

THE NATIONAL AQUARIUM IN BALTIMORE: CAMBRIDGE SEVEN ASSOCIATES

FROM BEIJING TO KASHI: OBSERVING THE CHINESE RURAL HABITAT TWO INTERPRETIVE CENTERS BLEND INTO NATIONAL PARK SITES A HOUSE BY RICHARD TREMAGLIO BUILDING TYPES STUDY: LOW-RISE OFFICE BUILDINGS FULL CONTENTS ON PAGES 10 AND 11

ARCHITECTURAL RECORD

MAY 1982

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Letters to the editor

Sometime I would like to talk to Bradford Perkins about various points he raised in his very thoughtful review [ARCHITECTURAL RECORD, February 1982, pages 86-89].

E.g., the idea that the rising costs of building had something to do with the triumph of the International Style. I insist it had *nothing whatsoever* to do with it.

> Tom Wolfe New York Citv

The article by Bradford Perkins about Tom Wolfe's book in your February edition and his comments about media influence on the development and maintenance of an architectural practice are ever so right.

I suppose everybody knows, or should know, that media coverage and especially media connections can make a successful architect. However, it is discouraging to think of innumerable small practitioners who consistently have good designs and never get recognized because they practice in the wrong location and lack the right connections, mediawise. Opposite to that, we have the Graveses, Venturis and Rudolphs, whose latest designs might get acclaimed because of the name behind the design rather than the merits of the design.

In his article, Mr. Perkins comments that architecture has become too close to fashion. Could it be that the pressures associated with trying to get coverage make architects drift toward the latest published ideas and styles, no matter how artificial or unsuited to their particular design? How many times have we not seen buildings, portions of which seem vaguely familiar, and come to realize that they have been strongly influenced by published designs?

In a simplistic way, architecture has always been an art with a trend anyway. Otherwise, how could the Gothic, the Romanesque and the Baroque have occurred as architectural movements and not as isolated cases? That the first examples of each period were a response to the cultural happenings of the epoch does not detract from the fact that once each movement started it carried itself to exhaustion by simple repetition of the central theme.

The difference from the kind of fashion Mr. Perkins talks about is merely that today ideas get instant and wide distribution by the media. There is little if any explanation of the *philosophical* theory behind each. Ideas get adopted and discarded like clothes by designers who do not fully understand the reasoning behind the ideas. They get adopted for the wrong reasons, and rarely are they fully developed or do they evolve to maturity as a comprehensive whole. I wish Mr. Perkins would have elaborated this facet of the article. As it is written, it raises many interesting questions and should produce, I hope, a lively discussion.

Elsa Pena, Architect Georgia State University Atlanta

George Nelson's review of *Knoll Design* is thoughtful, very generous and witty [RECORD, mid-February 1982, page 49].

He continues to be one of the most articulate writers in the architectural profession.

Florence Knoll Bassett Coconut Grove, Florida

I am reminded of Mark Twain's comment that "reports of my death have been greatly exaggerated" by your recent article on Ten Stamford Forum [RECORD, December 1981, pages 86-91], which cites my building by Aldo Giurgola as "in spirit akin to a Beaux Arts cenotaph across the street."

Webster's Third New International Dictionary defines *cenotaph* as "a tomb or a monument erected in honor of a person whose body is elsewhere." I'm not elsewhere yet—and my name appears on that monument.

The monument incorrectly designated as a cenotaph was once primarily a monument to the living. It is St. John's Park Monument, dedicated in 1920 to those citizens of Stamford whose names are inscribed thereon and who had served our country from the French and Indian War through World War I. Although our numbers have diminished considerably since the occasion, I recollect that at the time of the dedication-Armistice Day, 1920-there were many of us young World War I veterans present, along with some old codgers from as far back as the Civil War, and we were all pretty proud to see our names inscribed on the bronze plaques at the base of the monu-

The monument that inspired Mr. Giurgola's splendid design was itself inspired by a distinguished architectural forebear. The design is by George A. Freeman and is an interpretation of the Choragic Monument of Lysicrates (335 B.C.) in Athens, of which Sir Banister Fletcher remarks, "a type of monument erected to support a tripod, as a prize for athletic exercises or musical competitions in Greek festivals...and referred to in Virgil's Aeneid: '... the Sacred Tripods glow with wreaths of palms to bind the Victor's brow.' "

Someday the monument could be a cenotaph, but, hopefully, not soon.

F. D. Rich, Sr. Founder and Chairman Emeritus F. D. Rich Company Stamford, Connecticut

Calendar

MAY

12-13 Seminar, "Air Systems Design and Retrofit for Energy Cost Effectiveness," first seminar in the Energy Professional Development Series of the American Society of Heating, Refrigerating and Air-Conditioning Engineers; at the New York Statler Hotel. Contact: ASHRAE, 1791 Tullie Circle, N.E., Atlanta, Ga. 30329.

17 Professional Development Seminar 1, sponsored by the Society for Marketing Professional Services; held in Seattle, Wash. Contact: Society for Marketing Professional Services, 1437 Powhatan St., Alexandria, Va. 22314. 20 through July 5 The American premiere of the First International Exhibition of Architecture from the Venice Biennale, "The Presence of the Past," at Pier 2, Fort Mason, San Francisco. Contact: Friends of the Biennale, 415/433-5149.

27 through Oct. 3 Exhibition, "Grand Central Terminal: The City Within the City," exploring the development and influence of Grand Central Terminal. Organized by the Municipal Art Society of New York, sponsored by Philip Morris Incorporated and the National Endowment for the Humanities, and designed by Hardy Holzman Pfeiffer Associates. At the New York Historical Society, 170 Central Park West, New York City.

Through May 28 The Office for Metropolitan Architecture's "Toward a modern (re)construction of the European city: four housing projects," an exhibition of recent projects by Rem Koolhass and Elia Zenghelis; at The Institute for Architecture and Urban Studies, 8 W. 40th St., New York City.

JUNE

6-9 Annual national convention of the American Institute of Architects, "A Quest in Time"; Honolulu. Contact: AIA, 1735 New York Ave., N.W., Washington, D.C. 20006.

11 Seminar, "Application of Groundwater Source Heat Pumps for Commercial and Industrial Heating and Cooling," sponsored by Geraghty & Miller, Inc.; at the New York Hilton Hotel, New York City. Contact: Richard M. Miller, American Ecology Services, Inc., 127 E. 59th St., New York, N. Y. 10022.

Through June 20 Exhibition, "Robert A.M. Stern: Modern Architecture after Modernism," at the Neuberger Museum, State University of New York, College at Purchase, Purchase, N.Y.

24 through Oct. 10 Exhibition, "New American Art Museums," conceptual drawings, plans, renderings, photographs and models of eight new museums and museum additions. At the Whitney Museum of American Art, Madison Ave. at 75th St., New York City. ARCHITECTURAL RECORD (Combined with AMER CAN ARCHITECT, ARCHITECTURE and WESTER ARCHITECT AND ENGINEER)

(ISSN0003-858X) May, 1982, Vol. 170, No. 6. Title reg. in U. S. Patent Office, copyright® 1982 b McGraw-Hill, Inc. All rights reserved. Indexed Reader's Guide to Periodical Literature, Art Inde Applied Science and Technology Index, Engineerin Index, and The Architectural Index.

Every possible effort will be made to return materi submitted for possible publication (if accompanie by stamped, addressed envelope), but the edito and the corporation will not be responsible for lo or damage.

EXECUTIVE, EDITORIAL, CIRCULATION AND AE VERTISING OFFICES: 1221 Avenue of the America New York, N.Y. 10020.

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SUBSCRIPTIONS: Position, firm connection, and tyj of firm must be indicated on subscription orde Please allow 4-12 weeks for shipment. Subscriptio rates for personnel of Architectural, Engineerin Interior Design, Design and other directly relat firms and students thereof, are as follows: U.S. at U.S. Possessions \$28.00; Canada \$30.00; all oth countries \$57.00. For all other personnel: U.S. at U.S. Possessions \$39.00; Canada \$50.00; all oth countries \$65.00. Publisher reserves right to dete mine subscription rates which apply. Single co price for Domestic and Canadian: \$6.00; for Fe eign: \$7.00.

CHANGE OF ADDRESS: Forward changes of addre or service letters to Fulfillment Manager, ARCHITE TURAL RECORD, P.O. Box 430, Hightstown, 08520. Provide both old and new address; inclu zip code; if possible attach issue address label. GUARANTEE: Publisher agrees to refund that part subscription price applying to unfilled part of su scription if service is unsatisfactory.

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PUBLICATION OFFICE: 1221 Avenue of the Am cas, New York, New York, 10020. ARCHITECTUI RECORD (ISSN0003-858X) published monthly exc February, May, August and October when se monthly, by McGraw-Hill, Inc. Second-class post paid at New York, NY and additional mai offices.

POSTMASTER: PLEASE SEND FORM 3579 to Fu ment Manager, ARCHITECTURAL RECORD, P Box 430, Hightstown, NJ 08520.

THIS ISSUE is published in national and separ editions. Additional pages or separate editions n bered or allowed for as follows: Western Sec 32-1 through 32-4.





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Publisher Paul B. Beatty



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dwellings from Beijing to Kashi A report and photo essay by Mildred F. Schmertz, who last October attended a seminar on "The Changing Rural Habitat," sponsored by the Aga Khan Award for Architecture, which began in Beijing and was followed by a remarkable 5,000-mile field trip across China to Xi'an and the rarely visted cities and towns of ürümqi, Turfan and Kashi (Kashgar).

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blend into natural sites Two centers that aid visitors understand the National Park Service's function in maintaining wildlife refuges set a new contextural and energy conscious image. The first, by architects Neil Astle Associates, is located on the De Soto Refuge between Iowa and Nebraska. The second, by Leonard Parker Associates, is on the Tamarac Refuge in Minnesota.

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Richard Tremaglio's "process" approach to building design results in structures whose spatial sequences are best understood as they unfold through time. Author Eleni Constantine's analysis of a seaside house designed by Tremaglio relates the architect's idiosyncratic style and philosophy to the demands of a specific program.



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NEXT MONTH IN RECORD

Building Types Study: Rehabilitation

Because of the United States' large stock of sound but outdated buildings, architects will likely find much business in the salvation of old buildings and their re-application to new uses. The June Building Types Study will consider the conversion of an old papermill to new condominiums, the reuse of a luxurious stable as a hard-working school for the blind, the pivotal position of an endangered office building in a small city, and the metamorphosis of a big-city artist's studio into a secluded village of Japanese teahouses.



THE RECORD REPORTS

NEWS IN BRIEF NEWS REPORTS BUILDINGS IN THE NEWS DESIGN AWARDS/COMPETITIONS REQUIRED READING

February's \$8.9 billion of contracting for new construction fell 16 per cent after seasonal adjustment, interrupting the modest improvement made in recent months, according to George A. Christie, vice president and chief economist for the F.W. Dodge Division of McGraw-Hill Information Systems Company. The brief improvement in December and January was due to several large electric utility and gas pipeline projects. "February's contracting decline was confirmation that the expected recovery of the building industry remains stalled by the basic problem of the high cost of credit," said Christie. "Ordinarily, when the economy is as deep into recession as it is now, funds that are not being invested in the industrial sector find a secondary outlet in residential building. By this process, housing usually leads the rest of the economy into recovery. But it's not happening in 1982, and it won't happen as long as the Federal Reserve and the Administration continue to give higher priority to reducing inflation with monetary restraint than to promoting recovery." February was the seventh consecutive month in which the rate of housing starts remained below the one-million unit level.

Fazlur R. Khan, general partner of Skidmore, Owings & Merrill, died of a heart attack on March 27, while working in Saudi Arabia. He was 52 years old. As a general partner-in-charge of structural engineering at SOM's Chicago office, Khan was the chief structural engineer for the Sears Tower, the world's tallest building. Khan was born in Bangladesh where he received a bachelor of engineering degree at the University of Dacca. He did his graduate work at the University of Illinois, Champaign-Urbana, and was known for the innovative bundled tube and long-span structural systems he designed for a wide range of award-winning buildings. Khan was a member of a number of professional organizations, including the American Society of Civil Engineers, the American Concrete Institute, the National Academy of Engineering and was chairman of the International Council on Tall Buildings and Urban Habitat. Author of numerous scholarly papers and engineering publications, Khan lectured throughout the world and was a recipient of numerous honors and awards.

The first World's Fair in seven years will open May 1, for six months, in Knoxville, Tennessee. McCarty Bullock Holsaple, Inc., a Knoxville architecture firm, is in charge of the over-all planning, development and landscaping of the site. Foreign and United States architects will be designing specific pavilions. The World's Fair will be located between downtown Knoxville and the University of Tennessee. Over 11 million visitors are expected to attend.

The work of Mies van der Rohe and Robert A.M. Stern will be shown at the Neuberger Museum of the State University of New York at Purchase this summer. *Robert A.M. Stern: Modern Architecture after Modernism,* a collection of the architect's models, drawings and furniture designs, will be open until June 20. *Mies van der Rohe: Barcelona Pavilion and Furniture Designs* will be open until August 22. For further information contact: Suzanne Delehanty, Office of the Director, SUNY, College at Purchase, Purchase NY 10577, 914/253 5087.

Manhattan Suite, at the Museum of the City of New York, celebrates eight important buildings. The exhibit of large color screenprints by Richard Davies, an English artist, and Bernard Pratt, a proofer/printer, will depict the following Manhattan buildings: Flatiron Building, Rockefeller Center, The Seagram Building, 9 West 57th Street, Citicorp Center, the World Trade Center, the Chrysler Building and the Empire State Building. *Manhattan Suite* will remain on view in the Museum's rotunda through June 10. The Museum is located on Fifth Avenue at 103rd Street.

The AIA has proposed an energy research approach that would place emphasis on retrofit of existing buildings. The proposal was made in recent Congressional testimony concerning the Department of Energy's fiscal 1983 budget for conservation and solar programs. The proposal is called the Building Energy Research Technology Programs. "The current 1983 budget ignores the important contribution that energy-efficient buildings make to the nation's economic health," said Ellis W. Bullock Jr., AIA vice president. The AIA's research priorities, as outlined by Bullock, are: monitoring the energy performance of occupied buildings to gauge the effects of using energy conserving technologies and passive design strategies; creating energy design tools that are compatible with architectural practice; and developing adequate climatic data at regional and micro-climate levels.

The Architecture of Richard Neutra: From International Style to California Modern will be shown at UCLA in the School of Architecture and Urban Planning, from July 31-October 19. Forty-five of Neutra's buildings and projects will be represented by photographs and architectural drawings, and approximately 80 other drawings, ranging from early landscapes and portraits to architectural studies, will also be on view. The exhibit was organized by the Department of History and the School of Architecture and Urban Planning at UCLA.

The American Institute of Architects 1982 Medal honoring artists whose work relates to architecture goes to Jean Dubuffet, a renowned French artist who has made significant contributions to the architectural world of sculpture. The award will be presented to Dubuffet during the AIA's 1982 national convention in Honolulu, June 6-9.

Judge rules that copyright law protects architects

In a decision of national significance, a Nebraska Federal District Court has ruled that engineers and architects enjoy copyright protection of their drawings under the Copyright Act of 1976. In one of the first such cases under the Act, Judge Warren K. Urbom ruled that such drawings normally may not be reproduced by a client for use in building a second structure based on the original plans.

The decision came in a suit for copyright infringement brought by the architecture/engineering firm of Aitken, Hazen, Hoffman, Miller, against the Belmont Construction Co., both of Lincoln.

The firm, in 1977, had designed an apartment building for Belmont, which was completed in 1979. Later,

President's housing plan is countered by NAHB

President Reagan has unveiled his short-term program for helping the severely depressed homebuilding industry, but it is "too little and too late," according to Fred Napolitano, president of the National Association of Home Builders. As a result, the NAHB is stepping up its lobbying efforts to persuade Congress to enact a program more to its liking.

As part of a five-point program, Reagan proposes to relax regulations that have put constraints on state housing agencies in issuing mortgage revenue bonds. That step could provide funds for 50,000 more homebuyers at a lower cost, according to the President. The restrictions were first imposed as a result of criticism that mortgage revenue bonds, which were supposed to provide low-interest mortgages for low-income home buyers were, in fact, being used to funnel subsidized financing to middleand upper-income purchasers.

Mr. Reagan also promises changes in Federal regulation of private pension funds to encourage investment in mortgages for singlefamily houses. This would also encourage the private sector to take over the processing of loan applications submitted to the Federal Housing Administration (FHA), change FHA rules to allow relatives to assist young people in financing down payments, and remove restrictions that bar realtors from going into the title insurance business.

But these proposals would be ineffective in stimulating new construction and new jobs, according to Napolitano. "The trouble is that the President continues to cling to his basic economic program despite mounting evidence of deepening recession, record-high interest rates and rising unemployment," he said.

The NAHB is putting its support behind proposed legislation under which the government would put up Belmont used the same plans for the construction of a similar apartment building in 1980 without the firm's permission, and the firm filed suit.

Because of the case's potential impact on future interpretation of the Copyright Act, the American Institute of Architects (AIA) and the National Society of Professional Engineers (NSPE) joined the Nebraska Society of Architects as "friends of the court" supporting the plaintiff's position.

Judge Urbom ruled that copyright protection for design plans extends only to the copying of such plans, as opposed to the structure itself. Citing from a legal reference, Judge Urbom wrote, "Where the alleged infringer has copied a plan from a plan, the copying has been held to be an infringement." He also said that the law indicates that architectural structures themselves may

an estimated \$1 billion a year for five

years to finance so-called buy-down mortgages that would be parceled

out to lenders who would agree to

make mortgages at below-market

interest rates. The government would

retrieve its investment once a house

that was financed in this manner was

One variation on this theme,

sold or re-financed.

News, Washington, D.C.

Brooks Law.

New Brooks Law directive

is temporarily suspended

the Brooks Law too vague.

Washington, D.C.

not be subject to copyright.

Another issue that arose in the case was whether the architect/engineer had an employee relationship with the construction client, or was acting as an independent contractor. The copyright law provides that an employer owns the copyright to work that is prepared by employees as part of their employment or specially ordered or commissioned as part of a collective project.

Judge Urbom ruled that the plans and drawings in the case before him are, "not a commissioned work because there is no written agreement between the parties that the plans should be considered a work made for hire." But he put off until further hearings a ruling on whether the architecture/engineering firm could be legally considered an employee of the construction company.

In another aspect of the case, the construction company claimed that its suggestions to the firm during the design development were significant enough to make it a co-author of the plans, and, therefore, free to reuse them with immunity from copyright infringement. The architecture/engineering firm countered that the client's contribution was minor. Judge Urbom declined to rule on this issue pending more testimony. The firm also argued that its client could not be considered a co-author of the plans in any case because it is not licensed to practice architecture or engineering in Nebraska. Judge Urbom said that argument is attractive and has considerable policy strength, but again he declined to make a ruling, pending further testimony. - Peter Hoffmann, World News, Washington, D.C.

Lucy the Margate Elephant gets a new lease on life

After 101 years of enduring punishing coastal winds that aged and disfigured her, Lucy the Margate Elephant is finally getting a face lift. Lucy is actually an architectural folly, born of the real estate fancy of land developer James V. Lafferty who designed and built her. This six-story, 90-ton

pachyderm of a building has recently been designated a historic landmark. Lucy operated as a tourist attraction in a Margate town park on the New Jersey shore, before falling on hard times. Her dignity will finally be restored to her when the landscaping around her is completed this spring.



Two groups discuss energy-efficiency in existing buildings

Retrofitting of the nation's existing ouilding stock—some 65 million resilential and 4 million nonresidential tructures-with energy-efficient quipment could open up a profitble vista for the American housing ndustry that would result in huge energy savings during the rest of the entury. Yet, if present financial and conomic trends prevail, much, if not nost, of that potential will be lost. his was the message that emerged rom two events in Washington relatng to energy conservation, that took place during late March and the eginning of April.

The first, sponsored by the National Institute of Building Sciences, vas a sponsor's briefing for NIBS's Building Energy Efficiency Project, the opening rally to attract sponsors to come up with \$370,000 to pay for he first part of a two-stage effort to promote more efficient use of energy n buildings. The second was a new energy-in-buildings study presented by the Office of Technology Assessnent in House hearings. "The nation is a whole has been slow in respondng to the many opportunities to use energy efficiently....Past public and private sector efforts to respond to his situation have met only with limted success, and new government nitiatives in this area are unlikely," aid Joseph Newman, president of ishman Research Corp. and former president of NIBS' board of directors. 'This building energy efficiency project intends to fill this void."

NIBS initially wants to formulate trategies that would draw on indusry experience and expertise to idenify the economic payoff for energy mprovements, pinpoint barriers gainst them and find means to overome them. A second step would ormulate specific programs to exand the market for energy-efficient uilding products. NIBS says it has Iready found six sponsors willing to ut up a total of \$150,000, close to alf of the initial financial goal, Repreentative Richard Ottinger (D-N.Y.), hairman of the House Subcommittee in Energy Conservation, who was mong the more than a dozen indusry and government speakers at the neeting said that the United States ould save the equivalent of more han 8 million barrels of oil a day by xing up the nation's buildings. NIBS stimates that they account for onenird of the total energy consumed at total cost of more than \$100 billion very year. "This is energy saved very day, year after year," said)ttinger. "I'm very enthused that the istitute is undertaking this initiative nd that the building community is /illing to participate."

The OTA study, *Energy Efficienv of Buildings in Cities*, was preented at the April 1 hearing of the ouse Subcommittee on Housing and ommunity Development. According *i* the study, appropriate investments could result in savings of up to seven guads annually-one guad is about 50 million tons of coal. Most of these investments could be recovered in most building types within seven years, frequently resulting in annual returns of more than 30 per cent. However, poor access to long-term financing, typical for most types of commercial and multifamily building owners, precludes the widespread introduction of energy retrofit measures. In most of these instances, property improvement loans are available only at high interest ratestwo per cent above prime and shortterms of two years or less. "I would normally want to spend \$5,000 to save \$2,000 a year but not when I can't afford debt service on the \$5,000," said one apartment building owner from Buffalo in the OTA study.

"Apartment managers must conserve capital in the early years," another owner told OTA. "They are not going to want to touch the cash flow." Long-term financing presents less of a problem to big-time owners, such as pension funds, insurance companies, corporations that use their own buildings, and nationally syndicated partnerships because, according to one executive of a national syndicate interviewed by OTA, "The sophisticated investors we deal with want quality in their product not just a tax shelter."

Low-rent buildings, which would benefit most from energy retrofit because energy is such a large part of expenses, find it especially hard to raise this type of capital. In one of its case studies, OTA found that this expense is causing grave concern to city housing officials: "The smaller landlords are well in over their heads already and do not know how to cope," a Jersey City, N.J., official told OTA, adding that the Jersey City building inspection departments in 1981 registered an increase in heating complaints from 2,400 to 3,400 tenants within one year.

Both Senator Ted Stevens (R-AI), chairman of OTA's board, and Representative Henry Gonzales (D-Tex.), chairman of the Subcommittee, came down hard on the problems caused by high-interest rates on energy, but they differed over what to do about it. Gonzales urged the Housing and Energy departments and state and local officials to review the study and to take immediate steps to stimulate necessary and cost-effective energy conservation improvements in our existing building stock. "It makes it even more important that we continue efforts to reduce Federal spending and get the budget under control." said Stevens. "It is heartening to see that it is possible to improve the energy efficiency of our nation's buildings without the need for additional Federal spending."-Peter Hoffmann, World News, Washington, D.C.



Second step in Carnegie Hall renovation is announced

A second step in the restoration and expansion of Carnegie Hall was recently announced by Isaac Stern, president of Carnegie Hall, Deputy Mayor Karen N. Gerard and Philip E. Aarons, president of the New York City Public Development Corporation. The officials released a request for proposals to real estate developers for the development of a vacant lot, known as the Rembrandt Site, that lies directly east of the Hall. The first step in the Carnegie restoration was to create a new lobby for, and restore, the Recital Hall and to renovate the studio entrances to their 19th-century appearance. The officials are expecting the new structure to provide urgently needed music support spaces, loading facilities, rehearsal studios and public areas for the Hall; to generate funds for the restoration and renovation of the Hall itself, and to help insure its physical and financial future; and to create new revenue and employment for the City of New York. They also want to assure a building that is architecturally compatible with Carnegie Hall. "At a time when government support for the arts is diminishing, Carnegie Hall is looking for practical, businesslike ways to help ensure its future," said Isaac Stern.

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Morris Aubry Architects designs Houston towers

One Westheimer Plaza is the first phase of a twin-tower office development by Alfanco in Houston, estimated to cost a total \$100 million. Designed by Morris Aubry Architects, the 22-story tower is scheduled to be completed in July. The terraced design at the sixth and top four levels provides private balconies and decks that overlook the Galleria area and west Houston. The building is clad in travertine marble and recessed bronze glass, and focuses on a landscaped plaza and motor court.

)M builds Hartford wer

v windows create a cornerview from each exterior ice of Skidmore, Owings & rrill's CityPlace in Hartford. 3535-ft, 38-story main oftower, the first phase of development, is the tallest Connecticut. It will be linked a three-story glass-enclosed um. The second phase of project will involve the struction of a 12-story of-· building, adjacent the in tower and atrium. The ject is being developed by Urban Investment and Deopment Company of Chicaand Bronson & Hutensky of omfield, Connecticut. The ver is scheduled for comtion in 1983.



SOM designs downtown San Antonio's largest building

Skidmore, Owings & Merrill have designed this new 28story bank in San Antonio, which will be the largest building in the downtown area. First International Plaza will be constructed on a two-acre plot, and is designed to reflect the Gothic Revival style prevalent in many of the city's buildings. The Plaza will include a garage, retail and restaurant services and landscaped public plaza. This \$50-million building is scheduled to be completed in mid-1983.



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Northwestern University's law school addition will house ABA national headquarters

Northwestern University has unveiled plans for construction of a national legal center, which will house an addition to its School of Law and the national headquarters for the American Bar Association, at Lake Shore Drive, between Chicago Avenue and Superior Street. The new structure, de-

signed by Holabird & Root, is a two-level structure, connected to the present law buildings by a glass-enclosed, four-story atrium that will contain three classrooms, a moot courtroom, auditorium, offices and a major library. The addition is scheduled to be completed in 1984.





A new convention center is underway for Rochester, New York

James Stewart Polshek and Partners, in association with Skoler & Lee Architects and The DeWolff Partnership, are designing a 215,000-squarefoot convention center in Rochester, New York. Located at the Intersection of Main Street and the Genesee River, the building's galleria will provide access to all parts of the building and will provide a view of the river, The Old Erie Canal Aqueduct, and the restored brick 19th-century mill buildings along the river's west bank. Facilities will include an exhibition hall, banquet hall, meeting rooms, dining and food service areas and office space. It is due to be completed in 1985.



ARCHITECTURAL RECORD May 1982 39

DESIGN AWARDS/COMPETITIONS

The American Institute of Architects will present Honor Awards to 12 projects at the 1982 AlA National Convention next month. Eight winners in the Current Use category (designed and completed within the past seven years) were selected by jurors Joan E. Goody, AlA, jury chairman; Howard Barnstone, FAIA; Thomas H. Beeby, AlA; Gary Chan, an architecture student at the University of Washington; John O. Merrill, Jr., FAIA; Jay C. McAmis, an associate AlA member from Mission Viejo, California; and Robert Venturi, FAIA. Four Extended Use projects (representing restoration, rehabilitation, or adaptive use carried out during the past seven years) were cited by Frank O. Gehry, FAIA, jury chairman; Bruce A. Abrahamson, FAIA; Dora P. Crouch, associate professor of architectural history at Rensselaer Polytechnic Institute; Mark Lowe Fisher, an associate AlA member from Minneapolis; Pamela Jenkins, an architecture student at Pratt Institute; Nory Miller, a senior editor of *Progressive Architecture*; and Peter Papademetriou, AIA, of the Rice University School of Architecture.



1982 AIA HONOR AWARDS

The Current Use jury observed a "preponderance of modest and lowtech commissions in the final pool of projects," according to Joan Goody. "We had anticipated more examples of design that could represent solutions to the many large-scale, socially significant or technologically difficult building problems facing us today. The few submissions which dealt with these issues, however, did not sufficiently transcend their national origins to become architecture of a higher order....The group of winning buildings are sensitive to and fit easily into their surroundings, avoiding harsh juxtaposition of scale and treatment. Spatial organization is conceived for the benefit of the user, rather than to satisfy a preconceived geometric order. Appropriate use of traditional building materials and methods has produced a variety of solutions with appealing textures and colors. The jury hopes that the work indicates a direction that will find fruition soon in larger and more complex commissions and will advance in technically and conceptually more innovative directions."

Frank Gehry commented on the deliberations of the Extended Use

jury: "Our awards included only one project that could be called an architect-designed remodeling. There were dozens submitted. It was the feeling of the jury that while the quality of restoration in the United States had markedly improved in recent years, the quality of work that demands an interweaving of old and new still generally falls short of the quality of the best new design. Much work simply evades the challenge on the assumption that the only alternative to matching is ignoring. We feel that remodeling, renovation, and all the various categories which mix new



and old can be viewed as architecture in context, not unrelated to buildings in urban contexts."

1. Illinois Regional Library for the Blind and Physically Handicapped, Chicago, Illinois; Joseph W. Casserly, Chicago City Architect, and Stanley Tigerman & Associates, consulting architects (Current Use). A colorful focus for an inner-city neighborhood, the library was designed to permit interaction between blind and sighted users. The Honor Awards jury remarked that "fenestration, architectural features, and furnishings are used to orient and direct library

patrons. The atmosphere of the entire project suggests that a building can be joyful and even capricious while still solving the pressing needs of a difficult and sensitive program." 2. Garfield Elementary School, San Francisco, California; Esherick Homsey Dodge and Davis architects (Current Use; see RECORD, August, 1980, pages 103-105). Designed to meet seismic safety codes, the three-story school comprises 10 classrooms, two kindergartens, and a multi-use space available for neighborhood activities. Solar collectors, operable windows, and outdoor walkways maximize

year-round energy efficiency.

3. American Academy of Arts and Sciences, Cambridge, Massachusetts; Kalimann, McKinnell & Wood, Architects, Inc. (Current Use; see RECORD, November, 1981, pages 79-87). The panel described this meeting place for distinguished scholars as "a strong evocative form which ... shelters without overpowering smaller neighboring buildings [and] merges into its wooded hilltop site by careful placement, landscaping, and choice of materials."

4. LeJeune Residence, Orono, Minnesota; Frederick Bentz/Milo Thompson/Robert Rietow, Inc. architects (Current Use). The cedar-clad house responds to an irregularly shaped site with extensive lake frontage. "Circulation sequences and careful placement of openings dramatize views to the lake while sheltering private spaces from road disturbances," the jury noted. "Precise detail reinforces an over-all design that is both resourceful and truly creative." The tapered, sloping roof has been oriented to deflect winter winds.

5. Lath House at Heritage Square, Phoenix, Arizona; Robert R. Frankeberger, AIA, architect (Current Use; DESIGN AWARDS/COMPETITIONS

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see RECORD, June 1981, pages 100-103). Situated in central Phoenix, adjacent to gardens, courtyards, and historic landmarks, this timber pole structure provides a multi-purpose shelter for public activities. The jury commended the Lath House as "a unique public gathering space, particularly appropriate to the warm climate in which it is located."

6. Residence, East Hampton, New York; Eisenman Robertson Architects (Current Use; see RECORD, mid-May 1981, pages 78-81). "The house accommodates a rich variety of needs-programmatic, climatic, formal, and symbolic-in a controlled and yet easy way Its conventional saltbox form fixes the house as a shelter appropriate for its exposed site, but its inner layer of set-back window-walls opens the house to the outside for use on summer holidays."

7. Talbot House, Nevis, West Indies; Taft Architects (Current Use). Four two-story stone towers, housing bedrooms and a kitchen, flank the central living/dining space of an open pavilion. The massing and bright colors of the project reflect indigenous architectural forms. Building stone, which

was found on the site, probably came from earlier plantation structures and garden walls. The pavilion is oriented to take advantage of multiple exposures for cross-ventilation. Because the house has no electricity, lighting, cooling, and refrigeration are all kerosene-powered.

8. Macondray Terrace, San Francisco, California; Hood Miller Associates, architects (Current Use). "Macondray Terrace utilizes its steeply sloping site in an exceptionally sensitive and creative manner. Located in a finely scaled residential area, this relatively large condominium complex relates

quietly to its neighbors with well proportioned setbacks and carefully detailed exteriors. The two major building elements, one above the other with a common exterior garden between, take full advantage of the restricted site. The glass-enclosed inclined elevator connecting the various levels adds to the over-all quality of openness and grace which is inherent in the design."

9. Schulman House Addition, Princeton, New Jersey; Michael Graves, architect (Extended Use.). A new living room, garden wall and screened porch were added to a two-story



Calendar

- PCI 1982 Awards. The awards program recognizes architectural and engineering design excellence in architectural precast concrete and precast prestressed concrete buildings and bridges. The entry deadline is August 2; winners will be announced on November 2. For entry instructions, write to the Prestressed Concrete Institute, 201 North Wells Street, Chicago, Illinois 60606.
- Owens-Corning Fiberglas Energy Conservation Awards. The program recognizes architects, engineers, and building owners who have made significant contributions to energy conservation through design excellence. Entries will be judged in five categories: commercial, governmental, industrial, institutional, and multifamily residential. The competition is open to all registered architects and professional engineers practicing in the United States. Any building completed, under construction, or commissioned and being designed on the entry date is eligible. Entries must be submitted by August 27. To receive an entry form, write to Jane P. DeChant, Owens-Corning Fiberglas Corporation, Fiberglas Tower, Toledo, Ohio 43659.
- 1983 AIA-ALA/LAMA Library Buildings Award Program. Coordinated by the Library Administration and Management Association, a division of the American Library Association, and the AIA, the awards commend excellence in the design and planning of libraries. Brochures with application forms are available from Roger Parent, executive director, LAMA, ALA, 50 East Huron, Chicago, Illinois 60611. Initial entry slips should be postmarked no later than October 1, 1982. Submissions in binders are due December 1, 1982.

suburban house. The stepped alignment of structures along the street facade is intended to accentuate a new entry. Graves's project was commended for both its "inventive solution to an ordinary problem and the manner in which the physical environment was extended beyond the existing conditions. It is a contemporary approach to the problem of linking old and new by the knitting together of fragments...."

10. Curtis Park Face Block Project, Denver, Colorado; Long Hoeft Architects and McCrystal Design, architects (Extended Use). With the goal of

reversing the decline of a city neighborhood, this project coordinated by Historic Denver, Inc. restored the exteriors of 43 houses occupied by their low-income owners. The average budget for each house was \$10,000; funding came from Federal, state, and private-sector agencies. The architects discussed strategies for exterior rehabilitation with individual owners, who made all final decisions. "This project was a demonstration of architectural practice in a true service capacity, an important type of professional activity. This allowed present owners to remain in their envi-

ronment, as well as to see its improvement through the thoughtful attention of the architects involved." 11. Scoville Square Building, Oak Park, Illinois; Office of John Vinci Inc., architects (Extended Use). The 74year-old Masonic Temple Building, one of the few commercial structures influenced by Prairie School architecture, has been adapted to serve as corporate headquarters for the Industrial Fire and Casualty Company, and to provide rental store and office space. The jury noted: "The project actually combines elements of careful restoration, inventive reconstruction,

and adaptive re-use."

12. Valley National Bank, Des Moines, Iowa; Charles Herbert and Associates, architects (Extended Use). Built in 1931 and vacant since 1972, the bank required new energy systems, improved lighting, and more effective circulation areas. "Restoration was undertaken with a great deal of design restraint as well as thorough technical competence. The brilliance of earlier detail was brought out fully in the process, in addition to which the principal banking space was improved through better handling of both natural and artificial light."

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Interference with contract: the law and ethics

Until 1981, the AIA had an ethical prohibition against an architect approaching another architect's client for a given project unless certain requirements were first met. This ethical prohibition was known as the "supplanting rule" because it prevented one architect from being supplanted surreptitiously by another. The rule was designed to preserve orderly relationships between architects and their clients. In the 1970s, the "supplanting rule," as had happened with many other professional ethical provisions, came under attack on anti-trust grounds. As a result, the AIA has announced that it no longer will have or enforce a rule against supplanting. The change in the ethics, however, does not leave an architect defenseless when someone wrongfully interferes with the architect's contractual relationship with a client. That relationship is protected by law, and liability can ensue if someone tampers with it.

by Arthur Kornblut, Esq.

Prior to 1981, the AIA's ethical prohibition against ``supplanting'' generally stated that an architect could not attempt to obtain, offer to undertake, or accept a commission for which he knew another legally qualified individual or firm had been selected or employed, until the architect had evidence that the selection, employment or agreement had been terminated and the architect gave the other firm or individual written notice that the architect would be taking on (or attempting to take on) the commission. Because of anti-trust and other considerations, the AIA issued a revised statement of ethical principles in 1981 that no longer regulates the problem of supplanting. However, this change has no impact on the legal consequences of someone wrongfully interfering with the relationship between an architect and his client. The former ethical prohibition, after all, was basically a professional expression of concern about a course of conduct that the law has long recognized as improper. Nonetheless, sanctions by a private organization such as the AIA against that type of conduct were deemed to conflict with the anti-trust laws; thus, the demise of the ethical prohibition.

The case which focused on the anti-trust implications of the "supplanting rule" was *Mardirosian* v. *AIA et al.* which was filed in 1977 and settled in 1981 (ARCHITECTURAL RECORD, October 1981, page 35). The plaintiff, an architect, brought this lawsuit after the AIA censured him for "supplanting" another architect. After extensive discovery proceedngs, the plaintiff filed a motion for partial summary judgment on the issue of the sup-

 $\mathsf{Mr.}$ Kornblut is a registered architect and practicing attorney in Washington, D.C.

planting rule being in violation of the antitrust laws. In ruling for the plaintiff, the court found that the ethical prohibition against supplanting violated the Sherman Act because it unreasonably restrained trade or commerce.

The court was particularly troubled by the operation of the prohibition against supplanting even though a valid contract might not actually be in force between an architect and his client; *i.e.*, when the "supplanting" occurred after selection of the first architect but prior to entering into a contract. The now-rescinded ethical standard specifically prohibited attempts to obtain a commission when another architect had been selected (as well as when he had been employed).

The court noted that the supplanting rule operated at the selection stage to limit the freedom of an owner to negotiate with, select, or employ some other architect once he selected the first architect unless the AIA ethical strictures were observed, even though the ethics would not otherwise apply to a non-member of the AIA. The court called this a "broad and artificial monopoly" as directed against any other AIA member, with the effect of suppressing competition. The court recognized the apparently valid concerns which prompted the development of the supplanting rule, but it concluded nonetheless: " ... the means that the AIA has chosen to address these legitimate concerns is the imposition of a broad and direct restriction of competition after one architect has been 'selected or employed,' in any and all circumstances where the competition is directed at the same work covered by that selection or employment. Suppression of competition is the essence of that restraint as well; it is, therefore, necessarily anticompetitive. This ruling and the continuing costs of litigating the suit led the AIA to a decision to settle the case and to revisions in the profession's ethics. But even without an ethical prohibition against supplanting, the legal protections against interference with contract remain as viable as ever.

Many cases involving the issue of wrongful interference with contract stem from exemployees contacting the clients of their former employers. Even though the facts of these cases are not analogous to one architect supplanting another architect for a project, the legal principles are similar. In a 1978 Pennsylvania case, lawyers who had been associates (employees) of a law firm decided to establish their own firm. In the process, they contacted clients of their former law firm to announce the formation of the new firm. They sent these clients form letters (and self-addressed stamped return envelopes) with which to discharge their former firm and to retain the new firm as their legal counsel. The former employers promptly filed suit to get an injunction to stop these activities.

The Pennsylvania Supreme Court, in ruling in favor of the law firm whose clients had been contacted, said: "At least since (1853), the common law has recognized an action in tort for an intentional, unprivileged interference with contractual relations. It is generally recognized that one has the right to pursue his business relations or employment free from interference on the part of other persons except where such interference is justified or constitutes an absolute right.... There are frequent expressions in judicial opinions that 'malice' is requisite for liability.... But the context and course of decision make it clear that what is meant is not malice in the sense of ill will but merely purposeful interference without justification." The court noted that the elements of the tort of inducing breach of contract or refusal to deal involve one party, without legal justification, inducing a third party not to perform a contract or enter into or continue a business relation with another party, with actual harm resulting. If interference with contract can be shown, the defendant will be liable for the pecuniary loss that results from the third party's failure to perform the contract.

Under the foregoing principles, an attempt to induce an architect's client to terminate a valid contract for architectural services would be grounds for a lawsuit. Even though the architect no longer would have recourse through professional disciplinary channels, the ability to recover monetary damages provides meaningful protection against this type of conduct.

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Systems '82 expands into a major automation show for architects and engineers

SEMINAR TOPICS

Thursday, June 10, 1982

Managing Professional Performance Low-cost Applications for Small Computers The Designing Computer Setting Up a Standard Detail System Working With the Repro Services Firm How to Find Good People and Keep Them Project Management and MIS Buying a Small Computer A/E Computer Use for the '80s CADD: What it Can and Can't Do for A/E's Managing Reprographic Production Getting the Most Out of Overlay Drafting Reprodrafting and Reprographics Implementing an Ink Drafting Program Legal Aspects of Construction Documents Marketing Your Systems Capabilities How to Do More in Less Time Improving Specification Production How to Shop for Interactive Graphics Organizing for New Production Techniques Training Staff to Use Systems Communications and MIS Minimizing Liability Claims Managing the Marketing Program How to Select a Word Processor Planning and Organizing for CADD Small Firm Production Techniques

Friday, June 11, 1982

How to Manage Change Buying a Small Computer Planning and Organizing for CADD Managing Reprographic Production How to Introduce Systems to Your Office Minimizing Liability Claims Project Management and MIS Managing the Marketing Program Low-cost Applications for Small Computers Engineering and Planning

Applications for CADD CADD: What it Can and Can't Do for A/Es Setting Up a Standard Detail System The Future of Reprographics How to Introduce Systems to Your Office How to Find Good People and Keep Them Marketing Your Systems Capabilities How to Do More in Less Time How to Select a Word Processor How to Shop for Interactive Graphics Organizing for New Production Techniques For those who find the burgeoning field of automation and reprographics equipment and services a somewhat bewildering prospect—or for those already into automation and looking for more sophisticated systems some serious answers and clarifications may well be found at the upcoming Systems '82: the Third International Conference on Production and Management in A/E Firms.

To be held June 10-11 at the Expocenter in downtown Chicago's Apparel Mart, the two-day trade show and seminar program is expected to draw some 4,500 architect and engineer attendees, and approximately 500 sales representatives and company experts to explain and demonstrate the systems of about 150 vendors, displayed in some 250 booths.

Since the first conference in Chicago in 1980 and the next year in Los Angeles—with attendees and exhibitors about doubling each year—the emphasis has been on reprodrafting, mini- and micro-computers, overlay drafting, financial management systems, computer-aided drafting, copiers, drafting equipment and materials. Though there are many computer/automation shows held in the country each year, the expected growth in displays and attendance this year will make Systems '82 the largest and most comprehensive such show specializing in serving architects and engineers.

A partial exhibitors list released for this year includes such familiar firms as Auto-trol, Calcomp, DuPont, Eastman Kodak, Hewlett-Packard, Intergraph Corporation, Keuffel & Esser, miniMax Association, NuArc, Vemco and Xerox.

Concurrent with the exhibits will be a two-day seminar program to present the latest information on implementing these systems. Attendees will have access to 49 presentations and workshops, conducted by 32 experts in various disciplines; many are given twice for convenience in scheduling. The full list of topics and repeats is boxed at left.

Management consultant Ken Barlow will lead off on Thursday, June 10 with a talk on "Managing Professional Performance," followed by Doug Stoker of SOM on "The Designing Computer," and Russ Molpus on "Managing Reprographic Production" and Page Highfill on "Low-cost Applications for Small Computers." June 11 will have presentations by Weld Coxe on "How to Manage Change," Kent Johnson on "Buying a Small Computer," Ed Powers on "Setting Up a Standard Detail System" and Tim O'Connor on "Planning and Organizing for CADD." The presentations are scheduled to run for half an hour to an hour, and obviously many will run concurrently.

"This will be a double-barreled event," says George Borkovich, Systems '82 Conference Director. "The exposition will present everything new in engineering and architectural firm automation, and the 49 workshops will present objective guidance in selecting and setting up new systems." He adds that "We think the popularity of the event is another testimony to increasing competition in the design professions. A-E's have learned they must adopt new tools and new techniques for boosting productivity. We're trying to make Systems '82 the single, best place where A-E's can find ways to sharpen their firm's competitive edge." Borkovich does make it all sound compelling, whether one is feeling competive or just very curious.

Systems '82 is sponsored by *A/E Systems Report* (a new newsletter combining *The Paper Plane* and *Design Compudata Exchange*) and *PSMJ* (a management newsletter for professional services firms). Michael Hough, publisher of both newsletters and promotional director for Systems '82, notes in the promotional flyer for the conference, "It is not an easy transition into these new methods. First, attitudes within the firm have to change. Then you have to be sure to select new techniques and equipment that are right for the firm. And then these new methods have to be correctly implemented.

"When you have comparative information regarding the systems that are available, you are less likely to choose the wrong one. And when you can hear the implementation mistakes others have made, you are less likely to make them yourself."

For those who want to explore all this further, advance registration is \$95 for the seminar program and no cost for the exhibit; on site it is \$125 and \$10, respectively. For further information, contact Carol Gosselin, Systems '82, P.O. Box 11318, Newton, CT 06111; phone: 203/666-1326.

—Herbert L. Smith



THE NATIONAL AQUARIUM IN BALTIMORE: CAMBRIDGE SEVEN ASSOCIATES



"Architecture is not the issue," says Cambridge Seven's Peter Chermayeff. Rather the new aquarium's form is conceived as merely a device for organizing a progression of experiences "so involving that you forget about the architecture." Happily, the device is only partly successful. Within the building the orchestration of exhibits is so merged with their visual and spatial framework that the architecture becomes ineradicably a part of the visitor's total experience. And without ... it is surely architecture that establishes this spirited and spirit-lifting landmark at the rim of Baltimore's Inner Harbor.



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Behind the entry platform, which shields a seal pool (far left), is an

THE NATIONAL AQUARIUM IN BALTIMORE



second, smaller glass pyramid.

Although literal nautical references are shunned, the aquarium enters zestfully into the spirit of its aquatic surround. The upthrusting pyramids, for example, hint broadly at sails thrust into the wind, or the prow of a ship—or, less romantically, pierside gantries. The gaily painted pattern of the harbor-facing west wall strongly recalls signal flags or burgees. And the projected bases of the graduated pyramids are defined by—what else?—navy blue.

Because the waterborne site precluded placing the aquarium's extensive mechanical, service, and staff areas below grade, these occupy the plaza level and one level above. Public spaces are introduced by a pyramidcapped raised platform that affords an overlook to the inner and outer harbors, the city skyline, and the flag-bedecked forecourt of the aquarium itself.

The adjacent lobby marks the beginning of the continuous one-way path through a building of which its designer remarks, "Circulation is what it's all about." As shown in the schematic above, the route zigzags upward through the central atrium lined by exhibit galleries, emerges at the rooftop rain forest, then winds down again via scissored ramps through the center of the huge ring tank.

Entering the lobby the visitor first encounters a "water toy": transparent tubes of bubbling and gurgling blue water that screen the gift shop beyond and deflect incoming traffic away from the outbound circulation stream.

As the entering visitor moves on to the main exhibit area, he passes into a hushed and shadowy undersea world, a soaring cavern crusted with projecting balconies and decks and crisscrossed by upreaching bridges. Immediately below, dolphins cavort



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The entry lobby (bottom) is enlivened by burbling blue tubes whose mirrored images spin off to infinity, and a colorful mural. The adjacent atrium is a soaring space of strong forms and vivid images: dolphins at play, a skeletal whale poised to sound, an ominous glimpse of sharks. Radiograms of sea creatures, projected against concrete balconies, dissolve and re-form, adding to the sense of movement within the space.







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THE NATIONAL AQUARIUM IN BALTIMORE

glimpsed around the next bend.

The ascent culminates in the dense and humid jungle of the rain forest, where lush foliage yields to reveal free-ranging birds and animals. Emerging from the twisting path, the visitor climbs to a tree house from which can be surveyed across the treetops the panorama of city and harbor.

From the forest one descends to the surface of the water in the ring tank, and a wrap-around painted horizon, before drifting down the ramps through the enclosing tank and into the depths. The first port of call is a coral reef whose brilliantly colored inhabitants swoop and dart under the occasional shadow of more formidable fish. Descending farther the visitor is surrounded by the sinister forms of sharks and rays before moving gratefully on to a lower expanse of windows looking from underwater to the dolphin pool.

The final lap is up to lobby level, where a summary exhibit traces the role of man as explorer and exploiter of the fragile, lifegiving sea.—*Margaret F. Gaskie*

NATIONAL AQUARIUM IN BALTIMORE, Baltimore, Maryland. Owner: City of Baltimore. Architects and exhibit designers: Cambridge Seven Associates, Inc. —Peter Chermayeff, principalin-charge; Frank Zaremba, principal exhibit designer; Bobby C. Poole, project architect; Esther Pullman, graphic designer. Consultants: Jerry M. Johnson, Inc. (habitat exhibits); LeMessurier Associates/SCI (structural); Francis Associates/SCI (mechanical/electrical); Inland Oceans Design & Management Group (life support systems); Howard Brandston Lighting Design (lighting). General contractor: Whiting-Turner Contracting.





through the aquarium leads through displays depicting extremes of coastal environments-North Atlantic cliffs (complete with puffins a California kelp forest, a Pacific coral reef-to the building's most appealing exhibit. A children's cove simulates the rocky Maine coast, with tidal pools where children may climb and splash and handle such small shore creatures as crabs and starfish. A short escalator ride up, the visitor emerges to the daylit pyramid-roofed rain forest with its panoramic harborscape. The downward path then descends via scissored ramps through the ring tank, which offers 360-degree view of a colorful Atlantic coral reef and the deepwater domain of sharks and giant rays.



ISLAMIC ARCHITECTURE AND RURAL DWELLINGS FROM BEIJING TO KASHI



Last October in Beijing, the Aga Khan Award for Architecture held a four-day seminar on "The Changing Rural Habitat," followed by a seven-day trip across China. We went to the city of Xi'an, then on to the Xinjiang-Uygur Autonomous Region in the far west—populated by a large minority of Muslims of Turkic origin.

This was the sixth seminar in a series which began in April 1978 at Aiglemont near Paris and continued over a three-year period successively in Istanbul, Turkey, Jakarta, Indonesia, Fez, Morocco and Amman, Jordan. The China seminar was the first in a new series following the presentation of the first Aga Khan Awards in Lahore, Pakistan in October 1980 (see RECORD November 1980). Except for the first, all the seminars preceding the one in Beijing have been held in Muslim countries. The Aga Khan chose China for his sixth to acknowledge and take advantage of the current change for the better in China's treatment of its Muslim minorities. During the Cultural Revolution (1966-1976), Muslims, Christians, and Buddhists were persecuted and their places of worship were closed by the Red Guards in the autumn of 1966. The present regime allows freedom of religious belief (for all but the Roman Catholics), permits minority languages to be spoken and written, and respects the customs and habits of the minorities. The Muslims in particular are being well treated because of China's current foreign policy goals, which include certain accommodations with the Muslim nations of the Middle East and Southeast Asia. The improved attitude is related also to the Sino-Soviet tensions. The USSR is wooing the Chinese Muslims in Xinjiang, which is directly across the Soviet border, so the Chinese government is reciprocating.

To this end the Chinese have recently opened the Xinjiang-Uygur Autonomous Region to visitors from the rest of China, foreign travelers, and—most significantly—to the Aga Khan, in his role as spiritual leader of the Ismaili sect and as the Muslim who has done so much to bring an understanding of Islamic culture to the rest of the world.

Although the Aga Khan's primary agenda in China was religious, the opportunity to hold an architectural seminar there was not to be missed. The rural habitat in the Third World is a major concern of the Awards program, and because 80 per cent of the *Chinese population consists of rural peasants*, the rural habitat is also very much in the minds of the Chinese government. So it all came together in a scholarly seminar in Beijing followed by a remarkable five-thousand mile field trip, which allowed the world's specialists in the Third World human habitat to meet the rural peasantry of China face to face.

There were 120 of us in all, including staff and logistics personnel. The seminar participants, including the Aga Khan's brother Prince Amyn, numbered 49 visitors to China and 20 participants from our host group, the Architectural Society of China. The 49-member visiting team comprised an international theoretical and technological elite including architects, planners and engineers-largely specialists in regional rural development, Third World housing and renewable energy techniques. Among the social scientists were an ethnologist with particular knowledge of Chinese village patterns, an anthropologist expert in all forms of rural dwelling and several sociologists interested in the psychology of social change. Helping us all gain perspective were the small corps of art and social historians in the Islamic field who continue to help shape and guide the seminars.

The 20 participants from the Architectural Society of China included two historians and three professors from schools of architecture. The rest were associated with institutes for building research and/or construction (sub-professional technical schools) or government bureaus. From those who spoke English I was able to learn that most had been forced to work in farms or in factories during the Cultural Revolution and had been separated from their families. There is presently a serious lack of architects and architectural technicians in China because of the ten-year gap in which the schools and universities were closed. Today China has about 6,000 architects in a population of 1 billion people. Of the world's architects, only one in 50 is Chinese.

It is unclear how many of this number are or will be at work on rural habitat problems or how the building bureaus and institutes actually function in rural areas. We did not meet mid-level officials in charge of the actual implementation of rural policies. Thus our perception of the role of the architect/planner in the Chinese countryside was not sufficiently focused to help us formulate answers to one of the basic questions of the conference: What is the role of the architect/planner in the rural Third World?

In developed societies we are used to the idea that a good architect is able to intervene for the better in any project for which he has been engaged—at least so far as the interests of his client are concerned but ideally, for most who are affected, including the users and the public in general. But the rural habitats of the developing world are frequently harmed by experts' initiatives. Sadly, the architect/planner who upholds vernacular traditions may do as much damage to a given rural community or region as the champion of technological innovation.

As several case studies presented at the seminar made clear, experts are too often ignorant of the realities of a particular rural place. Unfortunately, however, the quantity of information—ecological, cultural, financial, technical which the architect/planner must master so as not to make things worse is formidable. More attention must be paid to the hopes and aspirations of the Chinese rural people themselves, but plans cannot be tailor-made for each rural community.

It may be true, in the words of Harvard University professor and Aga Khan Award steering committee member Oleg Grabar that: "Perhaps the rural world is still too little understood to be given to architects as a field of work." It seems to me, however, that architect/planners have a role in attempting to shape the rural habitat when it has been or is about to be disrupted by resettlement programs made necessary by disasters or by the depletion of natural resources. Decisions to reorganize agricultural patterns and to create lakes and dams must also be accompanied by architectural and planning expertise. Further, the architect/planner can help rural communes to construct the kinds of buildings which are new to them-schools, medical centers and various types of community buildings for example.

Finally, the so-called "total rural architect" who brings solutions to energy issues, addressing the depletion of wood supplies, fuel and food can be of direct and immediate use to the Third World. World Bank economist/engineer Roger Carmignani presented an important paper on this subject in which he discussed renewable-energy technology such as photovoltaics, small hydro plants and solar energy. And he defined for us his concept of the ideal rural strategist. In his words: "One who is first a surveyor of the social and economic agriculture scene; second, aware of energy issues as they affect rural life; and only third a designer and builder always conscious of the need for self help and mass diffusion, when building for the rural poor." -Mildred F. Schmertz

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XI'AN: THE GREAT MOSQUE



All one-hundred-twenty of us taking part in the seminar were, whatever our faith as individuals, supporting players in a great ongoing religious drama, a joyous pageant, beginning in Beijing, moving to Xi'an and then airborne over the ancient silk route with stops in Ürümqi, Turfan and Kashi (Kashgar). We were celebrating the coming together of Chinese Muslims-persecuted during the Cultural Revolution and only recently allowed to resume the practice of their faithwith their spiritual brother, the Aga Khan (shown at left being greeted by the Imam of the Great Mosque of

Xi'an). The Mosque (photos above), acknowledged to be an architectural masterpiece, was founded in A.D. 742 during the Tang period (A.D. 618-907), the first era in which Islam came to China. It was rebuilt in its present form in A.D. 1392 (early Ming Dynasty) through 1522, and restored and added to in 1606 and 1764-8. Because the Mosque plan is axially symmetrical, the stone gateway (photo top) centers on the main portal of the prayer hall (masjid) and the rectangular walled courtyard. Ornament and detail combine Islamic and Chinese motifs. The fountain would look

equally at home in the Alhambra. The so-called memorial archway (above left) is located in the first of five courtyards. The brick and stone arch (above right), one of four symmetrically placed, appears to be an 18thcentury addition. Its over-all form, decoration and calligraphy are Chinese but its inner arch is Islamic. The entire complex is presently undergoing restoration. The mosque, as well as being a religious center, plays an important political, cultural, educational and social role in the lives of the Hui Muslims and lies in the center of their district.







XI'AN: RURAL COMMUNES



In Shaanxi Province, near the city of Xi'an, is the Fenghuo People's Commune which includes a school carved into the hillside (top and above left) and dwellings for 240 households. The photograph of the school was taken from an almost identical wing opposite the facade shown. This incredible earthwork-a terraced, four-tiered U-shape-overlooks the peasant houses arranged Soviet style in parallel rows on the plain below (above right). On the first two tiers of the school are the classrooms, literally caves hollowed out of the soft earth called "loess." (This is a fine silt or clay made from dust blown by strong winds from the steppes of Asia and covering the entire province of Shaanxi as well as vast neighboring territories.) On the third and fourth tiers are smaller caves-student living quarters except during the rainy season when the rooms are said to be too damp to be lived in. They looked unliveable at the time of our visit (the dry season), most were closed and none seemed to be occupied. The classrooms did not appear to be functioning either. The fact that Mao Zedong himself once went to school in a cave is said to have inspired the Fenghuo People's Commune to build this instant ruin, although it surely must have taxed their common sense so evident in the rest of their construction. Farther down the hill is a recently built and very snug little classroom building of mud brick. The elderly peasant (photo left) lives in one of the cave dwellings (opposite page top) in small village near Xi'an. In his village, 164 people make up 34 households, and 22 of these families live in caves. They aspire to houses, and as the commune prospers houses are being built. So far there are 12 of them with more planned.







Christopher Little



TURFAN: A MOSQUE AND AN ANCIENT MUD CITY IN CHINESE TURKESTAN



When we flew from Xi'an to Ürümgi in the Xinjiang-Uygur Autonomous Region, we left the land of the Chinese people and their culture and entered a world populated by Muslims of Turkic origin, who for centuries have used Arabic script. Comprising seven ethnic groupings among which the Uygurs and Kazaks predominate but which includes the Kirgiz, Salai, Tartar, Uzbek and Yugur peoples, these descendants of invading Turks and Mongols were once nomadic but are now mostly farmers. They all belong to a language grouping (one of five in China) called Altaic,

which has roots in common with modern Turkish. The Turkish-speaking members of our seminar were able to communicate with Uygur peasants. The little girl in the photo is probably a Uygur (their faces are said to combine Indo-Iranian and Mongol features). She lives in a mud brick house in Turfan which is just a few hours by bus from Urümqi along the ancient silk route. Our late 20thcentury caravan was led by a black Chinese limousine allocated to the Aga Khan, several staff cars and six small buses for the seminar participants. We left our visitors compound

in ürümqi at dawn following Marco Polo's route to Turfan across a parched, gray mountainous landscape. The town itself is a little oasis of vineyards, honey melons and cotton. Along the way we visited an ancient walled city built of rammed earth (opposite page) of which little appears to be known. Only a mile and a quarter to the east of Turfan is the mud brick Amin Mosque (above and opposite page top). Built in 1778 it is a modest, provincial effort clearly inspired by the great Islamic buildings of Samarkand, Bukhara, Khiva, Urgench and Tashkent-all in Uzbekis-







tan in Soviet Central Asia. These cities, whose greatest monuments were begun in the 14th century by the Timurid Dynasty (founded by Tamerlane), are connected to Turfan by a branch of the silk route which turns northward at Kashi (Kashgar). Unlike the great works to which it aspires, the Amin Mosque is without mosaic tile work, but there may once have been some decoration in the niches and panels. The minaret has a fired brick pattern in a style which suggests that the late 18th-century minaret builders of Turfan carefully studied an early model—the Kalayan Minaret in Bukhara, built in 1127. The mosque has been extensively restored since the Cultural Revolution. The roof, except for a dome over the mihrab and small paired domes around the perimeter is flat and built of mud plaster over a wooden frame supported by wooden posts. The simplicity of the entire ensemble, except for the minaret, reminds us that Turfan was never more than a humble oasis along the silk route. More important, it tells us that by the end of the 18th century, the Muslim passion to build magnificently was spent.







KASHI (KASHGAR): THE ABA KHOJA MOSQUE AND MAUSOLEUM AND A LITTLE HOUSE NEARBY IN TURKISH STYLE



Kashi is at the western tip of the Xinjiang-Uygur Autonomous Region. To the north and northeast on the other side of the Pamir Mountains, is Uzbekistan, U.S.S.R., and the cities of Samarkand, Bukhara and Tashkent. Just to the southeast is Afghanistan, Pakistan and Kashmir, separated from Xinjiang by the Karakoram Range. The people of Kashi once moved back and forth across the mountain passes, but today, because of the international tension in the region, they are made to stay put. All diplomats and journalists have been denied access. For the last 20 years or

so, only the occasional mountain climber, linguistic scholar or archaeologist has been allowed to visit Kashi. So the whole town turned out to watch our motorcade, lining every route we took. For three days they watched the black limousine, the staff cars and six small buses carrying the world-disgorging Europeans, Americans, Middle Easterners, Japanese, Indians, Africans, Egyptians, Pakistanis, Malaysians, Indonesians and our Chinese hosts. They watched us streaming into mosques, climbing minarets, buying rugs, hats, strange musical instruments and photograph-

ing everything. And some, including the lady in the photo, invited us into their homes for little ceremonial feasts. We will never know how we must have seemed to them. The early 18th-century Aba Khoja Mausoleum (above top) and its interiors (opposite page right) display both engineering skill and artistry in the arrangements of vault and dome. The prayer hall of the mosque (opposite page top left) has been restored along with the gate to the compound. Also shown are the porch and interior of a small Kashi house, not very different from old houses in Istanbul.







Christopher Little

















KASHI: THE POTTERS' VILLAGE



A mile or so from Kashi is a small settlement that ascends and crowns a hill. Intricately terraced in mud brick, its roofs double as walkways. This little place was considered to be too fragile in its construction to withstand a visit from all 120 of us so it was arranged that on our last morning in Kashi only four people go-Michael Curtis, who is executive aide to the Aga Khan for education, health and housing, the photographer, Christopher Little, a Chinese guide and myself. The town seemed underpopulated but it is possible that a good number of its residents had left for

Kashi at dawn, by foot or cart to be present for yet another sweep of the motorcade, on its way to a nearby commune for a demonstration of local mud building techniques. The lady in the goatskin cap was one of several who invited us into their homes-tiny guarters in which each family lives, sleeps, cooks and eats in one room. These dwellings were even smaller, darker and more crowded than the peasants' caves in Xi'an. Even such humble spaces, however, have one element in common with all the rural housing we saw in China. Known as the K'ang-a brick platform to the rear of the principal room is heated by means of a fire box inserted within it, and used as a sitting area by day and for sleeping at night. The town itself appeared to be self-sufficient with its own vegetable gardens, public market and mosque The pottery is made in a number of small workshops spread throughout the village. More is produced thar would seem to be locally required and is probably shipped abroad by way of Pakistan. I have seen woo rugs from Kashi for sale at Blooming dales. Some of this pottery may be getting there too. -M.F.S.







A visitor center that fits into a natural site



Neil Astle Associates designed this large concrete structure for a 7,800-acre wildlife refuge that stretches across the Missouri River between lowa and Nebraska. To help make the structure harmonious with the site, the architects have made ample use of wood infill panels and earth berms, and have divided the building into several parts that reduce its scale (see plan overleaf). The berms (see photo left) are also important in helping the building retain heat and deflect north winds during the severe winters. Called the DeSoto Visitor Center, the structure was conceived to provide public education about the ecology of the river, and about an important archaeological find-the wreck of the steamboat Bertrand, which sank nearby in 1865. Accordingly, the rooms are arranged in a careful sequence (see caption overleaf) that culminates in a viewing gallery over the water (photos right and below). From the gallery literally thousands of ducks and geese can be seen resting at peak migration periods.

DESOTO VISITOR CENTER, DeSoto National Wildlife Refuge, Iowa and Nebraska. Owner: U.S. Department of the Interior, Fish and Wildlife Service. Architects: Neil Astle Associates. Engineers: KKBNA Inc. (structural); Ray Alvine Associates (mechanical/electrical). Interpretive design consultant: Consortium West. General contractor: Leuder Construction.





The building is reached by a long entrance drive past woods and ponds, with stopping points for views (see site plan above). It is located on a placid lake created by cutting off a bend in the Missouri River from the main channel. The building's water side is on tall concrete columns on piles to raise it above flood level. The round form of the theater for introductory films (photo right) projects into a central court. Large glass areas face south and act as solar collectors during winter months. In summer, the building is cooled with water from the lake. The Center anticipates a million visitors by the year 2000.

