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EVENTS

Nov. 30: Seminar on Ownership Transition for Design Professionals, Tampa, Fla. (Repeat seminar Dec. 1, Dallas.) Contact: Professional Services Management Journal Seminars, 45 Van Brunt Ave., Dedham, Mass. 02026.

Dec. 2: Roofing Systems Conference, New Orleans. (Repeat conferences, Dec. 9, Dallas; March 24, Charlotte, N.C.; April 7, Kansas City, Mo.) Contact: National Roofing Contractors Association, 8600 Bryn Mawr Ave., Chicago, Ill. 60631.

Dec. 2-3: Passive Solar Workshop, Santa Fe, N.M. Contact: Passive Solar Associates, P.O. Box 6023, Santa Fe, N.M. 87501.

Dec. 2-3: Seminar on Construction Claims, Denver. (Repeat seminar Dec. 6-7, Long Beach, Calif.) Contact: Construction Claims, Seminar Division Office, 2210 Wilshire Boulevard, Suite 250, Santa Monica, Calif. 90403.

Dec. 2-3: Workshop on Microcomputers, Los Angeles. Contact: John Waxman, American Planning Association, 313 E. 60th St., Chicago, Ill. 60637.

Dec. 3: Conference on Federal Design and Construction Dollars—Where Are They? How Can You Get Some? Alexandria, Va. Contact: Howard Birnberg, Design Professions Business Consultants, 600 S. Dearborn St., Suite 2002, Chicago, Ill. 60605.

Dec. 3-4: Interdisciplinary Conference on Art and Architecture, Cooper Union, New York City. Contact: Extension, Minneapolis College of Art and Design, 133 E. 25th St., Minneapolis, Minn. 55404.

Dec. 6-9: Conference on Thermal Performance of the Exterior Envelopes of Buildings II, Las Vegas. Contact: American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., 1791 Tullie Circle N.E., Atlanta, Ga. 30329.

Dec. 7-9: Mid-Atlantic Energy Conference and Exposition, Baltimore. Contact: Mid-Atlantic Energy Conference Program Chairman, P.O. Box 1096, Rockville, Md. 20850.

Dec. 8: Growth Markets Conference, Kansas City. Contact: Carol Gosselin, A/E Marketing Journal, P.O. Box 11316, Newington, Conn. 06111.

Dec. 8-10: Workshop on Life Cycle Costing, University of Wisconsin, Madison. **Dec. 8-10:** Workshop on Marketing of Professional Services, Salt Lake City. Contact: American Consulting Engineers Council, 1015 15th St. N.W., Suite 802, Washington, D.C. 20005.

Dec. 9-10: Value Engineering Orientation for Design and Construction, University of Wisconsin, Madison. **Dec. 10:** Symposium on Sandstone Restoration, New York City. Contact: New York Landmarks Conservancy, 330 W. 42nd St., New York, N.Y. 10036. Dec. 16: Seminar on Jail Architecture. Houston. Contact: Voorhis Associates, Inc., 5796 51st St., Boulder, Colo. 80301. Dec. 16-17: Workshop on Facility Design for Computer Centers, Las Vegas. Contact: Data Processing Security, Inc., 200 E. Loop 820, Fort Worth, Tex. 76112. Jan. 16: Workshop on Human Factors in Transportation, Washington, D.C. Contact: Emilie E. Larson, National Institute for Safety Research, 966 Hungerford Drive, Suite 31, Rockville, Md. 20850.

May 22-25, 1983: AIA National Convention, New Orleans.

LETTERS

World Architecture: I have just finished reading, cover to cover, your mid-August world issue, including the numerous excellent and arresting advertisements, and I am exceedingly pleased. I can't help recalling earlier issues, like 20 or 30 years ago, when the JOURNAL was *not* very exciting reading. In fact, it was dull, small, and uninspiring, with a few dull ads (chicken and egg analogy?). It appears that advertisers have come to know a good thing when they see it!

This issue, eminently readable and absorbing, is the culmination of a steady rise in excellence. Generous show of color, both editorial content and in ads, is only one of its good features. I enjoyed the presentations from foreign countries, especially the one on Russia by Professor Ryabushin. *This* out of Russia? On looking around our country (with Tom Wolfe) at innumerable repetitiously dull, inspired, and unimaginative glass boxes, it strikes me that this may well be what *we* need.

I feel that the JOURNAL has arrived as a major architectural publication. But I believe that the mid-August issue, "like every new architectural project, or a system, or a building" is not, as the late Fazlur Kahn said, "an end in itself, but a step forward in the continuing process of evolution of ideas and concepts which should respond to human needs, should reflect new technology and economic realities, and should produce exciting, fresh forms and architectural expressions." *William Arild Johnson, AIA Anchorage*

Architectural Drawings: The frontispiece of your recent publication of architectural drawings (September issue) seems to sum up my impression of the winning submissions: Nothing much new in the area of architectural drawing since Corbu and Mies and the biplane were still in the living picture plane. Many of the selected drawings owe much to Mies's use of collage and to Corbu's use of abstraction and color.

I delight in Donald Copper's use of the Muybridge cutouts in his town house renderings (page 45). There is great potential in using pictures of naked people wrestling as a marketing device in presentation drawings—particularly for time-sharing projects. Emmett Walsh Associate Member, AIA St. Petersburg, Fla.

Orchids to the AIA JOURNAL for the September issue. I had begun to feel that all the architectural magazines were being put together by editors and writers who were only intrigued by their own clever phrases and turns of words—all without any understanding of a three dimensional building (photos and explanations seldom shown in "readable" arrangement on a page).

Thank you for this inspiring, creative 1982 issue that has few words, but is to the point. *Lillian Leenhouts, FAIA Milwaukee*

It was good to see the JOURNAL devote an entire issue to drawing, but I disagree with the apparent basis for the selection of drawings. To value an architectural drawing as an artifact, separated from the problem it proposes to solve, is to trivialize the role of drawing in the design process. The collection of drawings you published is like an interesting bouquet of cut flowers or a dried arrangement of plants, their stalks dripped in exotic artificial colors, but cut off from the processes on which their vitality and validity W. Kirby Lockard, FAIA depend. Tucson, Ariz.

The Information Revolution: As authors of *Planning the Electronic Office* (to be published by McGraw-Hill next February) and as specialists in the information field, we found your article, "Architecture and the Information Revolution" (see July, page 65), of interest.

We believe that the field of architecture is on the brink of cataclysmic change. The change is a result of the cybernetic revolution. We witnessed, for example, the installation of a system for computer-aided drafting and design that phased out the need for 20 draftsmen and designers. That same system allowed three designers and one manager to turn out 1,600 drawings in one year.

Most architects are unaware of this threat to their economic existence. The reason is simple, and also economic. Until recently, such systems were too costly for all but the largest A/E firms.

Aaron Cohen, AIA Elane Cohen Croton-on-Hudson, N.Y.



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"A Switch to Gas Saved Thousands on My Hospital Bill."



In order to cut energy costs to a minimum, Gerald Foster, Director of Plant Administration for Loudoun Memorial Hospital

in Leesburg, Virginia, switched to gas. The operation was a success. It has already saved the hospital over \$100,000 in fuel bills.

Conversion of two oil-burning boilers to dual-fuel function cost the hospital \$22,000. But, according to Foster, it paid for itself in 63 days. The actual \$100,078 savings was based on the prevailing price of oil versus what was actually spent for natural gas over a twelvemonth period.

"We only expected to save \$60,000," said Foster, "but we've already gone way beyond that."

Although the cost of all energy will go up over the next few years, Foster's decision to switch to gas will save the hospital hundreds of thousands of dollars over the life of the boilers. Because, as the price of natural gas goes up, it will still remain a better buy than oil or electricity. "And in the meantime," says Foster, "we're way ahead of the game."

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AIA JOURNAL/NOVEMBER 1982 11

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Two-Acre, U-Shaped Plaza Selected for Fort Lauderdale

A vision, if not yet the reality, of an urban center is alive in Ft. Lauderdale, the sprawling south Florida city whose Downtown Development Authority this summer sponsored a one-stage competition to design a two-acre plaza. The three winning schemes, chosen by Mario Botta, James Stewart Polshek, FAIA, and William Turnbull, FAIA, from 195 entries, exhibit a broad spectrum of solutions, from the semi-enclosed, versatile, first-place design of Aragon Associated Architects of nearby Coral Gables to the fanciful, topiary-filled secondplace scheme of Heery & Heery, Atlanta, to the more cerebral, double-square plan by Thomas and Marleen Davis of Courtland, N.Y.

The plaza site touches the New River, whose pleasant course through downtown to the Intercoastal Waterway suggests a wider and deeper version of San Antonio's waterway. The plaza would incorporate an existing riverfront strip park. Competitors and jurors were asked to consider the plaza as a major symbolic river access and to answer a program that included sculpture as a focal point, a bazaar for craft shops, an outdoor theater for 300-400 people, a 200-seat restaurant, a lounge, and an office structure to contain 8,000 square feet of space. Opposite the river, the plaza site is bordered by a curve in East Las Olas Boulevard, across which will be an art museum designed by Edward L. Barnes Associates. Beyond the museum site, a public library designed by Marcel Breuer Associates is under construction.

The U-shaped built elements of

Aragon's first-place design (1) form a piazza open to the river. Focus of the open space is a small stage that can be used in two ways: Presentations on a small scale face east to audiences of up to 150 sitting on curved steps descending from the food bar/bazaar. Larger productions play to audiences facing the river. Across the green from the bazaar is the office building fronted by a colonnade, a single-story element that will also extend along East Las Olas. A free-standing restaurant is placed outside the piazza in the space formed by the curve of the boulevard.

Turnbull said the Aragon project deals well with "urban space as an extension of an urban park and the riverfront park itself as the beginning of the riverfront walkway that links and organizes, in a pedestrian sense, many of the downtown blocks . . . a very clear, good, central idea that should add a lot to the heart of downtown." Six people worked on the first-place scheme, including John Ames Steffian, chairman of the architecture/ planning department at the University of Miami, and Armando Montero of the architecture faculty at Miami-Dade Community College. They won a \$10,000 cash award. The Downtown Development Authority estimates the project to cost \$1.7 million.

Dominating the second-place entry scheme (2) are 20 or so giant, colorful topiaries, to include, according to the entry, "massive bougainvillea cabin cruisers and crow's-nests, limbo-gumbo travel trailers and re-entry vehicles, passion fruit architectural fragments, etc." Enclosed building space is located along East Las Olas and an adjacent street; the river is lined with five miniature theaters or *teatrini*; and the fourth side by a row of trees. Submitted drawings are intended as conceptual, with plans to be worked out.

Polshek called the Heery & Heery entry "clearly the most provocative and intelligent scheme. . . . The emphasis seems to be on instant gratification through an engagement in fantasy reinforced by color and an architecture that is reminiscent of a built ruin discovered hundreds of years later covered by tropical flowers." But Turnbull faulted the design for "arcing itself off from its surroundings.... The mandate was for a public place, and this is a magic private place." Nine people contributed to the Heery & Heery submittal, winner of a \$6,000 cash prize. The team was headed by Mack Scogin, AIA.

In plan, the third-place design (3) is two adjacent squares with pinwheel appendages, the largest two containing the amphitheater and restaurant. Two smaller structures are an office block and a bar, the latter open below to form a sheltered bazaar. Reciprocal forms abound in the scheme, including the curvilinear amphitheater and restaurant, chamfered office block and bazaar, an open cube sculpture and cube topiary, and clock and observation towers.

Turnbull likened the design to a building courtyard while questioning whether the enclosed spaces would be large enough for proposed uses. Polshek called it "an elegant scheme . . . but one whose architecture is in no respect reflective of the nature of Ft. Lauderdale."

The husband/wife team winning third place won a \$4,000 cash prize. Marlene Davis teaches at Cornell; her husband Thomas is a graduate student at Cornell, where he also teaches a design course. *News continued on page 16*



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ENERGY-EFFICIENT PRODUCTS AND SYSTEMS: A Comparative Catalog for Architects and Engineers Energyworks. Inc. Designed as a subscription service, this sourcebook and subsequent updates at 6 month intervals help building professionals select energy efficient products and systems more easily and rapidly. approx. 800 pp. (1-87336-5) Nov. 1982 \$125.00	THE ART OF INTERIOR DESIGN, 2nd Ed.Victoria Kloss BallTotally revised and updated, this edition gives the latest information on materials, fabrics, equipment and techniques for the use of color. Lists of colorants in paints, and sections on the characteristics of textiles, woods, ceramics and glass are among the primary features of this revision. approx. 288 pp. (1-09679-2) Nov. 1982 \$29.95
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Tiered, 5-Story Building Chosen For County Government Offices

Fairfax County, Va., has chosen the joint venture of Arthur Erickson Architects, Toronto, and Dewberry & Davis, Fairfax, Va., to design a 343,000-square-foot county office building.

In a competition that drew 86 entries, the other three finalists were Cambridge Seven Associates, Inc., Cambridge, Mass.; LBC & W, Falls Church, Va., with Cesar Pelli & Associates, New Haven, Conn.; and Skidmore, Owings & Merrill, Washington, D.C. The team of Erickson and Dewberry & Davis was chosen by a jury consisting of Chloethiel Woodward Smith, FAIA, Jacquelin Robertson, FAIA, Barry Wasserman, FAIA, engineer Fred Dubin, and George W. Johnson, president of George Mason University. Their recommendation was adopted by the county board of supervisors.

The winning design (above) is a steppedback, tiered configuration, which is molded to the natural slope of the site to reduce the "potentially imposing impact of the 343,000-square-foot building," in the architect's words. The structure will be divided into three "blocks": a center section and two wings with four levels of office and public spaces. An atrium will serve as the building's focal point and as a "public forum space" and will provide "visual recognition of county functions and an overall attitude of accessibility to government functions within," the architect said. The five-story structure will bisect a 183-acre site with an 8-acre lake framing the eastern side of the complex. The design is to allow for future expansions.

The jury said that the design "evidences the best potential for development into an enduring, symbolic, and functional center for Fairfax County," and contains a "unique set of attributes in the way it uses the land and the way it organizes county facilities."

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HEWI Tumbler Holder	80	97	100	475.1.160	
with flat bottom glass tumbler <u>HEWI Tumbler Holder</u> with flat bottom nylon tumbler	31⁄8″ 80 31⁄8″	3 ^{13/16"} 97 3 ^{13/16"}	3 ^{15/16} " 100 3 ^{15/16} "	475.1.161	
<u>HEWI Soap Dish</u> ditto with drainage hole <u>HEWI Ashtray</u>	27 1⅓í6″ 110 4⁵∕í6″	141 5%16″ 141 5%16″	140 5½″ 140 5½″	475.2.110 475.2.120 475.2.141	C
Holder HEWI Toilet Brush Unit	120 4¾″ 470 18½″	160 6⁵⁄16″ 141 5%16″	21 %" 140 5½"	450 475.2.171	

Inch measurements are approximate. mm are exact.









Additions to Vietnam Memorial Approved but Not Their Siting

The U.S. Commission of Fine Arts has accepted the concept of adding a flagstaff and sculpture to the Vietnam memorial in Washington, D.C., recommending that these elements be grouped with a name locator near the approach to the memorial from the Lincoln Memorial. Also approved "in principle" was Frederick Hart's sculpture grouping of three young infantrymen.

Rejected was the proposed placement of the two elements-the sculpture on the lower ground 150 feet from the apex of the granite walls and the flagpole 40 feet behind the apex-and placement and design of the locator at the end of one of the walls. Chairman J. Carter Brown, in remarks adopted by the sevenperson commission, said the sculpture should not be "allowed to shiver naked out there in the field, to be an episodic element that is not integrated, that somehow relates to a flagpole which is so far away and whose height and silhouette will be cut off as one approaches the existing memorial. . . .

Regarding the locator, Brown questioned whether only one would suffice and whether its proposed design, a sheet metal tube, would "share the dignity, the sense of permanence, that a memorial should have." Such a locator will help visitors to the site find the names of the war dead and missing. More than 57,000 names have been engraved on the black granite walls, and they are listed chronologically in the order in which they fell.

Bringing the three elements together would "help enhance the entrance experience to the memorial," Brown said, and "honor and protect the integrity of the original design" by Maya Ying Lin.

Lin testified against the additions, saying she objected not to Hart's sculpture per se, but to the melding of two designs. The 50-foot flagpole, as proposed, was "too big for the memorial yet too small for the site," she said. After the commission's decision, Lin expressed relief "in a small sense" because of her concern that the new elements "not interrupt the memorial. I don't know where they will end up, but care will have to be taken so that you don't have three isolated elements floating in space."

Testimony of Institute President Robert M. Lawrence, FAIA, centered on maintaining the integrity of the competition process by which Lin's design was chosen, as well as that of the design. Lawrence insisted that the modifications as proposed were not an embellishment of the winning design. "It is a new scheme altogether, in which the statue becomes the actual memorial and the wall an almost incidental backdrop supporting a flagpole," he said. Lawrence later said the Institute "fully supports" the commission's recommendations to locate the three elements at the west end of the memorial site. "By recommending a complete separation of the conflicting design elements, the commission has preserved the integrity of Maya Lin's design and served the best interests of the public," Lawrence said.

Also speaking against the modifications was Paul Spreiregen, FAIA, adviser to the competition that selected Lin's design. He compared her minimalist memorial to Arlington Cemetery with its uniform tombstones, saying a figurative representation would limit and reduce the effect of the Vietnam memorial. The Washington architect later called the commission's decision "rather a good one," while pointing out that Hart "now has a problem because the three-figured design was really intended to work with the walls-the soldiers coming out of the woods and being surprised by the names inscribed on the walls. The statue will now become an entrance portal device.

... I think the sculpture will have to be revised."

Hart, who explained the concept of his sculpture to the commission, was later quoted by the Associated Press as calling the commission's decision "Solomon-like."

Officials of the memorial's sponsoring agency expressed reserved appreciation of the commission's decision. Speaking for the Vietnam Veterans Memorial Fund, Robert Doubek, project director, said, "We are enthusiastic about the decision



in that approval of the flagpole and sculpture is a significant step toward completion" of the memorial. VVMF President Jan Scruggs said, "We got the essential approvals that we wanted . . . and now we can begin the process of getting Vietnam veterans moving behind the memorial again." Doubek said the fund's architects—the Cooper/Lecky Partnership and Joseph Brown—are working with Hart on a new proposal for siting the three elements.

More than 30 people, many of them veterans, spoke in favor of the additions, including representatives of the American Legion, the Veterans of Foreign Wars, and the Vietnam Veterans Relief Association. One, who served "many, many months in combat," was Representative Donald Bailey (D.-Pa.). "Veterans are still tortured by the question of whether they fought for a proper reason," he said, and the original memorial design projects a political message, "whether you like it or not. . . . Please allow us to carry a message of honor as to why the war was fought. . . . You had to have a reason why you were going to tell a kid to do something that might take his life. That is what that flag and statue represent to us.'

Interior Undersecretary Donald Paul Hodel told the commission that Secretary James Watt would grant a permit to dedicate the memorial only if the compromises were approved. Watt later gave verbal approval for dedication on Nov. 13, during a "National Salute to Vietnam Veterans."

Hart has estimated that one year will be required to complete the statue after final approval. Meanwhile, the inscribed granite walls are in place and landscaping is virtually complete for the memorial as designed by Lin. *continued on page 19*



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Tax Incentives Have Spurred Interest in Historic Preservation

The federal tax incentives provided in the 1981 tax act have brought a surge of interest in the preservation of historic structures. Across the country, developers, lenders, and investors are turning to the rehabilitation of older buildings especially certified historic structures mainly because of the tax benefits. As one participant at a recent conference on preservation law and the development process put it, the market is "hot."

Although incentives to encourage preservation were first passed by Congress in 1976, the real boost came in 1981. Provisions in the Economic Recovery Tax Act of 1981 significantly changed federal tax policy from that of favoring the demolition and replacement of old buildings to one favoring restoration over new construction. And although the most recent tax act, the Tax Equity and Fiscal Responsibility Act of 1982, changes the depreciation allowable for certified historic structures, the tax benefits of rehabilitation over new construction are still substantial.

The 1981 tax provisions replaced the previous incentives (passed in 1976 and 1978): a five-year amortization of qualified rehabilitation costs, accelerated depreciation for substantial rehabilitation, the denial of incentives for demolishing historic buildings, and a 10 percent tax credit for the costs of rehabilitation. It established a three-tier system of tax credits for rehabilitation costs, and instead of requiring a property's depreciation over its useful life, the new law permits straight-line or accelerated depreciation over just 15 years for most buildings (this last clause applies to both new and old buildings).

Under the 1981 tax act a 20 percent tax credit of the rehabilitation costs is offered for 40-year-old buildings and a 15 percent credit for 30-year-old buildings. A 25 percent credit is available for a certified historic structure (one listed on the National Register of Historic Places) or a building located in a registered historic district and certified by the secretary of the Interior as being of historic significance to the district. In order to receive this 25 percent tax credit, the historic structure must be substantially rehabilitated-expenditures must exceed the greater of \$5,000 or the adjusted basis of the property (the cost of the building plus any previous capital improvements minus depreciation)-and 75 percent of more of the external walls must be retained.

To illustrate the scale of the benefits that the 1981 act provides, take the following example: If a group of investors, all of whom are in the 50 percent tax bracket, spent \$1 million for the construction of a new building, annual straight-line depreciation deductions would be \$66,667 and the tax savings during the first year would be \$33,333. If this same group of investors spent \$1 million on the rehabilitation of a historic structure, the annual depreciation deduction would be the same (\$66,667), but the tax savings during the first year would be \$283,333 (\$250,000 for the 25 percent tax credit and \$33,333 for annual depreciation deductions). The rehabilitation of a 40-year-old building would bring \$226,667 in tax savings.

Although it is too early for exact documentation of the increase in historic preservation due to the 1981 tax act, the preliminary indications are extremely positive. Sally Oldham, formerly of the Interior Department's preservation assistance division and now with Langelier Historic Properties, Inc., says that applications for certification of historic structures have doubled in many states since the '81 act was passed by Congress. The Interior Department reported that as of June 30, 1,220 buildings qualified for historic certification, which means that 28 percent of all rehabilitation of certified historic structures spurred by federal incentives has occurred within the past year. Preservation Action, a Washington, D.C., nonprofit group, reported that 53 percent of those rehabilitating historic structures say they undertook the project because of the tax benefits.

Another indication of the increased interest is the large number of limited partnerships established for rehabilitation projects. A June issue of Fortune Magazine reported formation of a "flurry of limited partnerships" with rehabilitation in mind: "The earliest were formed by small developers or local syndicators and were hard to find. But lately some have been sold by big brokerage firmsincluding Bache, Paine Webber, Shearson/American Express, and Butcher & Singer." And while such syndications are not unusual these days for large new developments, they have rarely been used in the past for rehabilitation work, Oldham comments.

The first such public offering under the '81 tax act was made last fall by a Seattle brokerage firm. The partnership, called Cherry Street Properties Ltd., raised \$11 million, at a minimum of \$5,000 per investor, for the rehabilitation of two early 20th-century landmarks in Seattle: the Alaska and Arctic buildings. One of the most recent offerings is a joint venture between a New York securities firm and the Rouse Co. to raise \$20 million for the rehabilitation of Union Station in St. Louis.

But while preservationists were heralding the successes of the new tax procontinued on page 21

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Government from page 19

gram, they lost a battle with Congress over the '82 tax provisions. The one provision changed by the '82 tax act that affects preservation (with some exceptions) begins Jan. 1, 1983. Taxpayers must subtract $12\frac{1}{2}$ percent of the qualified rehabilitation expenses in calculating the building's depreciation. This would mean that for \$1 million in rehabilitation \$250,000 would still be available in tax credits, but only \$875,000 instead of \$1 million could be depreciated over the 15-year period (\$1 million minus one half of the \$250,000 tax credit).

Preservationists are concerned that in some cases the benefits of rehabilitating a historic structure versus a more recent building will not be great enough for a developer to go through the Department of Interior's certification process and agree to retain the historic character of a building.

Increased Funding Seen for Art-in-Architecture Program

Federal spending on art work for government buildings is due for a substantial increase, says Gerald P. Carmen, GSA administrator. Amid criticism of the Reagan Administration for spending only \$335,000 for art in two years while more than \$3.1 million was spent during the Carter Administration, Carmen announced that the art quota in 1983 will exceed \$1 million. Federal spending for art is part of GSA's art-in-architecture program (see June '79, page 38), which sets aside up to one-half of 1 percent of construction funds for art.

Carmen blames cutbacks in federal building projects for the low amount spent on art. A review policy that started approximately a year ago has also contributed to the low figure, he said. Donald Thalacker, director of the art-inarchitecture program, explains that previously, a number of artists was first selected by a National Endowment for the Arts panel. GSA then selected the artist it wanted for a particular project. "Now," says Thalacker, "work of the selected artists is reviewed by local citizens and elected officials."

Participation by local people has helped to avoid confrontation after the art work is installed, Thalacker said, adding that their participation can motivate support for the work as well. GSA then considers citizen reaction when making its final choice of an artist. The process is more time-consuming, Thalacker said, but it leads to more satisfying results.

The art-in-architecture program started in 1963, after a presidential committee recommended that work of living American artists should be incorporated into the designs of new federal buildings.

GSA Urged by GAO to Check Energy Expertise of A/E Firms

Federal buildings constructed since 1976 consume 20 to 83 percent more energy than they were designed to use, concludes a General Accounting Office report. Because of this, GAO is urging GSA to establish a standard for evaluating energy conservation expertise when selecting A/E firms, among other recommendations.

GSA's attention to energy conservation in buildings began in 1972 with the establishment of an energy conservation demonstration project, which resulted in the construction of the Norris Cotton Federal Building, Manchester, N.H. (see Dec. '77, page 32). In 1974 GSA established annual energy usage goals for all new buildings-55,000 BTUs per gross square foot at building boundaries and 100,000 BTUs per gross square foot at energy sources. And in an attempt to increase energy savings in new buildings, in 1979 GSA established tougher energy usage goals for new buildings based on site condition, climate, occupancy, and current technology. In the meantime, an executive order was issued in 1977 requiring GSA, along with all other federal agencies, to reduce by 1985 the energy consumption of new buildings by 45 percent based on the average 1975 consumption in similar buildings.

GAO acknowledges GSA's efforts to make federal buildings more energy efficient, such as its 1979 standards, its development of procedures to diagnose air infiltration in buildings, and realigning responsibilities for managing the overall quality of designs. But GAO calls these actions "first steps. . . . Significant benefits may not be forthcoming unless GSA takes additional actions to improve communications between A/E firms and GSA offices. . . . And GSA should commit sufficient resources to implement programs that affect energy conservation designs and adequately emphasize energy conservation matters."

GAO recommends that GSA provide more information to A/E firms on the successes, failures, and problems of the building in Manchester and more recent projects. It also recommends that GSA implement the postoccupancy evaluation program with specific attention to energy conservation matters.

As for the establishment of a standard, with "minimum and maximum" values, for evaluating energy conservation expertise when selecting A/E firms, GSA says it agrees with the intent but is reluctant to establish such a standard. GSA says it will explore alternative methods for increasing the emphasis on energy conservation expertise.

News continued on page 22

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DOE's Reorganization Seen as Threat to Conservation Programs

The proposed plans for the reorganization of the Department of Energy are "likely to damage the effectiveness of the federal conservation and renewable energy programs," said AIA President Robert M. Lawrence, FAIA. Lawrence's written comment comes on the heels of recent hearings about the proposed reorganization in the Senate Committee on Government Affairs.

The "Federal Energy Reorganization Act," S. 2562, seeks to shift approximately two-thirds of DOE to the Department of Commerce, instituting a new agency handling nuclear issues and research & development. A large portion of the remainder of DOE would move to the Department of the Interior and the rest to the Departments of Agriculture and Justice.

Among those who applauded the Administration's reorganization plan at the hearing was Joseph Tribble, assistant secretary for conservation and renewable energy, who testified that DOE's basic research efforts "would be continued." Pointing to linkages between the work of DOE and Commerce, Tribble said that placing these activities in the same organization "is a logical step."

O. Pendleton Thomas, chairman of

PenVest, Inc., of Houston, who has held a number of board positions in various oil companies, also championed the Administration's proposal. He said that "the perceived need for a Department of Energy resulted from government enacted regulations and controls. Without ... controls there would have been little need for a Cabinet level position...."

But others who testified were critical of the proposal. James R. Schlesinger, President Carter's energy secretary who directed the establishment of DOE in 1977, called the merger of the Energy and Commerce Departments "distinctly a retrogressive step," and said that a strong voice for energy "at Cabinet level is perhaps most dramatically needed to satisfy our international responsibilities." At its core, Schlesinger said, the reorganization plan was "a poor idea."

Connecticut Governor William A. O'Neill, testifying on behalf of the National Governor's Association, said that although most would agree that the present organization is not perfect, "neither is the current proposal for its dismantling." Quoting from the association's policy on the reorganization proposal, O'Neill said, "The dismantlement of DOE without its replacement by such an agency would symbolize a diminished committment by our country to fullfill its responsibility to both the American people and other nations." Scott Sklar, political director of the Solar Lobby, said that dispersing DOE functions among various departments "will only lead to a disjointed, incohesive national energy policy in an area where coherence is imperative."

Others echoed Sklar's sentiments, among them David H. Moulton, policy director for the Energy Conservation Coalition, who advised that "both Congress and the Administration redirect the time and energy spent on considering this bill to the more urgent and necessary task of managing existing programs efficiently and cost effectively."

In a letter to Senator William V. Roth Jr., (R.-Del.), chairman of the committee, Lawrence expressed doubts as to the continued effectiveness of the conservation and renewables programs if they were transferred to the Commerce Department, pointing out that "DOC has little or no experience with the building industry," with the exception of the National Bureau of Standards, which has lost much of its "energy and building expertise during the recent staff reductions."

In the area of energy research and information for architects and builders, Lawrence said that proponents of the reorganization have suggested that the National Technical Information Service (NTIS) could disseminate energy information now being carried out by DOE.



EFCO: WINDOWS P.O. Box 609 County Road and Bridle Lane Monett, Missouri 65708 "However," the AIA president warned, "most practicing architects and homebuilders have never heard of NTIS, much less obtained information on how to save energy in buildings from that source." Lawrence also pointed out that since most NTIS literature is designed to convey research results only to other researchers it does not "fulfill the information needs of the building industry." Lawrence said that the Institute be-

The Institute

Use of Computers Accelerates, AIA Firm Survey Concludes

effectively.'

The number of architectural firms using and planning to use or acquire computers continues to increase, according to a survey of AIA member firms. And these computers are most often used for general office tasks.

In the second annual survey of computer use, 30 percent of the 580 firms responding use some type of office computer, compared to 24 percent a year ago. And 52 percent anticipate acquiring a computer or increasing their hardware/software holdings, compared to 46 percent last year.

The most often cited use of computers is for word processing (53 percent). This is followed by specification software (40 percent), job cost accounting (39 percent), and financial management (36 percent).

More specialized uses are cited less frequently: project management (19 percent), energy audit/consumption software (14 percent), scheduling (13 percent), computer graphics (12 percent), library storage (12 percent), structural and mechanical design software (10 percent), and life-cycle costing (8 percent).

As for the cost of the equipment, the majority of those responding spent under \$15,000. This indicates, said William Hooper, AIA, of the Institute's practice department, that firms are interested in microcomputers for basic elementary management functions. This also relates to the size of the firms, Hooper added. Seventy-five percent have one to nine firm members.

Concerning firms' needs in the area of computer hardware and software, the most frequently mentioned are knowledge of software availability (43 percent) and basic computer applications education (41 percent). Also of concern are access to software (22 percent) and evaluation of vendors (28 percent). The problems most often cited are evaluating needs (14 percent) and comparing cost versus system value (13 percent). In the second part of the survey the firms were questioned about professional liability insurance. Of the 572 firms responding to this part, 66 percent indicated that they carry liability insurance, 32 percent do not. Of those carrying insurance the length of the coverage may reflect their growth patterns, Hooper suggested. Four percent have carried professional liability insurance for up to one year; 17 percent for one to five years; 9 percent for five to 10 years; 22 percent for 10 to 20 years; and 15 percent over 20 years.

lieves that the "conservation and renew-

ables programs need stability and effective

cently regained, thus further diminishing

their effectiveness." Lawrence concluded

renewables programs be managed more

management," adding that "another re-

organization is likely to destroy the

stability that these programs have re-

that AIA would prefer that DOE "re-

main intact and its conservation and

Concerning the limit of coverage, the respondents fall fairly evenly between \$100,000 and \$1 million (10 percent at \$100,000, 16 percent at \$250,000, 15 percent at \$500,000, 14 percent at \$1 million). The deductible average is \$7,080 and the premium average is \$8,520.

Board Approves Funding for PBS Series on Architecture

By a vote of the AIA board of directors at its September meeting, the Institute will help to fund a Public Broadcasting System television series on architecture and design, the first five-part installment entitled "America by Design" to be aired beginning January 1984. The board also received and directed to each commission for study a Direction '80s implementation report produced by a Kansas City, Mo., management consulting firm.

The PBS series will be produced by the Washington, D.C., public television station WETA (Channel 26). In January 1981 WETA received a \$700,000 grant from the National Endowment for the Arts for the series, which WETA describes as a program on "architecture, planning, and design to show how spaces, places, and solutions come about in the built environment. These programs *continued on page 26*



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The Institute from page 23

aim to teach Americans how to look at and experience the buildings and the spaces they inhabit and to address the problems that evolve from the way we live."

AIA will contribute \$100,000 for production of the five-part series (total production cost is \$2.1 million). AIA will also establish an honorary board of advisers to work with WETA and will offer help in identifying potential sources of additional funding (\$175,000 is still needed). One AIA representative will serve as an adviser to the "America by Design" series. In the future, the board may vote for an additional AIA contribution of up to \$200,000.

In addition, WETA and AIA will develop written materials to supplement the television series, which will be distributed to teachers as well as "specific sectors" of the public. An additional hour of programming will be developed for both 1984 and 1985, and more programs may be produced if the series is favorably received by a large audience.

In supporting the program, AIA stressed that it would "permit maximum public exposure for a relatively modest investment of the Institute's resources." Currently 297 stations serving 45 million households subscribe to public broadcasting. And since PBS programs generally are shown twice a week and twice a year, the five-part series will provide 20 hours of air time.

As for the Direction '80s study (see April, page 11), the board received it as a preliminary "source of ideas" on possible ways for implementation. Each AIA commission was to report back to the executive committee in October.

In its report Lawrence-Leiter & Co., managing consultants, concluded that implementation of Direction '80s could mean major changes within AIA, or gradual shifts in activities, or a combination of the two.

The study noted that a "high level of mutual dependency" between headquarters and components is needed to accomplish Direction '80s and that there is a "high level of correlation" among the five areas of focus of Direction '80s.

In forming its conclusions Lawrence-Leiter interviewed over 20 Institute headquarters staff members, the presidentelect of an unstaffed component, and the chairman of the Council of Architectural Component Executives. The interviews revealed that the Direction '80s and long-range planning reports are generally received positively, with views ranging from enthusiastic to neutral but hopeful. Some expressed concern that the Institute may not allocate sufficent resources in terms of both staff and money to effectively implement Direction '80s.

The board also adopted a community 26 AIA JOURNAL/NOVEMBER 1982 design center policy stating that AIA "supports community design centers and encourages members and components to do community services using community centers as a vehicle." The board reaffirmed support of all existing AIA scholarship programs and approved in concept the establishment of an endowment ensuring the permanent support of minority/disadvantaged scholarships. It approved an increase in the amount of "voluntary negative dues checkoff" for scholarship funding from \$3 to \$7.

Among other actions, the board: • Authorized the regional development and natural resources committee to prepare an AIA policy on wilderness; • Approved the AIA/CNA/Schinnerer professional liability program through 1983;

Authorized the development of AIA Document A312, "Construction Bid Bond," and AIA Document A313, "Construction Performance Bond and Construction Payment Bond";
Received a report that AIA membership has grown from 38,317 as of Dec. 31, 1981, to 39,554, as of Aug. 31, 1982.

Fallingwater Forum Reunites Three Taliesin Apprentices

The Taliesin apprentices with Frank Lloyd Wright in Bill Hedrich's familiar 1937 photograph below were the three most closely associated with the design and construction of Fallingwater. Last month the trio—Robert Mosher, Edgar Tafel, and William Wesley Peters—was reunited for the first time in more than 40 years at Wright's celebrated country house in western Pennsylvania, and they shared reminiscences with an audience of architects.

Joining them in a forum sponsored by the Pennsylvania Society of Architects was Edgar Kaufmann, jr., son of the client and donor in 1963 of Fallingwater to the Western Pennsylvania Conservancy.

For Robert Mosher, who practices in Marbella, Spain, the reunion was a first visit to the U.S. in 25 years and his first sight of Fallingwater since the late '40s, when he was "taken in" for several days by the Kaufmann family. "To return today was as if I never left," he said, and then he recalled the speed with which Wright first sketched the house in 1935. "The design seemed to flow out of the architect's mind, but obviously it had been cooking for a long time." The following year, Mosher under 25 and a still-inexperienced Taliesin apprentice, was made supervising architect on the site.

Also young and inexperienced, Edgar Tafel took over that assignment on this difficult project after construction of the second floor. Tafel, author of *Apprentice* to *Genius* and now practicing in New York City, said the test of a building is whether you want to return to it, experience it, share it—and he finds walking across the bridge at Fallingwater "still a thriller."

Peters, now chief architect at Taliesin West, did the working drawings for Fallingwater. He recounted the story of the dispute between Wright and structural engineers over the size of piers and rebars. Although the engineers warned that the structure was insufficient, Wright insisted that it be built as specified and, as usual, got his way. The proof came 20 years later, as recalled by Edgar Kaufmann.

Timber scaffolds were attached to the house during repainting of the exterior concrete when rains unexpectedly flooded Bear Run over the bridge, swelling the wood tightly against the house. Kaufmann says the scaffolds exaggerated the effect of the wind and torrents, and the structure literally shook. But when it was all over, he says, there was no real damage, "a very good test" of Wright's structure. *News continued on page 29*



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ROMO 2000 - PARI:

The Arts **Painted Screens of Baltimore**



Painted door and window screens have thrived as a folk art for over 60 years in the Patterson Park neighborhood of east Baltimore. According to Paul Douglas, an associate professor of English at Towson State University who has studied the phenomenon of screen painting, the art form is "virtually unknown outside the city," making it Baltimore's best kept secret.

William Oktavec, a grocer who later became the owner of an art supply store and a restorer of liturgical art, is credited with painting the first Baltimore screen around 1916. Local legend has it that Oktavec was asked by a neighbor to paint something for her front window to discourage "bums on the corner rubbering in her window." The painted screens soon became popular as devices to brighten up otherwise undistinguished row houses.

Today, screen painting is pursued by a number of local artists-the Oktavec brothers, Ben Richardson, Charles Bowman, Johnny Eck, Dee Herget and others. And they are still prized for providing picturesque privacy. "They invite the eye, but do not invite the viewer's attention any further into the house than the windowsill," says Maryland state folklorist Charles Camp.

Subject matter varies from artist to

artist. "Cozy cottages" are popular, as are windmills, sailboats, and buildings of community significance, such as the Patterson Park pagoda. Most patrons supply the screens, which are cleaned with vinegar and then base coated with white or gray paint. The subject is then sketched in chalk and the finished work protected with varnish.

Johnny Eck uses simple poster paints for his creations. "They're cheap and bright, and last a long time," he says. Most screen paintings will last decades if they are taken in during the winter months and occasionally touched up.

> MICHAEL I. CROSBIE AIA JOURNAL/NOVEMBER 1982 29

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commission or committee of any kind is generally the last place to look for statesmanship. Yet that was the quality displayed last month by Washington's Commission on Fine Arts in dealing with the redesign of the Vietnam Veterans Memorial on the mall to incorporate a flagpole and statue. The commission, as reported on page 17, suggested to the point of mandating that the two new elements be grouped, along with a locator for finding specific names on the memorial, off to one side at the principal point of entry.

Let there be no doubt that we would have preferred to leave the memorial unadorned (except for the locator, which will be a distinct kindness to visitors seeking the names of lost friends and relatives). The flagpole is redundant to the wonderful ring of flags around the base of the nearby Washington Monument. And the statue does precisely what the memorial competition proscribed, making a statement, if an oddly ambiguous one, about the war.

In the locations initially proposed these elements would have predominated. The statue would have become the memorial, with the walls of the original design a background element pointing to the flagpole. The commission's favored arrangement at least gets these unhappy objects out of the way of the walls and the serene space in front of them. That is where the statesmanship comes in, redeeming what could have been a most uncomfortable compromise.

Regular readers will know that this magazine is not given to sycophancy toward its sponsoring organization. Yet comment on the memorial controversy would not be complete without complimenting the leadership of the Institute for its bravery in resisting the redesign. It was brave, on the face of it, to seem to come out against a flag and a statue of fighting men. The fact was underscored by none other than Tom Wolfe, whose commentary on the controversy somehow appeared in the *Washington Post* the day of the commission's vote.

Wolfe did not deal directly with the merits of the two designs. Instead, he pictured the controversy entirely in terms of the valiant veterans vs. the "mullahs" of modern art and architecture.

There were, of course, veterans on both sides. And the controversy was fueled, not by the veterans, but by ideologues who wanted a memorial, not to the veterans, but to the war itself. *D.C.*







ATLANTIC CITY

What happens when gambling is used as a tool for urban renewal. By Thomas Hine "The Atlantic Ocean used to be something. You shoulda seen the Atlantic Ocean in those days."—Burt Lancaster in the film "Atlantic City," written by John Guare.

The Atlantic Ocean still is really something, of course. After more than \$1.3 billion worth of investment in casinos and hotels on the sandy, geologically volatile barrier island that is Atlantic City, the ocean will still have the final say. The ocean was there before there was salt water taffy or Boardwalk or Park Place, or Miss America, and it will be there after the last quarter tinkles out of its thousands of slot machines.

But the literal ridiculousness of that bit of dialogue is also its great truth. There have been big changes in Atlantic City in the five and a half years since casino gambling was approved and in the four years since the first casino opened. The changes have not been entirely physical. They have also been perceptual. For many, the ocean really is different. For most of its new visitors, the ocean is irrelevant.

Casino gambling is radical therapy for a dying city. Nothing quite like what is happening in Atlantic City has ever been tried before. Casino gambling made Las Vegas out of almost nothing, and it has supplemented other established resorts. But it has never before been used as a tool of urban renewal, not to make a buck but to remake a city.

But after four years, the changes that have come have not been those hoped for. It is, admittedly, too short a time for a




Left and previous pages, Caesar's Boardwalk Regency hotel casino meets and reflects the Boardwalk; above, a period postcard; below, the beach today.



city that was terribly troubled to be renewed. But it is nevertheless worth considering whether the changes that have come will lead to the city's rebirth.

Hurslev/Lark/

Fimothy Hursley.

The physical changes have been made to only a few areas along the famous Boardwalk. The ocean is still on one side, squalor is still on the other. There are nine casino hotels, most of them covering areas that would have accommodated two or three of the previous generation of Atlantic City hotels. These nine casinos have brought all sorts of change. Unemployment in Atlantic County has plummeted to below the national average. Nearly 35,000 new permanent jobs have been created in the casinos alone. The tax base has stabilized and risen sharply, although there is some evidence that the casino operators have not been hit as hard by reassessments as homeowners have. In fact, property taxes have doubled and tripled for many homeowners, crime has risen 80 percent, and there are fewer stores serving Atlantic City residents than there were before.

There are pieces of property in the Inlet section, a slum area, that were almost unsalable five years ago and that have been resold in the tens of thousands of dollars, then in the hundreds of thousands, and finally over a million since that time. If you look at it, it is still obviously a slum. But perceptions have obviously changed.

A drive down Atlantic Avenue, the city's main shopping street, shows tiny patches of investment and activity amid blocks of ill-tended, once attractive old buildings that are obviously just about getting by, and large empty blocks, used for parking. The Inlet, which is within a five-minute walk of most of the casinos, has many blocks with abandoned and deteriorated housing. On many rows of turn-of-the-century porch-front houses, well-kept homes alternate with abandoned ones. The usefulness of the homes as places to live has been discounted. They are now counters in a real-life game of Monopoly. Some players of that board game, whose places are named for Atlantic City streets, always hope to make a killing on Baltic Avenue. Many still do.

When New Jersey's voters were asked to approve the referendum to allow casino gambling, they were not sold a vision of a gambling town full of daytrippers on buses. Rather, gambling was presented as a device that would restore Atlantic City's status as the nation's most successful popular resort. The ocean simply has to have something to do with that. But to judge from the new construction that has happened thus far, you would hardly know that you are at a beachfront resort.

Gambling casinos are fundamentally inward-looking. They do not want to let go of their patrons. They trade in obsession. They do not want to break the spell. Indeed, Caesar's Boardwalk Regency, said to be the most popular with the coveted high rollers, goes to such lengths to cut itself off from the outside world that its exits appear to be for emergencies only. When casino designers and operators talk about their business, they fall almost immediately into sexual metaphors. Casinos are places of illusory potency. "Our goal is to get people to commit an unnatural act," says Stephen A. Wynne, president AIA JOURNAL/NOVEMBER 1982 35



Survival 'depends on more than gamblers.'

of the Golden Nugget, Inc., owner of the liveliest of Atlantic City's casino hotels. The unnatural act to which he refers is, of course, losing, which most casino patrons realize they will probably do. "We've always seen the casino as a painted lady," says Wynne. "It's a prostitute who, although she takes your money, makes sure you have a pretty good time." This philosophy led to the creation of not only the most enjoyable, but probably the shrewdest casino hotel built in Atlantic City to date.

But the survival of Atlantic City depends on more than gamblers. It must also appeal to conventioneers and their families, and to people who like the beach as well as the gambling tables.

In order to achieve this, the state legislature adopted a complex, and some casino operators say onerous, set of regulations designed to assure that the casino hotels will become part of a balanced resort in which gambling is an important, but not overwhelming, element. These regulations have helped shape the nine casino hotels that have opened to date, as well as plans for three more that have been started but not completed, and several others that are still planned.

These designs all more or less comply with the regulations, but they contribute very little to making a resort atmosphere. Their exteriors have very little gaiety and no sense of the ocean or of being in a place away from home. Atlantic City was always a contradiction in terms, an urban encounter with nature. Its buildings came out of the Beaux-Arts and eclectic styles of their time, but, through such devices as ballustrades of intertwined dolphins and brightly colored patterns with ³⁶ AIA JOURNAL/NOVEMBER 1982





terra cotta and tile, they gave the sense of being a city on holiday. There are only a few vestiges of that left, most strongly in a few buildings that house hot dog stands and taffy shops, although Resorts International, the old Haddon Hall Hotel, with is pyramid roofline has a little bit of that flavor.

Before casino gambling, Atlantic City was quite a cheerful con job, and its patrons delighted in being fooled. This is an atmosphere that seems as if it would be quite compatible with gambling. But several of the new casino hotels, with their sprawling gaming floors, give the patron the sense of being processed rather than seduced.

This problem grows in part out of the sheer size of the new buildings. They are literally required, by state law, to be huge. A revival of the resort business was dependent on providing hotel rooms, so each casino had to have at least 500 first class rooms, plus meeting facilities, restaurants, theaters, and other resort facilities in order to be considered for a gambling license. There was some use of existing buildings, but the law required that even these be treated as if they were new construction. The casino operators complied. There was a sense that there was tremendous money to be made, no matter what one did, as long as the building was finished quickly.

This period of Atlantic City building is over. There is a widespread sense that the pure gambling market will soon be saturated. Atlantic City will once again have to be a resort. That will not alleviate the problem of placing such huge buildings in an environment that had been geared to an essentially pedestrian scale. Indeed, it might make things even worse.

There are two models for the next generation on the drawing board. One, a casino planned by the Trump Organization, is something of a throwback to the earlier era of hotel build-







ing. Its restaurants and bars are all at the balcony level, with views out over the Boardwalk toward the ocean. There will be outdoor balconies as well, where visitors can take the unconditioned salt air that was the city's first reason for being.

The other is a proposed 1,000-room expansion of Resorts International. This would incorporate tennis courts and a tremendous array of other recreational facilities on one of the old amusement piers that juts out into the ocean. This pier would be reached by a very wide bridge that would make a piece of the Boardwalk into a tunnel. This addition projects the attitude that a single facility can be a full resort in itself. If you give people everything they want to do within the complex, you do not have to worry about whether Atlantic City as a whole becomes a nice place. (It is also practical, of course, since Atlantic City is cold and damp much of the year, and Resorts needs year-round business.)

The Resorts scheme is large and ambitious, although not as spectacular as a scheme John Portman did for Resorts five years ago. The new scheme depends on the success of Atlantic City as a gambling center, and will surely increase the city's lure for conventions. But it is, at the same time, pessimistic because its inward, self-contained quality shows little confidence in Atlantic City as a whole. Resorts is apparently unwilling to gamble that Atlantic City will become a good place.

Throughout its history, Atlantic City's sense of place has been carefully contrived. It has dealt in nostalgia almost from the time its was new. And such resorts always have a labor force that is low paid and seasonal. The Monopoly game board, which dates from the 1930s, shows the same low-rent areas as today. People tend to look back on manufactured memories rather than what really was. It began a bit more than a century



Facing page, survivors along the Boardwalk, including rococo honky-tonks and a pier where Resorts plans expansion. Lemon contrasts with adjacent Playboy, as do back-street houses(top). Above, a holdout enveloped by construction on hold.

Casino gambling as 'old taffy in new boxes.'

ago as a real estate promotion: It was the piece of the sea most accessible to Philadelphia, then the nation's second largest city. But it quickly, and quite brilliantly, created an array of traditions—being rolled down the Boardwalk in a wicker chair, eating salt water taffy—that many city dwellers came to perceive as essential delights of summer itself.

The upper class atmosphere of the resort was always a veneer. There were a dozen or so grand hotels along the Boardwalk at its peak during the 'teens and '20s. Most of the rest of the visitors stayed at boarding houses, or much later, hotels, and partook of the grand hotels with their tearooms, saloons, and hot and cold running sea water, only vicariously. Even the grand hotels somewhat overdramatized their elegance. They were far more likely to play host to the plant manager than to the owner of the company.

Today, this myth of bygone elegance and distant innocence surfaces in peculiar ways. A recent casino show, "Playboy Fantasy," featured a number of fairly contemporary sensations, including a young man in leather jockey shorts harassing a leashed tiger, and a noisy production number that featured chorus boys on motorcycles. But its finale featured straw hats, rolling chairs, and the old song that ends "On the Boardwalk in Atlantic City, we will live in a dream." Although the dreams may be a bit kinkier than they once were, Atlantic City is still looking to a mass market and it is still about dreams.

Thus, casino gambling can be seen merely as the resort's newest gimmick, old taffy in new boxes. Like such earlier successful innovations as the Boardwalk, Convention Hall, and the Miss America pageant, it was designed to give it an edge in its competition for the tourist dollar. Unlike the previous gimmicks, casino gambling introduced a whole new cast of characters, whose frame of reference was not what Atlantic City has been but what goes in Vegas or the Bahamas. The locals were not prepared to argue. Here were people with hundreds of millions to spend in a place that had become, by the 1970s, little more than a ghetto with a good beach.

The outsiders rapidly became aware that Atlantic City was not a clean slate. A preservation constituency materialized to save the Blenheim, an ever so vaguely Turkish delight in reinforced concrete that embraced the Boardwalk and the ocean like a huge crab. Bally Manufacturing Co., the slot machine manufacturer that owned it, was able to produce a number of well-known architects and engineers to pronounce it, among other things, camp. But for many, it symbolized the little bit of romance and excellence the city had left as the casino era began. It was designed by the Philadelphia architect William Price, and Thomas Edison was the concrete designer and contractor. The fight was over when a study commissioned by the state's Coastal Commission and carried out by engineer Nicholas Gianapolos, an admirer of the building, concluded that the structure was not sound. The few remaining landmarks were less of a hindrance to the newcomers than the configuration of the place itself. It is on Absecon Island, a narrow barrier island rarely more than a mile wide. There are only three points of access from the mainland and only four lengthwise arteries. To make matters worse, the block closest to the beach, into which all of the cross streets dead end, is often extremely wide. There is a traffic problem now, but it is not nearly as bad as almost everyone agrees it might become. This is particularly troublesome to casino operators who quite consciously are tied up with the notion of sweeping into the casino in your car, without any impediments. You never saw James Bond standing in a satellite parking area, waiting for the shuttle bus.

To figure out how to fit the explosive new development on this difficult piece of land, the city fathers hired Angelos Demetriou & Associates of Washington, D.C., to formulate a master plan. The most important aspects of this plan restricted the development of casino hotels to three and a half miles along the Boardwalk and to a smaller marina area. This was intended to make the casino economy restore the beach-resort economy, and it was also supposed to limit speculation on property inland. Demetriou argues that if casinos had not been limited to those districts, they would probably have clustered near the highways into town, have had huge parking lots, and destroyed the older fabric of the city.

It is also true, however, that neither of the original goals has been fulfilled. The casino hotels have, in some cases, forced local businessmen out of the business of renting umbrellas and beach chairs, and they have forced many of the small stores along the Boardwalk out of business. But they have made few gestures to life along the beach.

As for the fabric of the city, it is badly frayed. Much of the land is in the hands of speculators. Their hopes for big condominium and commerical developments on their land may be unrealistic, but that is irrelevant as whole areas continue to crumble. Under the legislation that made casino gambling possible, the casino companies themselves have a responsibility to invest a portion of their profits in new housing in the area. It has taken a long time to clarify these regulations. The first planned will be outside the city limits because land prices in the city are so high. Many of the poor people who were strong supporters of casino gambling have found themselves worse off, with little hope for improvement.

Another aspect of the master plan called for all-weather links between the casino hotels, an idea that does not seem to serve any pressing need of the casino hotels, visitors, or the city as a whole. It seems to posit an intensity of new development that Demetriou himself admits is probably not realistic.

The other major planning principle is that towers should be perpendicular to the beach and the Boardwalk in order to minimize shadows. (The beach runs basically north and south. Slabs along it would block out the afternoon sun.) To date, one major exception to this rule has been allowed, the Playboy





Hotel and Casino. This is truly the exception that proves the rule and it should guarantee that no further exceptions will be granted. This dark glass building is wedged onto a narrow strip of land next to Convention Hall. It is extremely oppressive on the outside, where it presents a four-story, two-block stretch of glass curtain wall to the Boardwalk. There is a restaurant inside, but this is not visible from any distance. The effect is deadening. Inside, the long, narrow configuration produces a lobby and three-level casino that are claustrophobic. Demetriou testified in favor of granting the exception. He recently explained that he did so because it was early in the casino era, and it was important to keep Resorts International, the first hotel to open, from having too long a monopoly. As it happened, Playboy suffered many delays, and it opened only last year.

Given all the obstacles the casino operators faced, it is scarcely surprising that they failed to find the ocean itself. Not only do the existing casinos fail to make any architectural gesture to the sea, they do not even provide a discreet way to get from your room to the ocean while wearing a bathing suit. There are no balconies or solariums. There are a few top-floor cocktail lounges, but there is no place to sip a drink and feel a sea breeze.

The only project currently underway that does support the traditional beach and Boardwalk economy is by a developer who is not in the casino business. The old Million Dollar pier is being rebuilt as Ocean One, an amusement and retailing center. Its design, by Cope & Linder, recalls the form of an ocean liner. It promises to be the first development of any kind in Atlantic City that would not look perfectly at home in almost any newly built part of any downtown. It has a real sense of resort architecture and is the first reason to hope for a revival of Atlantic City as a resort.

One of the nicest aspects of the Ocean One development is



Ocean One Pier (across page) is under construction. Top, the Playboy wedges between the Boardwalk and Convention Hall. Above, the Playboy's top-floor lounge.



Places that pretend that time doesn't exist.

that, like the old Atlantic City, it tries to have things both ways. It responds to the ocean, but it also is a basically urban experience. It is like the benches along the Boardwalk. Typically, there are eight rows, but only one faces the ocean. The rest face inward, to facilitate people-watching. The ocean was an excuse, but it was quite a good excuse.

Today, the tension between the ocean and the shore is heightened. The ocean shows the passage of time with the changing of the tides, and its aspect changes drastically with the weather. Fundamentally, however, it is outside of time. That is the comedy of Guare's line. The one thing Atlantic City has not had is a sea-change. The casinos, by contrast, are very sensitive to the time. They have been studied so that their operators know just how much certain tables can be expected to yield at certain times of the day and certain times of the year. Yet, they pretend to exist outside of time. The cocktail waitresses, with their brief, metallic costumes and rouged bosoms, scurry about at 10 A.M. looking just as they do at 2 A.M. Most of the casinos have the same lighting at all times of day. Casinos seek to be a different world, one where ordinary caution can be discarded and certain fantasies, profitable for the casino operator, can have free rein.

In order for Atlantic City to work, the casinos and the ocean have to work together. So far, the bulk of the casinos' business has been people in for the day or night from within a few hours' drive, a substantial market that includes both the Philadelphia and New York areas, as well as Washington and 40 AIA JOURNAL/NOVEMBER 1982

Baltimore. But the goal of casino gambling is to revive the convention business, to draw people who will spend money in stores, restaurants, and hotels, not just at the tables. Even though Atlantic City is very far from reaching this goal, the intent has had a major role in shaping what was built to date.

The key phrase is "casino dominance," and it is something the Casino Control Commission, which must approve of casino plans, wants to avoid. It means that each casino hotel must be designed so that someone who does not want to be tempted by the casino can nevertheless make use of all the rest of the facilities in the building. This is a particularly vexing problem for the architect, since the client's major interest is to get people into the casino and make them stay there. Even the regulators want enough people to be able to find the casino so that the operators make a profit, since the state gets a cut. Nevertheless, the designer must prove that the casino is easy to avoid.

Some of the attempts to accomplish this are quite ingenious. At the Tropicana, designed by Welton Becket Associates, you enter from the Boardwalk and ascend by escalator into a large atrium. When you reach the top of the escalator, the slot machines, which fill a major portion of the atrium, cannot be seen. They are screened by plants and a wall. There is a clear path to walk away from the casino, past a series of bars and restaurants. It is all in compliance with the law. But even before you get to the top of the escalator, you are bombarded with the sound of coins plunking out of the slot machines. If you are of a mind to be lured by gambling, the temptation is quite evident.



Bally's Park Place (left) combines a new casino block with the mansard-roofed former Dennis Hotel. Below and bottom, daytrippers unload at Bally's. The Claridge and Sands are beyond.



The Casino Control Commission's regulations add to the expense of building casino hotels, and they are intended to do so. Early in the casino era, then-Gov. Brendan Byrne complained that existing buildings were being converted to casino hotels without sufficient modification or investment. The state wanted to give a boost to the contruction industry, and it wanted to ensure that what tourists find in Atlantic City would be sufficiently attractive to help rebuild the tourist industry. There followed the notorious bathroom incident, which casino operators and architects nearly always cite when complaining, as they often do, about excessive regulation. Part of Caesar's Boardwalk Regency, the second of the casino hotels to open, was originally a 1960s vintage Howard Johnson's Motor Lodge. A member of the commission visited the construction site and saw that although rooms were being redecorated, bathrooms were left untouched. He made an issue of it, and noted, perhaps unwisely, that they did not fit into the color schemes of the rooms. The offending bathrooms were remodeled, and the commission has been entirely replaced, but the incident is well-remembered. Barbara Lampen, chief planner for the commission, defends the commission's action. She says the commission's duty was to see that Atlantic City would become a high quality resort, and that good bathrooms are part of that.

Development of Atlantic City's casino hotels has certainly been costly. Both Bally's Park Place, designed by Skidmore, Owings & Merrill, New York, and the Tropicana exceeded \$300 million in cost. The figure for the Park Place is even more dramatic when you consider that it is only partly completed. All its guest rooms are in the former Dennis Hotel, and



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The Tropicana was built around the skeleton of the former Ambassador Hotel, which had not been occupied since 1968. Its atrium mezzanine (above) is now packed with slot machines.

The casinos were built in a gold rush atmosphere.

its hotel tower is still to come. Only part of these high prices were brought about by regulations. Atlantic City is not an easy place to build. Access is difficult for construction, and traffic patterns are difficult to design. Each casino hotel must have large food-storage areas, since there is no food wholesaling center from which purchases can be made, as in large cities. Each of the casinos functions somewhat like a small city, and all are at the ends of dead-end streets.

After an initial honeymoon, the investment community has soured on Atlantic City. This is true despite indications that gambling has been recession-proof. One reason is uncertainty over the future of Convention Hall, now leaky and ill-suited to the kind of convention business the city hopes to attract. A team led by Cambridge Seven and Perez Associates was chosen this summer to design a \$220-million renovation and expansion that would double the 500,000-square-foot hall.

But some of the problems grow from the way the hotels were built. Some casino operators allowed themselves to be caught up in the gold rush atmosphere. Their belief was that the first few casinos to open would capture the bulk of a very large business for a long time. Architects specified materials not so much for their suitability as their availability. Meeting an accelerated schedule became crucial. Overtime was allowed to go out of hand. Money was spent in ways that would not serve any long-term purpose other than winning the race.

In the end, the theory was only partly true. Resorts International, which won the race before it started by developing plans even before the referendum passed, remains a dominant force in the market. But there was no benefit in being third.

Bally's Park Place, which was third, is the most dramatic example of the gold rush syndrome. It has captured a respect-



able share of the market, but the return on its huge investment has been small, sometimes nonexistent. The building meets the Boardwalk with a massive expanse of gray granite, and its interiors, though expensive, have the feeling of a hot pink airport. It is visibly an expensive building, but this comes across in the wrong way, the way Richard Nixon does when he is trying to be a regular guy. Its exterior has the sort of blocky respectability most people associate with banks. "Fiscal responsibility is the last thing you want to evoke in a design for a gambling casino," says Alan Lapidus, an architect who specializes in casino hotels. Yet this is what Bally did, and the first few years of results show that it was not a very smart course, fiscally. Bally's building was too expensive to pay off.

In contrast to Bally stands the Golden Nugget, which has been showing healthy profits since it opened with a building that cost little more than half as much as the Park Place. Its exterior is undistinguished, but its interiors are sufficiently outstanding to justify its advertising slogan: "You have to see it to believe it." Once you see it, you shouldn't believe it. Its intricate moldings, its luxuriant bracketing and millwork, its plaster reliefs, and its stonework are largely bogus. This is nothing new in architecture, however, and it is quite convincing. The Golden Nugget creates a complete Gay Nineties fantasy. Guests arrive in a porte cochere that has a mirrored and brass-like ceiling, not to mention chandeliers. They walk into a multistory space, with a huge bird cage, a fountain, murals of Atlantic City's past, and large concrete columns rising incongruously off-center into a painted dome. The latter is a mistake, and quite a big one. The overall effect is so successful, however, you scarcely notice it. The atmosphere is reinforced by a subtle, but omnipresent pop tune Muzak that is heard in all the public spaces. The restaurants are full of stained glass and gingerbread, some of it real. There is a

Victorian Chinese restaurant that is a real tour de force, but even the coffee shop has been thought out as a theatrical event. The casino takes advantage of a limitation on casinos the requirement of a surveillance floor above the gaming tables. At its center aisle, where no surveillance is needed, the casino ceiling rises into a mirrored vault with chandeliers. This helps create a sense of spaciousness and occasion, which is sorely lacking in most of the others. Perhaps the nicest touch of all is the brass finish at the ends of the slot machines. This provides a slightly antique glow that adds to the atmosphere.

Like most of the casinos, the Golden Nugget was designed in-house by the company that built and operates it. It is so frankly manipulative, so blatantly the painted lady that Golden Nugget President Wynne speaks of, that one hesitates to praise it as architecture. But it is an extremely sophisticated thing. Wynne says that when it was being designed, he posted a sign in the drafting room that read: "Anything Worth Doing Is Worth Overdoing." The result certainly belies the contention that our times are incapable of producing highly decorated places because of the expense and dearth of craftsmanship. Only in comparison with other casino hotels was the \$160 million Golden Nugget not a very expensive building. But when you compare it with other casinos that spent as much money to much less effect, the Golden Nugget becomes quite a remarkable building. The architecture may be dishonest, but it is ingratiating, especially to a clientele that wants to be fooled. It takes some of the populism that postmodernist architects espouse and carries it to its logical conclusion without the slightest trace of irony. Unlike some recent buildings, which evoke the glories of the past only to remind us they are lost forever, the Golden Nugget suggests we can have anything we like. We can't, and we know it, but that's the sort of thing we come to Atlantic City to forget.

The Golden Nugget is the most successful of the casino hotels, though it is not alone in the theatricality of its interiors. The Boardwalk entrance to Resorts International's casino is a superheated version of art deco that somehow manages to make real marble look like plastic. A lounge next to this space has sinuous curves and indirect lighting that makes it feel like a 1940s railroad station bar.

The top floor at Playboy is an exercise in United Airlines Hawaiian, complete with brass palm trees. It is, however, one of the few places in Atlantic City that has a good ocean view.

The interiors of the Sands use marble and white, tan, and other muted shades in order to make the hotel, which is smaller than most, appear the richest and most tasteful. But it has also recently remodeled part of its slot machine area using a science fiction/disco theme. The Sands, which has already changed its name twice, has been struggling for identity.

The Claridge, a classically detailed building whose octagonal tower has been an Atlantic City landmark for nearly 60 years, is more successful at projecting the high-class image. Like many of the old hotels, the Claridge had several stories of public spaces, including upper and lower lobbies, a library, solarium, and restaurant. The multi-level casino uses this area and carries the dark paneling and other elements of the old Claridge throughout. A casualty of this conversion is the hotel lobby; it is extremely cramped.

Harrah's is the only casino now open that is not on the Boardwalk. It is at the state marina, which was to have included Hilton and MGM casino hotels that have been indefinitely postponed. Its large, attached parking garage is probably its major lure for members of an audience who might view going to a gambling casino as they would visiting a suburban shopping mall. Harrah's site is less restricted than any of the others, which seems to allow a less confusing circulation pattern. The major circulation spine admits a lot of natural light into the casino. Harrah's, which is a unit of Holiday Inns, attempts to create a more wholesome, family-oriented atmosphere than most of the rest. Ironically, its remote location far from the beach offers little to do besides gambling. Its building uses somewhat better materials than the average Holiday Inn, but it is otherwise quite similar, an effect that was probably intended.

The Tropicana, which was developed by Ramada Inns, is much more a downtown hotel-with-gambling than a casino hotel. Its overall design, with its decorative use of space frame structures, an atrium, and its striving for a distinctive shape on the skyline, make it an up-to-date example of corporate architecture.

Caesar's Boardwalk Regency, the second casino hotel to open, already presents an image of decay. The prismatic glass forms of its Boardwalk facade were inappropriate when the hotel opened. Now they have been discolored and their effect is dissipated by the oil canning of the panes. Its interiors are probably the least grand of the hotels, but they have an honest tawdriness that many find endearing, even comfortable.

But perhaps the greatest physical image of the new Atlantic City involves a hotel that has not happened. It is the massive rusting steel frame of the aborted Penthouse casino hotel engulfing some small boarding houses whose owners refused to sell. The casino developers were reportedly willing to pay up to \$500,000 for the tiny, row house lots, but the owners wanted a million. They overplayed their hands. They "crapped out," in Atlantic City lingo, but so did the developers. Now the owners of the little houses have lost their shot at a fortune, and their houses are overshadowed by the hulk of someone else's unrealized dream.

Gambling has made a fortune for some and awkward predicaments for others. The city is a little bit ahead of what it was when it took a chance on casinos, and, like most gamblers, it is staying with the game, waiting for the big payoff. □ 44 AIA JOURNAL/NOVEMBER 1982



Learning from Atlantic City

Thomas Hine interviews Robert Venturi and Steven Izenour

Robert Venturi was learning from Atlantic City long before anyone heard of Las Vegas. He went there frequently as a boy. He owns furniture designed by William Price for the Traymore Hotel, perhaps the most important building ever to stand there. Early in the casino era, Venturi's firm had a commission to design a new casino hotel, into which he proposed to incorporate Price's Blenheim Hotel. This design, with festoons of lights linking two slab room towers to Price's Moorish fantasy has been widely published, but it was not built.

Steven Izenour, coauthor (with Venturi and Denise Scott Brown) of *Learning from Las Vegas*, in 1980 taught a studio that considered Atlantic City. An exhibition based on that University of Pennsylvania studio was shown at the Cooper-Hewitt Museum in New York City, AIA national headquarters in Washington, D.C., and elsewhere throughout the country.



Here are excerpts from a recorded conversation with them about Atlantic City:

Venturi: I didn't know Atlantic City in its really glorious days, up to 1930, although I do remember going as a child in the late '30s when some of the grandeur was left, though fading. It was always for me an extremely romantic place. When you went there, there was enormous excitement. I think it was the combination of the spectacular ocean, and the Boardwalk, and the romantic, fairy-tale-like buildings. I remember being particularly in love with the Traymore way, way back.

Then later, when you come to analyze the combination of the ocean, the beach, the Boardwalk, and the great hotels, you realize that the dramatic quality came because you had on one side the vast space of the ocean—purely a natural phenomenon, always the same, never touched—and on the other side you had this highly artificial, very urban, constantly changing place. The drama of one side with one thing and the other side the other was simply amazing. It was like nothing else in the world.

Another thing was the combination of honky-tonk and grandeur. On the land side, you had a layered situation. On the lower layer you had the honky-tonk, and on the next stratum

there were rich old Quaker ladies rocking on the porches just above the honky-tonk. They were looking beyond it to the ocean. It is very rare in the United States to have this kind of a juxtaposition. You get it a lot in Europe. The Palazzo Farnese is across the street from houses that contain five stories that are the equivalent of one story of the palazzo. On one side lives a prince and on the other live hundreds of families. The contrast between the honky-tonk and the grand gave Atlantic City an enormous liveliness that then became part of that other contrast between the buildings and the vast space of the ocean.

How much of this was planned? Well, who cares? It was a phenomenon. Sociologically, another funny thing was that many of the hotels started out as Quaker boarding houses that expanded. You had this funny combination of Quakers who were good businessmen and this honky-tonk environment.

And some very distinguished architecture resulted, especially the two hotels (the Traymore and the Blenheim) by William Price. The Traymore was extremely sophisticated. When you look at that building and know the date, 1915, and then you look at the furniture, it is amazing. Art deco did not exist in 1915, but this is really a form of art deco that was





'We're saying the new work is not vulgar enough.'

extremely advanced at the time. It was very interesting, and more important, very good. Fine art came out of this environment of Quakers and honky-tonk.

I have not been there in four or five years. It makes me so sad. We wrote a book about Las Vegas. I'm not easily turned off by things. I'm afraid to go because the lost opportunities will make me sad. It's sad that the old Atlantic City went, but that's life. What's really sad is not that what followed it is different, but that it is inferior.

Izenour: It's so gray.

Venturi: It just doesn't have the fantastic vitality that those dull old Quakers whose mothers wore gray bonnets were able to produce.

Q: Why is there no connection between the new hotels and the ocean?

Izenour: Casinos are probably the most introverted building type ever invented, whether they're in Las Vegas or Atlantic City. That's for obvious, money-making reasons. You don't want to let people become aware of time, space, the weather, 46 AIA JOURNAL/NOVEMBER 1982

anything. If you have a grasp of reality and the outside world, you are likely to say "What the hell am I doing?" All that gets in the way of making money.

The new Atlantic City is not what Bob was talking about honky-tonk and high art. And it isn't Las Vegas either—beautiful, glitzy shlock, but so much shlock that it almost becomes more.

In the earlier Atlantic City, you had the entrepreneurial Quakers doing the thing at the turn of the century that turned out to be architecturally wonderful. And you had the Vegas entrepreneur in the '50s and '60s doing his own personal thing. They were playing out a different set of fantasies for a different time and purpose, but the results are marvelous in their own way. What you have now in Atlantic City is esthetics by committee. The end result is just gray. There's nothing. It's corporate architecture for corporate clients. And the corporate in this case refers to the gambling companies, which isn't just a guy with a Caesar's Palace fantasy any more, but a board of directors and a bunch of guys from Harvard Business School. Also within the corporate mentality are the people at the state level who are controlling how it will all come out. Atlantic City is losing its vulgarity, so, in a sense, it's no longer



The Golden Nugget's lobby (left) and casino floor (above).

interesting. You can be high art and exciting, or vulgar and exciting, but you've got to be exciting.

The test of my thesis is the Golden Nugget, which is the most entrepreneurial and the most successful too. It's a bunch of smart young guys and a few backers who know what they want and go after it. It's not great architecture, but it's got character and it's got pizzaz—glitz coming out of its ears. That is part of the spirit of both Atlantic City and Las Vegas. **Q:** The people who are the regulators, the ones you blame for part of the dullness, all agree with you and say the Golden Nugget is the best.

Izenour: It has been proved in the marketplace. Esthetics aside, they are getting the best return on their investment. They did true surface glitz, not grand elevations on the Boardwalk. It is cheaper to do, and the effect pays off.

The other big change is that the scale of development is so much greater than it was at the time Bob was talking about. Then, even the biggest hotels only controlled relatively small pieces of the Boardwalk. There were plenty of blocks where you could still have a smaller scale of development. Now you have superblock schemes. The inevitable result is that you have to consciously plan for those smaller elements Bob was talking about. They don't happen naturally anymore. It has to be a conscious effort that people were not willing to make at the beginning. Whether they are going to begin to do so now that the bloom is off the rose, I don't know. All of the second level stuff, restaurants and other things between the monster hotels, is all left to do. Whether that scale of development will go ahead in this economy, I don't know.

Q: The old Atlantic City, including the Price hotels, was scorned by architects and critics of that time.

Venturi: The architectural community often doesn't like great buildings when they are new.

Q: Might we be falling into the same trap?

Venturi: No. The critics of Price were saying his work was too vulgar. We're saying the new work is not vulgar enough. Price's critics condemned how his buildings differed from the other architecture of the time. The new Atlantic City buildings could be anywhere, and they're not particularly distinguished for what they are. \Box





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Alexandre Eiffel's 'Iron Church'

All but unknown, it stands in a tiny Mexican mining town. By Vernon L. von Pohle, AIA

After many years of reading, traveling, and studying books and maps about Mexico, and particularly of Baja, I saw a picture with a caption that intrigued me. It read, "The Iron Church... the church that should not have been." I had seen stone churches, brick churches, stucco churches, and concrete churches—but never an iron church. The picture and the small article in the book supplied by the Auto Club of Southern California went on to explain that this small church had been designed by none other than Alexandre Gustave Eiffel, of Eiffel Tower fame. The caption went on to add that the church, which was to have been sent to some place in Africa, had mysteriously been set down in the far-off copper mining town of Santa Rosalia, Baja California del Sur.

To fully appreciate the church it is necessary to know more about Eiffel. He was born in Dijon, France, on Dec. 15, 1832. He graduated from Ecoles de Centrale des Artes in 1855 and Manufactures University in 1858. In just three years after his schooling Eiffel was entrusted with the design and construction of a large bridge over the Garonne River in France. This was the first use of caissons and compressed air, which saved both time and money. Eiffel was able to construct the bridge with a minimum of falsework and supports.

His fame spread, and he soon started his own company. Some of his accomplishments included a bridge over the Douro in Portugal in 1876, a viaduct for the Garabit Canal in 1882, the framework for the Statue of Liberty, locks for the Panama Canal, and his best known and greatest achievement, the tower for the Paris Exposition of 1889, which bears his name.

Mr. von Pohle is an architect in Riverside, Calif., and teaches architecture at Loma Linda University.





A demountable structure with panels as cladding.

The Paris Exposition had a paid attendance of 39 million and brought into the French treasury vast amounts of money. The exposition was so successful that France decided to have another. For the second, Eiffel designed another iron structure -a demountable church. He later planned to send the church to Africa where termites would promptly destroy a wooden one. The iron church, however, was never sent to Africa but instead traveled throughout the Western world.

At the 1892 Columbian Exposition in Chicago, Eiffel exhibited his church, and it made news as a new method of construction. After the closing of the exposition, the church was crated up and returned to Europe where it wandered from exhibition to exhibition. When the novelty of the portable iron church finally wore off, the structure was put into storage and forgotten.

Meanwhile, thousands of miles away in Baja, the women of Santa Rosalia decided that something had to be done because their town had no church. Neither the Rothschild Co. (owner of the mine) nor the miners had felt the need for a church. The miners were more interested in saloons than in religion. The women of the town felt differently. They formed a delegation and went to the head of the mine.

A delegation was then appointed in 1895 to go to the Rothschild Co. headquarters in Paris to see about getting money to construct a church, and to arrange for an architect, engineers, mason, and others gifted in the art of church building. While the delegation discussed the problems with the company officials, someone in the office remembered the portable church that had been designed by Eiffel.

The advantage of a metal building, aside from the fact that it could be put up and taken down easily, was that it would stand for many years in a dry climate. The delegation felt that this was a quick way to get a completed structure and the price was not high. Therefore, they agreed to buy the galvanized stamp-plate church and had it sent to Santa Rosalia. The shipping of the church posed very little problem since French

ships traversed back and forth to Santa Rosalia. Erection of the metal panels began in 1896, and the building was completed the following year.

The first mass was held by Father Giovanni Rossi for all the people of the village. The women of Santa Rosalia rejoiced, for they had a church at last, even though it was far different from the stone and adobe churches and missions up and down the length of the Baja Peninsula and the mainland of Mexico.

The church is not the greatest in comfort as it is cold in winter and unbearably hot in summer. In fact, the current priest said it was so terribly hot in the church that he doesn't wear a stitch under his robes when he holds mass in the summer. He also said that the straight-backed, wooden pews are most uncomfortable.

Despite all its discomforts, the iron church has a charm all its own in its "ornate" simplicity. The frieze at the roof cornice is an open truss work that is simple, yet effective. The bell tower frame is open and in the church, supplying an intriguing interior element. An interesting design was stamped with care and exactness into the metal plates. The exterior pattern is different from the interior, which adds variety and breaks the monotony of the one-meter-square panels that are set one above the other.

The method of locking the panels together is unique. Spandrels tie in the building and battens cover the joints and give the building a vertical, and churchly, appearance. Originally the church had a sun shade along each side. However, to accommodate more people inside, the exterior side panels were removed and used to make a ceiling for the two enclosed sections. An exterior plaster wall was also installed. The side additions extended the width of the structure by 20 feet.

The many tourists driving through this coastal Mexican village rarely notice this unusual structure, as it is not on the main road. The iron church, however, now named the Church of Santa Barbara, is still serving its purpose as the center of the Santa Rosalia religious community and, at the same time, has been for 85 years an almost unknown monument to its designer, Alexandre Gustave Eiffel.

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LONGITUDINAL INTERIOR





Workmanship: Key To Good Building

By Gordon Simmons



J ohn Ruskin had more things to say than anyone else about the relation of workmanship to architecture. His book, *The Stones of Venice*, called for the return to medieval craftsmanship to counter the social evils of 19th century industrialization. But some of his ideas transcend his nostalgia. He had, to put it mildly, some definite views about workmanship.

He considered it a mistake to suppose that one man's ideas can or ought to be executed by another's hands. Ruskin allowed such interpretation as necessary in geometrically defined design on a large scale—that is, in architecture. But with that rather significant exception he pronounced himself sure that the thought of one man can never be expressed by another.

The skill of workmanship was for him entirely subordinate to the worker's pleasure in working. You can either make a man of the common worker, said he, or a tool of him. If you would humanize him, then let him try his mind and imagination. You will get from him roughness of execution, but you must be willing to sacrifice convenience or beauty or economy to get happy, healthy, and ennobling work.

For Ruskin, good artifacts are those (like Gothic stone carvings) that express free and dignified work. They must give evidence of human invention without imitation (for that is not art but manufacture), and will normally be imprecisely finished (because perfection is inhuman: "Neither architecture nor any other noble work of man can be good unless it be imperfect," he wrote).

It is absurd for Ruskin to suggest that because his dreaded mechanized production is regular and precise, imperfect work is natural and therefore good. And that if permitted to think, or design, a worker will be incapable of accurate work. Such a view ignores the beautifully precise and thoughtful craftsmanship in traditional trades such as cabinet making and ornamental plastering. From the very reasonable and admirable notion that workmen should take pleasure in their work, Ruskin leaped to the untenable conclusion that makers must continually be original.

The spontaneous qualities of free and rough workmanship are appreciated by us all, where they seem fitting, but Ruskin was too ready to accept unskilled work for the sake of happy workers, under the delusion that accurate workmanship and pleasurable work preclude each other. We can, however, recognize that his sincere and zealous concern for the human values of work and art led him to illuminate significant ideas about technology that are still with us.

One is that our specialized designers and producers share less and less common knowledge and purpose. There is a widening disunion of head and hand. "We are always in these days endeavoring to separate the two," he wrote. "We want one man to be always thinking, and another to be always working, and we call one a gentleman, and the other an operative; whereas the workman ought often to be thinking, and the thinker often to be working, and both should be gentlemen, in the best sense."

Mr. Simmons is a practicing architect and an associate professor of architecture at the University of Cincinnati's college of design, architecture, and art.

Ruskin saw very early the dehumanizing implications of increasing numbers of products being made with machines, where even less thinking is required of operators. He attributed the debilitating loss of human freedom to an industrialization whose end is profit, whose labor is thus ignoble, and whose objects, as Ruskin's disciple William Morris was later to say, are by-products.

It is not possible to draw an absolute dividing line between craftsmanship and machine workmanship, since some sort of tool or machine is used in nearly every kind of making, and it is difficult to say exactly when a tool becomes a machine. It is a matter of the degree of human intervention. David Pye, in his book *The Nature and Art of Workmanship*, suggests that we can characterize craftsmanship generally as a workmanship of *risk* that requires continual judgement, dexterity, and care. Industrialization is a workmanship of *certainty* because the qualities of the product are predetermined before production.

W ith increasing mechanization, two important changes are occuring in the nature of workmanship: one in process, the other in product. The first is that there are fewer people doing creative work. Machine operators are supplementary to the machines, attendants interfere only if something goes wrong. They are laborers who are ultimately dispensable as their repetitive, unpleasant jobs are gradually replaced by further automated machines that labor more efficiently than people. Creative work in mechanized production is being concentrated in design, where the head is guiding the hands, and increasingly the machines, in the making of the model. One result of this emphasis is the requirement for more general intelligence and technological understanding, rather than the detailed and specific knowledge and training of skilled production workers.

The second change in workmanship is the character of the objects produced. In general, the personal touches and spontaneity of craftsmanship are yielding to precision and regularity. Precision is not exclusive to machine production; it is commonplace rather than exceptional. What is economically difficult to accomplish in machine production is variety, an attribute to which craft workmanship has accustomed us.

But there is a danger greater than mechanization—a threat to the human sense of workmanship itself. Large scale industrialization is a tool of big business, whose overriding goal is monetary gain. As Ruskin saw, this is antiworkmanship in effect. Within a workmanship outlook, technological efficiency and proficiency are centered on the worker and the product. Management for business gains means that work is valued for the price it will bring.

This has been a growing problem since bargaining and selling became separated from the workman. The workman has direct contact with the technology of production, but with diminishing control over what he is doing, he tends to focus on his own material well-being and will do as little as necessary for the highest wage his union can exact. Businessmen are once removed from (and less knowledgable about) the production process itself, but are in control through material ownership and use that power to obtain the highest price the market will bear. And there is a third element—the money interests who underwrite ownership. Separate from production altogether, their role is to concern themselves exclusively with financial benefits.

The big question then is: What is to come of workmanship in the face of the fiscal focus of big business? Thorstein Veblen felt that workmanship is more intrinsic to our makeup than a mechanistic conception of production. Workmanlike efficiency commands "the approval of thoughtful men," he wrote, "as being serviceable to the common good and as a substantial manifestation of human excellence; . . . efficient work is a source of comfort and complacency to the workman. . . . The test of efficiency in economic matters has come to be, not technological mastery and productive effect, but proficiency in pecuniary management and the acquisition of wealth."

If we can accept the points outlined above as the characteristics of modern technology, what are its effects on workmanship in building? There are two complaints about the construction industry today, apart from its dollar cost. One is that it is unfortunately not the highly skilled craft work that it once was. The other is that it hasn't become a modern mechanized process like industrialized manufacturing. What we have is a fascinating mixture of traditional and industrialized production.

A large number of industrially produced materials and products is incorporated into the building process. Hundreds of new products are introduced every year. During the past century, the making of most building components has been transferred from artisans to the factory. Architectural design is increasingly concerned with the *selection* of components from the thousands of pages of manufacturers' catalogs. But the components tend to be inadequately tested and understood, and are habitually uncoordinated in size and performance. It sometimes seems perverse. You would think, for instance, that by now our standard factory-fabricated steel door frames would fit the vertical coursing of the concrete block walls into which they are regularly installed.



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Perhaps more significant in the long run is the realization that architects are abdicating their traditional work of designing the physical parts and increasingly limiting their responsibility to determining the disposition of the components.

The very nature of on-site construction may always inhibit comprehensive industrialization. Buildings are large and heavy and more or less tied to the topography, geology, and climate of specific sites. Large building components are commonly bulky and difficult to transport. Many of the materials are still produced locally for very good reasons of natural circumstances and tradition. Centralization of such a varied and dispensed distribution arrangement is not very likely.

The general transformation of industrial production by the force-transmitting machines that displaced human muscle power has provided construction workers with power-driven hand tools and some larger machinery for hoisting and conveying and excavation. Construction at the building site is now less a fabricating process and more one of assembly. But its operation is not a great deal different from what it has always been. It remains a rough and ready undertaking, disjointed and messy compared with a factory setting, greatly affected by the weather and the season, requiring wide tolerance in fitting things together, and still very dependent on the thought, the talents, and the physical exertion of its everyday workman.

It is the second age of mechanization that promises to make the greatest difference in building. The revolution in information processing in extending the reach of the human brain has already begun to systemize the complex planning and scheduling of construction projects. The process of design has been affected as well, by progress in the rationalization of materials information and specification. One vital question still unanswered is the potential for the intervention of computers in that relationhip between the head and hand that has always been the crux of the human work of design. As things now stand, unresponsive hardware and insensitive program mechanisms tend to make the computer an imposition and an impediment to good workmanship in the design process.

The building industry also differs significantly from the structure of modern industry in general in not being made up of large economic units. The extent of the industry in total and its impact on the national economy are obviously enormous. But it is an inertia-bound, fragmented collection of independent companies and authorities, almost universally small in size and capital expenditure, put together loosely and variously on a project-by-project basis.

The building capacity of the country is consequently not owned by a few giant organizations, like the automobile, electronics, telecommunications, and other conglomerations. Although the production of building components is primarily in the hands of corporate manufacturers and there are some large general contractor or construction management firms who temporarily hold bigger collections of productive work, the system as a whole continues to resist the overall control necessary for huge scale management.

This resistance to industrialization and business control is held by detractors to be a bad thing. It is inefficient and generally unprogressive—practically un-American. But there are reasons to hope that in the long run, the technological conservatism of building construction will actually turn out to be beneficial.

One of these reasons is the continuing central attention to the *project*. Mass production has encouraged a tendency to 54 AIA JOURNAL NOVEMBER 1982 value quantitative productivity. In constructing a building, we still bring together people, materials, and money at a particular place to make a singular artifact. Surely this will continue to inspire concern for good work.

Second, even if the level of craftsmanship is scarcely what it used to be, on-site construction still demands greater individual skills, in general, than manufacturing. A fair amount of human expertise and pleasure in making is being conserved.

And third, the inertia of building construction against being dragged into the production line gives us time to think about what we *ought* to do. It is time to reflect on the results of those technologies that have become very large and heavily industrialized. We have a chance to make purposeful choices.

Building does share with the mechanized industries an increasing specialization of work. This is most evident in the worsening split between design and production. The professionalization of both architectural practice and education in the 19th century was indicative of the increasing complexity of tasks. A steadily growing distinction of responsibilities and goals during a time of rapid expansion of technical information has widened further the gap between architect and builder. They have become antagonists around the issue of construction cost, gentlemen or not.

rchitectural values, technological and otherwise, are a complex mixture of old and new. Despite the fact, for instance, that modern construction is by no means technologically advanced, modern architects have consistently been intrigued by the *expression* of high technology. Its imagery and symbolic values have persevered even if cleft from the practical reality. The "honesty of materials" ethic is another example. It stems from our appreciation of craft technology. where the tradition of hand-working a few natural materials has yielded an understanding through direct familiarity about what can be done most simply and naturally. But such intuitions or empathies developed over time in relation to constant characteristics seem less accessible in the case of industrially synthesized products. Their makeup is the result of scientifically directed processes, which renders them more distant from our experience and everyday understanding. Does PVC plastic, which can be chemically constituted and fabricated to order with any number of physical properties, have an architectural "nature?" Such dichotomies point up the fact that man's capacity to create for himself a world of meaning is gradual and adaptive while his technological pace has been rapid and revolutionary.

The most significant similarity of construction to manufacturing, and the essential hindrance to good work, is its tendency toward a price system of competition. In such a system, efficient buildings, like efficient toasters, would become those that are monetarily rewarding to their producers and investors. It is the narrow sense of efficiency, focused blindly on the calculations of the marketplace—the ratio of the number of units produced to the number of labor hours and material quantities consumed. Now, making money is presumably not inherently a bad thing. Buildings are indeed economic objects the major components, in fact, of the capital stock of the nation. It is simply that a *predominance* of such an attitude is sure to lead to effects inimical to workmanship.

The craftsmanship we love and admire in traditional building was possible because the work was highly skilled and low priced. Since it is no longer low in price, there is not nearly as much of it. And since construction has accomplished little of the economics of huge scale management and mechanization, we have been provoked to reduce dollar cost by reducing the quality of the product and consequently some of the interest and pride in the whole enterprise.

But there can be no question that we need to place more, not less, emphasis on high quality and durability: to use better materials, to strive for greater excellence of workmanship. How is it possible, though, if there is no foreseeable relaxation of the economic vise? The most direct answer comes under the heading of a matter of will. We ought to spend substantial resources on building. It is right that we do so, because good buildings are fundamental to the physical and cultural continuity of man, and because good building is purposeful and participatory work—the alternative to thoughtless technology.

It may seem paradoxical to suggest more expensive buildings when the general cry is that they already cost too much. Well, they do cost too much, but only for what we get. Minimum first cost for maximum immediate return is usually an uneconomical idea. In too much government sponsored housing, political myopia appropriates dollar sums that simply won't sustain decent, durable building. And in "make-a-fastbuck" speculative development, supported by regressive tax laws, good building is actually contrary to the end in mind. Can you imagine, sometime in the future, social interest in restoring such buildings?

We have all seen recent signs of some reawakening of a more workmanlike attitude in building, primarily instigated by increasing economic pressures. Most visibly, energy costs and depletion have been redirecting architects and building owners toward the traditional notion of an environmentally efficient building fabric. There is a similar growing awareness of the long term costs of owning and operating buildings. Recognizing that inflation in maintenance, management, and insurance costs rivals that of construction, more owners seem willing to build more durably and expensively to save resources over time. The burgeoning preservation movement is to a great extent economically inspired, but more significantly it reaffirms the cultural importance of good work.

So for all the reasons mentioned, the building industry is not likely to conform to the totally industrialized goal of manufacturing. For that matter, we may see a retrenchment from an overcommitment to mechanization in other industries as well. But that is a broader question. In building, at least, the task will be to discover and employ the appropriate scales and styles of technology to suit the needs of a whole range of situations.

It is not very adventuresome to predict that the greater part of construction will continue in the foreseeable future as a hybrid system in which prefabricated components are assembled by hand and machine on the building site. Substantial improvement must take place in the workmanship of integrating the two types of production. We need to direct product design, worker education, and construction organization toward solving the present difficulties of transportation, sequence of assembly, tolerances, and finishes.

Large scale industrialization will increasingly be the source of building components, particularly for conditions of light weight and heavy finish, mechanical and electrical items, and elements with moving parts. These components and their assembly techniques will become more sophisticated and inclusive, especially for buildings of a repetitive sort. Enlightened cooperation is obviously needed to provide a proper From 'der vollkommen Architectus' by Andreas Grote



level of standardization and functional coordination, whose ends must be useful and beautiful buildings—to which purposes the need for variety in repetition must be fulfilled.

Almost none of the hundreds of factory-made products on the market today were designed by architects; we can hope that architects will rise to the challenge to bring to bear their traditional concern for workmanlike values on the design of the parts as well as their selection and disposition. Most importantly, we must develop the understanding to decide responsibly on the standard of social benefit, where and to what degree industrialized products are the better choice.

There will always be locations and situations for small scale technology and skilled craftsmanship. This is certainly true for special places in important buildings where the higher price can be appropriately and gladly borne, and in preservation work where we must have the knowledge and the craftsmen to recreate the work of the past.

Finally, there is the craft work that will be done by people building for themselves. Now, it is easy to oversentimentalize this urge for selfsufficient making. Much of today's abundance of do-it-yourself literature is probably more responsive to saving money, or revolts against industrial society, or the pride of having accomplished something, than to the enjoyment of actually doing the work and the appreciation of well made artifacts. Still, the first three goals are also valuable indeed, and the sheer amount of interest in making things for ourselves suggests that Veblen was right, that a primary human instinct is being touched—a part of man's being that might at times recede, but will never really disappear.

A concern for the human will to work and the abiding values of workmanship is far more than wishful remembrance. Whatever the character of the possible means of design and construction in the future, architects, builders, and dwellers at large can proceed from the existence of workmanship as the very core of good building. Buildings are works—the products of the work of people and embody the whole human condition.

Martin Heidegger once wrote that "building is not merely a means and a way toward dwelling—to build is in itself already to dwell." He helps us to grasp the wonder to which construction has always been, and is still, devoted: Building is the essential way in which people, in making enduring places, accommodate themselves with, and in a very real sense, recreate, their world.



Baltimore Re-Examined

A President, and an AIA team, visit an accomplished city. By Simpson Lawson

In mid-July President Reagan stood beside Baltimore Mayor William Donald Schaefer on the 27th floor observation deck of the city's World Trade Center. He gazed approvingly at Baltimore's redeveloped Inner Habor and the structures and open spaces that make it the pre-eminent downtown gathering place and stage for civic pageantry.

Taking advantage of the panorama this level of I. M. Pei's pentagonal tower offers, Mayor Schaefer pointed out such landmarks as the Maryland Science Center, the National Aquarium, and restored houses in the historic Otterbein area that homesteading owners can often sell for \$90,000. Dominating

Mr. Lawson, executive vice president of Calvin Kytle Associates, a Washington, D.C., consulting firm, was executive editor of *City* magazine.

the view from this height is Charles Center, Baltimore's pioneering urban renewal project in the heart of the central business district.

"The irony of that scene," said a Baltimore official later, "is that if Reagan had been president during the past 30 years, those developments wouldn't exist." The President's speech to the National Association of Counties in the Baltimore convention center just before his sightseeing tour seemed to attest to this. "For the first time in too many years," the President said, "the federal government will recognize the limit on what it should do, how fat it can grow, and the power it can claim. With your help, we will reverse the flow."

The flow to Baltimore over the past three decades for the Inner Harbor and Charles Center alone amounted to \$135 million, primarily for acquiring and clearing land. Two federal office buildings were built in those renewed areas at a cost of \$20 million. Federal funds on this scale are no longer available to American cities.

So even as it basks in richly deserved acclaim for its showcase projects, Baltimore, like most other cities in the East and Midwest, is adjusting to a period of austerity that some authorities feel might last through the rest of the century. As the President continues to fulfill campaign pledges, cities are encountering what the Urban Institute calls a counter-revolution in the way the nation handles social and economic problems. The effect of the President's initiatives and Congress's acquiesence, says the nonpartisan research group's September

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report, is to reverse long-standing policies of federal intervention in domestic affairs.

The President outlined part of his rationale in his Baltimore speech, described by the White House as a restatement of the "New Federalism" doctrine he proclaimed in his State of the Union address last January. "In the recent past," he said, "as the federal government has pushed each city, county, and state to be more like every other, we've begun to lose one of our greatest strengths, our diversity as a people. If we're going to renew our country, we must stop trying to homogenize America."

As the national debate over those proposals continues, consolidation of programs and shrinking appropriations reduce the size of community development block grants that are made to local governments on the basis of criteria designed to determine the degree of need. Baltimore received \$27.9 million in such grants in fiscal 1982, compared with \$32.5 million in FY 1981. Fewer funds are available for urban development action grants, awarded to projects judged capable of generating private investment.

Two days after the President's visit the American Institute of Architects' QUEST-Quality Urban Environment Study Team-arrived for a two-and-a-half day review of urban development in Baltimore. The team chaired by Rai Okamoto, FAIA, San Francisco, included attorney Richard Buford of Gladwyne, Pa., and this writer. The team examined the process that had produced Baltimore's progress over the past 30

President Reagan views Baltimore from the World Trade Center's observation floor. As keyed above, surrounding (1) the Trade Center are (2) the Inner Harbor, (3) Charles Center, (4) the site of Market Center, and (5) Mount Royal.

years. That progress was documented in kits, sent to team members before their visit, which said that new private, public, and institutional investments totaling \$1 billion had been completed or were under construction or committed; that \$350 million in new investment is planned; that 75 major downtown buildings have been built or recycled in the past 20 years, 52 of them in renewal projects.

On the first day of the visit the founding fathers of the pioneering Greater Baltimore Committee and their chief professional aides described the roles they and their counterparts played in Baltimore's transformation. Retired retailing executive Walter Sondheim Jr., now chairman of the Charles Center-Inner Harbor Management Corporation, sketched the history of these two developments. Archibald C. Rogers, FAIA, chairman emeritus of RTKL Associates, described the work of a multidisciplinary design concept team whose reasoned analysis of transportation issues in the Baltimore metropolitan area is credited with elimination of a projected 14-lane bridge at the mouth of the Inner Harbor and preservation of historic Federal Hill and Fells Point. William Boucher traced the changing relationships between public and private development interests from his perspective as executive director of the Greater



'The revised standard version' of revitalization.

Baltimore Committee. David Wallace outlined the principles of the urban design scheme he developed and coordinated in downtown Baltimore. James Rouse combined his reminiscences with an assertion that there are "strong forces at work" that can strengthen the center city. In his commentary on a slide presentation, Martin Millspaugh, president and chief executive officer of Charles Center-Inner Harbor Management, Inc., outlined some of the intricacies of financing public/private investments.

Sometimes the speakers differed in their recollection of events or their perceptions of the roles played by individuals, organizations, and institutions. But there was little disagreement over the basic facts in their accounts. The consensus version—"the revised standard version," as team member Richard Buford put it—runs like this:

In the early 1950s Baltimore's central business district was undergoing a cycle of deterioration, particularly in retailing, even more severe than comparable Northeastern and Midwestern cities were experiencing. An economic analysis forecast even bleaker days for business and eventual fiscal bankruptcy. The closing of O'Neil's department store at the site now occupied by One Charles Center grimly symbolized the impact of proliferation of suburban shopping centers on down-





Among new Baltimore buildings are Meyerhoff Concert Hall (left) by Pietro Belluschi with Jung/Brannen Associates, headquarters for RTKL architects (below), and an addition to Baltimore Art Museum by Brower Lewis Thrower (above).

town retailing. In 1955, a group of young businessmen, all chief executive officers of their companies or senior partners of their professional firms, formed the Greater Baltimore Committee and a Committee for Downtown. They assessed themselves at levels ranging up to \$10,000 a year to develop what many of them recalled as a "rifle shot" effort to halt Baltimore's decline.

To prepare the plan the Greater Baltimore Committee hired David Wallace. The first stage in what Wallace described as a "tactical maneuver" became Charles Center, containing office, retail, and cultural developments totaling \$145 million. For an area in which only one new office building had been completed in the previous 30 years, the Wallace plan called for two million square feet of new office space. ("If the director of the planning commission had projected the same thing he would have been on the next bus to Peoria," said William Boucher.) If such an ambitious goal failed to shake the faith of Wallace's clients in the Greater Baltimore Committee, there was skepticism expressed in the streets and in the press.

Tommy D'Alesandro Jr., mayor from 1947 to 1959, didn't share these doubts. Boucher recalls that when he disclosed the plan to the mayor at D'Alesandro's home one evening, he told him that legislation would be needed designating the downtown area an urban renewal district. D'Alesandro, Boucher said, insisted on drafting a statement that night. Subsequent action by the city council and the Maryland legislature brought prompt urban renewal authorization. "It set the whole tone," said Boucher, "that five subsequent city administrations have had toward downtown development."

Charles Center was barely under way when Theodore R. McKeldin, then-mayor and former governor, pronounced it a success and proposed that the city and business leaders join forces to develop the Inner Harbor. Too small to accommodate modern ocean-going vessels, this finger of water pointing toward downtown had not been used as a working harbor since World War II. Its shores were lined with rotting piers and abandoned buildings.

Wallace once again was brought in to do a master plan, now realized and even expanded upon (see June '81, page 32). The 240-acre area contains, among other attractions, the Pei tower, the Maryland Science Center, an outdoor music tent for the performing arts, the National Aquarium, and the glass-enclosed pavilions of Harborplace. In its first 18 months of operation, Harborplace's collection of restaurants and small merchants, two-thirds of them food-oriented, had 18 million visitors. The Urban Land Institute found that its sales volume per square foot has been greater than that of Faneuil Hall Marketplace in Boston, in many respects a model for Harborplace.

The design of the two \$22 million pavilions of Harborplace, James Rouse told the QUEST team, was influenced by the report of delegates sent to Boston to look at Faneuil Hall Marketplace. They were instructed, said Rouse, to try to determine "the sources of human delight—what it is that makes this place affect the spirit of people. Then come back to Baltimore and have a brainstorming session on how that spirit of delight can be treated in Baltimore terms, not Boston terms. Harborplace is very different from Faneuil Hall, not as sophisticated, more democratic. More open to all kinds of people. A much more vulnerable place."

The QUEST team's primary focus was process, and its members were particularly intrigued by what Mayor Schaefer and his associates call "creative financing" and what some of his critics believe is operation of a "shadow government."

"The city acts as lender of last resort," Martin Millspaugh explained, "through something called the trustees. The city finance director and a retired chairman of the board of Monumental Corporation, which owns an insurance company, have been named as trustees for the city. They act as private individuals, and the city has entrusted something like \$150 million in city funds and urban development action grant funds to them. They act as a bank. They back the loans that are a little bit too risky for financing in the private market but that are essential to make the city's development strategy go. They have dozens of ways of putting deals together. Asked the arguments for and against the trustee system, Millspaugh said: "They are the same. It works because the trustees, being private individuals, can bypass all city charter requirements for competitive bidding and selection of consultants and architects. They can make deals like a private business person would. The argument against it is that they are doing that outside the city government, outside the charter provisions, and therefore avoiding the system of checks and balances that have been built up over the years.'

On its final day in Baltimore, the QUEST team turned its attention to the impact of the public/private initiative in Baltimore's neighborhoods, among the most highly organized in the world. Throughout the visit the team was told repeatedly that the neighborhoods receive an overwhelmingly large share of local- and federal-government funds—87 percent by Mayor Schaefer's estimate. Nothing in statements by any neighborhood representatives on the panel suggested that lower- and moderate-income residents resent the use of public funds for showplace projects in Charles Center and Inner Harbor. Lack of any significant protest over \$12 million in UDAG funds that helped underwrite construction of a Hyatt Regency hotel in



Shopsteading and downtown retail redevelopment.

Baltimore was regarded as the litmus test of neighborhood concurrence in these establishment activities. Doris Johnson, executive director of the Coldstream/Homestead/Montebello Community Corporation, said she sees such developments as the hotel and Harborplace in terms of the jobs they produce. Vincent P. Quayle, director of St. Ambrose Housing Aid Center in poor black neighborhoods, criticized an ABC television documentary for "posing the downtown glitter" against the neighborhoods. "The problems Baltimore has are not between City Hall and the neighborhoods," he said. They stem rather from land speculation and blockbusting, he said, noting that during the 1960s more than 90 percent of the housing in some areas changed from white to black ownership.

Baltimore was one of the first cities in the country to offer homes for sale for a trivial sum—in Baltimore's case \$1—to families who would agree to rehabilitate them to specified standards and live in them for a minimum of two years. At one point more families were engaged in homesteading in Baltimore than in every other city using the device combined. Discussion during the QUEST visit centered on the Otterbein neighborhood in Inner Harbor West. This was a cluster of old houses doomed by plans for the expressway network and given a reprieve when the Inner Harbor bridge was demapped. Sold by lottery, these houses had a special appeal for people who like to be on the "cutting edge" of change. They also were attracted by the availability of 100 percent rehabilitation loans from the city. Currently the city is pioneering a commercial variant of homesteading. Selected commercially zoned properties are sold for \$100 to entrepreneurs who agree to rehabilitate them to city code and design standards and operate a business for at least two years. In some neighborhoods the shop owners are encouraged to live in the property. Efforts are made to cluster the shops, as in the 1600 block of East Baltimore Street, considered the city's model shopsteading block, which has a concentration of professional offices, shops, and studios.

What can the city do as an encore to Charles Center and the Inner Harbor? The answer may emerge in an 82-acre area on the west side of downtown called Market Center, surrounding the 200-year-old Lexington Market, a working market with open stalls for the sale of meat, fish, produce, and other foodstuff. Its main structure, the 90-stall Lexington Market East, is a 30-year-old masonry building that replaced the market's original wooden sheds. The market's booths, raw bars, and stand-up lunch counters bear little resemblance to the cafes and boutiques of Harborplace, but they attract shoppers from throughout the region and are patronized extensively by neighborhood residents.

Earlier plans for developing the retail district had failed to gain the right combination of public and private support. Shortly after taking office in the early 1970s, Mayor Schaefer told the Greater Baltimore Committee that commitment of city resources and manpower to the Inner Harbor precluded the city's redeveloping the retail district. He suggested that the business community undertake it. The result was an ambitious renewal plan that called for investments totaling \$200 million and clearance of most of the buildings along Lexington Street for a megastructure to connect the old retail district and Charles Center. The committee searched in vain for two years to find a major developer to get the project started.

At this point, an aide recalls the mayor saying, "It doesn't seem to be happening. We (the city) will try to pick this up and run with it."

A substantial part of the Market Center planning is funded by a \$10 million value-capture grant from the Urban Mass Transit Administration, one of the few such grants that agency made. One of the two downtown stations for the Baltimore subway system, scheduled to open in 1983, is at Lexington Market. William Pacy, president of Market Center Development Corporation, the quasipublic counterpart of Charles Center-Inner Harbor Corporation, plans no deliberate effort to change the existing mix of retailers. Stereo and record stores, discount clothing outlets, and credit-jewelry stores seem to dominate in this mix.

Pacy often refers to Market Center as the "hole in the doughnut"—a reference to the fact that the long-neglected area is surrounded on all sides by expanding and upgrading institutional and cultural activities. To the west is the Baltimore campus of the University of Maryland, with its twoyear old law school library and the university hospital and medical school. Significant residential improvements are taking place in the residential areas of Seton Hill and Mount Vernon, to the northwest and northeast. Still further north, in the Mount Royal area, Baltimore's major cultural complex is flourishing. Dedication this fall of Meyerhoff Concert Hall, new home of the Baltimore Symphony, provided that area's crowning touch.

In an interview, Jay Brodie, AIA, commissioner of the city's department of housing and community development, spoke of Market Center as the wave of the future in the redevelopment of downtown retail districts. Brodie said: "Someone said Charles Center is a '50s and '60s project and that Inner Harbor is a '60s and '70s project. Market Center is a project for the '80s and beyond. It is marked by less clearance, more rehabilitation; a greater mix of uses; more concern with public transportation, less reliance on the automobile; more concern for a lively pedestrian environment than we had 25 years ago; less clear-



Lexington Mall (across page), will be terminated on the west a new addition to Lexington Mall, designed by Mark Beck Associates. Market and subway entrance are seen in photo above.

ance of land; and more creative financing and tax incentives, particularly through historic preservation."

Prominent in the projected mix of future uses for Market Center is office space. Plans and sketches by Robert Tennenbaum, Market Center Development Corporation vice president and architect, depict midrise and highrise office towers and office space in restored buildings above street-level shops.

For the time being, Baltimore's hope for getting offices built on this scale is in the hands of David Murdock, a Los Angeles investor and developer whose recent accomplishments include a 25-story office building in downtown Akron and a 15-story tower in Omaha. Murdock, who tends to shun public attention, has extensive business holdings both in this country and abroad.

After a tour of the Market Center area in 1980 that included a pause for oysters at a Lexington Market raw bar, Murdock spent an afternoon reviewing plans for the district. Subsequent negotiations between him and the city resulted in his signing a property-disposition agreement representing a potential investment of \$250 million in Market Center.

Under the agreement Murdock is committed to building at least a million square feet of first-class office space; to restore the exterior of the old Hochschild-Kohn department store (known locally as the "Palace"); to build an atrium that will link that building with the Lexington Market subway entrance plaza; to build parking garages and elevated walkways as part of a "skywalk" system in the core of Market Center; and to construct street-level shops. Murdock has agreed to pay \$5.5 million for four Market Center parcels.

Restoration to convert the Hochschild-Kohn building to upper-floor offices and ground-floor shops is under way. It is scheduled to be completed next spring, about the time the company plans to break ground for the first of two 200,000square-foot office towers on a site adjacent to the expanded East Market.

Brodie expects scaffolding on the facade of the "Palace" to reduce the skepticism in Baltimore about Murdock's proposals. Some design-conscious citizens, including some architects, fear that Murdock will be cast as the savior of an area that would otherwise languish in blight and thus escape the rigorous design review that kept building quality high in Charles Center and the Inner Harbor. To those skeptics Brodie responds: "I remember people saying, 'You'll never market office space on Pratt Street (where the World Trade Center stands). Companies want to be in Charles Center.' Twenty years before that they wanted to be in the county. Each time we have gradually and successfully changed perceptions, and I have complete confidence we can do it here."

The QUEST team's response to what it had seen and heard in Baltimore was a compound of admiration and anxiety admiration for what the city had accomplished, anxiety about how it could carry out anything approaching this level of accomplishment with federal funds drying up. James Rouse offered some hope for a delayed response by the business community to President Reagan's plea that the private sector take up the slack in domestic programs left by cuts in the



Can the pace be maintained without the uncle?

federal budget. Rouse said he was encouraged to find that many business executives are seeing the implications of "getting the government off our backs. They are now coming to realize that they've got to put their own back out to a lot of these problems."

Mayor Schaefer asked Baltimore businessmen, in effect, to put their backs out early last summer when slots in a federally funded job program were cut from 16,000 to 5,000. Business leaders pledged about 1,700 summer jobs in what the mayor calls a Blue Chip-In program. A few corporations assumed responsibility for carrying out defunded federal programs; utilities, for example, took over weatherization projects stripped of federal assistance by cuts in the energy budget. There is no evidence, however, that the Greater Baltimore Committee, now merged with the Chamber of Commerce, will play the catalytic role it played in the '50s and '60s. In the field of physical development the need for such a catalyst no longer exists. Leadership has shifted to the city government and, particularly, its department of housing and community development, the superagency that orchestrates such functions as public housing, public works, licensing, and building inspection in carrying out the urban renewal process. Both Robert Embry, who set up the city agency and ran it for nine years, and Brodie, his immediate successor, recognize that Baltimore's redevelopment program must be geared to today's leaner times. Both, however, assert that the widespread image of Baltimore as a city grown fat at the federal trough is not supported by statistics. Embry, in an interview, said he has urged Mayor Schaefer "to prioritize" to make the best use of what he regards as declining but "still significant federal money" for physical development.

Above left, shopsteading on East Baltimore Street; above right, the community market at Old Town Mall east of downtown.



"Cities," said Embry, "must think in action-grant terms, carefully determining what they get for the public money they spend. How much private money will be spent as a result? How many jobs will be created?" The suggestion is not surprising from one who as assistant secretary of Housing and Urban Development and chief architect of the Carter Administration's urban policy established the UDAG program for the federal government.

Even at what he regards as the dawn of the age of urban scarcity, Jay Brodie envisioned a redevelopment strategy that relies heavily on the action-grant concept. Brodie recalls telling his staff before the last presidential election: "Whoever is elected, we in housing and community development are in for a very austere time.' It was apparent that budgets were never going to be what they were in the last 20 years. So we started to accommodate ourselves.

"Even in the past, with virtually no corporate headquarters and without a Rockefeller or a Mellon, we learned to take what we could find and leverage it. As a result we learned to live by our wits and be inventive and creative both downtown and in the neighborhoods. Those were good ways to learn to behave. |Limitations on funds| force private and public actors to sit down across the table and negotiate deals. If you ask 'How should you use scarce federal or other public dollars?' my answer is, 'Award them to projects that have merit, and that produce jobs, taxes, and critical needs. . . .' I wouldn't be upset if funds from community development block grants were distributed [on the basis of merit] as the UDAG funds now are."

In testimony before a House committee in 1981, Mayor Schaefer gave a preliminary prognosis for further progress in Baltimore in the post-federal era. "We are going to survive. We're not going to fold up. But we were doing so very well with federal aid," he said poignantly. Baltimore, he said, "typifies what federal and state aid means to a city that knows how to utilize the resources given to it."

BOOKS



The Case for Postmodernism as Evolution

After Modern Architecture. Paolo Portoghesi. (Rizzoli, \$19.95.)

With hindsight, the evidence accumulates that the hegemony of modern architecture existed more on the printed page than in the built world. Editors, writers, critics, historians, and curators helped to create the intolerant dogma that allowed no exceptions, and they provided the names: International Style, brutalism, and functionalism. But orthodox modern architecture—that radical attempt to create an architecture, abstract and new, functional and machine-



like, and supposedly free of history and style—always had dissenters and alternatives were present.

There were those like Frank Lloyd Wright and Eliel Saarinen who retained vestiges of traditional imagery and ornament. There were the older academicians, the regionalists, and those in the entire private housing industry-at least in the U.S. -who never succumbed to the enticements of modern architecture. Some dissenters were castigated, such as the Italian "neoliberty" movement, which Reyner Banham in 1957 called a "retreat ... from the vanguard of the modern movement" and "infantile regression." The attempt during the later 1950s by Edward Durell Stone, Minoru Yamasaki, and Philip Johnson to reintroduce ornament and historical images was treated as rank heresy by the architectural press; Stone and Yamasaki wound up in exile and Johnson returned to the fold-for a while.

Instead of cataclysmic changes of sensibility and abrupt shifts of taste, which some critics believe Robert Venturi's *Complexity and Contradiction* inaugurated in 1966, it is evident that modern architecture was more a concept than a reality. One simply has to go back and read Douglas Haskell's *Architectural*

Above, Portoghesi's Monte dei Paschi agency; left, his Holy Family church.

Forum magazine from the late 1950s and early 1960s to see postmodernism avantle-lettre. The old Beaux-Arts system never really disappeared; it simply took on some new clothing as in the work of Louis Kahn. Certainly, there have been some recent concerns that have caused the so-called postmodern movement (a poor term) to gain currency: the environmental movement, the rise of historic preservation, the "energy crisis," urban renewal, and the perceived failure of modern architecture, as with Pruitt-Igoe. (This last is certainly more the fault-if it is to be assigned-of planners and politicians than architects.) And then there is the ritual of youth, of the younger generation always questioning and revising the received wisdom of the elders. Yet, as indicated, Sir Edwin Lutyens and Bruce Goff were always present as alternatives.

This brief critique of the concept of postmodernism indicates some of the strengths and flaws of Paolo Portoghesi's new book, *After Modern Architecture.* On first glance, the book is appealing, well illustrated with a variety of known and relatively unknown (at least to Americans) architects. The chapter titles are intriguing: "The Trail of Ashes," "The Primitive of a New Sensibility," and "The Star System and the Crisis of the Functionalist Statue," and the book *continued on page 66*



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appears to be an attempt to sum up recent tendencies. Unfortunately, this anticipation is only partially fulfilled.

Portoghesi is perhaps best known as a historian of Italian baroque architecture and as an architect. His buildings, too little known in the U.S., betray a decided Borrominiesque character. Obviously, he is part of the Italian dissent from modern architecture, and, while the book is not written as a participant's memoir, he has the participant's viewpoint. Consequently, the Italian story is told in more detail and receives top billing; American developments are treated perfunctionally, and the rest of Europe and the world are merely a supporting cast.

Italy, of all the European countries, was least affected by orthodox modern architecture, and, while Mussolini flirted with the Italian rationalists such as Terragni in the 1930s, native traditions remained steadfast. The consequence was that in the post-World War II years a remarkably pluralistic architectural scene developed that contained Bruno Zevi championing Wright and organic architecture, a neovernacular contextualism, the neoliberty style, and also a more rigorous modern architecture. The 1960s and the 1970s brought the "tendenza" and a supposedly Marxist architecture of stripped classicism-or

vernacularized classicism as evidenced in the designs of Aldo Rossi, Franco Purini, and Bruno Reichlin and Fabio Reinhardt. This neoclassicism is the motif that Portoghesi appears to use as a method for extending his story outside Italy.

Certainly, it does appear that some form of revised classicism has come to dominate much speculative architectural thought throughout the world. Yet Portoghesi does not really have a system by which some architects are included and others ignored. More importantly, he does not have any grasp of the recent architectural history outside Italy. The result is a book of disconnected chapters. Accepted without question and taking up an entire chapter is Peter Blake's Form Follows Fiasco (1974), a totally biased and certainly ahistorical account. Charles Jencks is accepted at face value, categorizations and all. Against this are several important chapters of proto-Marxist analysis of architecture and society-perhaps the most lucid writing that has appeared in English translation, though it succumbs at times to dense jargon: "At present, industrial civilization can be seen as simultaneously contradictory and strongly dynamic; the 'civilization of the machine' juxtaposes itself to (and attempts to integrate itself with) a culture of 'limits' which tends to control the rhythms of autonomous

industrial development, imposing on it a series of conditions."

The promise of the extensive illustrations is not carried out in the text. Among the Americans, Allan Greenberg, Andrew Batey, Marck Mack, and Thomas Beeby (he even provides the cover illustration) are shown, but not even referred to in the text. The Americans covered in detail are (predictably) Venturi and Moore, and, to a lesser degree, Stern and Graves. At least the Americans receive a chapter, probably because of the book's audience. Beyond America and Italy, Portoghesi skims and passes over lightly the Kriers, Stirling, and Bolfill. The result is an uneven balance, illustrations that relate only in the most superficial manner to the text.

Such critical comments on my part should not hide the fact that the book has some value beyond recounting the recent history of Italian postmodernism. Most of the European architects are far more engaged than their American counterparts in questioning the relation of architecture to society and culture. American arguments on the question of whether to ornamentalize or historicize appear trivial-and yet Americans have always been tentative about any possible relation of architecture and society-beyond its status-conferring value. Portoghesi is a readable example of the intellectual

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European architect. He quotes extensively from many sources, but his guiding figure—and the beacon for many of the Europeans—is William Morris. Of course, Morris was the father figure for earlier architects, as diverse as Gropius and Wright. And this brings me back to the initial point I made in this review: There have always been competing forms, ornament, and styles. What is called "postmodern" is simply a continuation of earlier ideas. RICHARD GUY WILSON

Mr. Wilson chairs the division of architectural history, school of architecture, University of Virginia.

The Riches of Morocco's Architectural Vocabulary

Traditional Islamic Crafts in Moroccan Architecture. André Paccard. Two volumes (Annecy, France: Editions Atelier 74; distributed in this country by Editions Atelier 74 169 Prospect Park West, Brooklyn, N.Y. 11215, \$250.)

These two stunningly beautiful (and expensive) volumes deservedly won the great silver medal from the French Academy of Architecture in their first French edition. Now published in English, with translation by Mary Guggenheim, they celebrate Morocco's master craftsmen (maallems) and their remarkable techniques for traditional Moroccan crafts used in architecture. The author, a Frenchman who is now interior decorator to King Hassan II, calls the volumes "the Book of the *Maallems*." He says that their skill and knowledge, transmitted by word of mouth from master to apprentice—from father to son—is still "jealously" guarded and that they did not relinquish all their secrets nor display all their geometrical "finds," but because of their confidence in Paccard they did point out keys in various figures that help "to follow the labyrinthine thread of the arabesque."

The volumes, known informally as "Le Paccard," also celebrate, in a manner of speaking, the King of Morocco, who came to power in 1961 upon the death of Mohammed V. The king permitted the portals of palaces to be opened for the first time to the camera lens. The work of the camera is splendid, and the many, many black and white and color photographs are pure delight to see and study. It was the king, says Paccard, who ensured the rebirth of traditional crafts

At the Royal Palace at Fes, the tiles make a geometrical pattern based on diagonals that underline an octagon within a square. Paccard says: 'The varnished green roofing tiles visible in the foreground, the fountain, and the ground cover make a restful and harmonious whole.'



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and "graciously permitted the traditional masterpieces, both ancient and contemporary, basic to Islamic architecture to be made known." We are told that Hassan II, often called *al Bani* (the Builder) by his subjects, has safeguarded Morocco's architectural heritage, erecting and also restoring many structures, as well as spreading Moroccan architecture beyond the boundaries of his country.

It was Hassan's decision to build a mausoleum to Mohammed V that generated the return to traditional crafts. He issued a call to the maalems to build a structure that "would reflect the fervor and veneration" with which Mohammed V was regarded. Since then, says Paccard, innumerable work projects have begun in every town "to renovate royal palaces, mosques, medersas [Moslem institutions for higher learning], mausoleums, public buildings, and bring the most varied crafts back into use." For example, Hassan II wanted the restoration of the Royal Palace in Marrakesh, where some 3,000 artisans were employed, to be "more than an adornment. He wanted it to represent the rebirth of the soul of the country and to be a spectacular affirmation of national identity."

In his informative book entitled Morocco (Putnam, 1967), Rom Landau remarks on Morocco's national individuality, saying that there have been very few fundamental changes in ways of life or creativity. "The same changelessness applied to the buildings they erected." A 19th century mosque or house, he says, did not portray any particular features of its century, but was "timeless." Plan, shape, and decoration were "neither new nor individual, but repetitions of structures erected during the preceding two, three, or four centuries. This attribute of permanence seems very peculiar to the Moroccans." He sums up the culture of a country that gave the world the oldest university in the Western world, some of the finest Islamic architecture, the Arabic system of numerals, and the use of the decimal point by saying: "For well over a thousand years we find an undeviating hatred for the usurpers from abroad; deep respect for piety and culture paid by both the learned and the uneducated; unswerving faith in the teachings of Islam; and ruthlessness and courage in battle."

The "permanence" to which Landau refers is revealed in these two volumes. Paccard begins with a discussion of Islamic art, its history and influences, also making pertinent comments on the concepts for dwellings and places of worship, basic decorative patterns, and calligraphy. And then he turns to the heart of his subject, explaining and liberally illustrating the work of the master craftsmen in clay, stone, gypsum, wood, metal, and water and light. *continued on page 70*

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"We might almost say that, for the Moroccan, architecture is decoration," Paccard says. And the decoration, like a skin, covers interior surfaces, walls, pillars, and ceilings. Paccard illustrates and explains figures, knots, plaits or borders, the vocabulary of design, the combinations of forms and counterparts, grid drawings, designs of decorative devices, filling elements, calligraphy in decoration, arches, and harmony and matching in patterns.

Paccard, in his in-depth coverage of all the materials used, discusses the work of specific *maallems*, the oldest and most respected of whom say that "we must create beauty and put usefulness a far second." In his discussion of clay as a material, Paccard shows how *zalijs* (terra cotta mosaic tiles) are used for ground covering as well as wall decoration. The ground covering at the Royal Palace at Casablanca (above) reveals a colorful pattern. Rarely uniform in color because of the way they are baked, the tiles contribute to the building's glory, making a harmonious whole.

It is this harmonious whole that is revealed throughout these two handsome volumes. The magnificent patterns are a true reference source for the American architect, interior designer, and landscape architect. Despite the almost overwhelmingly beautiful patterns and colors, Paccard is right when he says in the last caption of the second volume, illustrating a door's panel, that "we are reminded that this art is in praise of the Unseen, and that, where the choice is between Presence and Absence, Absence always has the last word."

At the second volume's conclusion, there are a table of Moroccan dynasties, chronological references, a bibliography, a suggested outline of places to visit, and a glossary. This reviewer only twice has had the good fortune to see some of the places named. It would take two lifetimes to encompass all of Morocco's architectural glories. Nonetheless, these volumes make a starting place. MARY E. OSMAN, HON. AIA 70 AIA JOURNAL/NOVEMBER 1982 **Sun Rhythm Form.** Ralph L. Knowles. (MIT Press, \$25.)

In the belief that solar design will improve the quality of life, Ralph Knowles, architecture professor at the University of Southern California, has devoted a number of intensive research years to understanding the architectural form generated by respecting sun angles. His earlier book Energy and Form recorded the structural logic of natural ecological forces and solar thermal responses. It developed both an analytical methodology and an architectural form synthesis implicit in the force world of energy. And he invented the "solar envelope" as a term to describe the three-dimensional architectural geometry of solar response. It is an imaginary planning boundary for buildings sensitized to the sun, a boundary that allows adjacent buildings and land the right of an equal solar access.

Knowles' new work, Sun Rhythm Form, explores and articulates the concept of the solar envelope. For the meek he has methodically defined the limits of solar architectural envelopes in a handbook of expansive prototypical situations. For the creative he has suggested the plural parameters of new energy integrities that could restructure our cities. The title suggests the dynamics of respecting the rhythm of day and seasons in an architectural dance of life and liveliness. Knowles demonstrates that solar form is much richer than the single static architectural section typically shown to prove that fixed overhangs are calculated to cut out the midsummer noon sun.

But the romantic and even mystical potentials of solar form-giving are not very visible in the uninspired blue paper jacket or yellow covers of the publisher's dry style. Severe graphics and sans-serif type breathe white boredom into a careful and thorough text. Unlike the inspired immediacy and personal graphics of Knowles' public presentations, his book seldom sings or celebrates. There are occasional stunning images, such as the weather-torn corner of an Alaskan building (page 16), or the vivid capsulization of the "Jeffersonian grid" (page 34), or the bioclimatic plan of Richardson's Glessner house (page 150); and these seldom have graphic illustrations. Precise language, logical methodology, nonjudgmental alternatives, and exhaustive thoroughness characterize a reference book that is bound to be the definitive benchmark in the field.

Knowles as an architect with a conscience and a planner with a public purpose has gone far beyond the logical and progressive organization of solar form managing. There is an urgency in his intensity, and an integrity in his comprehension that project artistic and social potentials to the architecture of natural energy rhythms: "My original interest in this work was imagery. I wanted to make the concepts of solar access and design literally and figuratively clear.... Along the way I found my priorities shifted.... The quality of life, not solar energy, became my focus."

Knowles' physical concern is the direct radiation of the sun on building surfaces-maximizing its capture and guaranteeing its geometrical accessibility for host and neighbor alike. Knowles totally ignores diffuse and reflected radiation-useful for heating, and the essence of daylighting. In spite of his Los Angeles base and experience, he also does not even mention the cooling imperative, and the potentials of reradiation access to the skydome as a heat sink. His references are few, his glossary nonexistent; but his knowledge is profound, his experience extensive, and his belief in the need for human response to solar rhythms is unshakable. It is a social responsibility at every level of the building and planning process.

Scientific rigor and an almost cryptic shorthand characterize Knowles' expression. He defines the problem not with numbers, but with strategies. He describes solar envelope generation not only with theoretical cubes, but with real urban sites. He demonstrates design quality with photographs of models of case study solutions. Unfortunately, soulstirring solar solutions have yet to verify the artistic potential of the solar envelope, and the extensive case studies are illustrated with student massing models.

Knowles' academic methodology produces few absolutes. Rather, he spreads out the range of alternative standards and their relative merits. By articulating the problems and defining points of reference for property owner, neighbor, city, and potential future developers, he demonstrates that solar access is neither simple nor static. Sloping sites, trees, fences, land assembly, air rights over public and private lands, and the interrelation of privacy and view are all included in his solar sensitivities and scholarship.

While enthusiasm is undisguised, this is no arm-waving picture book, and no sentimental rerun of recycled and wellknown snippets. As the newest addition to the solar Vitruvius, *Sun Rhythm* may never top the list of most popular books. Rather, it is a fundamental and original treatise of that responsibility that sets newly understood design standards for the dynamic shape and meaning of all of man's responsible building. JEFFREY COOK, AIA

Mr. Cook, editor-in-chief of Passive Solar Journal, is a professor at the college of architecture, Arizona State University.


Medieval Gardens. John Harvey. (Timber Press; distributed by International Scholarly Book Services, Inc., P.O. Box 1632, Beaverton, Ore. 97075, \$34.95.)

Medieval gardens are of more than antiquarian interest. To the architect or landscape architect they frequently offer examples of well designed, small scale open spaces, which provided respite from the trying conditions of urban life, or a private realm for meditation or the pursuit of pleasure. Yet medieval gardens are notoriously difficult to study, for their physical remains have all but vanished, and the interpretation of their written graphic sources requires a highly sophisticated grasp of medieval history.

John Harvey, who has authored many distinguished books on medieval history and architecture (The Master Builders is perhaps his best known work), has produced a most valuable addition to our knowledge of medieval gardens. Employing a very broad definition of gardening as "the culture of plants of any kind," Harvey examines a wide range of medieval "gardens," such as kitchen gardens, orchards, physic gardens, pleasure gardens, and parks. Harvey organizes his material in chronological sequence beginning with the legacy of Roman gardening in Britain after the fall of Rome and ending with Tudor England. Much of the account is

devoted specifically to English gardens, although those of other European countries are also treated. Harvey's scholarship is both meticulous and thorough, the fruit of 40 years' study. He treats everything from garden ornaments to workers' wages. He delves deeply into medieval plant materials, which will be of value to those engaged in garden restoration.

Harvey contends that except for variations in the use of plant materials, "national distinctions in gardening were comparatively slight" during the Middle Ages. He also refutes the claim of many historians that specialized pleasure gardens did not exist in Europe prior to the Renaissance. His account of the influence of Moorish design and horticultural tradition on European medieval gardens is persuasive and well documented, as is his thesis that medieval man, far from cringing in ignorance before the terrors of the forest, actually engaged in considerable forest management and park design in the period 1000-1500.

While Harvey's penchant for detail will please the historian or horticulturalist, it risks wearying the general reader. His claim that national distinctions in medieval gardens were "slight" is at best a premature generalization in what is otherwise a well documented work. His few critical remarks on the design of medieval gardens are astute. He praises them for their masterful use of a limited palette of plant materials, their command of intimate scale, and their well executed transitions from smaller to larger scale spaces. One only wishes that he had provided more design analysis and critical comments. The numerous well chosen illustrations and accompanying captions, which can be read independently from the main text, will most likely hold the most appeal for readers interested in design issues.

Also, one wishes that he had provided more detail on the various uses of medieval gardens, along the lines of Mark Girouard's excellent social history, Life in the English Country House. Much can be gleaned from the illustrations, but given Harvey's superb command of medieval history, a more detailed discussion of typical garden activities within the context of medieval culture would have been a most valuable addition. Despite these omissions, however, Harvey's book is a most valuable contribution to our knowledge of medieval gardens. Indeed, I know of no better work on the subject. REUBEN M. RAINEY

Mr. Rainey is assistant professor, division of landscape architecture, school of architecture, University of Virginia. Books continued on page 72 AIA JOURNAL/NOVEMBER 1982 71

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Great New England Churches: 65 Houses of Worship That Changed Our Lives. Robert H. Mutrux, AIA. Foreword by John Updike. (Globe Pequot Press, Chester, Conn. 06412, \$14.95.)

Admirers of John Updike's writings will admire his introduction to this book. He tells of how he "came late to New England" and later still attended the Congregational Church in Ipswich, Mass., where on some winter mornings scarcely a dozen people came to worship. Nonetheless, he writes, "I have never felt closer to the bare bones of Christianity than on those bleak and drafty Sunday mornings...." Through this old carpenter Gothic church, now destroyed by fire, Updike "entered into the spiritual life of my adopted region." He calls this book an "enthusiastic and knowledgeable guide" to 65 churches in Massachusetts, Vermont, New Hampshire, Rhode Island, and Connecticut, saying that it will let the reader "conduct his own tour of cathedrals without crossing the Atlantic-indeed, by staying within the compass of a pleasant day's drive out of Boston.'

Robert Mutrux, AIA, who has designed some 15 churches in New England himself, has written a commendable guide that calls attention to New England's rich heritage in church architecture from this country's earliest days to the present. His intention, he says, "is mainly to arouse interest in an aspect of human creativity in the New England states that is forever and everywhere present, always stimulating, and highly revealing."

The selected examples of New England religious architecture are arranged chronologically within the respective states. The book begins with an account of the Old Ship Meetinghouse in Hingham, Mass., completed early in 1682. Mutrux describes each church, supplying interesting details on its history and construction, information about its style, construction materials used, and other significant features. There are black and white photographs of interiors and exteriors. He also gives added information on location, date, name of architect, time of services, seating capacity, construction cost, and "how to get there." Where available, there is brief biographical material on the architect.

Mutrux describes 20 houses of worship sited in Massachusetts, ranging from the Old Ship Meetinghouse to Cranwell Academy's Pierce Chapel in Lenox, completed in 1966 and designed by Peter McLaughlin. Seven Vermont churches are included, two in New Hampshire, two in Maine, four in Rhode Island, and 30 in Connecticut. In all, the 65 houses of worship include chapels, meetinghouses, cathedrals, churches, an open-air tabernacle, a synagogue, and a monastery. Among the architects for these structures are Henry H. Richardson, I. M. Pei, Charles Bulfinch, Edward L. Barnes, Richard Upjohn, Asher Benjamin, and Eero Saarinen.

Architectural Theory and Practice from Alberti to Ledoux. Dora Wiebenson. (University of Chicago Press, \$25.)

So intimately bound together are architectural theory and architectural practice that their interaction can be treated as a single subject-as Adolf Placzek, Avery librarian emeritus, calls it in his foreword, "that fundamental topic of architecture: Theoria and pragma, ars and scientia." This fundamental topic is the subject of Dora Wiebenson's fine paperback, written as a catalog to accompany an exhibition of the same name at Yale, the University of Virginia, and Columbia University. In addition to the introduction, bibliography, and some text sections by Wiebenson, there are brief contributions from almost 50 other scholars, including James S. Ackerman, Joseph Rykwert, and Naomi Miller.

The selection begins with the Renaissance discovery of Vitruvius' first century De architectura and the consequent efforts of Alberti and others to render Vitruvius intelligible. It continues with groups of treatises devoted to the education of architecture students and to the enlightenment of amateurs, and ends in the 18th century with books concerned with four "elements" of architecture: the orders; geometry and perspective; technology; public and private architecture. Each of the more than 200 texts listed is described, and there is a brief biographical information about each author. STANLEY ABERCROMBIE, AIA

Form and Purpose. Moshe Safdie. (Houghton Mifflin, \$19.95 hardbound, \$9.95 paperbound.)

This is a book of ideas—Moshe Safdie's ideas as expressed in conversations with John Kettle, also his editor and collaborator for Beyond Habitat (MIT Press, 1970). These conversations evolved into the theme of the Aspen Design Conference of 1980, and the present slim volume. Richly illustrated, but not indexed, the book puts the focus on Safdie's test for design, the feeling of commitment to the needs of people. This leads him to denigrate postmodernists for their concern with "abstract visual patterns, graphic gamesmanship, and eclectic exercises," and their interest in designing single, isolated homes for the rich, rather than confronting the social and economic problems of community housing. He scolds our society for its narcissism and architects for their share in expressing it.

Safdie rightly reminds us of the signif-

icance of scale, numbers, density, relation to nature, and the demands and opportunities of the new technology for the profession of architecture. He issues a call to define goals for improving the built environment, given our awareness of the limitations of our resources. In the present ongoing debate over the course architecture should take. Safdie's reaffirmation of basic human needs as expressed in architecture voices his faith in the value of attempts to create environments in response to human needs. The possibility of arriving at collective agreements through the definition of goals, and of inventing a new kind of "master plan" for environmental needs, seems doomed in a pluralistic society with few agreed-upon values.

Safdie's comparisons with the planning of early villages, mosques, and neighborhoods seem to be part of his romanticizing of popular efforts. History is more likely to reveal that a powerful mogul, a strong archbishop, and a medieval baron or a Renaissance prince had played major roles in planning the village mosque, the cathedral with its market square, or the city's open places. For those who missed the Aspen conference in 1980, and have followed Safdie's work in Jerusalem as well as in Montreal, this book is an opportunity to share the feeling and thinking of this man of ideas, Moshe Safdie. SARA HOLMES BOUTELLE

Ms. Boutelle of Santa Cruz, Calif., is director/founder, Julia Morgan Foundation and author of a forthcoming book on Julia Morgan.

The Art Museums of New England. S.

Lane Faison Jr. (David R. Godine, \$35.)

In 1958, Harcourt, Brace published Lane Faison's A Guide to the Museums of New England, which is now out of print. This book is a complete revision of the earlier work. Faison says that the word "guide" has been omitted in the new edition because the word suggests a descriptive compilation. What he proposes in the current work is "an excursion into art criticism and art history based on the vast treasure available to the public in New England." Some 550 works of art in 101 museums are illustrated and discussed. An unusual system of cross referencing places many of the art works in a larger context, providing the user with information, for example, on where other works by the same artists can be viewed in New England museums.

The survey, which provides information on where a museum is located, its hours, and whether an admission charge is made, is arranged south to north by states, and alphabetically by towns within each state. Faison is professor emeritus of art at Williams College.

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Books from page 72

Construction Claims Investigation Worklist. J. Norman Stark, AIA, and M.C.D. Stark. (Professional Publications and Communications, 960 Leader Building, Superior Ave. at E. Sixth St., Cleveland, Ohio, 44114, \$11.95.)

Architect/attorney Norman J. Stark and his wife have prepared a practical checklist in this 20-page pamphlet to aid the user in preparing a legal premise supported by documented information. The list proceeds systematically from the occurrence of an incident to recommendations regarding strategy to use in preventing future claims. The format permits the user to go through a case step by step, giving advice on an array of topic, such as principal parties and witnesses; documents, evidence, and exhibits; and licenses, registration, permits, and approvals. For those who want a structured procedure to follow in preparing a body of argument, this publication will be helpful.

Shops: A Manual of Planning and Design. David Mun. (London: Architectural Press, £40.)

British architect David Mun presents here a comprehensive analysis for the design of all kinds of shops. He discusses the general principles of design, considering such subjects as planning and layout, fixtures and fittings, shop fronts and signs, security systems, and HVAC systems and engineering services. Elaborately illustrated, the book contains many photographs and diagrams of some of the world's most successful shops. Although directed to the British architect, the book is universal in its principles.

The Architect. Meyer Levin. (Simon and Schuster, \$15.50.)

Meyer Levin, in the last book before his death, accomplished what we would have thought impossible: Taking as his subject matter the rip-roaring life of Frank Lloyd Wright, he has written an absolutely bloodless dud of a novel. S. A.

More Houses Architects Design for Themselves. Edited by Walter F. Wagner Jr., AIA. (McGraw-Hill, \$29.95.)

The successor to a 1974 book entitled Houses Architects Design for Themselves, this publication also has been written and compiled by the staff of Architectural Record. The book contains articles that are organized around major themes such as experimental contemporary designs, vacation houses, apartments, and houses for hot climates. Designs by more than 40 architects are examined and lavishly illustrated. Among the architects whose houses are included are Warren Platner, Ulrich Franzen, Ray Crites, Paul Rudolph, Morton Hoppenfeld, and Francis Mah. □

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An engagingly simple group of chairs (1) is offered by the Italian firm Citterio. Without arms, they are called 400 chairs; with curved one-piece arms, 400B. Seats are solid wood or woven straw; frames are of ash, chestnut, or beech; connecting hardware is plastic-covered metal. Two table designs by Achille Castiglioni for Zanotta of Milan are the Morbio (3) and the Cacciavite (2). The first has a top and legs of beech, maple, or walnut and an unseen frame of fire-lacquered steel. The second has a black lacquered top and legs of beech with a light yellow aniline stain. In both cases, legs are removable.

A sampling of newly available fabrics: Designed by Peter Seipelt for Knoll Textiles (4) are glazed patterns called Basket, Linea, and Zigzag. There is a complementary collection of semi-transparent white casements with the same patterns. The Icelandic collection of woven woolens (5) is from Rudd International. Fall Line and Beaufort (6) are designs in silk by Larry Rosen for Upper South Studio, 858 West 4th St., Winston-Salem, N.C. 27101. And from Stendig Textiles are, top to bottom (7), Meterra, a high pile mohair plush in 10 colors; Ridgeway, a wool/cotton tewill in 10 colors; Aston, a spun nylon in 16 colors and neutrals; and Montana, a wool/viscose blend in 4 colors.

The Jill floor lamp (8) is designed by King, Miranda, and Arnaldi for Arteluce, available here through Atelier International. Its base is of heavy glass, and it takes a 300-watt halogen lamp.









4

Two lighting designs a bit out of the mainstream are, first, a pendant fixture of "illuminated clay" (1) by porcelain craftsman Allan Kluber, and, second, a six-foot-high pair of floor lamps called Kennsington Arms (2) by sculptor R. M. Fischer. Both artists may be contacted for custom work: Kluber at 243 West D St., Springfield, Ore. 97477 and Fischer at 73 West Broadway, New York, N.Y. 10007. A growing need in the office is for furniture that can intelligently accommodate the proliferation of electronic equipment. This CRT terminal stand (3) designed by Bill Stephens for Knoll offers two separate supporting surfaces, one for the screen and one for the keyboard, both attached to a five-legged base. Surfaces can be finished in a choice of five veneers and five plastic laminates.

The oval conference or dining table (4) is designed for Thonet by Warren Snodgrass. Its oval tubular steel frames are available in polished chrome, brass, or powder coated finishes, and tops may be white oak or mahogany veneer, polyethylene finish, or plastic laminate, all with a variety of edge and color choices. The Snodgrass table is also made in round and rectangular versions. The Triberg arm chair (5) was designed by Heinz Wirth in 1954 but is newly available, not showing its age a bit, through Kroin Architectural Complements, 14 Story St., Cambridge, Mass. 02138. Its welded tubular steel structure is finished, in white or brown, with a weather and abrasion resistant coating. From Metropolitan Furniture is the Kane Desk Group designed by Brian Kane. Tops may be marble, as shown (6), lacquered oak, high gloss polyester resin, or wrapped in leather. Side and back panels are of cast high gloss resin in Metro's range of 18 colors. \Box





DEATHS

Clifton J. Marshall, AIA: Former national president of the Association of University Architects, Mr. Marshall was associated with the University of Kentucky from 1966 to 1981. As director of the design and construction division, he was in charge of all the university's physical planning and construction. Among his more recent projects are an addition to the King Library and renovation of the main library building, a multidiscipline research laboratory building, a fine arts center, and an addition to the animal disease diagnostic laboratory. Before his association with the university, he was an associate professor of architecture at Clemson University.

Mr. Marshall, who died on Sept. 6, was graduated in architecture from the University of Illinois. He was a member of many civic and professional organizations, including the American Planning Association, the Society for College and University Planning, the Newcomen Society, the panel of arbitrators of the American Arbitration Association, and Lexington, Ky.'s Design Review Board.

In 1957, he established his own firm in Owensboro, Ky., and later served with such firms as O'Connor & Kilham, New York City; Bradley & Gass, Pittsfield, Mass., and Eggers & Higgins, New York City. He won three decorations for his 26 months of service, 1942-45, U.S. Army Corps of Engineers, in the Asiatic Pacific Theater.

Philip T. Shutze, FAIA: Mr. Shutze's architectural career spanned nearly eight decades. Born in Columbus, Ga., on Aug, 18, 1890, Mr. Shutze enrolled in Georgia Tech's school of architecture in 1908. He did postgraduate work at Columbia University and won the Prix de Rome for Architecture for study at the Academy in Rome in 1915. In 1926 Mr. Shutze became a partner in the firm of Hentz, Adler & Shutze of Atlanta. Described as a master of the classicist approach, in 1950 Mr. Shutze was awarded an AIA fellowship for his "mastery of the fundamental principles of design and the use of the classical architectural forms as well as his taste in ornamentation and detail." In 1974 he was awarded the AIA bronze medal for achievement in design by the Georgia Association of AIA.

Of his death on Oct. 17 at age 92, John Portman, FAIA, said, "It's a great loss. Mr. Shutze was the grand old man of architecture in Atlanta."

Clay E. Baker Jr., Charleston, S.C. Carl Bierschenk, Toms River, N.J. Aldo B. Cardelli, New Bern, N.C. Charles Crowe, Grand Rapids, Mich. Charles Fleckenstein Jr., Birmingham, Mich.

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Leonard N. Freed, Saddle Brook, N.J. William Lampton Gill, Jackson, Miss. Max J. Heinberg, Alexandria, La. Edward P. Hodge, Rolla, Mo. Donald E. Jarvis, FAIA, Dallas L. Bruce Kinne, Portland, Ore. Edward W. Koerber, Dallas Glenn W. Mantle, Fairview Heights, Ill. C. Alden Meranda, Rochester, Ind. Emeron L. Reynard, Long Beach, Calif. Noel Jon Tyson, Philadelphia Richard A. Walsh, Harwood Heights, Ill. James E. Yeager Jr., Richardson, Tex.

BRIEFS

National Trust Awards Entries.

The National Trust for Historic Preservation has set a Jan. 15 deadline for its honor awards program that recognizes "significant achievements by individuals and organizations active in the preservation, rehabilitation, restoration, or interpretation of the built and maritime environments and cultural landscapes in the U.S." A \$500 stipend, funded by the Rust-Oleum Corporation, will accompany each honor award. The Louise du Pont Crowninshield Memorial Award includes a stipend of \$2,500. For information and a nomination form, contact the 1983 Honor Awards Program, National Trust for Historic Preservation, 1785 Massachusetts Ave. N.W., Washington, D.C. 20036.

Historic Houses Course.

The Attingham Summer School is sponsoring its 32nd study tour of English country houses. One scholarship is available to a graduate architect. Applications must be received by Jan. 31. Contact The Attingham Summer School, 126 Jefferson Road, Princeton, N.J. 08540.

Solar Energy Tours.

Jordan College and the Solar Lobby are cosponsoring a series of international tours to France, Israel, England, Australia, and the Caribbean to study renewable energy projects. For more information, contact Herbert Sebree, Jordon College, 360 W. Pine Street, Cedar Springs, Mich. 49319.

Award Deadline Extended.

The Building Stone Institute will accept entries for the Tucker architectural awards program until Dec. 1. For more information, contact Building Stone Institute, 420 Lexington Avenue, New York, N.Y. 10170.

Design and Research Awards.

The design arts program of the National Endowment for the Arts is sponsoring an awards program to honor completed design and research projects that have contributed to design excellence. Deadline for submissions is Feb. 21. The program seeks a range of research types, from the most theoritical to the most practical, buildings and interiors, environmental graphics, and urban planning. For more information, send a self-addressed stamped envelope to Design Research Recognition Program, BOSTI, 1479 Hertel Ave., Buffalo, N.Y. 14216.

AIA Student Awards.

Kenneth McDonald is the first recipient in the AIA high school awards program. The Mt. Clemens, Mich., senior was presented with a medal and certificate. The high school awards program "seeks to identify and recognize outstanding high school seniors . . . who demonstrate an aptitude for architecture." Operating through local AIA chapters, the program is intended to increase "public awareness of the profession," while providing visibility for the chapter. Those chapters interested in the program should contact Yina Moore at AIA headquarters.

Loeb Fellowships Announced.

Harvard University's graduate school of design has awarded 12 Loeb Fellowships for 1982-83. The recipients are Carolyn Adams, Portland, Ore.; Rifat Chadirji, Iraq; David Conover, Boston; Steven Krog, New York City; Alexia Lalli, New York City; Scott Matthews, Sausalito, Calif.; Mary Means, Washington, D.C.; Robert Ross Jr., Washington, D.C.; Beatrice Ryan, Seattle; Gene Slater, Chicago; Dale Smith, AIA, Dayton, Ohio, and Marguerite Villecco, Washington, D.C.

Architecture and Garden Tour of Japan.

A study tour designed for architects and allied professionals, limited to 23 participants, is scheduled for April 6-27, 1983. For more information, contact Kenneth Masao Nishimoto, AIA, 30 North Raymond Ave., Pasdena, Calif. 91103.

Mexican Architectural Tour.

The Boston Architectural Center is sponsoring a 13-day architectural tour to Mexico in January. The itinerary will include Mexico City, Coyoacan, Pearegal, San Angel, Teotichuachan, San Miguel de Allende, Guanajuato, Morelia, Merida, Uxmal, and Chicken-Itza. For more information, contact Leon Bailey, BAC Tours Committee, 320 Newbury St., Boston, Mass. 02115.

Housing Design Competition.

An international competition for the design of "high quality" social housing is being sponsored by Architects Foundation for Housing and Environmental Studies (Stawon) and the Royal Institute of Dutch Architects. Requests for program information must be made by Nov. 30 to STAWON Competition, Keizersgracht 321, Postbus 19606, 1000 gp Amsterdam. *continued on page 83*

The American Gas Association presents:

Passive Solar Design Awards Competition*

Purpose: To encourage the design and construction of practical residential housing which optimizes the use of energy through passive solar design techniques and the use of natural gas for space conditioning and household appliances.

Eligibility: This competi-

tion is open to all architects, designers, and builders with built or buildable designs. By entering the competition, designers of unbuilt projects agree that should they win, they will build their designs.

Categories: A. Single-family detached.

B. Multi-family, up to six dwelling units. Registration: A non-refundable \$50 registration fee must be submitted by January 31, 1983 for each design to be entered. Design submission deadline is February 28, 1983.

Awards: Winners in each category will receive the following awards:

• First prize-\$4,000.

• Second prize - \$2,000.

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Jurors: Samuel J. Cunningham, Manager of Research, Southern California Gas, Los Angeles, CA; James Leach, Downing-Leach, Boulder, CO; Richard G. Stein, FAIA, The Stein Partnership, New York, NY; Donald Watson, FAIA, Guilford, CT; Steven Winter, Steven Winter Assoc., New York, NY.

Competition Director: Albert J. Ream, American Gas Association, Arlington, VA (703) 841-8575.

*Cosponsored by Solar Age Magazine.

PHONE

To receive a copy of the registration booklet which contains detailed instructions concerning design submissions, please complete this form and return to: Passive Solar Design Awards Competition, Room 1002, American Gas Association, 1515 Wilson Boulevard, Arlington, VA 22209. Do not send design entry with this form. AIA - 11

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Briefs from page 80 **Rotch Scholarship.**

The Rotch Traveling Scholarship will be awarded to a single scholar in 1983 who will receive a stipend of \$13,000 for eight months of foreign travel. Written requests for application forms must be received by Jan. 7. Contact Norman C. Fletcher, FAIA, Secretary, Rotch Traveling Scholarship, 46 Brattle Street, Cambridge, Mass. 02138.

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