with John A. Holabird and John Wellborn Root Jr. But Neutra did have a dynamic relationship with his friend Rudolf M. Schindler, and through him with Louis Sullivan and Frank Lloyd Wright. In the majority of cases, the charted connections are significant.

The line connecting Thomas Jefferson and Benjamin Latrobe, Robert Mills, William Strickland and Thomas U. Walter is strong. Although Jefferson was largely self-trained, he is a part of the architectural lineage. Indeed, it is believed that he may have had contact with Richard Taliaferro, the gentleman/architect to whom Westover and Carter's Grove in Virginia are sometimes attributed. Jefferson did have significant contact with a friend he made in France who seems to have had a strong influence on his architecture—Charles-Louis Clerisseau.

Little is known of Clerisseau's buildings. It is his thousands of romantic drawings and the *Antiquities de Nîmes* that have carried his name down to the present. But here at the beginning of the list of interconnected architects is found the kind of pregnant relationship that becomes a common factor in the mechanics of fame in architecture. Clerisseau not only influenced but directly aided Jefferson in his choice of the temple at Nîmes as a model for the Virginia capitol.

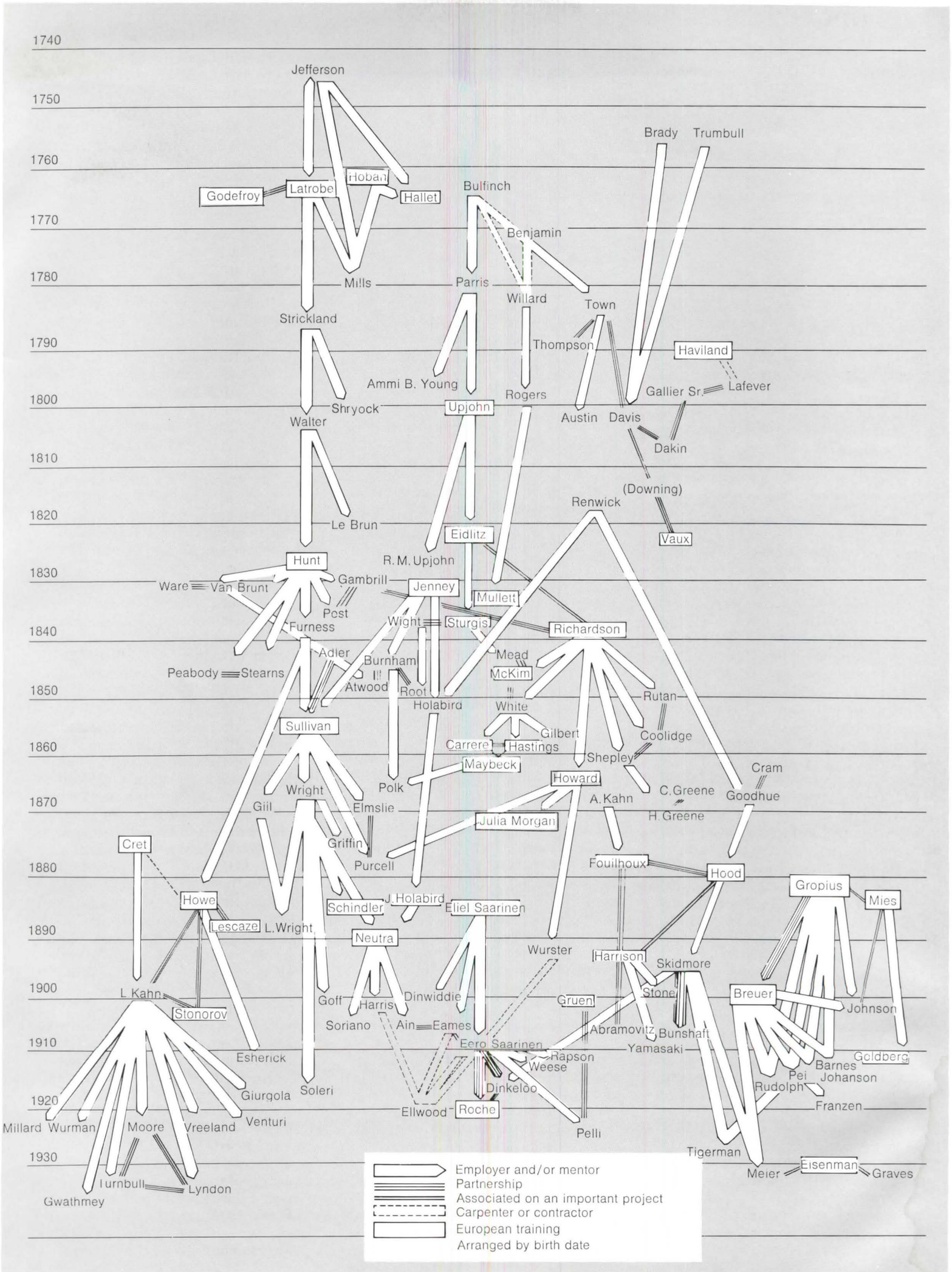
One of the best-known architects in early America was Latrobe, who apprenticed in London under Samuel Pepys Cockerell. After his arrival in the U.S. in 1796, through social maneuvering Latrobe quickly came to the attention of Washington, and by 1802 was under Jefferson's patronage. That relationship was mutually beneficial. The dramatic centerpiece at Jefferson's University of Virginia is said to have been the result of Latrobe's suggestion. His first major commission, however, came because of his family connection with the social leaders of Philadelphia, not through Jefferson. His fame made him testy, and he eventually quarreled not only with his French-trained partner Maximilian Godefroy, but also with his own pupils, Mills and Strickland, after they began to get commissions.

Mills was with Latrobe for five years (1804-09), after a short time with Irish-trained James Hoban and a period as assistant to Jefferson at Monticello. Strickland worked for Latrobe on and off from 1801 to 1805. In winning the competition for the Second Bank of Philadelphia in 1818, Strickland challenged his former master Latrobe and won his own fame. His assistant at this point was Gideon Shryock, to be known principally for the capitol at Frankfort, Ky.

Violent competition and quarrels do not seem to have been unusual in this connected line. Mills came under attack by Walter by the time he designed the Treasury building (1836-42). Walter had been a pupil of Strickland at the Franklin Institute and was also his apprentice from 1828 to 1830. Walter's own first dramatic work would be a Greek temple facade applied to Andalusia, the home of his client for the more important Girard College. One of his assistants there was Nicholas Le Brun, well known to his contemporaries but not in the histories. Richard Morris Hunt was to be noted, however, and he was with Walter at the beginning of the latter's most publicized venture—the dome of the U.S. Capitol (1855-65). Thus, a major dynasty is formed.

A second line of succession comes out

Ms. Williamson is an assistant professor, school of architecture, University of Texas at Austin.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Gropius
Howe
Schindler
J. Holabird
Eliel Saarinen
Mies
Lescaze
L. Wright
Neutra
Wurster
Harrison
Skidmore
L. Kahn
Goff
Harris
Dinwiddie
Gruen
Stone
Breuer
Stonorov
Soriano
Ain
Eames
Abramovitz
Bunshaft
Johnson
Eero Saarinen
Yamasaki
Esherick
Rapson
Goldberg
Weese
Barnes
Pei
Johanson
Rudolph
Giurgola
Soleri
Dinkeloo
Franzen
Ellwood
Roche
Millard
Wurman
Moore
Vreeland
Venturi
Pelli
Tigerman
Meier
Eisenman
Graves
Turnbull
Lyndon
Gwathmey
Employer and/or mentor
Partnership
Associated on an important project
Carpenter or contractor
European training
Arranged by birth date

of Charles Bulfinch. He was self-taught but, like Jefferson, superbly educated. Politically, he was not one of Jefferson's men, and it was James Madison who moved him into national prominence. Both Asher Benjamin and Solomon Willard worked on Bulfinch buildings and were under his influence, but their intimate friend Alexander Parris was actually his assistant and executive at the building of the Massachusetts General Hospital. Parris himself is best known for the Sears House and Quincy Market in Boston.

Ammi B. Young should be better known for his sure sense of proportion and detail. Said to be a pupil of Parris, he was the designer of the magnificent Boston Custom House (1837-47) which now, unfortunately, bears a later addition on its shoulders. English-born Richard Upjohn worked in Parris' office from 1834 to 1839 while working on Gothic revival commissions on his own. Upjohn catapulted to fame with Trinity Church in New York City (1846). One of his assistants on the building was the recently arrived Leopold Eidlitz, who would himself design 30 churches, as well as numerous houses and commercial buildings. And Eidlitz would continue the chain.

In the late 19th century, a 'spider web of contacts' from Hunt, Richardson and Jenney.

A branch was formed by Isaiah Rogers, who would be known primarily for hotels. His pupil, draftsman and eventual partner, A. B. Mullet, would design the State, War and Navy building (1871) next to the White House.

Still another branch came from the office of Asher Benjamin, who ran a school on the side, where his friend Solomon Willard probably studied. Ithiel Town, however, was a salaried employee and important in the execution of Benjamin's commission for the Center Church in New Haven (1812-14). Town's own assistant on the project was Henry Austin, a designer who would be best known for his Egyptian gates at the Grove Street cemetery (1848) in the same city.

From 1827 to 1828, Town was in partnership with Martin Euclid Thompson, not well known today, although his New York City branch of the Bank of the United States (1824) was a splendid classic design. His apprentice, Robert Cary Long Jr., became a prominent Baltimore architect. Town's much more famous partner was, of course, Alexander Jackson Davis, who was 19 years younger than Town. Town & Davis gained national prominence, but their effect on the lineage of famous architects was sideways through partnership with James H. Dakin and through Davis' connection as illustrator for Downing.

By the 1830s, the system had become so closed that it is a surprise to find James Renwick Jr. rising to prominence without apparent connection. He fathered a line of prominent architects. Two very different men, William Holabird and Bertram Grosvenor Goodhue, apprenticed with him, and they, in turn, contributed a link to Neutra and Hood.

In the second half of the 19th century, a spider web of contacts begins to develop. Hunt, Richardson and William Le Baron Jenney were catalytic in the creation of well-known architects. It is at this period that almost no one is included in surveys today unless he was in the set, while at the same time there were beginning to be more architects in America. In the years immediately after the Revolution, there were several good designers who did not form dynasties, but they are known because there were so few practicing architects of any kind at that time. None was as successful in practice or in the establishment of reputations as those on the chart. Today, they are known either by a single building or as a local architect.

The same thing holds true for a few designers in the later periods who are known only regionally or for one building, and they are not among those on the chart. For example, in the first half of this century, one-building reputations would include Ernest Flagg and the Singer Building (New York City, 1906-08), Dwight Perkins and the Carl Schurz High School (Chicago, 1910), Whitney Warren and Grand Central Station (New York City, 1903-13), Henry Bacon and the Lincoln Memorial (Washington, D.C., 1914) and John Russell Pope and the National Gallery of Art (Washington, D.C., 1940).

American architects born in the 70 years between 1820 and 1890, whose names are well known today, were all in direct contact with at least one another. At this point, the chart almost explains itself, even though it is at its most complicated. It forms a close and closed diagram. Over and over, the period of the nearly essential contact occurs at the point of take-off for the older man.

The best-known apprenticeships are well documented. Charles McKim and Stanford White apprenticed with Richardson during the design of his first building to gain national attention, Trinity Church in Boston (1872-77). William R. Mead would come from apprenticeship with Russell Sturgis to join them as McKim, Mead & White. This firm then produced Cass Gilbert and both John M. Carrère and Thomas Hastings who, as partners, employed their classmate Bernard Maybeck. Maybeck went on to practice in California, but also to teach the first architectural course in that state. Richardson's employees, George F. Shepley, Charles H. Rutan and Charles A. Coolidge, continued his practice after his untimely death, and Shepley, Rutan & Coolidge had Henry Greene, the younger of California's famous Greene brothers, as apprentice.

Hunt took pupils into the atelier he established in the French manner, and several partnerships developed out of this studio, including Ware & Van Brunt, Peabody & Stearns and Post & Gambrill. Robert Ware left his own sort of dynasty by founding first the Massachusetts Institute of Technology school of architecture and then one at Columbia University. But Frank Furness was Hunt's most significant apprentice in terms of the continuity of famous architects. Attention first focused on him because he was cited by Louis Sullivan as a mentor.

Sullivan benefitted from three important alliances. After a year with Furness at the extraordinary age of 16 and a period at the Ecole des Beaux-Arts, he moved to Chicago to the office of William Le Baron Jenney. Jenney's office also produced both Daniel H. Burnham and William Holabird. Burnham's partner, John W. Root, considered little-known Peter B. Wight his principal mentor. Wight joined John H. Sturgis in partnership for a brief time after completion of the multihued National Academy of Design building in New York City (1862), his first major work. By the time he was a principal in the firm of Carter, Drake & Wight, and Root was his apprentice, he had turned his attention to fireproofing.

'From Sullivan came Wright,' and from Wright a lengthy lineage of descendents.

Burnham had to find another partner to complete the Reliance Building (1890) when Root died that year at the age of 40. He turned to Charles B. Atwood, an apprentice of Ware & Van Brunt. Atwood died within a few years, but Burnham went on to build a large and prosperous firm. One of Burnham's apprentices gets notice in the textbooks—Willis Polk. His glass-walled Hallidie Building in San Francisco (1918) is nationally acclaimed.

From Sullivan came Wright. Again, they connected in Sullivan's first abundance. Irving Gill also worked for Sullivan before going on to California, where his handling of simple planes, masses and openings in that brilliant sunshine would mark him as a forerunner of the International Style. George Elmslie worked for Sullivan for 21 years and has recently

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The Movement from Modernism: Cause for Concern or Celebration?

One of the many questions warmly, and at times amusingly, debated at a free-flowing AIA conference on design. By Jane Rippeteau

AIA recently got together about 250 people, including seven premier architectural minds, to talk design. After a day or so, the owner of one of those minds took stock: "People have expressed diametrically opposite points of view," noted sociologist Robert Gutman, "and they've all been applauded to the same degree."

Indeed, at the conference's close, possibly the only agreement would be that:

- Architecture, as it shakes off modernism and the International Style, is slouching toward a new architectural order through a chaos of styles that many find alarming and others delight in, and that
- Design in architecture, as that pluralism of styles unfolds, is swinging toward humanism; or is growing more and more victimized by a technocratic society; or, is managing to reconcile the two.

The intent of the two-day meeting in Washington, D.C., was not to address the nitty-gritty, the how-to of design, or even how to cope with a recession that keeps "the wolves at our door," as one Canton, Ohio, architect complained. Nor did it seek to address at length any specific, current challenges, such as design for energy conservation, design for the handicapped and elderly, or design to minimize seismic or fire risk. It focused, rather, both theoretically and with examples of particular architects' work, on how the profession will replace restrictive and largely discredited tenets of modernism. To some, there's cause to celebrate. To others, architects are wallowing in an officious malaise of little service to human needs.

In addition to Gutman, who is on the faculties of Rutgers and Princeton universities, the participants were: George Nelson, FAIA, moderator of the conference; William N. Morgan, FAIA, chairman; Joseph Esherick, FAIA; British architect Norman Foster; Japanese architect Arata Isozaki; Philip Johnson, FAIA, and writer William Marlin.

Opening the conference, Nelson noted several reasons why, to him, the state of design is no cause for joy.

Design is now a process involving a number of nondesign considerations, he said. In the absence of traditional patrons, it can be argued that who designs is no longer just an individual or even a firm, but a group to include, for instance, regulatory agencies, zoning boards, financiers, the energy-conscious. "Is it Skidmore (Skidmore, Owings & Merrill) or equal" who designs? he asked. "Or is it the people who misconceive the local zoning ordinances, or . . . the guy with pencil who, when the architect gets to the 47th floor and is about to pass 50 to get this exquisite proportion he's dreaming of, says, 'Stop! If we go past 48 floors, we won't be able to mortgage out. . . .' "

The money men and others aren't the only trouble, for, to Nelson, the rise of engineering beginning at the turn of the century led to the "disintegration of architecture in the traditional . . . sense that architecture contains deep meanings of great importance to all of us." That's so, he said, because engineering in buildings celebrates technology.

Paris' Centre Pompidou, the glass and steel culture home that's encased in huge pipes, scaffolding and tubes (*see* Aug. '77, p. 22), is, to Nelson, a sad example. Pompidou celebrates technology rather than art or other notable human activity as major buildings once did. "It wasn't celebrating battles or victories . . . or a system of beliefs," Nelson remarked, "it was celebrating a lot of plumbers and other mechanics . . . it was celebrating heating, plumbing and ventilation."

At least, to Nelson, it's architecture because it does celebrate something. "Architecture is a celebration," he said, and as such, buildings should be decorated to reflect what a society finds important. Basreliefs, sculptures, stained glass through the ages did that. But the glass-walled skyscrapers of today, lacking decoration, celebrate, if anything, technology. "We have nothing else to celebrate," he said. "We're a society that has almost nothing to say about itself."

What's worse, our technological society's education system is "almost universally anti-intellectual," he said. We're taught never to think before we act because we're restless "to get to the bottom line, to the mortgaging out, to the payoff, whatever it is we've been brought up to lust for."

Not so for Philip Johnson (photo right).

To Johnson, architecture's ferment is a source of creativity promising a better future and is, personally, an experience of "just pure exuberance . . . very much like sex and eating."

Having helped launch the International Style, he now faults its rigidity as unimaginative, and delights in the current plurality of design approaches: "We can now pick and choose . . . anything from our vast panoply of history" any style that lends itself most appropriately to the need.

To him, Centre Pompidou is a great success as evidenced by "the millions and millions of French people who struggle to get through [its] doors," to gather there and to "ride up and down the escalators," which, hung outside the facade, provide in-motion views of activity all around. "It's a broad, clear statement," he said, something new that, if nothing else, works as a people place.

To Johnson, Pompidou is a product of a valuable ferment of design diversity.

The main movements, as he outlines them, include direct revivalists; sculpturists, who viewing architecture as fun and impertinent, give buildings particular shapes, such as his own slant-topped Pennzoil Place; neopopular, the largest movement, which, as does Robert Venturi, capitalizes on pop art themes; and the hermetic architects who, more mythical and obscure, approach design almost in a surrealistic way. In this group he includes Peter Eisenman, designer among other things of a house in which layout doesn't necessarily conform to user needs. A dining table, for instance, is located in a closet-sized space between columns and is almost inaccessible. This group, Johnson said, is the most likely to come up with imaginative solutions of the greatest future influence.

"We have at last freed ourselves from the modern movement," he said. "We're in a dark room . . . just trying to create spaces, to create shapes."

And history is back. History, with its plethora of styles and options, means we won't, for instance, take down "those beautiful 19th century buildings to put up an International Style cigar box. . . . In some cases the International Style will work, in others it won't." In its strictness, he said, the International Style forgot the value of history.

As architects, designers have to escape societal constraints such as functionalism, the "notion that the simplest solution is the best, or that money has something to do with architecture . . . or that architecture has something to do with social progress," Johnson said.

To Johnson, the key now is to escape these controls that interfere with the art of designing buildings, and to stop resisting the plurality that's replacing modernism with design freedom.

Johnson concluded: "Let the engineers put their silly glass walls up if the public will stand for it. . . . I don't think they will. I think we stand on the threshold of the art of architecture."

'I don't care what strings I have to pull. I'll work with anybody at his game.'

What the Americans found problematical, especially the polarization of art and technology, Britisher Norman Foster appears simply to capitalize on.

Foster opened his London-based firm, Foster Associates, in 1966. He has developed an international reputation and, he said, clients now are coming to him.

In a slide presentation detailing the development of several projects, he showed that, to him, designing isn't merely the drawing, it's a "means of integrating and resolving conflicts." Countering several of his colleagues, he said that "the beautiful things department can be and should be reconciled with moving through the maze of cost, time and quality control."

His design process, he said, includes researching the design problem to find the best solution, and changing the client's mind if it's not what was specified; getting all skills in at the start so design integration possibilities are known; selecting the best technology—high or low—suitable to the situation, and steering through the tangle of governmental permits and approvals.

By involving himself in all these non-design functions, Foster said, he can better control the design solution: "I don't give a damn what strings I have to pull. . . . I'll work with anybody at his game."

Far from disdaining technological advances, Foster goes abroad, particularly to the U.S., in search of them. For a glass wall system, he went to an American glass manufacturer in Indiana. He adopted his systems designs from those developed in the U.S. largely by Ezra Ehrenkrantz, such as the school construction system development (SCSD). In 1965, under SCSD, the same set of components was used for the construction of 13 elementary and high schools in California. The flexibility of SCSD, such as movable partitions to alter spatial arrangement for changing uses, proved useful to Foster on several projects, he said.

In 1970, for a small combination advance office, communications, computer center for IBM in England, he used integrated design and produced, he said, "the cheapest computer building IBM has ever built." The award-winning project allows for changeable heights and spatial arrangements, as uses evolve, "under the same umbrella."

His acclaimed 1975 Willis, Faber & Dumas office in Ipswich can be considered a multistory version of the IBM building, he said. The project was designed for the maximum use of prefabricated elements—all but the columns and floors—with integrated parts. His office, for instance, designed a new lighting system at the same time as the suspended ceiling. The contractor, then, was selected solely for his management expertise; all the actual construction work was done by specialist subcontractors.

The attention this glass-wrapped building has received underlines a tenet of Foster's approach to architecture: designing for users.

"It seemed to us," he said, "that most office buildings are designed for the visitor," with the best materials and design attention devoted to visitor areas. "We thought, let's reverse that" and make the building most pleasant for its users. Hence, the design called for carpet in the offices, special attention to bathrooms, a roof-top park and, notably, a central elevator well that rises up through the building's interior levels. The atrium-like effect permits people to look up and down several levels. For the curious, workings of the escalators were left exposed. "It puts people into the action," he said, "and that's what it's all about . . . people."

Describing a project for Norwegian shipper Fred Olson at the Port of London —in which he proposed relocating an isolated dockworkers' canteen and combining it with a new passenger arrival center, a facility for mentally and physically handicapped children, and a visual arts center, Foster showed that his empha-

Foster Associates' glass-walled head office for the insurance brokerage firm of Willis, Faber & Dumas, Ltd., in Ipswich, England. At left, aluminum ceiling channels.

sis is on designing for the user, and with technology, not against it.

Of technology, he said, much is available to the building industry that simply isn't being used. And in the current soul-searching among design professionals, he said, "We're in danger of missing the appropriate technology."

For sociologist Robert Gutman, the Norman Fosters, who seemingly bend technology to serve art, meeting user needs at the same time, are rare for a reason.

In perhaps the conference's most analytical view of architecture today, Gutman said that changing social pressures—which stem from the struggle between a humanistic and a technocratic culture—are driving architecture to its art-versus-technology polarization so that "we're in a situation where design is established as a counter to serving the user and client." As a result, he said, design solutions tend to run to extremes of either artistic freedom or slavery to user needs, which today includes the "preeminence" of cost efficiency. At one extreme, he cited the Eisenman house as "designed without regard for user needs," but on the other extreme cautioned: "Architects' idea that their primary responsibility is to respond to user needs . . . is a problem of your profession."

Architects are grappling with the problem of whether architecture is an art or service profession, and how the two can be merged into one, Gutman said. "One reason we have this pluralism" might be "because there is this sense there is no one answer anymore."

To illustrate, Gutman cited unemployment figures among professionals that placed architects at a midpoint, with what he called more secure professions such as law, medicine and civil engineering having lower unemployment, and less secure, such as acting, painting, sculpting, showing higher unemployment. In the middle, "both secure and insecure," architecture, he said, has had to adapt to survive. This has "given birth to new branches within architecture" to include cost estimating, construction management and engineering, so that "now the architect can claim competence in all those other areas." He cited more figures showing that the number of architectural firms decreased in the 10-year period 1965 to 1975, while the number of architect/engineer firms in the same period rose.

The "response of the profession" to a technocratic society "has been rational and based on survival." The cost, he said, is that this makes it "impossible for humanistically oriented architecture to escape. . . . Given the way the building process operates today, architecture is subject to tremendous pressure to conform to the wishes of the owner and user."

Buildings fall victim to criticism of whether they serve the users, Gutman said, with their value as enduring pieces of architecture ignored. Right or wrong, "buildings are judged by their performance in their time and by their user, not in the actual historical impact they may in fact hold," he said.

The challenge to architecture now is to reconcile the humanistic elements of architecture with the demands of technocratic society, Gutman said. "Architects need to get a hold on what they consider good design." To him, postmodernism and the current confusion of styles is a welcome response to the dilemma.

Not so cheerful was Joseph Esherick, principal in the firm Esherick, Homsey, Dodge & Davis and chairman of the architecture faculty at UCLA-Berkeley.

Noting from the start that he was in a "sour frame of mind," Esherick faulted architects as elitists who talk to themselves and design for themselves, leaving society as a victim of their thoughtless and self-centered authority. The current pluralism may be entertaining among architects, he said, but meanwhile it's not solving anything; it's not meeting real needs of a changing society. "This conference . . . is symptomatic of an uneasy feeling that we may not be on the right track and that the present track may not be the right one," he said.

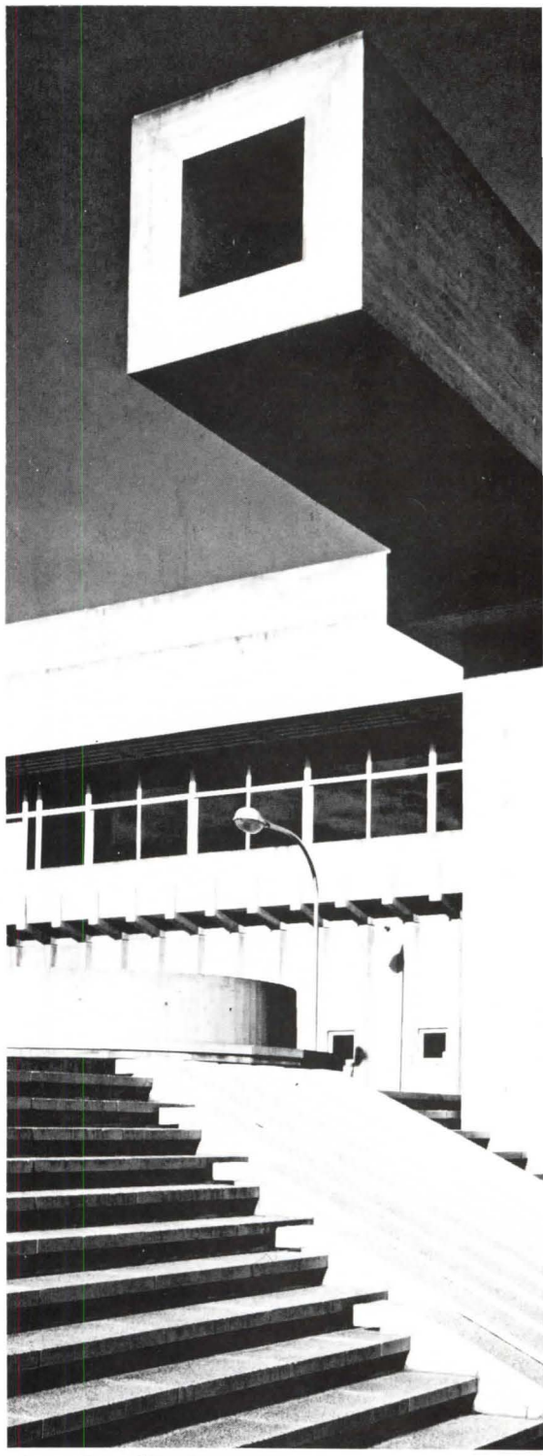
Others at the conference warned against the demands of a cost-conscious, efficiency-minded, technocratic society. Esherick insisted that, indeed, it is an architect's job to serve the building needs of a society in the best way possible.

But instead of searching out society's needs and designing solutions, architects turn inward, toying with new design trends which he called "merely institutionalized phenomena that [are] only slightly responsive to real, outside forces. [We're] just talking to ourselves [rather] than to a larger constituency. Why do we turn inward? . . . We seem unable to face a much larger reality" outside, such as social and economic issues.

Architecture fails as a leader of the building industry, he says. Evidence is the violence such as graffiti, that a "disenchanted public" visits upon buildings. The public is antagonistic, he says, because buildings represent an "arbitrary authority" imposed by design professionals who allow the public little choice in what it's to have.

It's "not a game to be solved by some self-appointed elite," he said. It should be "a joint effort to create a better life."

Proferring a point of view that quickly became a target of criticism, Esherick asserted that architects in their vanity are failing even to try "to solve real problems for real people in a real world." Of architects, he said, "I wish we could see the world more clearly through users' eyes . . . and less through our own set of special filters."



Arata Isozaki's Oita Prefectural Library (1964-66) in Oita City, Japan, the architect's native city.

In a two-part slide presentation, Japanese architect Arata Isozaki discussed architecture in Japan and his own work.

To illustrate what he called "drastic changes in the last 10 years" in Japan, Isozaki juxtaposed color, picture-postcard views of Japan with black-and-white scenes of modern Japan not depicted in the postcards.

A house close by a lake nestled in mountains contrasted, for instance, with a

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In Memory Of Leroy M. Campbell, AIA

By Robert J. Nash, FAIA

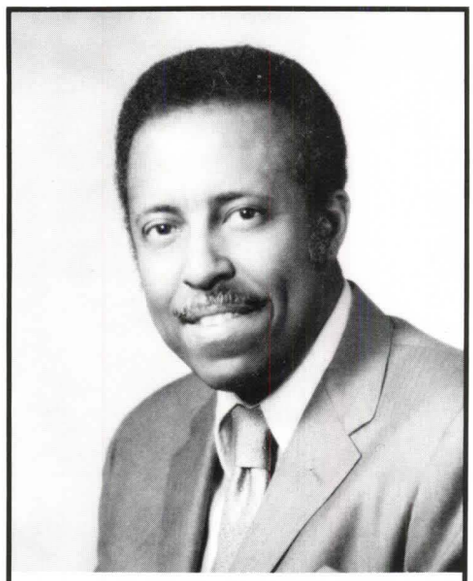
Leroy Campbell was a man who chose to make his contributions to this world via the avenues of architecture. I do not know when he reached this decision, but from the moment he was admitted to the school of architecture at Howard University, he never wavered from the path. He set and achieved goals that made him the envy of those who surrounded him, yet his warmth and compassion for his fellow man would only allow one to love him.

Leroy proudly accepted the challenges he faced as a black man. It was almost impossible in the '50s to be an unknown minority businessman and professional and to get over the big hurdles. In fact, it took years to get over some of them, but each one brought more stature and experience to Leroy, and he became one of the giants in the profession where hurdling became a professional hobby. He did it well and gracefully.

Leroy was born on July 5, 1927, in New York City as the only child of Roma Miller Campbell. Those of us close to Leroy know his mother to be a beautiful person with all the warm qualities of a mother. Leroy grew up in New York and attended Rock Castle High School in Virginia. In 1946, he enrolled in the school of architecture at Howard University and received his degree with the class of '51. A year later, he married June Peters.

After graduation, Leroy had a series of jobs with local firms in the Washington, D.C., area. One of those jobs was with Hilliard Robinson, FAIA, where he met John D. Sulton, AIA, his soon-to-be partner. During 1964, they made the big move, which was the beginning of the very successful firm of Sulton Campbell & Associates Chartered, located on Georgia Ave. N.W. in Washington. (It is interesting to note that Georgia Ave. has more black architects' offices than any other street in the world.)

During the 13 years Leroy practiced, he consistently served as an instrument of change. Refusing to be restricted by small black commissions, he constantly sought a better piece of the action. Not long after his practice began, the riots of '68 wiped away major sections of the city. His firm became extremely active in the restoration effort and has been responsible for some of the major contributions as a result.



Leroy Miller Campbell, 1927-1977

It was the confrontations of the '60s that brought this nation to the realization that the old ways were counterproductive. So, when Whitney Young and others were charging blacks to remain silent, Leroy's move away from the establishment at first appeared to be a retreat by some. Later it served as the major impetus which was to shape the lives of many black professionals who would enter the field of architecture. In this light, the National Organization of Minority Architects was formed. As a charter member of NOMA, Leroy's vision helped to assemble this organization, which continues to be responsible for equal recognition, coexistence and now one of the accepted forms of practice, the black/white joint venture.

His firm has been a pioneer, probably more than any other, in the black/white venture. It presented a difficult position at first, forcing those involved to accept a portion of a commission less than their capability because of their role as a minority firm. But the fighting spirit of Leroy and his associate battled and negotiated for a stronger position, and could not be denied. Several successful projects exist today as the byproduct of this committed union.

Leroy Campbell was registered and practiced in Washington, D.C., Maryland, Virginia, Pennsylvania and his native state of New York. His experience was extremely diverse, complemented by several areas of major interest and accomplishment. Most of his work was in large-scale housing developments, institutional architecture and transportation projects.

Leroy was a member of the board of directors for the Metropolitan Washington Planning and Housing Association and the Washington Planning Workshop (CDC); he was a member of AIA's housing committee and chairman of the resolutions committee; he served on the board of the AIA Foundation, and was a member of the commission on the school of architecture and planning for Howard University, and a lecturer at the university; he was chapter vice president of Alpha Phi Alpha Fraternity. Professionally, he belonged to AIA, the National Technical Association, the D.C. Council of Black Architects and was president and a charter member of NOMA.

Leroy Campbell died on Aug. 28, 1977 at the age of 50, after a brief illness. He leaves a tremendous void. He was a winner, a leader and a team player. No tribute is too great for this giant and brother of our profession. □

Mr. Nash heads the firm of Robert J. Nash, FAIA, & Associates in Washington, D.C. Active in AIA and NOMA affairs, he has served as a vice president of the Institute.

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*Engineering News-Record; May 19, 1977

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'Immortalization of the contemporary is foolish,' so the more recent names are tentative.

Williamson from page 48

been recognized as more important to Sullivan's success than the latter's *Autobiography* would indicate. Elmslie's partner, William G. Purcell, was a Sullivan man, too, who had also worked for John Galen Howard, a graduate of Richardson's office, founder of the architectural school at the University of California and mentor for Julia Morgan and William Wurster.

Frank Lloyd Wright's career was extremely long, with several revitalizations. Lloyd Wright, his son (who, incidentally, also worked for Gill for a period), Bruce Goff and Paolo Soleri all were with Wright and credit him as a source of inspiration. Walter Burley Griffin went on to become prominent in Australia. His wife, Marian Mahony, received fame only with a belated acknowledgment of her presentation skills as vital in Wright's office. But Schindler and Neutra both became famous after working with Wright.

Any consensus on who is famous and who is not tends to become less clear as the subject approaches one's own time. Some names appear repeatedly in books; others have been so active in self-promotion that their names are familiar. Forewords to surveys of contemporary American architecture often have an apologetic roster of also-rans and near misses, names that vary considerably from book to book.

In 1933, the architecture building at the University of Texas was designed by Paul Cret. Carved into the limestone are the names Iktinos, Vitruvius, Palladio, Goodhue. Indeed, in the late '20s, Goodhue was a very famous architect, but if choice of a name had been made in 1943, it probably would have been Wright. In 1973, it might have been Kahn, Cret's own pupil and apprentice.

Immortalization of a contemporary is foolish—there are hazards in guessing the future. The chart of those born after the turn of the century includes names of a number of architects who may have ephemeral reputations, but who have made a bid for fame in past decades. The names at the bottom of the diagram, then, are tentative entries.

In this century, the Bauhaus movement to Boston has established a new dynasty, as did Kahn at Yale and the University of Pennsylvania. Eliel Saarinen began another line, considerably strengthened by his son Eero. There is a branch from Albert Kahn to Minoru Yamasaki, weakly connected to a stronger limb through Hood's and Wallace Harrison's joint work on Rockefeller Center and Jacques A. Fouilhoux's partnership with each of them. José Luis Sert's name is missing, but like Oscar Stonorov who is on the chart, he worked for Le Corbusier for two years and thus, with several other immigrants, carried the pattern across the ocean. Sert probably connects a future dynasty to Le Corbusier through his deanship at Harvard. So might William Wurster connect MIT and California students to Alvar Aalto.

In summary, the student and apprenticeship period has been significant in the history of esteemed architects; an aspect in the mechanics of fame is the connection with another architect who is just emerging into prominence. It is only part of a formula, however, and other patterns, almost this consistent, explain how men like Pietro Belluschi and R. Buckminster Fuller became heroes without such stimulating connections.

Few architects even begin to receive attention before the age of 40. When it does happen early, look for a winning competition entry, a mentor in the background or a partnership with someone else who has made a step up in the direction of fame. Other patterns stress that important first clients generally come from an inherited, or carefully cultivated, social set. Fathers, mothers, brothers and wives perform a significant role at an early stage in the careers of a number of architects.

The contact that occurs and stimulates the architect on the way to fame is now on record as demonstrably important. Architectural students are startled to learn that Walter Gropius, Ludwig Mies van der Rohe and Le Corbusier were all working with Peter Behrens at the time of his first and most important work, the AEG turbine building in Germany (1909).

The frequency of this kind of happening is generally overlooked. Biographies of the masters demonstrate a formula for fame that repeats, and repeats for other designers. There is little question that they had talent, but the question of other talented potential geniuses who did not follow the set patterns, and hence did not flower, is still unanswerable.

Could the famous architect of the future break the established pattern if we become more aware of the process? She or he could have designed beautiful, inexpensive, passive energy structures that make their users and viewers both comfortable and important. They will be noted for achieving the full range of needs that the antiheroic period realizes were not the required standards of its former gods. Venustas, Utilitas, Commoditas—Gloria! If all these ancient qualities are measure for admission to the celebrated, the mechanics of fame will work in new ways. □

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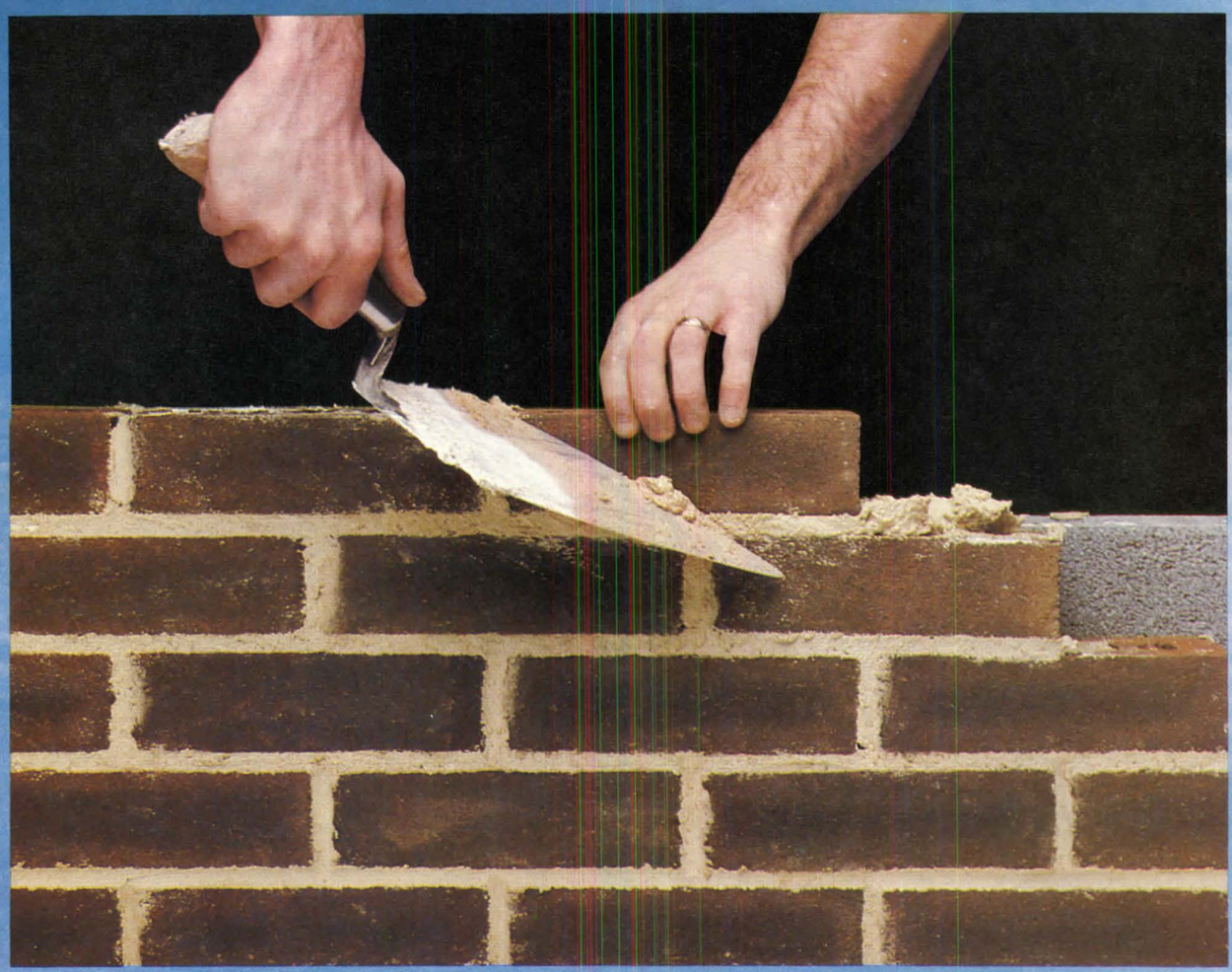

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Seeking 'a fusion of concern for art, science, culture and society flowing together.'

Design Conference from page 51

row of tenements on a narrow city street. In one picture, a family's sofa and other furniture were on a tiny porch, serving as a surrogate living room. A picturesque parade including traditional costumes contrasted with a demonstration so massive that it blocked a freeway.

Overcrowding was evident. "The numbers grow and grow," he said. "Always you have such crowds."

Strip development, shopping centers, polluted waterways and subway scenes belied a postcard beauty in an apparent attempt to show that, despite the models it has had to learn from, Japan in its rush to industrialize has gleaned little from earlier industrialized nations about how to avoid making the same mistakes that have created the same urban ills.

Of his own work, Isozaki noted that in designing the Gumma Prefectual Museum of Fine Arts for the city of Takasaki he based "all details . . . on the square" in an effort to cast an architectural monument in an appropriate style for an industrial city.

Other work discussed with the aid of slides included a small temple where geometrical shapes are graced by natural light admitted through a skylight and by a sculpture created by Aiko Miyawaki Isozaki, his wife.

As final speaker, William Marlin, associate editor of *Architecural Record,* recognized the diverse opinions to emerge at the conference but settled overall on an optimistic note for the profession's post-modernism ferment.

"We are talking about architecture as a fusion," he said, much in the same way that Mies van der Rohe viewed Thomas Jefferson as one capable of effecting a "fusion of concern for art, science, culture and society flowing together in a pragmatic, purposeful way." If architecture "in the coming period is to stand up," he said, "it will be because of . . . architects who do not fear a fusion of intent and technique."

As to the supposed dichotomy between humanism and technocracy, Marlin took a middle-of-the-road course, saying one cannot now design without accommodating "that range of relationships—economic, political, civic, artistic—that compose . . . a society." These factors cannot be ignored, he said, because they actually constitute "architectural materials." Institutions; corporations; commercial, governmental and regulatory interests are the elements "that determine what gets built and where" and, as such, are architectural materials.

He cited Citibank's new headquarters in New York City, Citicorp Center, as a project that succeeds because it is an amalgam of not only an architect's (Hugh Stubbins & Associates, Inc.) design but changes in a city's zoning laws that made possible a mix of "people-pulling and revenue-producing" activities, such as shops, a plaza with a fountain, and a church, at its base.

A goal, he said, might be "a good-looking, good-natured, nice-to-be-with building [that lets] people in on something more in the very process of amply accommodating specific functional requirements."

To Marlin, the future is promising. "After half a century of obligatory genuflecting . . . in the general direction of a truly objective architecture . . . we're beginning to realize a maxim "that the opposite of one profound truth often turns out to be another profound truth," he said.

For some, the hard, deterministic tenets of modernism and the International Style are softening. The exclusivity is giving way to a school of "inclusiveness," whose proponents are "on target with respect to the nature of science" in a way that eluded the modern movement. This is because, he said, it embraces the "spirit of inquiry, experiment and conclusion."

To him, optimistically, the times reflect "a subtle but sure movement toward a new comprehension of what is in fact a total approach to solving the environmental problems of our day." □

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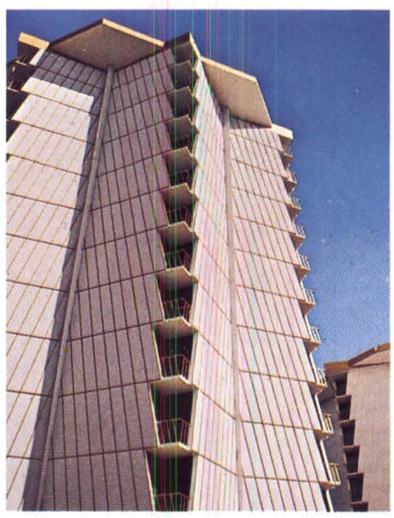

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BOOKS

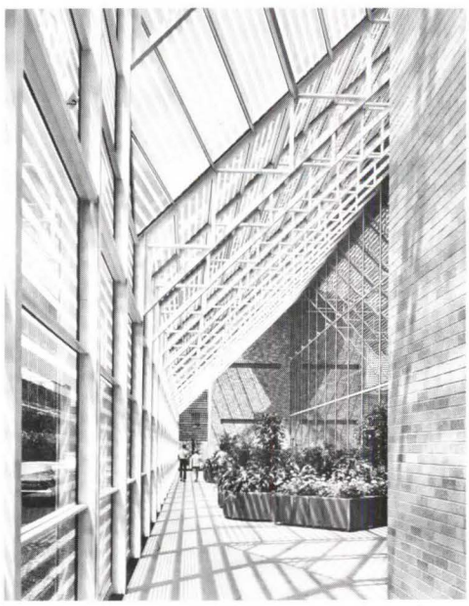
Kevin Roche John Dinkeloo and Associates, 1962-1975. Edited and photographed by Yukio Futagawa. Preface by J. Irwin Miller. Introduction by Henry-Russell Hitchcock. Text and captions in English, French and German. New York: Architectural Book Publishing Co., 1977. 256 pp. $49.95.

When Eero Saarinen died in 1961 at the age of 51, I wrote in *Architectural & Engineering News* that here was a man who "bent the materials to his purpose and technology to his imagination . . . a man to whom no form was taboo and by whom little was left untried. He spun no evident philosophic web, and was thus bound by none. . . ." The tragedy of the event was that we would now never know what this ever inventive mind still had to offer.

At the time it was not clear, at least to outsiders, whether the Saarinen office would endure; and if it did, how the new principals would build on (or depart from) the multiform output of the firm's founder.

Now we know. The new principals (new in the sense of taking charge—Roche and Dinkeloo had both been in the firm since 1950) kept alive the urge to innovate with form and materials. For example, their eagerness to explore the architectural potential of untried (in buildings) materials and methods persisted. It was a straight line from the automobile-derived window gaskets used at General Motors Technical Center and the freight car-derived use of weathering steel at the Deere & Co. headquarters, to such pioneering use of silo tile as a facing for the silo-like cylinders at the corners of the Knights of Columbus building in New Haven. Much of this continuity of innovation was thanks to the presence throughout of that technical genius Dinkeloo who was, and still is, the perfect foil for the form-giving roles of Saarinen and Roche.

The firm's attitudes to monumentality also survived the founder. Saarinen was always set on breaking up the niggardly scale of the International Style, and nowhere did he do this with more verve than at the Ingalls Ice Skating Rink at Yale and at the TWA terminal at New York City's Kennedy airport. Roche and Dinkeloo's



first independent buildings went even further, with the great covered walkways at Rochester Institute of Technology (begun in 1962), the monumental covered garden court at the Ford Foundation building in Manhattan (1963) and on to the soaring glazed lobbies at the University of Michigan Center for the Performing Arts (1965), at the Irwin Union Bank and Trust Co., Columbus, Ind. (1966) and in the mammoth new spaces now being completed at the Metropolitan Museum of Art, New York City.

Has anyone, then, uncovered such a thing as a "house style" at Roche/Dinkeloo? Their work is, as Henry-Russell Hitchcock says in his opening comments, "perhaps most clearly distinguished from that of their contemporaries by its general avoidance of the superficial modes that have had brief acclaim since the firm began to practice. Their handling of visible structure is not as consciously elegant as that of Mies and his imitators, yet it is not intentionally 'brutal.' For the most part the firm has eschewed, as Eero Saarinen did not, the lyrical or romantic, and only in a few instances does the choice of a basic form appear arbitrary or willful . . . [their] work resembles . . . not emotional poetry but rational prose."

Only in that one, emotional sense does the keen observer see a departure from the lyrical way in which Saarinen handled TWA and Dulles airport, Ingalls rink and the Jefferson memorial arch in St. Louis, toward the more severe, occasionally heavy aura one feels when walking through the University of Massachusetts Art Center or, conversely, toward the rational lightness of superglazed buildings such as the United Nations Plaza Hotel or the Worcester (Mass.) County National Bank.

It is an axiom that you can tell a lot about an architect by the clients he keeps. The clients that flocked to Saarinen and later to Roche/Dinkeloo wanted unique solutions to unique problems, solutions that must not be wrapped in the packaging of current stylistic fashion. The firm's characteristic production, says Hitchcock, "has not been tall blank skyscrapers built for rental or repetitious projects for housing controlled by bureaucratic social demands."

The real nature of the firm's clients came through sharply in the recollections of William Hewitt, chairman of Deere & Co. and client for the headquarters building. His insights were published in the August JOURNAL, p. 36. Characteristically, J. Irwin Miller, another Saarinen/Roche/Dinkeloo client, points out in the book that, unlike other artists, "the architect . . . has a client who . . . wants to speak and achieve through the proposed structure, and who looks to the architect to say for him what he cannot say for himself."

It is this kind of serious concern from clients that prods firms like Roche/Dinkeloo to raise the level of their design output to that extra-high peak.

Leafing through the 12x12 superbook is a very seductive experience. The photographs, black and white and in color, are of a quality and insight one has come to expect of Futagawa. He surely is one of the great masters of the camera. Each of the 30 or so buildings and projects comes with a paragraph of text, which unfortunately tends to restate what is already quite obvious from the photographs, instead of clearly spelling out the real design charge to the architect and how it led to the design response.

Unlike many firms, Roche/Dinkeloo

continued on page 60

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Gaps between architects, the public and clients in their perceptions of the profession.

Practice from page 37
practice, and not necessarily because they lack talent.

Two arguments frequently posed to support the continuing high volume of architectural school graduates are, first, that real world competition will ultimately sort out those who are competent from those who are not, and, second, that society and the profession can only benefit from having many people with educational backgrounds in architecture who do not practice architecture. In regard to the latter argument, it is assumed that the architectural student is a generalist, rather than a professional specialist, who may in later years become an enlightened decision maker, client, patron and supporter of the goals of good architecture.

The vulnerability of these arguments lies in the area of resource allocation. The generalist approach is expensive because of the numbers involved. Also, the standards of quality which can be maintained in mass-producing architectural graduates may be compromised. Obviously, every school must confront this issue, but so must every practitioner.

Perhaps an unspoken criticism of our educational institutions is the most telling. It relates to attitude development. Students, architects and nonarchitects seem to feel that architectural schools, through their curricula and their faculty, engender and cultivate certain attitudes and biases in the minds of students during the formative years of study which lead ultimately to frustration and disillusionment in practice. Many of those looking in at our schools preceive them as too idyllic, too divorced from reality, too willing to encourage and reward the offbeat and bizarre. The emphases and priorities are misplaced and unbalanced, they would claim.

How many architects have heard clients comment about their perception of architects' impulses to build monuments to themselves, to create fantasies, to design unbuildable structures, to refuse to cope with practical matters? Of course, architects' attitudes are, in fact, extremely diverse, ranging from real to unreal. Yet, there is little doubt that some of these perceptions are correct, and that architectural schools are essential in shaping the architect's vision of himself and of the world in which he functions.

AIA serves to institutionally complement the architectural schools and to represent the profession as a whole. AIA's objectives, like most professional associations, are to further both the profession's and the public's interest. . . .

Architects were asked in our survey to indicate what they thought to be the "most helpful services provided by AIA." The most frequently mentioned were "professional contracts," "documents," "research," "continuing education," "public relations" and "lobbying." Two-thirds of the architects interviewed disagreed with the statement that "AIA members are better qualified to render architectural services than nonmembers." This suggests that many architects do not believe that membership in AIA necessarily connotes higher standards of practice and performance. Another question in our survey reinforced this view. When asked whether "AIA sets clear standards and effectively polices the professional conduct of its membership," the majority of respondents said it did not. . . .

In assessing briefly AIA's role, our findings and observations are that:
(1) AIA, despite its lobbying and public relations efforts, does not seem to have significantly influenced or shaped public attitudes about architecture or about architects;
(2) AIA membership is often too introspective and spends much of its time talking only to itself;
(3) AIA has been quite successful and unclear in defining and enforcing standards of professional practice;
(4) AIA has not adequately addressed the needs and standards of professional education in architecture;
(5) AIA is tending to blur and compromise the architect's role as designer by unreasonably expanding the definintion of architectural services as a short-term, business remedy;
(6) AIA's most valuable service to the individual practitioner may well be the provision of documents, publications and information which are *useful* to him in practice.

Of the architects we surveyed, most expressed some degree of cynicism about AIA. We specifically asked if they thought "architects' professional status is as high as doctors' or lawyers'." Over half (57 percent) did not think so, while almost 60 percent of nonarchitects, in response to the same question, replied in the affirmative. Some surveys have appeared showing that the general public rates architects highly as to professional status and image, although most people have never dealt with an architect.

Again, we see an apparent gap between impressions held by some architects and clients on the one hand, and by large segments of the general population on the other. We believe it is to everyone's benefit to close this gap on the positive side. AIA can contribute significantly to achieving this goal. □

Books from page 58
talks very little about design philosophy, figuring a look is worth 5,000 pronouncements. Mercifully, Hitchcock was aware of this, and limits his 4,000-word text to a brief analysis that seeks to place the firm's work into the context of 20th century architecture.

We have been given the second "chapter" of what is now the firm of Kevin Roche/John Dinkeloo & Associates—for the years 1962 to 1975. Roche and Dinkeloo are still in their 50s. In the next chapter, we can safely count on more surprises. *Stephen A. Kliment, AIA*

The Airport City and the Future Intermodal Transportation System. Atlanta: Conway Publications, 1977. 333 pp. $35.

Anyone who bucks the traffic between home and airport knows that there is little else so frustrating about air travel. This bulky research report suggests that instead of separating the airport from the city, the two should be joined, with the runway becoming the future city's main street.

To document this assertion, or maybe in coming to such a conclusion, Conway Research, Inc., has spent a long time in the collection and analysis of data. The report includes chapters on intermodal and transmodal systems, market factors for airport projects, design factors, office and industrial parks, cargo and distribution facilities, travel facilities, planned airport communities, jetport cities and metro complexes.

There are more than 150 charts, illustrations and maps, and the appendix lists some 500 airport city or fly-in development projects in the U.S. and elsewhere around the world.

The report says that past policies have resulted in civic atrocities, and yet we continue in the same vein. What is required is an intelligently planned national transportation system that will result in harmonizing air and other modes of transportation into a "great intermodal transport system for the future."

If the reader worries about the noise factor, the report says that the planner can reduce noise problems by "shrewd location of activity centers with respect to the active runway and ramp areas; by allocation of suitable buffer spaces, and by use of vegetation to absorb noise." Engineers, the report continues, are "beginning to do for aircraft noise what has already been done for runway length—roll back the trend toward ever-increasing the decibel level. While there is an inherent conflict between noise level and short runway performance, it appears that both problems are beginning to become manageable."

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'Professionally we need to be quick of foot, free of mind and able to reach out.'

Meeker from page 23

In fact, when asked what he sees as his greatest strengths, Meeker replies, "A sense of humor and that I've been lucky. Napoleon used to ask when he selected the marshals of France, 'Yes, I know they won a lot of battles, but tell me, are they lucky?' I've been lucky, and I wouldn't want to lose my humor or my luck."

Commenting on Meeker's weaknesses at HUD, the *Impact* article noted that "it is fair to say that he was too prone to accept speaking engagements and to travel extensively for purposes that were almost marginal to his mission. . . . There were times when he was too easy to see, and too willing to listen, and too reluctant to say 'no.' There were a few people who sought to exploit this 'good guy' Achilles heel and got away with it. . . ."

From the time of his recovery from surgery until being nominated as AIA's new executive vice president—after the AIA search committee had an independent executive search service check him out—Meeker held an endowed chair at Cleveland State University and had a consulting practice in Washington. His consulting practice was an unconventional one for an architect. Meeker dealt with problems of economic development, community development, tax policy, policy for state and local governments and the like.

"It was reaching back and grabbing everything that I had learned in about 30 years of experience and finding an outlet for it. Whenever someone asks me, 'When are you going back to being an architect?' I reply, 'I am practicing architecture.' The value in today's society of an architect is that we are the last of the specially trained generalists. We have too often restricted ourselves to the property line. Architecture today is touching on things of increasingly great consequence, and with greater awareness. We're touching on the whole form of cities, for good or bad. We need to look at entire urban systems and their relationships just as we look at individual buildings and their interrelated elements. The use of resources, the capacity to respond to social concerns are all part of the utilitarian aspect of architecture which is an art form equal in importance to the shape of the building. My strength, if I have a strength in the profession, is that I feel at home in almost anything as being architecture. It is some of these thoughts that I hope to articulate more forcefully as the executive vice president of AIA.

"A related area that I have great concern about," continues Meeker, "is the opportunity that can pass our profession by if we stand aloof or allow ourselves to be split off into so many little select groups. I think as a profession we come into the public arena with a fairly untarnished image at this time, and I think we can offer some thoughts and influence what happens on the federal level. Because although we are influenced by federal decisions, our income is not dependent on them. This allows us to bring our skills to bear—not always in terms of market—but in terms of constructive concern. One of the things I will do, because it's in my character and experience, is to spend time continuing my liaison with people who are in the Executive and Congressional branches to let them know that we want to participate. I also belong to the American Institute of Planners, the National Association of Housing and Redevelopment Officials and other groups, and in some situations, I may recommend that we open our doors and ask their members to join us."

He goes on to say, "I also hope I can bring to the members of this organization a sense that the Institute is not a detached body in Washington, that it's a continuum from here right to the very smallest of offices, and that what happens here is affected by what happens to them. I've come from a system at HUD which was decentralized; I had about 1,500 employees, only 250 of them in Washington. I do want to reach out and go not just to grass roots, but to chapter meetings, and to meet with individuals to the greatest degree possible."

The last is directly related to Meeker's view of good management as being dependent on a personal approach, on accessibility, "on a laying on of hands to maintain touch," as he puts it. Beginning with military service during World War II, Meeker has always been in charge of something, and "there's nothing I like better than being in charge," he says.

He is quick to say that "my role here is not going to be a sudden turning over of this machine. I think that it's performed over a number of years in an increasingly effective way. What we need to look at is how to increase that effectiveness, often by a minor tuning rather than a major adjustment."

Meeker believes very strongly, however, in evaluation and says that "I'm not aware at the moment how evaluation of the efforts that we carry on is built into the system, and how you can deal with the issue of cost effectiveness, for example." Some financially costly operations, he believes, must be carried by the organization because their end product is of ultimate value. To help sort out administrative and budgetary wheat and chaff, Meeker intends to consult outside evaluators whom he used at HUD, as well as AIA members.

The Institute's most vexing problem, thinks Meeker, is inadequate communications, and one of the things he will be looking at is "how can the board be given more time to improve internal communications among themselves and the people whom they represent; at the same time how can we work within the staff to improve communications?"

Asked how he feels about being an administrator at AIA after having spent years in policy-making positions, Meeker replies, "I believe that I am a policy maker here, because I will identify opportunities and put them before the board for its ultimate decisions, as I did with the U.S. Cabinet and the President of the U.S. when I was at HUD. I proceeded by pointing out, 'Here is the problem. Here is what we know about it. Here are preliminary prescriptions for dealing with it. Here are the pros and cons of each. And here are two or three options considering these pros and cons, and I would prefer you to adopt option number two.' That's the way I work. The policy maker is the man whose ideas are adopted, regardless of who the decision maker is."

Does he foresee any problems in working with a new president and a largely new executive committee each year and a new board every three years? Meeker answers that during the 37 months he was at HUD, he worked under two Presidents, two secretaries and three undersecretaries, and that 17 assistant secretaries had gone through the building before Meeker himself left. "Compared to that," he says, "this is a relatively peaceful and sedate kind of situation. I am at my best and most content when I have to work with people, whether in small groups or large."

Another question: What will be his priorities during the first year? Meeker has no canned speech in response, and says without apology, "I have none. I haven't defined them yet, and have a little bit of a problem with the concept of priorities and goals. The positions that I've come from have taught me that it is difficult in human terms to say that you're going to concentrate on one group of issues more than another. So, I use the analogy that management of public institutions is akin to the Chinese juggler who has all those bamboo poles and starts to spin the plates. The idea is to keep as many plates spinning without breaking. I suspect that is what this job will require."

The principal weakness of AIA, says Meeker, is "that the process here may not be fast enough for the dynamic pace of society, and maybe professionally we need to be more quick of foot, free of mind and able to reach out so that we can grapple with the alligators." □

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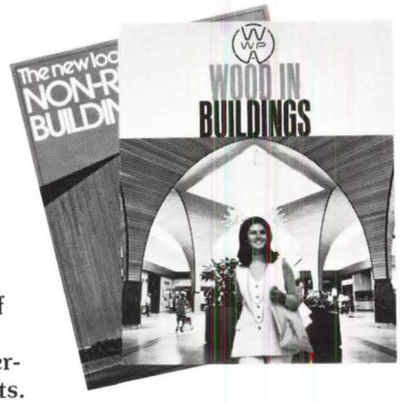

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Going On from page 15
their incomes for housing.

Simons warned the committee that if the present trends continue unchecked, the number of troubled projects could rise to more than 3,000 by 1982, which is equal to about two years of HUD construction of projects. In addition, insurance fund losses would increase to over $3 billion.

The troubled projects have deteriorated rapidly through the stages of default, assignment and foreclosure, Simons reported. And as the projects deteriorate, the debilitating cycle of community disinvestment begins and is reinforced. Ultimately, he predicted, the community development block grant program, as well as public and private revitalization efforts, will be affected.

Maintaining and operating these projects cannot be accomplished by the original subsidy plan, for it does not account for the widening gap between tenant incomes and operating costs, Simons said.

He added that raising rents cannot be the solution to the projects' financial problems because any rent increase would lead to displacement of the majority of the families now occupying these projects. This displacement would represent a reversal of earlier HUD commitments. In addition, these projects are often the only safe and sanitary housing available in a specific neighborhood.

Simons acknowledged that lack of skilled management—such as tenant screening, rent collection, maintenance and inadequate monitoring of loans—greatly contributed to the financial problems. He promised the committee that he would attempt to improve HUD staff training, program monitoring and management information systems.

Jefferson Medal Displayed At University of Virginia

AIA has saluted Thomas Jefferson's significant architectural achievements by presenting to the University of Virginia a commemorative medal in his honor. Presentation ceremonies, hosted by the Richmond chapter/AIA, were held on Dec. 17, when Frank Hereford, president of the university, accepted the medal from Herbert Epstein, FAIA, vice president of the Institute.

The pewter medal features a bas-relief of an eagle, the symbol of AIA, and is mounted on an octagonal marble column. The octagonal design of the marble sculpture is symbolic of the Octagon House, the 18th century mansion in Washington, D.C., purchased for AIA's headquarters in 1899 and now owned by the AIA Foundation.

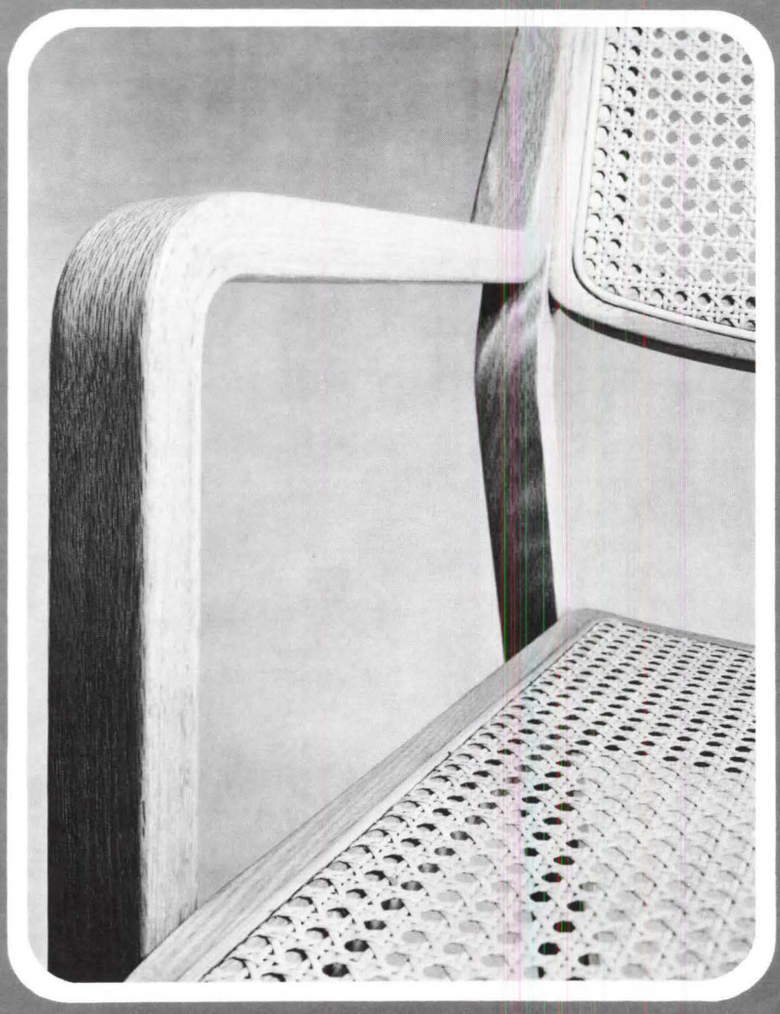
The medal will be permanently displayed at the Rotunda with a special citation presented by AIA in 1976 on the occasion of the nation's bicentennial. The citation recognizes that Jefferson's "brilliance as a statesman has overshadowed but cannot dim the enduring brilliance of his architecture."

Scholarships Offer Travel Stipends to Two Architects

The Rotch Travelling Scholarship Corporation, whose secretary is Hugh Stubbins, FAIA, has voted two awards for 1978: one for $11,000 and the second for $6,000. The winner of the basic scholarship will be known as the 1978 Rotch scholar (stipend $11,000 for nine months' foreign travel); the winner of the secondary scholarship will be known as the 1978 second Rotch scholar (stipend $6,000 for five months' foreign travel).

Persons are eligible to apply who are citizens of the U.S., under 35 years of age on Mar. 10, 1978, have a degree from an accredited school of architecture plus one full year of professional experience in an architectural office in Massachusetts, or have received a degree from an accredited school of architecture in Massachusetts and have at least one year of professional experience, not necessarily in the state.

Requests for application forms must be received no later than Feb. 6. Requests are to be made in writing to: Hugh Stubbins, Secretary, Rotch Travelling Scholarship, 1033 Massachusetts Ave., Cambridge, Mass. 02138. □



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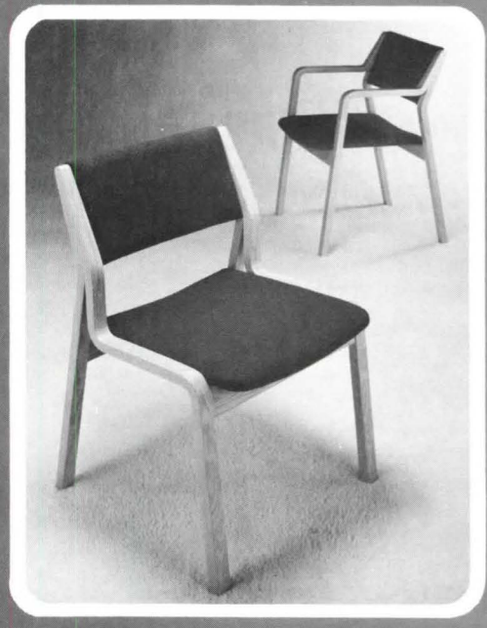

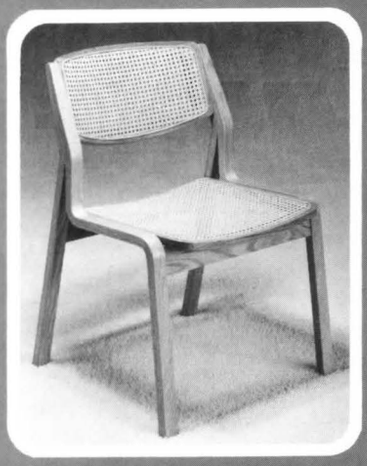

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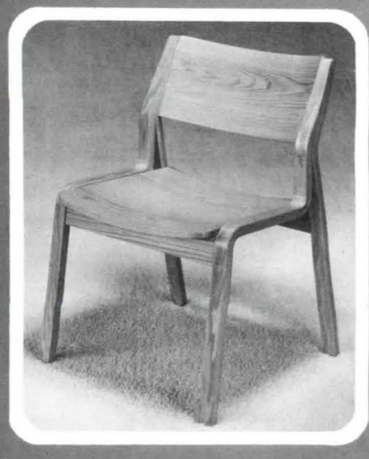

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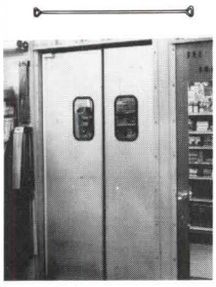

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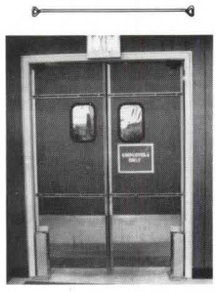
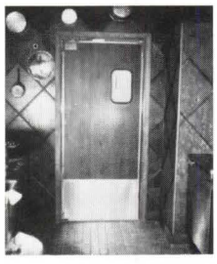
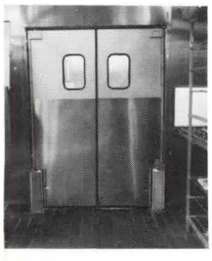
LWP 4: Same as "LWP 3" except with decorative high pressure laminate both sides. Decorative doors are practical with protective accessories. Door illustrated has 24" high Base Plates and two sets of Bumper Strips.



SCP 5: A Solid Core Door 3/4" thick. Illustrated door has Anodized Aluminum, Top Panels, 18 gauge steel center panels (SS front, Galv. rear), 14 gauge high carbon steel kick plates. Write for options and other Solid Core Door models. Applications same as "LWP 3", a heavier door but same easy action.

SCP 8: A Solid Core decor door. Illustrated door has 18" high Base Plates and Edge Trim (18 gauge Stainless Steel). Decorative High Pressure Plastic Laminate above Base Plates to top of door both sides. For Food Service and other areas where Solid Core Decor doors desired. Write for other models and options.





SCG 1: Gasketed, Solid Core Door 3/4" thick. Illustrated door has Anodized Aluminum top Panels and 48" high 18 Gauge Stainless Steel Base Plates. For Refrigerated areas, Work Rooms, Processing and Cooler to Processing. Write for options and accessories. Ask about 1½" thick Foam Core Doors.

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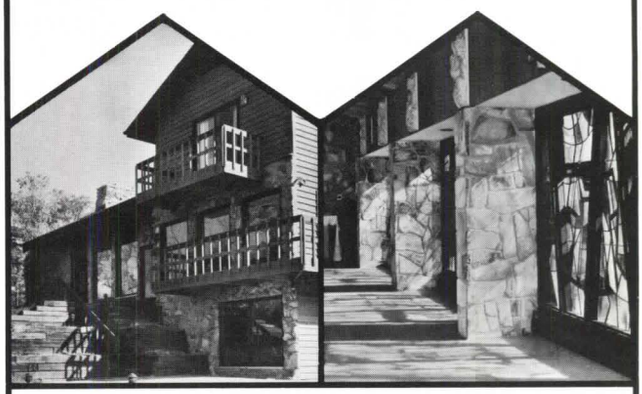

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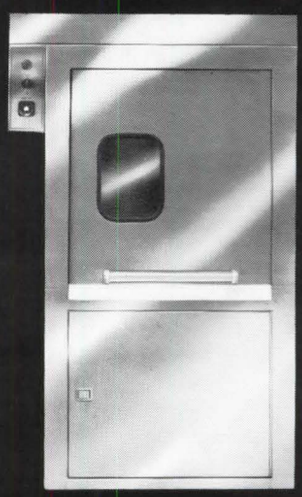

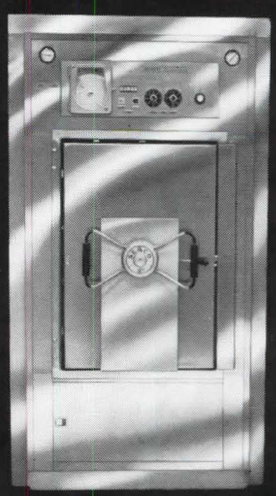

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FRAMING SYSTEM SAVED TIME IN LEXINGTON PROJECT.

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For their hotel, they specified steel construction and chose the innovative Staggered Truss steel framing system developed by M.I.T. under a grant from the United States Steel Corporation.

Mr. K.R. Kaufman, construction manager for Hunt/Landmark Ltd., emphasized how the use of the staggered truss design saved time and reduced costs. "The steel erection took three months" he said, "which was faster than we had planned and much faster than any other system. It saved us at least 4 weeks construction time."

This system consists of story-high trusses spanning the full building width at alternate floors of each column line. The trusses are supported only on the two rows of exterior columns and are arranged in a staggered pattern on adjacent column lines. This achieves an efficient structural frame for resisting wind loads while at the same time providing floor layouts with large column-free areas. Consequently, it is a system that lends itself to high-rise residential buildings such as apartments and hotels.

Structural steel, both ASTM A36 and ASTM A572, Grade 50, was fabricated in only two months, including fifty-six trusses. The pre-assembled trusses measured 60-feet by 9-feet 4-inches. The hotel contained more than 1,200 tons of steel.

In this project, and in many others, the Staggered Truss steel framing system proved to be the fastest, and the most practical and economical construction system. For more information on the design of Staggered Truss structures, contact a USS Construction Representative through your nearest U.S. Steel Sales Office. Or write for our booklet, "Staggered Truss Framing Systems for High Rise Buildings" (ADUSS 27-5227-02), to U.S. Steel, Box 86 (C788), Pittsburgh, Pa. 15230.

OWNER: Hunt/Landmark Ltd., Lexington, Kentucky. (the City and County of Lexington, Kentucky are owners of the Arena, Convention Center and Retail Mall).

ARCHITECT/ENGINEER: Ellerbe Associates, Inc., Bloomington, Minnesota.

ASSOCIATE ARCHITECT: Johnson/Romanowitz/Architects, Lexington, Kentucky.

CONTRACTOR: Huber, Hunt & Nichols, Inc., Indianapolis, Indiana.

FABRICATOR: International Steel Company, Evansville, Indiana.

ERECTOR: Whalen Erecting Co. of Ky., Inc., Lexington, Kentucky.

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TRADEMARK

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Newslines

Peking's newest landmark is the memorial hall which houses the crystal sarcophagus containing the body of Mao Tse-tung. Built in six months by an estimated 700,000 Chinese working day and night, the building is 105 meters square and 33.6 meters high.

The "International Journal for Housing Science and Its Applications" is a new periodical, the official publication of the International Association for Housing Science. Subscription rate for the quarterly is $110 per year. Orders may be sent to: Journals Department, Pergamon Press, Maxwell House, Fairview Park, Elmsford, N.Y. 10523.

Donald H. Bensen, AIA, of Carpenteria, Calif., has been honored by the California Polytechnic State University, receiving the university's school of architecture and environmental design's distinguished alumnus award for 1977.

Three positions are currently open at the school of architecture and urban design, University of Kansas. Requirements include achievement in architectural design and commitment to teaching in undergraduate or graduate programs. Starting date is Aug. 15. Contact: Gerald McSheffrey, School of Architecture and Urban Design, University of Kansas, Lawrence, Kan. 66045.

The 1978 Gypsum Association's "Fire Resistance Design Manual" is now available without charge from GA, 1603 Orrington Ave., Evanston, Ill. 60201. The 72-page manual is a standard reference of fire resistance and sound control of wall/ceiling partitions.

Fire killed about 8,800 persons during 1976 in this country, says the National Fire Protection Association. This is down from about 12,000 annual fire deaths estimated by NFPA in recent years. The decrease, however, results from better statistical methods rather than improvement in the fire-loss record. About 70 percent of the deaths occurred in residential buildings, this proportion having risen substantially from previous estimates.

The American Wind Energy Association has been established "to promote the use of wind as a renewable energy source." A one-year membership is $25. Corporate memberships are $100. Members receive the association's newsletter, a subscription to the *Wind Power Digest* and reduced rates for association conferences and its other publications. For more information, write: Ben Wolff, Executive Director, AWEA, 54468 CR 31, Bristol, Ind. 46507.

John C. Portman Jr., FAIA, of Atlanta has received the Georgia medal award from the Georgia Business & Industry Association. The award is given annually to a "Georgian who has made outstanding contributions to his fellow citizens."

Wind speed magnitudes in the U.S. will be studied for a two-year period by the National Bureau of Standards in cooperation with the National Oceanic and Atmospheric Administration. The data will improve building codes, it is expected, so that future structures are neither overdesigned for a particular region's wind climate nor underdesigned and thus unsafe in extreme winds. Additional information on wind engineering research may be obtained from Richard D. Marshall, Center for Building Technology, NBS, Washington, D.C. 20234.

Deaths

Joseph M. Bradley Jr., Milton, Mass.
Theodore Avery Chadwick, Bolinas, Calif.
Frank J. Fuchs, La Crosse, Wis.
Mott B. Schmidt, FAIA, Katonah, N.Y.
Robert Allen Ward, Vero Beach, Fla.
Louis M. Wolff, FAIA, Columbia, S.C.

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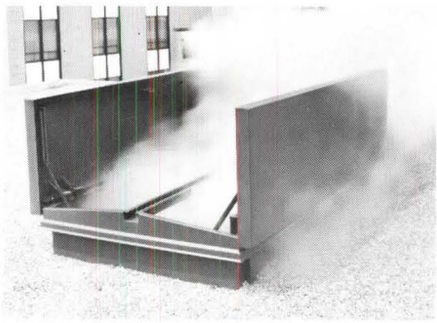

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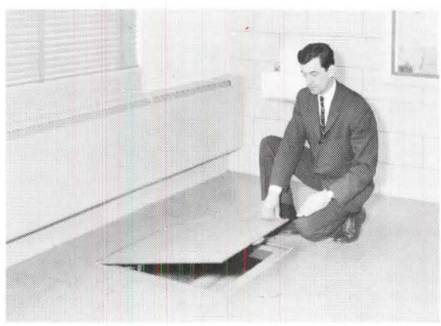

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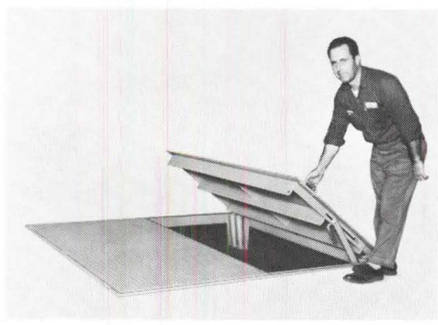

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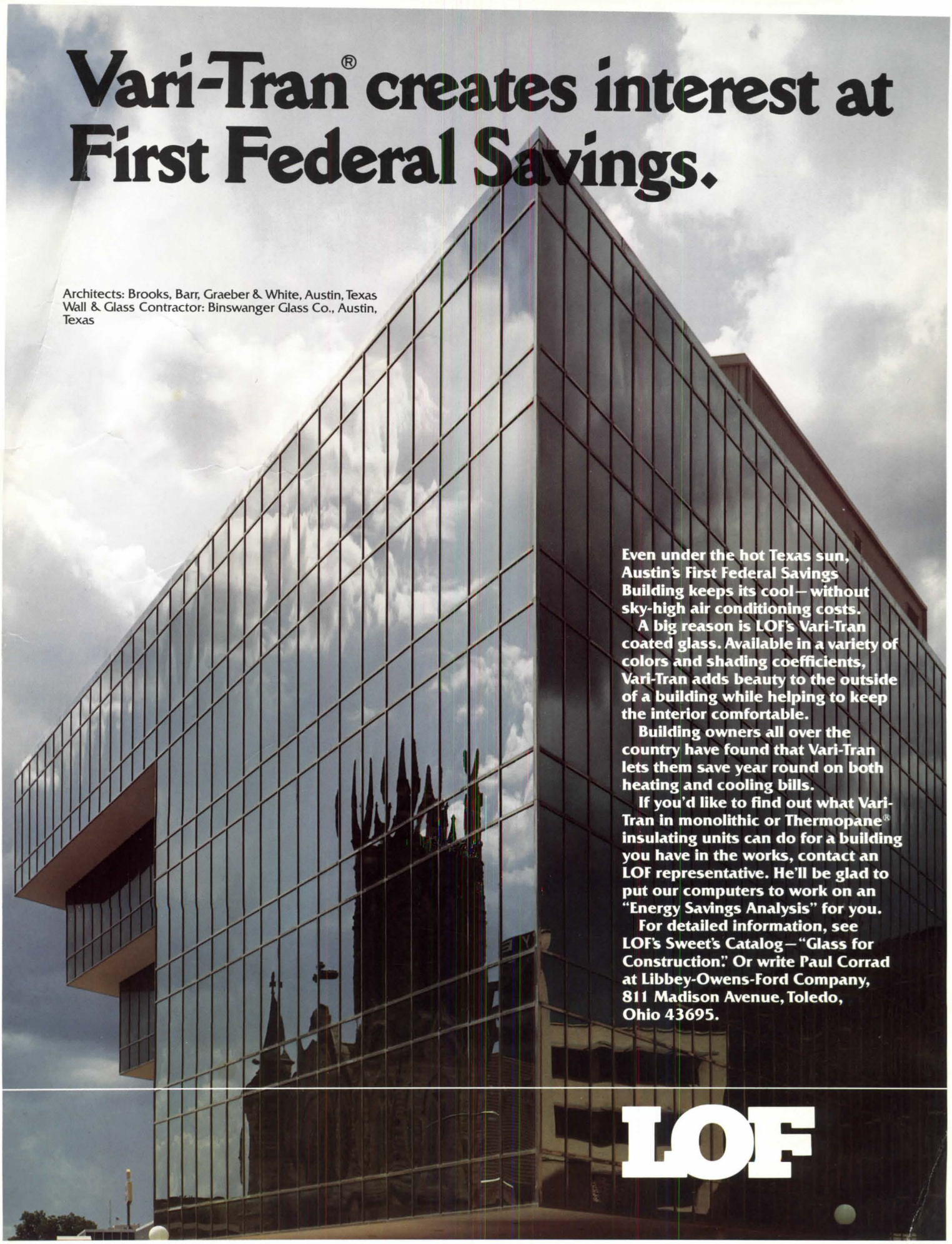

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Alamogordo, New Mexico
Architect: Charles Nolan,
Alamogordo, New Mexico
General Contractor: Frank Tatsch,
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