



CONTENTS

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The Fourth Annual Review of Recent World Architecture

Andrea Oppenheimer Dean, editor in charge

Australia Andrea Oppenheimer Dean			120
Canada Allen Freeman, Carleton Knight III			108
China David Cohn			78
France Bruce N. Wright, Brian Carter, Charlotte Ellis			82
Greece Anthony C. Antoniades, AIA			
Hong Kong Hiroshi Watanabe			
' Hungary John Macsai			142
Ireland Donald Canty, Hon. AIA			128
Japan Hiroshi Watanabe			132
New Zealand Gerald Melling			118
Norway Ulf Grønvold			114
Qatar A.O.D.			
Sweden Eva Eriksson			117
West Germany Douglas A. Greenaway, A.O.D.			94
Yugoslavia Theo David			145
Events & Letters	10	Furnishings	170
News	19	Products	175
Books	153	Advertisers	182

Cover: Photograph by Ivan Nemec of the exterior of the new Staatsgalerie in Stuttgart, West Germany, by James Stirling (see page 94).

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ARCHITECTURE, publication number ISSNO746-0554, official magazine of The American Institute of Architects, is published monthly by the AIA Service Corporation at 1735 New York Ave. N.W., Washington, D.C. 20006. Individual subscriptions: U.S. and its possessions; 528 for one year, 545 for two years, 562 for three years. Canada: 534 for one year, 553 for two years, 572 for three years. Foreign: 552 for one year, 593 for two years, 5134 for three years. Single copies, 55 each (except for May and September issues, which are 510). Publisher reserves the right to refuse unqualified subscriptions. For subscriptions: write circulation department, ARCHITECTURE, 1735 New York Ave. N.W., Washington, D.C., 20006; allow eight weeks. Quotations on reprints of articles available. Microfilm copies available from University Microfilm, 300 N. Zeeb Road, Ann Arbor, Mich. 48106. Referenced in The Architectural Index, Architectural Periodicals Index, Art Index, Avery Index to Architectural Periodicals. Second class postage paid at Washington, D.C., and additional mailing offices. © 1985 by The American Institute of Architects. Opinions expressed by the editors and contributors are not necessarily those of AIA. vol. 74, No. 9.







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Oct. 6-9: Industrial Power Conference, Chicago. Contact: American Society of Mechanical Engineers, 345 E. 47th St., New York, N.Y. 10017.

Oct. 8-11: AIA Architecture for Justice Meeting on Alternatives for Financing and Constructing Justice Facilities, Los Angeles. Contact Mike Cohn at Institute headquarters, (202) 626-7366.

Oct. 9-13: National Preservation Conference, Seattle. Contact: National Trust for Historic Preservation, 1785 Massachusetts Ave. N.W., Washington, D.C. 20036.

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Oct. 11-13: National Association of Plumbing, Heating, Cooling Contractors Convention, Las Vegas. Contact: NAPHCC, P.O. Box 6806, Falls Church, Va. 22046. Oct. 12-15: American Society of Landscape Architects Annual Meeting, Cincinnati. Contact: Pam Jensen, ASLA, 1733 Connecticut Ave. N.W., Washington, D.C. 20009.

Oct. 15-18: Computer Show for Contractors and Designers, Houston. Contact: CMC '85 and A/E Systems, P.O. Box 11318, Newington, Conn. 06111.

Oct. 15-20: Tenth National Passive Solar Conference, Raleigh, N.C. Contact: Solar '85, NCSEA, 850 W. Morgan St., Raleigh, N.C. 27603.

Oct. 17-18: Waste Heat Recovery Seminar, Chicago. Contact: Association of

Oct. 21-25: Workshop on Using Automation in Working Drawing Production, Madison, Wis. Contact: Philip M. Bennett, University of Wisconsin, College of Engineering, 432 North Lake St., Madison, Wis. 53706.

Oct. 22-25: World Energy Engineering Congress, Atlanta. Contact: WEEC, 4025 Pleasantdale Rd., Suite 340, Atlanta, Ga. 30340.

Oct. 23-25: Architectural Woodwork Institute's Annual Convention, New Orleans. Contact: AWI, 2310 S. Walter Reed Dr., Arlington, Va. 22206.

Oct. 24-25: Energy in Architecture: Redesign Workshop, Argonne, Ill. Contact: Brenda Henderson at Institute headquarters, (202) 626-7353.

Oct. 24-26: AIA Housing Meeting on Housing the Homeless, Washington, D.C. Contact: Ravi Waldon at Institute headquarters, (202) 626-7429.

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at Buffalo, Buffalo, N.Y. 14620. Oct. 28-Nov. 1: Course on the Application of Infra-red Scanners to Detect Building Energy Losses and Roof Moisture, South Burlington, Vt. Contact: The Infraspection Institute, Juniper Ridge, Box

2643, Shelburne, Vt. 05482. Oct. 30-Nov. 2: AIA Urban Design and Planning Meeting on Growth Management Issues in Rural Areas, Raleigh, N.C. Contact: Bruce Kriviskey at Institute headquarters, (202) 626-7452.

LETTERS

Contrasting Aquariums: As a student of aquariums as a building type, I enjoyed your articles on the Monterey Bay and National aquariums (June issue). I was disappointed, however, that you didn't elaborate on the ramifications of these two very different concepts.

Being inwardly oriented, the National Aquarium creates an appropriate illusion of "other worldliness" brought about by subdued light levels that seem to eminate from the water displays, while at Monterey the strong daylighting makes the aquatic life seem to be out of place. The opportunity is not developed to create a sense of fantasy and place inherent and appropriate in an aquatic environment.

The strong daylighting also renders aquatic displays and signage relatively dark, and, in contrast to the National Aquarium, the educational and environmental impact is muted.

The Monterey Bay Aquarium is masterful contextual architecture, but as an aquarium it is not on a par with the Bal timore facility and the possibilities to which that aquarium points: a comprehension of another environment studied in term of varying light levels that are a byproduce of water depths and geographic location for the different aquatic life forms.

John Cottle, Al Aspen, Col

Ordway Music Theatre: Alone among those who have written about the Ordwa Music Theatre, Joanna Baymiller caugh and described the "combination of intimacy and grandeur" that Ben Thompso was seeking, along with the feeling of bein part of the city (May, page 189).

Along with the kudos, however, come a couple of comments that I mention on because they cover two matters that hav become a recurring but erroneous them The first is the price, and the second is the matter of "change orders."

Regarding price, there is confusion everywhere (probably our own fault) as to the difference between "building cos and "project cost." Our original contract with the general contractor was for \$23 million, with some hoped-for savings ar some unfinished sections that, we hope would end up at \$21.5 million. Some of the savings actually materialized, but it turned out to be impractical to leave, for example, the Studio Theatre an uncompleted shell space. So, \$21.5 million was never a real number, and the decision to complete the building at \$23 million was a conscious one.

This is not to say that there was not a increase in the final price. There was. I the course of construction, it gradually became clear to the general contractor and his subcontractors that they had a vastly more sophisticated building on the hands than they had anticipated. The stag lifts, the 40-ton moveable orchestra encl sure, the stage lighting and rigging were all elements with which they had not pr viously dealt. Added to this, it came through as something of a shock to the mechanical trades that our acoustician really meant all of those things in the specifications relating to vibration isola tion of the entire mechanical and plum ing systems, as well as isolation of the performing spaces, one from the other, and all from environmental noises outside the hall. The upshot was that the "building price" rose from \$23 million t \$26 million with all spaces finished and all equipment installed. This is not exact peanuts, but in a fast track project of this complexity, a 13 percent increase over a two-and-a-half-year construction perio is entirely reasonable.

The \$45 million figure is *not* the "build ing cost." It is the "project cost," which covers among other things, land, lega *continued on page 1*

NEWS



rld Architecture XPO Center Gives Preview f Vancouver World's Fair

t year Vancouver, British Columbia, celebrate its 100th anniversary and host EXPO 86, a world's fair on transation and communications. This sumas the city prepares the exposition s, builds hotels and a convention cenand completes a rapid *transit system*, -story geodesic dome has been opened the public to provide an introduction the fair.

ancouver architect Bruno Freschi is ing as chief architect/planner for the "I see EXPO 86 as an amenity and an imposition," he says. "We have a tacular site.... It is so intimately interen with Vancouver's inner city and istory."

he exposition will be located on two erfront parcels totaling 173 acres and nected by the city's new 14-mile rapid transit system. This will be the first world exposition to take place on two sites.

The fair's main site, which will accommodate the theme center, the international and corporate pavilions, plazas, performances, special events, restaurants, and rides, curves along the northern and eastern shores of False Creek. This site is predominantly reclaimed industrial land and railroad yards owned by the quasi-public development organization B.C. Place, which has its own master plan for the area after the exposition.

Canada's host pavilion will be located within the Canada Place complex, which also includes office space, a 505-room hotel, a five-berth cruise ship terminal, and will become a trade and convention center after the fair. The large, ship-like *continued on page 24*



Top, EXPO preview center along the eastern tip of False Creek; above, Michael Hayden's 60-foot, spiraling neon sculpture in the center's rotunda.



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Circle 16 on information card





19

28

32

48

65

NEWS CONTENTS

World
Vancouver prepares for EXPO
Four Berlin housing complexes
French competition process debated
Proposals
Graves' Whitney design discussed
Government

House approves HUD appropriations 54 Institute

AIA considering code of ethics

Unless otherwise indicated, the news is gathered and written by Allen Freeman, Nora Richter Greer, Michael J. Crosbie, and Lynn Nesmith.

24 ARCHITECTURE/SEPTEMBER 1985

World Architecture from page 19 building located on an existing pier in the city's main harbor, Burrard Inlet on the opposite side of the downtown business core, was a collaborative design by Downs Archambault, Musson Cattell, and Zeidler Roberts Partnership.

The financial problems of the 1984 Louisiana World Exposition in New Orleans have prompted EXPO 86 officials to develop an aggressive marketing campaign for signing up exhibitors and selling advance tickets. As part of this strategy and as a test run for next year's fair, the preview pavilion, designed by Freschi, opened May 2 at a prominent location near the terminus of False Creek. "The EXPO Centre will be one of our best selling tools,"

Above, modular exhibition pavilions; lej shiplike Canada Place on Burrard Inlet.

predicted EXPO President Michael Bar lett. "It will provide a firsthand look at our world-class exposition." Within its fir month more than 100,000 people had visited the center, a 15-story geodesic dom with a stainless steel surface and white steel supporting beams. At night the sphe is lit with 130 randomly flashing strobe lights. The pavilion houses exhibition hal restaurants, and, within the dome, a 500 seat theater with a spherical screen appro imately nine times larger than the stand ard movie screen. Next year it will serve as one of the four major theme pavilion

Unlike some past World's Fairs, inclu ing Canada's last fair, EXPO 67 in Montreal, participating nations will not build their own payilions but will lease exhibition space from the host country. The 40 international exhibitors will be housed in modular pavilions designed by team made up of Freschi, Bogue Babicl Associates (structural engineers), and EXPO project architect Paul Bridger. Th temporary pavilions range in size from approximately 273 to 5,468 square yard and are constructed of triangular steel trusses, steel pipe columns, triangular wo roof panels, and wood wall panels. Eac exhibitor is responsible for the design at installation of displays and interior and exterior decoration.

Although most of the exposition's buil ings will be temporary, EXPO 86 will lea several permanent public amenities to t city: a 60,000-seat stadium, a park alon the waterfront, a 10,000-seat amphithea ter, an arts, sciences, and technology ce ter, a forestry center, and the first phase of a public transportation system.

News continued on page

How to tell the This part can get very tricky. Com-

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Recent Results of Berlin's Continuing 'Exhibition'

Two years ago when we first reported on the in-situ Berlin International Building Exhibition (IBA), only Rob Krier's Ritterstrasse housing was finished. The program since has completed four new complexes in the Friederichstadt and Tiergarten areas.

Most convincing, perhaps, is the group of four energy conscious houses in the Tiergarten by Schiedhelm & Axelrod; Pysall/Jensen; von Gerkan, Marg & Partner; and Faskel/Nikolic. Composed of only partially connected six-story buildings, each of which uses different energy conserving strategies and has its own plan and image, the complex is united by a fresh, mostly modern vocabulary.

Less appealing is O.M. Ungers' Lutzowplatz housing, also in the Tiergarten, a block demolished by war then reduced to a giant traffic intersection by postwar planners. Ungers' pleasant competitionwinning scheme was stripped by the housing authority to an almost flat wall to the street, brick at the base, then stuccoed and pierced by square windows to end in flat gable shapes. Somewhat more friendly, the courtyard is stepped to allow for maisonettes, stacked on top of each other.

The just completed Rauchstrasse complex, planned by Krier, is anchored on one end by an Aldo Rossi building (quietly sophisticated, more variegated than his usual), and on the other by a Krier creation (a mixed salad with a prominent, dreadful sculpture as garnishing). The complex also includes buildings by Hans Hol-



Top, overview, southern Friederichstadt; above, 'energy houses,' Tiergarten area.

lein (an indigestible hash of colors and shapes on the court side, a baroque elevation facing the street), Giorgio Grassi (thoughtful, modern) and Henry Nielback (modern, far less thoughtful).

The IBA program for new construction, headed by Josef P. Kleihues, is headquartered in streamlined offices in a stately, bullet-marked baroque building located next to the old Berlin Museum. In contrast, the other IBA concerned with renovation and infill, headed by Hardt Waltherr Hämer, is housed in a cozy mess of drafting tables, books, and plants off a scruff street in an industrial neighborhood. The resemblance to community-based architecture firms of the late '60s is no coincidence. Hämer's main concern is social we fare, self help, and creating jobs. "Architecture," Hämer says, "can't be better that the relationships between people."

Since IBA's beginnings in 1979, Hämen program has made livable or built anew 3,500 dwelling units in the Kreuzberg an Luisenstadt areas. These were mixed us working class neighborhoods that escape demolition and are now inhabited most by Turkish "guestworkers," punkers, and bereft street people.

To a large extent, Hämer has concentrated the program's limited resources of repairing damage, rather than moderniz tion-sealing roofs, tightening windows making the heat rise-without driving ou inhabitants. What Hämer found when h began in 1979 was a rundown area when 1,000 dwellings were already empty and others being rapidly abandoned. The pla was to clear them for demolition, but the Turkish occupants moved in with large families, as did young squatters."If we ha cleared and rebuilt as planned," Hämer says, "the final result would have been about 10 percent new dwellings or dwel ings in good order. Ninety percent woul have suffered further dilapidation." He therefore chose to use available funds to simply make existing dwellings livable an shops usable.

"The strategy," Hämer says, "means min mum cost and maximum effect for the state; minimum rents for the residents consistent with a standard correspondin to their wishes and resources. This often means using a stove instead of central heating. We are mainly advocacy planne in operation with the people affected."

One of the IBA's most appealing schem was designed and implemented by Hämen program. The Frankelufer complex by Hinrich and Inken Baller. Part infill, par a large new building, a creation resembling a Gaudì offspring. There are upwar curling balconies, curved pantiled roofs and swirling paved paths. The Ballers hav used metalwork balconies and cornice lin to tie the complex in with its neighbors and employed local craftsmen to contai costs.

However, Hämer's section is also respo sible for one of the IBA's grimmest creations, a grisly corner block by Alvaro Siza and Peter Brinkert from which the graffito, "Bonjour tristesse," hasn't yet been painted over.

The highest praise for Hämer's progra comes, perhaps surprisingly, from the esthetically oriented Kleihues. "Hämer won't mention it to you," he says, "but he's saving the history of Berlin." ANDREA OPPENHEIMER DEAN

News continued on page.

ARCHITECTURE OF THE CARIBBEAN

MN NEWEL LEWIS

Architecture of the Caribbean

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Theory Versus Practice in Recent French Competitions

Distinguishing between architectural reality and wishful thinking has become increasingly difficult in Paris, for with the Mitterrand regime came the ascendancy of the "Class of '68," a group of architects too long-in-the-tooth to be accurately described as young but painfully short of experience in architectural practice. Their preference for architectural philosophism has been given full rein, with the result that architectural debate has been valued more highly than actual achievement. Design projects have been promoted through publication and exhaustive exhibition, runners up in competitions often being given more prominence than the winners; such completed buildings that have been acknowledged at all have been discussed in terms of design principles, with truly appalling construction standards being either ignored or dismissed as inevitable.

Yet the palmy days of pure polemic may well be numbered. As the French parliamentary elections to be held next March grow closer, there is now political pressure for tangible results in architecture, especially so far as the Parisian *Grands Projets* are concerned. Due for partial completion next year is the new Museum of Science and Industry, a massive project for transforming a 270x110meter, 35-meter-high concrete slaughter house built at Villette in the 1960s but never put to its intended use.

The present museum project follows an amended version of the competitionwinning master plan by the French architect Adrien Fainsilber, in which various groups of designers are making contributions, notably the Paris-based high-tech British practice Rice-Francis-Ritchie, which is working on a new glazed facade for the building. The new museum is the centerpiece of the "Park for the 21st Century" being created at Villette, where already completed elements include Fainsilber & Mercier's near-spherical Geode, containing the second Omnimax facility to open in Europe, and the retained 19th century Grande Halle, first used this spring after restoration and conversion by the French architects Reichen-Robert to house the architecture section of the Paris Biennale.

The park itself is to follow the design that won Bernard Tschumi the French government-run international competition of 1982-83. Major works on the infrastructure started earlier this year and, following discussions with other designers, contracts are to be awarded this month for the design and execution of various thematic gardens within the framework of Tschumi's composition of points, lines, and *continued on page 36*



You're out front with American Olean

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World Architecture from page 32 surfaces. Overall design control of the park rests with Tschumi, as does the detailed design of the *folies* that punctuate the park to an overall grid. Three of these *folies* are due to open in the middle of next year, and an additional 12 early in 1987.

The final element planned for Villette, the Cité de la Musique, was reserved as the subject of a French architectural competition won this year by Christian de Portzamparc. Said to have missed winning the 1983 Grand Prix de l'Architecture by a whisker, this idol of the "Class of '68" architects was runner-up in the international Opéra competition won in November 1983 by Carlos Ott.

The new opera complex to be built at Bastille to Ott's design is scheduled to be entirely finished in time for the bicentenary of the French Revolution on July 14, 1989. Site clearance was already well advanced this June when a working model was put on public display in Paris. One of the main functional features of the new building-and of the competition brief-is an inner core where up to 10 entire sets can be whisked by electrically operated machinery between the main auditorium, scenery bays, rehearsal, and storage spaces. This box of tricks is to facilitate a wide repertory for the planned future audience of one million people a year. But as the model went through its paces to a suitably operatic accompaniment, it was hard not to speculate on the catastrophic consequences of a power cut or to wonder what might happen if an absentminded prima donna were to remain on stage long enough to be swept away to some remote, subterranean store.

A more architectural sense of reality was given to another of the longer term *Grand Projets* when a full-size simulation of I.M. Pei's pyramid was mounted for a few days in May on the Cour Napoleon



Top, redesigned Beaubourg space by Gae Aulenti; above, gallery before alterations.

site at the Louvre, drawing large crowds and all manner of opinions, for and against (see May, page 25). A far less controversial element in Pei's proposals for the Grand Louvre is the major reorganization for museum use of those parts of the palace still occupied by the ministry of finance. This government department is due to move into a building now under construction at Bercy to designs by Chemetov & Huidobro. This Paris-based practice is also responsible for the now largely completed leisure center just down the road from the Louvre in part of the hole where Les Halles used to be. Here, Chemetov & Huidobro have pipped Pei at the post by building this year no less than four glazed pyramids to light underground facilities.

The vast new museum of 19th century art being created in the former Gare d'Orsay railway station is among the other government *Grands Projets* due to open to the public next year. The conversion program is assigned to the Italian architect Gae Aulenti, in association with the French practice ACT Architecture. Aulenti has already demonstrated considerable skill in her facelift for the Museum of Modern Art, the first phase of which opened at the Centre Georges Pompidou at the end of May. To meet curators' complaints concerning the difficulties inherent in mounting permane and temporary exhibitions in the celebrated Piano & Rogers building, she ha provided a series of conventionally enclosed exhibition spaces on the fourth floor. Views over Paris through the glaze external walls of the original building hav been exploited to give vistas in circulation areas, but paintings by Braque, Picasso, Léger, and others are now place in room-sized galleries against a calm bac ground of white-painted walls, with parallel top-lit corridor-like spaces for the environmentally controlled display of drawings and other related objects.

The major Paris projects are by no means the only aspect of architectural activity in France. Pledged to encourag decentralization, the Mitterrand govern ment passed a law in 1982 devolving man powers to the regions. Some of the result were not as intended – a number of Pari based architects found local authorities le than willing to pay for projects original initiated by central government, and sor simply ground to a halt. More positively government demonstrated its support for out-of-Paris activity by selecting for the Grand Prix de l'Architecture this year a architect who has practiced almost exclusively in the southwest of France, Edmond Lay who is based in Bordeaux

So far as buildings go, decentralization has taken tangible form with the compl tion of the first administrative headqua ters for a newly created regional author ity to serve the Midi-Pyrenées (an area incorporating 10 Préfectures). The new building is in Toulouse and was designed by a Toulouse-based architect, Jean-Pierr Estrampes. Compared with much conter porary building in Paris, it is exception for being completed on time and within budget to high construction standards. Estrampes learned about working draw ings and project management in the Unit States and has definite opinions about the design of a building intended as a forwar looking but distinctly regional symbol authority. No doubt he will employ the skills to the full again on his next project the council chamber to serve the region council, to be built next to their headquarters office. Whether decentralization will continue to produce such happy results, only time will tell, but one way or another 1986 promises to be a most revealing year for architecture in Franc CHARLOTTE ELLIS

Ms. Ellis is an architect and free-lance writer living in Paris. News continued on page

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Le Corbusier Notebook Gives Clues to United Nations Design

Who designed the United Nations headquarters in New York City?

History's answer, of course, is that the conceptual design was created by a group of 20 famous and near-famous architects from member nations chaired by Wallace K. Harrison as director of planning for the U.N. The group, which met 45 times, included Louis Skidmore of the U.S., Oscar Niemeyer of Brazil, Sven Markelius of Sweden, Mathew Nowicki of Poland, and, or course, Le Corbusier.

The board of design came to a unanimous recommendation of the design ultimately developed and built. But from whose mind did the concept first emerge?

For many years Le Corbusier and his followers have claimed that the central idea for the U.N.'s design was his alone, but there has been a gap in the evidence needed to evaluate the claim.

Now there is new proof in a notebook of Le Corbusier's sketches, four of which are reproduced here for the first time. The notebook was once considered lost forever.

By far the most personal and immediate record of Le Corbusier's day-to-day thoughts and feelings about the projects he was engaged in and the places where he worked, he kept in the pocket notebooks (carnet de poche) he always carried with him. These were typical French artists' pocket sketchbooks, spiral bound along a short side. Many architects and historians know them well since their publication in four volumes by the Architectural History Foundation with the MIT Press and the Fondation Le Corbusier in 1983-85.

However, that series omitted notebooks for the years 1945-1950 inclusive. The editors state that Le Corbusier himself classified and numbered the notebooks, skipping those covering the critical years during which the board of design met. There were only a few of them, of varying sizes, he said, covering his work on and visits to his capitol buildings for the Punjab in Chandigarh.

Yet a notebook specifically covering the U.N. design period (January-June 1947) had definitely existed. It had been part of the material (Le Corbusier's original drawings and other documentation covering his U.N. work) that had been deposited on June 11, 1947, with Stamo Papadaki, an architect and close friend in New York City. Le Corbusier directed that this collection be delivered to the Institute of Contemporary Art in Boston. A large exhibition of his work was being mounted at the institute, to be sent on later to museums across the country.

Le Corbusier wrote a "note annexe" to his letter of November 1947 to James Plaut, a director of the institute, explaining the contents of the little notebook, with its pages dated from 28 Janvier to Mai 1947. He said that "this pocket notebook had been filled day by day by me each morning in the subway which took me from Eighth Street to the 55th where the atelier of design was, or in a taxi." He asked "that the notebook have its pages photostated at an honorable dimension."

A bit belatedly, on Feb. 3, 1948, Plaut wrote Le Corbusier in Paris acknowledging the "safe arrival" of the material, adding an inventory of what they received, including the entry: "Case II U.N. Notebook (in safe) (#1) 1."

From Le Corbusier's U.N. pocket sketchbook, clockwise from lower left: schematic details of site plan; elevation of site with East River in foreground, perspective view of the site; metaphorical sketches comparing his own design of unified buildings to Oscar Niemeyer's disassembled scheme.



Courtesy of Fondation Le Corbusier

On July 20, 1948, Le Corbusier wrote to the directors, Frederick Wight and Plaut asking them to have the notebook and the other materials sent to him instantly by the most safe method ("because I fear terribly, as I have told you, a loss intentional or not intentional [motive ou non motive]."

On Aug. 13, 1948, Wight replied to Le Corbusier's letter (and an apparently frantic cable that followed it): "... You expressed your inquietude of fear that your notebook was mislaid. It is necessary tha I tell you that that is the case, and my unhappiness is as great as yours. We had well understood here that you attached a very special importance to it because of the relations with the U.N. which are of little satisfaction to you. You had expressed the fear that the notebook not be lost (voluntarily or not). What happened is this: The assistant here and I had deposite it immediately in the strong vault of the institute. At the end of the exposition, when it was a question of returning that which remained in our hands, I asked that I be brought the notebook in question which should be always in the vault

"The notebook was not there. Since then I have had it searched and I have searched myself throughout the building from top to bottom. I had a desperate search made yesterday and I remain per suaded that the notebook is no longer in our possession. The only explanation to the mystery that I can make to you is that the notebook, well-used and illegibl to others, was not recognized as an objec of importance. Once it was outside the strong vault for a few instants, it is possible, I am forced to believe, it was put at one side and later lost."

Wight wrote that he would undertake new searches, and apparently some time in June 1950 the notebook was found. Although this portion of the correspond ence is not in the archive, Plaut must have joyfully informed Le Corbusier and received in reply instructions, on the basi of which he wrote (June 28, 1950) to the French consul in Boston: "We have aske M. Le Corbusier how he would wish to have this valuable document returned to him and he has requested that we return it to him through official channels and by diplomatic courier." He asked the cor sul to do so and, vastly relieved, I am sure, wrote to Le Corbusier: "I am deliv ering this document to you by safe hand He received a letter on July 3 from the consul acknowledging receipt of the "note book containing the designs and the orig inal sketches of the United Nations build ing," and added: "Following your sugges tion, I have had this document returned t him, today, by the Valise diplomatique. . .

A letter from Consul Chambon to Le Corbusier dated July 3 confirms his hav continued on page 4

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World Architecture from page 40 ing sent the notebook that day by diplomatic pouch. Although the institute in Boston requested confirmation of its arrival in Paris, the record reveals no acknowledgement or thanks from Le Corbusier.

In the spring of 1983 I started work on a book about the design and planning of the U.N. headquarters, which is based in large measure on the virtually verbatim notes I took of the meetings of the board of design, in my position as secretary of that impressive group of architects.

During January 1985, I was in Paris carrying on research for my book and had been very well received at the Fondation Le Corbusier. Mme. Eveline Tréhin, the directress of the foundation, and Mlle. Martine Lasson, the very helpful librar-

ian, gave me generously of their time, as well as appropriate access to the archives, library, and files. I was anxious to find any evidence still existing of Le Corbusier's thinking during the winter and spring of 1947. But Mme. Tréhin said that she felt sure the notebook for the U.N. period was not in the foundation's collections. She pointed out that Le Corbusier himself had organized the notebooks in series, stamping each with his typical large stencil numbers in continuous sequence, omitting the 1945-50 years. Did he himself want to leave out the notebook dealing with the U.N.? Had he destroyed it? Had others continued what he had occasionally referred to as the conspiracy against him from League of Nations days?

During each of three mornings when



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44

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we met, the directress and the librarian were kind and concerned enough to discuss the possibilities of its existence, even at the foundation.

On the last morning of that week, we had a final discussion. I repeated the thought that the notebook might be in an unexpected, miscellaneous group of materials, dealing with the U.N., which Le Corbusier might have put aside, apar from the voluminous archive he had so carefully organized. After a moment's thought, Mme. Tréhin spoke quickly to Mlle. Lasson about a storage area where models were kept and then excused herself. She returned after 10 or 12 minutes with a smile of success, holding out to u a small spiral-bound notebook. It looked like one of those commonly sold in Amer ican 5&10 cent stores or stationers.

We opened to the first page. There was the magic date 28/1/47, with a small roug sketch of a cross section of the U.N. site from First Avenue to the East River, with the secretariat rising above it.

The sketches and notes on ensuing pages clearly followed the course of the meetings of the board of design and show Le Corbusier's own creative thinking as the design process progressed, as well as his reactions to it. On page 59, dated 4 Mai, he notes that on "1 Mai Harrison decide que le projet 32, derive de 23, sera definitif." [May 1 Harrison decides that the project 32, derived from 23, will be definite-i.e. carried forward.| Below this note he drew two beautiful little cartoonlike sketches, the first of a femal at rest on her elbow, marked No. 23-th number of his own scheme for the headquarters. The second showed the body dismembered, the head cut off, the legs severed, the torso floating unsupported. He marked this No. 32, the number of the scheme by Niemeyer.

In scheme No. 23 Le Corbusier had introduced the idea of placing the meetin halls in a single rectilinear building stand ing on *pilotis*, with the secretariat as a highrise slab building rising above.

The board of design, however, wanted the general assembly hall separated fron the other halls on grounds of its greater significance. It was Neimeyer's scheme No. 32 that first showed the general assen bly hall standing alone. It was this schem that the board finally favored: by Neimeye the once-missing evidence suggests, out of a somewhat disapproving Le Corbusier. GEORGE DUDLEY, FAIA

Mr. Dudley is an architect and educator who now consults on architecture and planning around the world. He was formerly with the New York City firm of Harrison & Abramovitz and was archited ture dean of Rensselaer Polytechnic Inst tute and UCLA.

News continued on page 4

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Proposals

The Whitney: A Chance for Presentation and Discussion

The unveiling in early summer of a proposed Whitney Museum addition by Michael Graves, FAIA, immediately sparked an emotional debate. At a public discussion in late July sponsored by the New York Chapter/AIA, Graves formally presented his controversial proposal, and the standingroom-only audience, which included prominent architects and architectural historians, had a chance to ask questions and make comments on the design.

Paul Segal, AIA, president of the New York chapter and a former student of Graves, opened the forum by introducing Tom Armstrong, director of the Whitney, who gave the background of the museum and the planning committee's process for selecting an architect for the addition. "This is not the same Whitney that hired Marcel Breuer," Armstrong remarked.

Philip Johnson, FAIA, next gave a brief history of the numerous additions to the Metropolitan Museum of Art and his role in the expansion of the Museum of Modern Art. Johnson concluded by saying that he "joined the trustees in admiring the [Graves] design enormously."

The proposal had received some strong criticism, so when Graves took the stage he jokingly said, "I did smell some faint odor of tar coming in tonight. I'm sure it was just coming from resurfacing of the street." However, the representatives of the New York City architecture establishment in attendance provided a very warm reception for the Princeton architect, and any critics hoping for a tar and feathering were seriously disappointed.

Using numerous props, including a model, colorful renderings, plans, elevations, and two slide projectors, Graves presented a detailed description of the program and explained the basis for his design that uses the Breuer building as one component of an overall scheme. He talked about the significance of the cylindrical "hinge" that would tie together the old and new elements and create a "sym metry precisely at the middle." The pos sibility of a tower adjacent to the 1966 Breuer building was ruled out by Graves because of program requirements for large linear galleries and city zoning and setback requirements.

"I was worried," said Graves, "that whe we finished the building two visitors from Des Moines standing across the street would look at the Breuer building and the addition and one would ask, 'Well, dearie, which one is the Whitney?' I want them both to be the Whitney.... I want the whole composition to be one."

The first comments from the floor were by Richard Stein, FAIA, who said that h was grateful to have the chance to hear Graves' very complete presentation, but "after all the rationalization there is still a feeling that the new building crushes and overwhelms and does a disservice to what was a significant monument of Marcel Breuer's architecture."

Then Stein asked, "Is there a way to solve a very complex and necessary pro gram of the Whitney and do it without making the original building part of a su face interplay that reduces the whole build ing to another facade manipulation?" To which Graves responded, "I presume yo have one and I would love to hear how you might do that."

I low can the owner of this building meet the code requirement for elevator lobby separation and still keep



John Ascuaga's Nugget Hotel/Casino Sparks, Nevada.

this elegant lobby elegant? n support of Graves' proposal, Ulrich nzen, FAIA, said that one has to come erms with Breuer's building and that present Whitney is not really a "sculpal form." He said, "Graves has resolved isolation of the present building ... l even though the new design is stylistiy removed from the original by sevl generations, it is nevertheless a genus task. I am moved by the design." The most outspoken critic of the design Pascal Quintard-Hofstein of the firm een Card Architects, who accused ives of describing the program in detail le insufficiently explaining the soluh. He said sarcastically, "You justify all se floors, all these rooms-hey, we ould seem to] have the perfect buildfor the perfect program." Quintard-fstein also said, "The Whitney shows air, it shows a joint, and by totally lding around the stair and not showit anymore you are not dealing with at is architecturally important in the ginal building.... You lose the very ense of quality in the first fragment." Graves responded to the two criticisms t by saying that he didn't rely on the gram as the raison d'être. "I characze that as an Albert Speer approach," said. On the issue of the stair and nder Graves said, "Your views are not e. Neither of us is right or wrong."

In a statement of strong support of the design, Vincent Scully said that although he finds he likes the Breuer building more now than ever before, he believes Graves has not only given it context, he has "opened it up to act in a large context." Scully said, "It makes a kind of New Yorker penthouse fantasy, up above.... Loading as it does, putting a weight on the Breuer building, it now gives that building what it never had before, that is, that lifting facade now has something to lift." Scully's rousing conclusion drew applause, laughter, the evening's only heckle, and even a smile from Graves.

The only comment from the floor that seemed to challenge Graves was a more personal observation from Larry Richards, director of the school of architecture at Waterloo University, who said he had problems with the new proposal because "I like the Breuer stair enormously." He said, "I guesss that I feel about the cylinder the way I felt when I walked through [Graves'] San Juan Capistrano library, which I admired very much, until I came to the very end where over the fireplace in the reading room there is a plaster cast of a book. The book is too complete; it was almost as though everything had finally been answered."

Graves agreed that Richards had raised some interesting issues but said, "We have

heightened the quality of the Breuer stair by allowing it to finally open into a space rather than to that cramped short alley." He later added that he wasn't intent on covering up the void, but that he thinks the cylinder in fact offers tension.

Near the end of the discussion one young woman who confessed she was not an architect asked two questions: Why didn't the trustees of the Whitney commission the original architect to design the addition, and do buildings really have this "rich emotional life" that architects give them? Armstrong of the Whitney answered the second question saying that yes, indeed, "the Whitney Museum has a very rich emotional life." However, he did not feel it was necessary to respond to the woman's first question, just as Graves did not feel the need to answer one of the first questions from the floor: "Is there no possibility of freeing the new building in such a way that the Breuer building retains the integrity and strength and quality that many of us admire?"

During the AIA national convention held in early June, Graves had commented that "Everyone under 50 will love it; everyone over 50 will hate it." This prediction was off the mark if the speakers at this forum were representative of the proposal's supporters and critics. LYNN NESMITH News continued on page 54

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Safdie Redevelopment Scheme Chosen for Coliseum Site

A design by Moshe Safdie for Boston Properties was selected by city and state officials for the Columbus Circle site of the New York Coliseum, whose functions will be assumed by the new I.M. Pei-designed convention center. Headed by developer and publisher Morton B. Zuckerman, Boston Properties bid \$455.1 million for the right to redevelop the four-acre parcel, one of the largest and most valuable tracts available in midtown Manhattan.

Selected from 13 proposals unveiled in May, Safdie's plan calls for two towers, one 52 stories and the other 72 stories, rising above a curving, lowrise base. The complex would house offices, 270 condominium apartments, a 225-room hotel, and retail in a multistory atrium.

The plan must be reviewed by several community boards and city and state agencies including the city's board of estimate, and this approval process is expected to take at least a year.

The Safdie scheme was chosen through a controversial selection process sponsored by the owners of the site, the City of New York and the Triborough Bridge and Tunnel Authority, which is under the jurisdiction of the Metropolitan Transportation Authority. The decision was made by a panel of four city officials and four representatives from the M.T.A., none of whom are architects.

The selection process, which empha-

Moshe Safdie's proposal for a mixed use development on Columbus Circle.



54 ARCHITECTURE/SEPTEMBER 1985

sized financial benefits to the city, has been criticized by local residents, the Parks Council, and the New York Chapter/AIA. The criteria for choosing the winning design were spelled out in the request for proposals as: "(1) the amount of purchase price offered, which will be the primary consideration; (2) the economic viability of the proposal, the developer's experience and financial capacity, and the developer's proposed time schedule for commencement and completion of the redevelopment; and (3) the overall benefit of the proposal to the city."

The New York Chapter/AIA is asking the city to reconsider its selection process. In a letter to the transportation authority, Terrance R. Williams, AIA, former president of the chapter, said, "The public interest over the long run may or may not be served through 'realizing the highest financial return from the sale.' It will be served if the first priority of the selection process is to seek 'a development of the highest quality.'"

Zuckerman's redevelopment proposal does offer a variety of financial benefits to the city. The M.T.A. would receive \$477 million for mass transit improvements and \$25 million for renovation of the 59th Street subway station. In addition, the city is expected to receive \$100 million a year in taxes once the project is completed.

Woo & Williams Selected to Design Korean Olympic Villag

The Cambridge, Mass., firm of Woo & Wi liams (Kyu-Sung Woo, AIA, and John G Williams) prevailed over 38 rivals in an international competition to choose a d sign for the Olympic Village at the 1988 Olympics to be held in Seoul, Korea.

The village will be home to 13,000 at letes and officials, and to 9,000 journalists and service workers, during the games It is organized in a fan-shaped pattern o residential buildings that grow taller as they radiate outward from a central plaza All the apartments are sized for families and all will be presold for occupancy by the general public after 1988, when the village will become a relatively conventional suburb of Seoul.

The radial plan preserves views of the mountains in the distance from every poir in the town while focusing all activity of the central plaza and its community build ing, which, during the Olympics, will fee the athletes in dining halls the total size of two soccer fields and later will becom a shopping mall.

The village is scheduled to be completed in April 1988. Construction docu ments will be produced by the Seoul firr of Ilkun Architects. ROBERT CAMPBELL

Government House Approves \$56 Billion HUD Bill; UDAGs Funded

A week before the U.S. Congress approved in early August a budget aimed at reducing the federal deficit, the House passed a \$56 billion appropriation measure for the Department of Housing and Urban Development and more than a dozen related independent agencies.

Although the HUD bill is within the guidelines set in the approved 1986 budget, it provides about \$9 billion more than Reagan's proposal and is about \$2.5 billion more than the 1985 funding level. But the House measure is \$1.5 billion more than the Senate appropriation bill and will require further adjustments before a final agreement is reached. Usually Congress works out a compromise budget resolution that sets overall spending targets before addressing individual appropriations, but this was the fifth appropriation measure adopted by the House before a budget compromise was reached.

The bill approved by the House provides funding for a number of programs Reagan had wanted to terminate, including the Urban Development Action Grants (UDAG), the Solar Energy and Energy Conservation Bank, Indian housing, an housing for the elderly and handicappe The bill provides \$330 million for UDAG a 25 percent decrease from the previou year's funding. Funding of \$20 million w approved for the Solar Bank. Approval was also given for 12,000 units under th housing for the elderly and handicappe program, and the Indian housing prograu was continued with funding for 1,000 unit

The bill had originally asked for \$1.9 billion for 10,000 new public housing uni but final approval was given for \$990 million for 5,000 new units and low-income housing. The House also accepted an amendment that cut \$500 million from the bill for unspecified new housing programs.

Although Reagan had requested a two year freeze on all subsidized housing programs, the House bill provides about \$9 billion for those programs. Under the Reagan Administration funding for sub sidized housing has significantly shrunk from about \$25 billion in 1981 to about \$10 billion this year.

News continued on page



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U.S. to Raze or Remodel 126 Embassies for Security

At an estimated cost of "at least" \$3.5 billion, the State Department plans to replace or extensively renovate 126 of its 262 embassies and consulates worldwide to bring them up to current stringent security standards. Seventy-five embassies and consulates will be abandoned and rebuilt at new locations, and another 51 substantially renovated or rebuilt on site.

Saying they did not want to tell terrorists which buildings are vulnerable, State officials declined to identify the buildings involved. The eight-year building and security program will be supervised by the department's Office of Foreign Building Operations (FBO), which in recent years has spent only about \$100 million annually on State buildings abroad.

Robert Lamb, assistant secretary of State for administration who oversees both the FBO and State's security program, announced the building program in late June in response to recommendations in an 80-page report by a State Department advisory panel on overseas security. This so-called Inman report, named for retired Admiral Bobby Inman who chaired the panel, covers a range of security concerns abroad that are within the responsibilities of the secretary of state. Concerning the building program, the Inman report states: "The process of obtaining new buildings abroad (whether through construction or purchase) or renovating existing ones is excessively complex, time consuming, and has been inadequately funded. This has meant that we have fallen further and further behind on capital projects."

The report concludes that the 126 foreign posts require replacement or renovation for one or more of the following reasons: not meeting minimum physicial security standards for construction quality and distance from external perimeter barriers; sharing a common wall with adjacent buildings; and sharing a building with non-U.S. government tenants. These "represent a significant security threat by terrorist and/or hostile intelligence access," the report continues.

Car bombs, the report says, have required major new security efforts. "Unfortunately, perimeter defenses against incursions of a suicide vehicle are effective only when there is sufficient space to prevent the vehicle from gaining close access to a building."

Meanwhile, the State Department has commissioned the Building Research Board of the National Academy of Sciences to advise State on security design standards. A panel headed by John Eberhard, FAIA, director of the board, is preparing a series of reports, the first

56 ARCHITECTURE/SEPTEMBER 1985

of which will be delivered this fall.

Eberhard says one major recommendation will be the use of performance standards: "We are trying to get State off the practice of specifying certain products. Our design criteria will start out with performance requirements, and then let State indicate a preferred solution. But it will leave the possibility open that the design team can come up with alternatives if it demonstrates that they meet performance criteria."

The research board will also attempt in its design criteria to reconcile "the people who are concerned about security, who at the extreme end tend to push the design of an embassy toward a fortress mentality, with those on the other side of the house, who represent the U.S. diplomatically in other countries" and want to be "as open and hospitable as possible to foreign nationals," says Eberhard.

Court Orders EPA to Require States to Reduce Acid Rain

A federal judge ruled in late July that the Environmental Protection Agency must order states to reduce pollution that causes acid rain, and the EPA was reported to be considering an appeal of the decision. Meanwhile, an EPA-sponsored study estimates \$5 billion in acid rain damages annually in 17 states, an admittedly conservative figure, say federal officials.

The federal district court ruling came in a suit brought by several Eastern states. It deals with pollutants produced in Kentucky, Ohio, Indiana, Tennessee, Illinois, West Virginia, and Michigan that cross into Canada. The issue of interstate pollution is now before a U.S. appeals court.

(Acid rain is composed of oxides of sulfur and nitrogen created by the burning of fossil fuels. It travels through the atmosphere on prevailing winds and returns to earth in rain, snow, fog, or dry particles. Emissions from coal-burning power plants in the Midwest tend to be carried into Eastern states and Canada.)

EPA's formal reaction to Judge Norma Holloway Johnson's ruling was that the Reagan Administration "has publicly recognized that acid rain is a serious environmental problem in the United States and Canada." However, the Administration in the past has contended that much more needs to be learned about acid rain before a multibillion-dollar cleanup program is undertaken.

The EPA study that places annual damage to the built environment at \$5 billion in 17 states found that two-thirds of the harm is created by pollution from sources more than 30 miles away. The report also shows there is widespread damage not just in the Eastern states but also in the Midcontinued on page 60

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Government from page 56

west, according to Frederick W. Lipfert of the Brookhaven National Laboratory which conducted the study with EPA and the Army Corps of Engineers.

The study is still subject to final scient tific review, cautions EPA. It was based on a survey involving 1,100 buildings in Portland, Me., New Haven, Cincinnati, and Pittsburgh. From these and other date researchers projected the effects of pollution in 117 metropolitan areas in 17 states.

Not included in this study is the cost of damage to monuments, statues, and other cultural artifacts, which is to be co ered in a National Park Service report. The park service has estimated it will co \$2 million to repair monuments at one location alone-Gettysburg National M itary Park in Pennsylvania. Also uncalculated by EPA so far are total costs of destruction of freshwater life, forests, ar public health. But last year another dra study by EPA found that sulfates in the air, a precursor of acid rain, created vis bility losses in the Eastern U.S. that resulted in economic losses of \$2 billion a year. These were incurred in a number of ways, including decreases in tourist i come and increased delays and congestic at airports.

Also recently released are updated ma prepared by EPA charting the areas of the Northeast and Midwest that are sus ceptible to acid rain. An EPA spokesm: contends that the maps merely add det to what is known about areas with little natural resistance to the effects of acid rain, but environmentalists say the map indicate a greater problem than was proviously reported.

For New York State and New Englan EPA data show very low alkalinity read ings in 300,000 acres of lakes and surrounding wetlands, which is more than 10 percent of the seven-state area. Very low alkalinity indicates almost no abilit to neutralize acid rain. Another 1.5 mil lion acres there are considered vulnera ble. In the upper Midwest, 70,000 acres of lakes are rated very low in alkalinity, while an additional 300,000 are rated a low. Most of the endangered area is on Michigan's Upper Peninsula and in upsta areas of Minnesota and Wisconsin.

AIA has long advocated strong meas ures by the federal government to redu acid rain pollution and to increase resources for research into its effects on building materials. In a House of Reprisentatives hearing this spring, Richard Stein, FAIA, testified that thousands of "irreplaceable historic structures—each unique human statement—are undergoi slow but sure destruction from acid rai pollution." AIA is "disappointed in the Administration's failure to support acid rain mitigation," Stein said.

ministration Eliminates HUD nimum Property Standards

ter 50 years in use, minimum property ndards for single-family and duplex using have been eliminated by the fedl government. Instead, as of this month v houses must meet state and local lding codes or, if there are no such les, one of the model building codes to alify for Federal Housing Administran mortgage insurance or other federal istance.

First proposed in 1978 by the Federal k Force on Housing Costs, the replacent of the minimum property standards h local, state, and model codes is seen a way to cut bureaucratic red tape l resultant costs. "Why have duplicate lding standards when the state and al standards on the whole are quite od? Some may even be more restricthan the minimum property codes," s Charles G. Field, vice president for struction and development at the Nanal Association of Home Builders. He intains that when the minimum propcodes were first developed in the 0s, state and local codes were either onsistent or nonexistent. He says, it then appropriate for the federal govment to develop and maintain a stand-

That is no longer necessary, he adds. For architects, the change "will absoely lower costs," says Earl Flannagan, architect with HUD's Manufactured using and Construction Standards. He is that in the past for architects to sign to the higher requirement of either wo documents was an outrage and a e-consuming task. Now we can have document on the drafting table, which

document on the drafting table, which save costs." Flannagan is quick to ntion that HUD is working with the del building code organizations to re-'e any major discrepancies between se codes and the minimum property idards. He says he believes that evenly there will be only one code for resitial construction (currently there are ut 3,900 different building codes onwide). AIA encourages all levels of ernment to use and enforce consensus idards.

ritics predict that the changes can / lead to shoddier construction. Diane ius, counsel to the House Banking, ance, and Urban Affairs subcomiee on housing said this change will er the standard of housing in this ntry because local standards "are n favored vehicles for local politicians, re local zoning ordinances. This may be in the best interest of the coner." Others believe that builders and elopers will simply lower the quality ousing but increase their profits. News continued on page 65

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e Institute IA Circulates Draft of a [andatory Code of Ethics

reliminary draft of a mandatory "code thics and professional conduct" for A members is now being circulated ong components and members for comnt. The draft, prepared by AIA's ethtask force (chaired by Harry Harmon, A), is a response to a resolution passed ne Institute's 1984 convention in Phoewhich called for "a model code of essional responsibility and prototypical ans for its enforcement, strong enough rovide genuine authority yet flexible ugh to allow modification..."

ory of its development will be presed to several components around the ntry and then discussed to solicit "feedk from the membership so that we're doing it in a vacuum," he explains. eginning its work last November, the force reviewed documents it felt were tinent to the development of a new e, says Harmon, including the manory code of ethics that was in effect 1 June 1980 and the voluntary "ethical principles" that replaced it. The task force also studied documents of professional conduct issued by the National Council of Architectural Registration Boards, a draft of a code developed by the Boston Society of Architects/AIA (which, with the New England Regional Council/AIA and the Massachusetts State Society of Architects, introduced the 1984 resolution) and the codes of other professional organizations such as the American Bar Association and the American Institute of Certified Planners.

A set of criteria was then developed to determine the worthiness of each point in the new code. Says Harmon: "We asked, is it enforceable, is it redundant, is it trivial, is it applicable, does it place an AIA member at a competitive disadvantage over nonmembers, does it benefit the public, is it understandable, is it self serving, etc."

The draft now being circulated is organized (as were previous codes) in three tiers: canons, ethical standards, and rules of conduct. According to the preamble of the draft: "... canons are broad principles of conduct. The ethical standards are more specific goals toward which members should aspire in professional performance and behavior. The rules of conduct are mandatory, the violation of which is grounds for disciplinary action by the Institute."

There are five canons, each covering a different sphere of the architect's behavior: general obligations to the discipline, obligations to the public, obligations to the clients, obligations to the profession, and obligations to colleagues. There are 20 ethical standards among these five categories and a total of 36 mandatory rules of conduct. In comparison, the code in effect until 1980 had a total of six canons, 16 ethical standards, and 26 rules of conduct.

Comparing the draft to previous codes, Harmon explains that "a lot of the material is parallel because the world hasn't changed that much." Portions of the previous mandatory code prohibiting members from engaging in activities such as advertising, building development and construction, fee scheduling, and supplanting were deleted by AIA over the years either voluntarily or by order of the U.S. Department of Justice, as in the 1979 ruling by the late Judge John F. Sirica who determined that AIA's prohibition of supplant*continued on page 68*

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The Institute from page 65

ing violated the Sherman Act (see Aug. '79, page 21).

"We have to be careful that we don't include anything in this new document that is a restraint of trade or is in conflict with the federal trade commission or the Department of Justice," says Harmon. A copy of the draft has been sent to the justice department for comment and, explains Harmon, "we have an unofficial reply that it looks pretty good."

According to provisions in the draft, the code would be enforced by AIA's national judicial committee, appointed by the Institute's board. Penalties imposed by the committee would include admonishment, censure, suspension of membership, or termination of membership.

After review of the draft by the components, which should be completed in October, the draft is to be submitted to the executive committee of AIA's board and then to the board itself for changes and approval. It is then scheduled for distribution to the membership in March in preparation for debate at the Institute's 1986 annual convention in San Antonio in June.

Student Competition Winners

The American Institute of Architecture Students (formally the Association of Student Chapters/AIA) has announced the winners of a design competition, "Beaux-Arts Planning Revisited," which was supported by a grant from the National Endowment for the Arts.

The competition entailed replanning the open spaces of San Francisco's civic center and designing either a library, a modern art museum, or a court complex for the civic center.

Three projects were awarded first place, designed by: Raimundo A. Fernandez and Daisy Sanchez of the University of Miami; Patrick O'Carrigan of the University of Pennsylvania; and Henrietta Cheng, Kenny Lee, and Stuart Muller of Cornell University. Three \$4,000 prizes were awarded plus \$1,000 in travel expenses to AIA's national convention in San Francisco in June where the winning designs were exhibited.

Four honorable mentions included Michael Hoffman of the University of Virginia; Jose A. Gordillo, Freddy Hurtado, and Jesus Tineo of Louisiana State University; Mark Bergquist, Jack Black, and Mark Bollard of the University of Arizona; and Susan Petersmeyer Henneke and Lou Snyder of the University of Virginia.

Jurors for the competition were Philip Johnson, FAIA, Charles Gwathmey, FAIA, and Alvis Lawson, a student from Mississippi State University. Stanley Salzman, FAIA, served as professional adviser. News continued on page 168

Circle 48 on information card
ARCHITECTURE

Announcing a Post-Bicentennial Poll

In 1976 this magazine invited a panel of practitioners, historians, and critics to choose the best works of architecture of America's first 200 years. The winners are listed below.

Now we are inviting all of our readers to propose additions to the list from American buildings completed in the ensuing decade. Deadline for receipt of nominations is Nov. 15, and results of the poll will be published in the January issue.

Anyone who reads this is eligible to propose buildings. Please do so in writing (via card or letter to ARCHITECTURE, 1735 New York Ave. N.W., Washington, D.C. 20006) and indicate your occupation. Brief comments on the buildings are welcome. You can nominate any number of buildings (similarly, we have no set number of additions to the original bicentennial list in mind).

Liniversity of Vincinia Computer	Thomas Lafformer
University of Virginia Campus:	
Rockelener Center:	Reinhard & Hofmeister; Corbett,
	Harrison & MacMurray; and Hood & Fouilhoux
Dulles International Airport:	
	Frank Lloyd Wright
Carson Pirie Scott:	
	Ludwig Mies van der Rohe with Philip Johnson
	George Howe and William Lescaze
	Kallmann, McKinnell & Knowles
	Henry Hobson Richardson
	Skidmore, Owings & Merrill
	John A. and Washington Roebling, engineers
	Frank Lloyd Wright
	Frank Lloyd Wright
Ford Foundation Building:	Kevin Roche John Dinkeloo Associates
Grand Central Terminal:	Reed & Stem and Warren & Wetmore
Glass House:	Philip Johnson
Monticello:	Thomas Jefferson
Gateway Arch:	Eero Saarinen & Associates
Plan of Savannah, Ga.:	James Oglethorpe
Monadnock Building:	
Reliance Building:	Daniel H. Burnham
Wainwright Building:	Adler & Sullivan
Central Park:	Frederick Law Olmsted Sr. and Calvert Vaux
Salk Institute of Biological Studies:	Louis I. Kahn
Plan of Radburn, N.J.:	Clarence Stein and Henry Wright
Unity Temple:	Frank Lloyd Wright
Taliesin West:	Frank Lloyd Wright
Guggenheim Museum:	
U.S. Capitol:	William Thornton
Lincoln Memorial:	Henry Bacon
Plan for Washington, D.C.:	
Illinois Institute of Technology:	Ludwig Mies van der Rohe
Pennsylvania Academy of Fine Arts:	
John Hancock Center, Chicago:	
Marshall Field Wholesale Warehouse:	
Lovell Health House:	
Richards Laboratory:	Louis I. Kahn

Hong Kong

Steel-Corseted Bank Tower Gives the City A Needed Landmark

Hong Kong is built along the lines of a Brobdingnagian bed of nails where even the most modest building mimics its skyscraper neighbors in the vertical emphasis of its proportions. The partially reclaimed strip of land along the northern coast of Hong Kong Island, squeezed between Victoria Harbor and a high ridge, is bristling with towers. As if to balance the enormous vitality at street level, with its picturesque confusion of signs, shops, restaurants, stalls, pedestrians, and vehicles, nearly everything built above a certain height is sterile and devoid of imagination. These towers provide the sharpest possible contrast to the new headquarters of the Hong Kong and Shanghai Banking Corporation (HongkongBank, for short), designed by Norman Foster.

The building has been likened to a giant jigsaw puzzle, with pieces gathered from all over the world and painstakingly put together by specialists who represent, if not the United Nations, at least a respectably sized bloc.

The 47-story structure, engineered by Ove Arup & Partners, consists of two rows of so-called masts, spaced over 100 feet apart. Each is composed of four tubular steel columns, connected at every level by horizontal Vierendeel beams. At five levels-11, 20, 28, 35 and 41-along the heights of these masts, and connected to them by spherical bearings, are doublestory height east-west steel suspension trusses and north-south cross bracings. Each truss carries the weight of the floors directly below it, the number of floors carried by a truss diminishing with height, and the double-height stories define the five separate zones into which the building is organized.

For anti-corrosion protection, the structural steelwork is covered by a half-inch deep cementitious barrier coat developed by an English company. The steelwork is then wrapped by a ceramic fiber blanket for fire protection. The cladding is alu-

Right, the bank tower rises like a giant machine against Hong Kong's booming but bland skyline. Across page, head-on view of the bristling structure.

74 ARCHITECTURE/SEPTEMBER 1985



minum panels with a fluoropolymer finish—in all, about one million square feet worth.

The floors consist of prefabricated elements finished with modular panels, measuring approximately four feet square. These are supported on pedestals and are removable for access to underfloor airconditioning, telephone, and telecommunication services, allowing for faster changes in office arrangements. The services—toilets, airconditioning, electrical systems—are housed in 139 modules that were constructed and fully fitted out in Japan and plugged into the building. These modules, weighing 28 to 33 tons each, are stacked in four columns at the east and west ends of the building.

High-speed elevators, located on the west side, connect the plaza level with the double-height levels, and within each zone, up to level 35, are escalators. Two additional escalators located at an angle to the banking hall (in accord with the advice of a *fung-shui*, or geomancer, who recommended that the bank be entered from the northwest) lead from the plaza level to the third level banking hall; from there another pair of escalators leads to the fifth level.

The elevator shafts are glazed, and the cages made of opaque glass panels are visible as they travel up and down. Inside the cages, wiring and micro-circuits of the floor button panels are visible behind glass. The escalators, similarly, have glass walls that reveal their inner machinery.

The banking hall, wrapped around the 170-foot atrium, is the heart of the building. Visitors coming up by escalator from the public plaza pass through a suspended glass screen, referred to as a "crystal soffit," added to improve airconditioning efficiency. They then pass through a mast that forms a portal for the hall. The atrium is bordered by tiers of floors uninterrupted save for slim intermediate hangers and is crowned by a curved reflective ceiling that throws down natural light captured by an exterior sun scoop.

Foster's rejection of the conventional highrise tower with a central core and repetitive floors was based, in his words, on "social, functional, and visual" grounds, and so it is on these grounds that the building should be judged.

The personnel and facilities that will move into the bank headquarters were scattered during construction, and al-





though the bank continued operations, morale was low, what with misunderstandings and delays caused by the physical separation of employees. This points out the importance of the main social goal of the new headquarters design: to help develop a "community," in which the circulation system obviously will play a vital part.

By breaking down the organization into open plan, vertical zones, the architect hopes to encourage the development of "village units," each with its own identity, in which escalators allow easy mobility and face-to-face communication. Of course senior executives can circumvent the "rules" imposed by the design and wall themselves into offices furnished with antique furniture and Oriental carpets and take special elevators if that is their wish, but increased accessibility and an open plan leave middle and lower echelon personnel with less privacy. A follow-up study of the social consequences of this building should be intriguing.

From a functional standpoint, at least one critic has pointed out that the building's intricate exterior may be difficult to maintain, particularly with the high salt and dust content of Hong Kong's air; "Give it a few years and it will look as sad as Centre Pompidou," someone commented. If trouble strikes it will begin at the joints and junctions.

There is too the view that, despite Foster's considerable efforts, the building still provides a uniform and pristine environment to which users must conform and not vice versa. Although acoustical tests apparently show noise levels in the banking hall to be acceptable, and the raised voice of one irate customer will presumably not discompose the serene air of the entire atrium, 1 Queen's Road Central does seem to demand a certain style of behavior that people may find inhibiting.

Perhaps more damaging is the criticism that the architect's goal of an eminently flexible building will prove a chimera, and that for all its expensive provisions for future change the building will become outmoded, sooner than later. Future technological innovations cannot be foreseen and may prove incompatible with the building's design, particularly since it is conceived as all of a piece. The very fact that it is constructed with state-of-the-art technology and precisely crafted and assembled with very small tolerances may work against it, and a more "primitive" structure may have been more amenable to change. As example, the built-in television sets, bulky desk calculators, and other equipment provided in Kisho Kurokawa's 1972 Nakagin Capsule Building now seem positively quaint. If the bank proves adaptable, that may be in spite of and not because of its calculated provisions for change.

Visually, the building is a closed form, despite its slight asymmetries, setbacks, and voids that suggest an incompleteness and capacity of the building to grow. The northern facade seems much flatter than many of the published elevational drawings: From a distance the masts and suspension trusses appear to be a huge corset binding the building mass. Nor do the recessed double-height areas have the expected sculptural effect, at least on the north side. The result is that, at first glance and despite its radically different structural and organizational system, the building can be read as a simple membrane, not essentially different from nearby curtain walls. At shorter distances, of course, one starts seeing the superstructure in the round. (These observations were influenced by expectations raised by drawings and models, and made during construction, albeit in its final stages.) The breaking up of the building into five zones does reduce the scale of the building, as

Across page, the soaring central atrium. Above, looking into the atrium from the public banking hall on the third level. Below, the ground floor plan.



the architect intended. However, the fact that the number of floors in each zone diminishes with height creates a foreshort ening effect that makes the building appea taller, so that the net result is ambiguous

Inside, the atrium takes Wright's idea of the "etherealization" of space, made manifest in the Larkin Building, even fur ther. The lightness and transparency of the atrium would have been even more pronounced had the original idea of a translucent glass "pavement" at the plaz level to permit light down into the first basement level during the day and to glow from below at night been retained; how ever, technical difficulties including that of water disposal led the bank to drop the idea, and to Foster Associates that is perhaps the one major disappointment an departure from the original concept. At the same time, the atrium is a very austere space and apparently will not be relieved by the hanging plants shown in an early perspective, the architect possibly being wary of overtly romantic gestures.

Foster's acceptance of practices in Hon Kong, from consultation with a geomanc expert to the use of bamboo scaffolding shows him to be more than a high-technology ideologue. In fact, the building i sensitive in fundamental ways to the cor munity. It is perhaps when one is in motion, when one becomes a part of th on-going pageant, that one appreciates Hong Kong best. In that sense, Foster, wi his preoccupation with vertical circulatic systems, and the atrium over the plaza th affords a view of the passing populace, has captured the spirit of the city.

But the building also provides a stabl framework within which movement is given meaning. The criticism has been made that the new headquarters of the HongkongBank is more monument that office building, but with a glut of office space and no symbolic pivot around whice the city can revolve, that may not be altogether a bad thing. Facing Victoria Harbor and beyond that the mainland wite which Hong Kong will shortly have to come to terms, it attempts to provide at orientation in both time and space and thus create a place in a hitherto placeless environment. HIROSHI WATANABE

Mr. Watanabe, a frequent contributor to this magazine, is an architect and writ based in Tokyo.



China



'The Search for National Forms and Modern Techniques'

(This report is based on a two-month visit to China made by David Cohn last summer with a group of architecture students led by Klaus Herdeg of Columbia University, under whom Cohn wrote his master's thesis in architecture.-Ed.)

Architecture is once again a subject of debate in China. It was not always so. *China's* small band of architects has recovered from the years of persecution shared with other intellectuals during the Cultural Revolution and its aftermath (1966-76). Since the founding of the People's Republic in 1949, the Chinese have had little time for the fine points of design. Architecture has often been dismissed as a waste of money, while architects have strived to associate their work with something practical, like civil engineering.

Since the Cultural Revolution, as architect Wang Tan, head of the influential Building and Design Institute at Qing Hua University, told me, "the mind of the architect has been freed." In the midst of sweeping economic changes, architects are openly asking themselves what the architecture of a new China should be, in the continuation of a debate begun 60 years ago, when the first Chinese architects returned from abroad with American and European degrees. The Chinese have still not found a way to integrate Western building programs with their native culture; nor have they found a way to adequately adapt their great tradition in architecture to the demands of the present.

The problem is not simple. It reflects the deep split in China between the past and the present. To redefine China's architecture will require nothing less than the healing of a wound as old as China's first violent contact with the West.

The debate centers on a two-point program that has a semi-official status: "the

A Lamaist temple at Chengde, with wal in foreground surrounding Imperial Par

search," in Wang Tan's words, "for national forms and modern techniques." National forms are to be sought in history and local or folk building; modern techniques are to be sought from abroac The search for the two together rests or the perilous assumption that modernisn can be harmlessly absorbed into China's culture. The question is how. There are two opinions, the traditionalists' and the modernists'.

The traditionalists' position was represented to me by Chi Kang, a distinguishe architect and planner at the Nanjing Inst tute of Technology (N.I.T.). Chi Kang is attempting to embody Chinese architecture in a conservative national style. He showed me renderings of a monument be built in honor of Communist and oth martyrs from the revolutionary period. featured a column 40 meters high, set o a platform at the end of a 6,000-meter promenade. The massive complex was e in simplified Chinese forms. Chi ng expressed his design philosophy as ows: "Some architects like only the stern—the box, the box, the box. My nion is that we should pay attention he traditional and synthesize modern hniques with traditional forms." Chi Kang is opposed by champions of new like Dai Fu-dong, a former stut of Chi Kang who is now a professor Shanghai's Tong ji University. Dai pects tradition but does not worry about Without innovation," he says, "you ald not have to think about tradition. vould take care of itself." Therefore, holds, "Innovation is the mainstream." is work, references to the past are literal and more formal or abstract n Chi Kang's. In his 1981 competition ry for a comprehensive commercial ter in Canton, two mirror glass towrefer to the past only in their plan ns, which are hexagonal, like the plan he nearby Sun Yat-sen Memorial, and heir siting, on either side of the main s to the memorial, like twin pagodas. Chi Kang is a disciple of Yang Ting-(American name, T. P. Yang), who, h Liang Su-chen, is considered to be of the founders of post-imperial architure in China. Both trained in the ux-Arts program of Paul Cret at the versity of Pennsylvania in the 1920s, ere they were contemporaries of Louis ın.

The modernist position developed ong architects who were able to study oad in the 1930s and '40s. O.F. Voong, example, founder and first dean of the hitecture department at Tong ji Universtudied at the Bauhaus under Hannes yer. Wang Tan, of Qing hua University, nt a year's apprenticeship with Frank yd Wright in the 1940s. At these schools others, students still study Gideon's *ace, Time, and Architecture* and the ck of the "four masters" — Gropius, es, Corb, and Wright.

The modernists have always looked to West for inspiration. In the bookstores Beijing and Shanghai, the few illused texts amid the hundreds of technimanuals on crane dynamics and conte mixing are compendiums of Western Iding types—schools, hospitals, airts—taken from Western magazines and efully redrawn so as to print clearly newsprint.

n the continuing battle between tradi-



A pre-World War I building in what was, at the time, the Austrian concession of the port city of Tianjin.

tionalists and modernists, what counts most to the participants is what gets built. The traditionalists are generally favored by politicians, especially for honorific work like the Nanjing Memorial or Mao's Tomb. The modernists came into their own, however, with the failure of the First Great Leap Forward, when functionalism was adapted to meet the demand for pragmatic building. Pragmatics still define the contest today. Clients prefer a traditional design if they can afford it, but most work is done in a modern style. As one architect put it, "What you call 'modern' we call 'save money.""

The best work of either camp has come from a fresh look at the past. Historical work has proved its worth with the influx of Western tourists to China. Almost all the important monuments of Imperial China are being restored, including those sacked during the Cultural Revolution. Plans are also being prepared for the preservation and controlled growth of scenic areas such as Guilin and Hangzhou. Along with tourists, Chinese are also flocking to historic sites in record numbers.

The most promising work of the modernists has come from a new interest in local vernacular styles, which probably owes much to I.M. Pei, FAIA, and his Fragrant Hill Hotel outside Beijing (see Sept. 83, page 34).

The Rest House at The You Ling Caves in the Zhejiang Province by Ge Ruo-liang of Tong ji University and the Yellow Mountain Resort Hotel in the Anhui Province by architects at Qing hua University are both modern adaptations of local vernacular styles. Both respect the small scale of traditional building that has since become such a luxury. These buildings are perhaps closest to the ideal of combining modernization with tradition, but they are for the time being too small and too specialized to be widely imitated.

All of the buildings mentioned so far are innovative works produced by architect-teachers at the building design institutes of China's four major schools of architecture (N.I.T. and Qing hua, Tong ji, and Tianjin universities). At the municipal design institutes, where the bulk of design work is done, the pragmatism of the 1960s is still the rule. Designers, often with little formal training, produce a large volume of work following standards set by the central government.

Here, the main problem is time. China is in the midst of a building boom, and the few architectural offices are swamped with work. Lo-Yi Chan, an American architect who has worked with the Chinese, met an architect who had singlehandedly designed a \$10 million medical facility in the space of a year. "They can't spend the time we might making choices," he told me. "If they can't pull the stuff out of a drawer and get it on paper, then it's too late. Once they've solved a problem, or think they've solved it, they repeat it a hundred times, a thousand times."

At the level of planning, this haste generally leads to disaster, with buildings thoughtlessly crowded together in bleak rows. Individual buildings, however, are often surprisingly good. They have, at least to an American eye, an appealing simplicity and directness, born out of an incredible economy of means. The typi-





The most distinctive qualities in this work are those that, like automatic writing, refer without thinking to the past. The most important survivor of ancient China is the wall. Urban institutions, like farm villages, are still enclosed in a wall, which also contains housing, schools, and other facilities for the employees. This practice has a dramatic effect on city form. Modern Beijing, where huge areas are enclosed in compounds, is still spread out and private, like the old Imperial capital at its center.

Other buildings represent a strange doubling of past and present. Virtually all new housing is built in rows facing north and south, for example, a Russian planning practice that comes from European modernism, but it is also a practice ancient to China. More ambiguous are the glazed pavilions at the top of every modern building. They look like surveillance stations but are always empty and sunstruck. Are they a leftover from Russian constructivism? Or transported mountain retreats? They are only as strange, perhaps, as the Greek Temples on the tops of Wall Street skyscrapers in New York.

What remains of ancient practice seems to survive because it isn't seen or it can't be erased. Everything else has been lost in the urge for development. This is most dramatically seen in China's new relationship with the West. Chinese architects told me again and again that it is mainly Westerners who oppose the rapid pace of development. The American architect, invited as a "foreign expert" to China, is likely to find himself in the impossible position of trying to give to the Chinese their own architecture, only to find that they don't really want it. They seem to envision their future entirely in Western terms. The current focus of fascination is Welton Becket's Great Wall Hotel, a mirror glass island of Western luxury in the midst of Beijing. To enter the lobby is to leave China for Dallas.

The most perceptive commentator on



Top, Great Wall Hotel, Welton Becket Associates; above, modern office tower at Yangtse River Dam, Hubei province.

Chinese architecture whom I met was Charles Chen (Chen Zhan-xiang), one of the few architects at home in both European and ancient Chinese culture. Chen studied architecture and city planning in England in the 1940s; at the University of Liverpool he was a school friend of Robert Maxwell, now dean of architecture at Princeton, and Colin Rowe of Cornell. He stayed in China after 1949 and worked with Liang Su-chen on the plan for Beijing until his first fall from favor in 1954. He is now a semi-retired adviser on city planning for the central government.

Chen spoke of the lack of a sense of architecture as design. "Architects are classified as engineers—now, today," he says. He feels that the influence of Beaux-Arts methods hasn't helped. "Too much emphasis is placed on watercolors. Our students are first-class draftsmen. But architecture is not something to draw, but something to design."

He described a recent national design competition: "All of the famous architects of the country are brought to a place. The program is, design such-and-such a building, from 120,000 to 150,000 square meters. That is all; that is the brief. The architects draw on the spot, beautiful drawings and very simple plans, in two weeks. Now is this any way to design an important building?"

He went on to criticize the reliance of both traditionalists and modernists on the West. The Chinese cannot simply borrow Western models and decorate them

with Chinese motifs, he said. "We mustn' look at Chinese architecture from an occ dental point of view. They are absolutel two different cups of tea." He contraste Western idealism, with its form-types and spatial grids, to the architecture of the Imperial tradition. "The Forbidden City is made up of simple elements-the bay the module of construction. You maneuve these basic elements in different layouts to express certain ideals." At the court, it was the ideal of Confucius, the rigorous social code that bound all aspects of life in elaborate ceremony. In garden arch tecture, it was Daoism, the Way, in which man followed nature.

For the present, according to Chen, i is a matter of taking the old elements, the "collective memory" of Chinese arch tecture and putting them together in a new overarching order. "Now, in the pre ent, it is a question of the way of life. Take concrete things-for example, this hotel. What we cannot master is this life style of the West. Look at this lobby-it is not one thing or another." We were si ting in the cafe of the Western-style Beijin Hotel, in an area marked off from the lobby by a row of potted trees. Nearby, two well-dressed American businessmen were hunched uncomfortably in the swive lounge chairs. I noticed that under the green slipcovers, the chairs were made of phosphorescent pink foam. Chen wer on: "Why must we follow the life style of the West? There must be a Chinese way I'm sure that our tradition of hospitality would be appreciated by our foreign friends. It is more than a question of arch tecture. In the process of modernization we Chinese must have faith in ourselves

"Architecture ought to express our lif ideals. The old lines of class are gone, and it is a good thing. New things are coming up. We have grassroots organizations, we have neighborliness. It is for the architects to find the forms to expreit. But instead we import our housing pr totypes from Russia."

The most important developments in Chinese architecture may not come fro architects at all, however, but from the 80 percent of the population that still liv in the countryside. Chen acknowledges as much: "I place all of my hope on the peasants of China," he told me. "They carry the long tradition of building, eve today. In my native province of Zhejian, they have mastered pre-cast concrete tech





ogy, in their own way, and yet maintheir tradition."

Chi Kang described the dramatic anges taking place in the countryside. e rural reform policy of 1978, which market forces to work in agriculture, a launched an economic boom. Peasincome and farm productivity are reasing, and new enterprises are being ablished as peasants leave the land. Planners foresee a new China emergfrom this growth, a China based in interior provinces, away from the popTop, Rest House, You Ling Caves, Zhejiang province, by Ge Ruo-Liang, borrows from vernacular; above left, 'Imperial garden architecture for the people' at Water Park in Tianjin; above right, farmhouse in local style of Sichuan province.

ulation centers on the coast. They hope to keep growth in the countryside, settling new industry in villages. They are working to eliminate differences between town and country, a utopian goal that has been made official government policy. In the meantime, the peasants are building new houses, villages, and factories, usually in their own way. Jin Qi-min of Tianjin University told me that this work is generally better than what the planners could have offered them. "The architect is not very important for most people," he said. "The Chinese have had a lot of experience, from thousands of years. The peasants will build their own houses, live in caves even, for another 1,000 years at least. For 1,000 years it will be the same how to keep it good." □

France



School Changes As it Steps Down Its Hillside Site

The building sits quietly in a lightly wooded grove on the outskirts of a Paris suburb, its sprawling form nonchalantly gracing the sloped site like a string of children's building blocks. And when viewed in a certain light, the multihued facades look like a child's crayon sketch. All of the parts are there; they just don't seem to match up. It is at once a building and a non-building; disjointed yet strangely coherent.

The allusions are intentional in the children's recreation center, called *les Godets* by Jean Nouvel, in the village of Antony.

Though Nouvel is more apt to favor slick, technologically sophisticated buildings, such as his Institute for the Arab World in Paris, he talks of treating each commission as a unique problem. "I believe in the poetry of an architecture that comes from the existing conditions and uniqueness of the site," he recently said.

The building fits its site well, slipping between mature trees as if it had always been there. It was commissioned by the community to be easily accessible to all neighborhood children, but when not in use to recede into its site located between bordering houses. It does both well.

At the north and street end of the south sloping site, Nouvel has placed an administration/equipment/storage wing, a kitchen, and a large, high ceilinged space for group activities that can double as a cafeteria.

A skylit corridor down the rapidly descending slope leads to the two play groupings. First comes a trio of structures for preschoolers, then a second grouping for the older children. This cluster is a study in vaulted spaces and light. The scale is definitely for small fry.

Throughout, the project seems permeated with a sense of playfulness, not only in the design of spaces, but in the unconventional use of common building materials. The architect delights in visual puns.

From glazed entrance, above, a series of transparent and opaque, highly variegated small buildings (right) tumble gently down the site as in a child's drawing.









Above, a view of west facade near entry; right, transverse element off spine. Across page, two sides of southerly tip.







In the preschool grouping, Nouvel has created three parts of a typical house, tensibly to provide a familiar setting the children. These are the cave, ine cellar), the séjour, (living room), d the grenier, (attic loft). He has sepaed the parts as freestanding pavilions explain the art of domestic architecture. A major theme of the design is the twoedness of the building and the const between the two exterior cladding aterials. One side is unfinished, pouredplace concrete, treated only with tehes of blue and red color, which look spiciously like childish scribbles in ayon. The other side is brick. Here too, ouvel has toyed with the formalism of e material by creating and then filling false windows on the loft structure

(giving an instant "history" to the building), and by the random placement of windows in the administration wing.

The play of light throughout the building is similarly studied. Within the pavilions for the preschoolers are three different experiences of light. In the loft space light comes only from four roof skylights as it would in a typical French house. In the living room pavilion Nouvel has pierced three sides with an array of house windows-the south side with a double row at half normal scale, the north with one window at full scale, and the end with one huge window at twice normal scale, which becomes a French door. In the wine cellar, light enters through high, half-moon windows giving a fair approximation of a basementlike space.





In the big kids' spaces Nouvel has played with the spatial sensations created by three types of vaulted rooms, each with its own type of lighting: On the east side, a corrugated metal barrel vault (used as a woodworking shop) is lit from the ends by translucent glass fiber panels; on the south, a groin vault set on a square room is lit by slit windows on three sides and two corner glass doors; and on the west side, a circular domed room with niches gets light from an oculus in its peak.

In an effort to bring the outdoors in

Top, interior of older children's room with wall units masking cupboards; above, space simulating cave, or basement. Across page, end point punctuating les Godets.

and extend the building into its setting, Nouvel has made use of translucent and transparent materials in the roof of the central spine and in the curtain wall of the assembly hall. Beginning at the front entrance and passing down the slope, there is a gradual change in intensity of color in the corrugated glass fiber roofing, from dark green, to light green, to light blue.

In elevation, the architect has repeated this same sense of progression in the curtain wall, framing patterns ranging from opaque, geometric houselike forms to a mélange of half transparent, half translucent more abstract ones, to completely transparent glass set in free cloudlike shapes. BRUCE N. WRIGHT

Mr. Wright, managing editor of Architecture Minnesota, *has recently lived in France.*



Photographs by François Bergeret

France



'Enthusiastic Mannerism' in a Pair Of Paris Buildings

This competition winning scheme for a new corner in the center of Paris, designed by Christian de Portzamparc, provides for a new municipal conservatory combined with housing for the elderly on a site close to Les Invalides. It is bounded by a collection of late 19th and early 20th century apartment buildings and a '50s nine-story office block. A smaller villa is immediately adjacent to the site.

Portzamparc's scheme consists of two distinct and separate buildings. The conservatory, with its public educational facilities for music, art, drama, and dance, is a freestanding building fronting the main street, while the housing is tucked back on the smaller rue Jean Nicot.

Somewhat surprisingly for France's fiercely democratic society, the architect adopted the image of the temple as the model for the conservatory. Although he avoided classical detail, he has expressed classical elements in the form of the building. It is on a plinth, colonnaded, and trimmed with a pediment and a gable-



ended pitched roof. Corresponding to its tripartite composition, public areas are on the glassy lower floors; teaching and practice rooms are on three levels behind the solid midsection under studio lofts.

Closer examination, however, suggests that Portzamparc's bold mannerism has limited impact on the interior. With the exception of a magnificent dance studio under the sweeping pitch of the roof and



At left, the residential block; below, the conservatory with corner stairtower.

a generous entrance hall for performances, the internal spaces seem anonymous and unrelated to the external envelope. Glazing, which externally implies double heigh spaces, is in fact subdivided by floors, while bland finishes and small openings conspire to destroy the temple metaphor inside the building.

The main facade is interrupted by a freestanding circular stair tower, which works well as a marker but is deceptive. For the entrance is relegated to a minor position alongside the tower, and entry doors have been absorbed into the continuous glazed grid of the external wall.

As counterpoint to the tower is the ordering of the ground floor plan. It orients the building onto a newly created small plaza, which reads as little more than a residual space.

Portzamparc has extended his enthusiastic mannerism to the design of the residential building, whose alignment of 51 one- and two-bedroom flats extends the street frontage of the existing block. It is then cut back to form one side of the plaza. At the upper levels this corner converts into a round tower of rooms with windows, balconies, and rooftop loggias. The design of this block presents a continuous facade and a backdrop to the freestanding form of the conservatory. But, again, the entrance presents a problem. By design the scheme demonstrates an ambiguity, for the housing relates not only to the existing street on rue Jean Nicot and the new plaza but also to the rue de l'Université.

The main stair in the conservatory was built to utilize the craft of North African construction workers. It is a traditional Moorish spiral staircase without newels. Much of the other detailing and finishings is unrefined, which may be a consequence of the French practice of giving subcontractors responsibility for construction detailing.

Portzamparc, one of France's leading young architects, has spoken of his desire to create an "effect of presence." This complicated, all white scheme indeed does that. BRIAN CARTER

Mr. Carter works for Arup Associates in London and has taught and written exten sively on architecture.



heater Addition ears Traces of 's Predecessors

is theater renovation in Belfort, by in Nouvel and Gilbert Lezenes in assotion with Dominique Lyon, amounts a policy statement in the current ench architectural debate on architece and urban form.

The theater complex has been transmed to accord with the architects' n notions of democratic design about vn planning in general and public ildings in particular. They have reted the historicist approach for this restoration, as they had no wish to "recreate the past." At the same time, they eschewed overtly functionalist solutions, considering them wrong for an environment destined for leisure. One of their priorities was to make the theater more accessible and outgoing. As found, it seemed dusty, elitist, inward looking, and, as Jean Nouvel put it, "closed even when in use."

The main 19th century facade now "talks" to the town by means of an electronic information panel, and activities within the building are now visible from outside, particularly at night, thanks to a new, fully glazed elevation overlooking the river Savoureuse. As well as providing a window into the building, this realignment creates a new street axis intended to ameliorate visual and physical communication between the theater and the town.

It was achieved by the demolition of some ancillary buildings that had extended beyond the present street line. The new gridded, glazed facade is intended to make reference to the razed buildings in its rooftop elevation resembling a drawn section, and by painted cross hatching on the concrete members to represent sawn-off joists. The buildings to the other side of the corner stairtower were earlier additions

New addition is behind glazed facade. Cross hatching on earlier addition shows previous alignment with stairtower.



Above, original theater entrance with added rooftop electronic information panel. Across page: above. back wall of new fover with traces of previous construction. Blank rectangles with only names of past actors refer to photos of idols in theaters of the past. Plasterwork is by artists François Seigneur and Pierre Martin; below left, longer view of new foyer, with new columns, ceilings, floors; below right, newly plastered south wall of new foyer where Seigneur and Martin lined off squares, stamped them with image of old theater, then rubbed them 'to imply the fragmented quality of memory.



to the theater. Cross hatching has also been used on the lower building to indicate its previous alignment with the stain tower, which, in turn has been scraped down to underscore its relative insignificance compared to the more convention ally restored elevations of the original 19th century theater.

Inside, there is a sharp contrast in dec orative schemes: transformations behind the "sectional" river elevation are stressed by an almost archeological play on evidence of change in the built fabric, whil the auditorium and first-floor antechamber have been embellished to the point of theatrical parody.

Artists François Seigneur and Pierre Martin were consultants for decorative schemes in newly created accommodations such as the theater cafe, rehearsal rooms, and foyer areas behind the sectional elevation. Fragments of old paintwork, plasterwork, and brickwork have been retained, offset by new areas of plas ter and concrete and enhanced by judicious applications of color, in a conscious attempt to show how the building has metamorphosed to its present form. This theme is pursued in their mural painting covering a 6x11-meter wall in the new ground floor foyer. Here, images of the original theater have been stamped in the center of each square in an overall grid,







Above, grand foyer with trompe l'oeil to exaggerate make-believe and festivity of theater experience. Across page, main theater includes styles of its several previous incarnations, mingled with contemporary elements and paraphernalia.

then partially obliterated and overlaid with linear marks in bright colors, the whole representing the theater's transformation with reference to its past.

As an antidote to this somewhat Spartan approach, interior designer Gary Glaser has devised sumptuous decors for the auditorium and antechamber, no doubt in response to the architects' aversion to purely technical solutions. That is not to say that no functional improvements have been made; seating rakes have been changed to upgrade sightlines and all backstage equipment renewed. But it is the theatrical decorations that predominate—a caricature of the previous accumulation of styles dating from the mid-1800s to the 1930s in the auditorium—and in the antechamber a dense array of marbled paintwork, which extends upward to forn a massive coved cornice and downward over the chair covers.

The theater-going public of Belfort may or may not appreciate the attack on the perceived bourgeois nature of traditiona theater implicit in the debasement of the dignified pomp in the auditorium decoration or, for that matter, the attempted exposure of an elitist enclave to a wider public. Strangely enough, the imagery seems to succeed in spite of the architect stated intentions, precisely because of the traditional associations with theater and theatricality. The cross-hatching to the elevations is so striking that it acts as a kind of theatrical billboard whether or not its architectural purpose is understood while the contrasts in internal decoration



ve, if anything, to accentuate the cooned qualities of the auditorium and ace stress the schism between theater I the real world outside.

The underlying design philosophy, wever, has produced questionable hitectural results. The intended urban provement on the river frontage, for umple, has produced a dismal space her than an area so redolent with tenn that passers-by are likely to be ked in through the projecting doorys of the sectional elevation. Like the gic of theater itself, such effects rere more than mere tarmacadam and air. CHARLOTTE ELLIS

Ellis is an architect and a freelance ter living in Paris.

West Germany

Museum Without a Facade Centered on A Massive Drum

The site for the new Staatsgalerie whose design originated in a 1977 competition won by James Stirling, Hon. FAIA, is adjacent to the old gallery and bordered by mixed use commercial/residential blocks. While it is a part of Stuttgart's cultural and administrative core, the sloping site fronts an eight-lane artery, Konrad Adenauer Strasse. Other bordering streets are urban residential in character.

Though Stirling's design appears a synthesis of his earlier museum competitions in Dusseldorf (1975) and Köln (1975), much of his inspiration was derived from Karl Friedrich Schinkel's Altes Museum (1823-30) in Berlin. Museums of that century, unlike our own, he contends, became landmarks essential to a city's identity and sense of place. It is this sense of presence or concept of monumentality that Stirling attempted to achieve.

His design treats elements characteristic of the 19th century museum casually and unconventionally. While an axial plan is evident in the gallery extension, as in the Schinkel prototype and in Stuttgart's old Staatsgalerie, it is frequently compromised. The approach to the new gallery's entrance is initially axial, then suddenly transverse. The entrance itself is perpendicular to the axis. The public footpath traversing the site alternately crosses, then

Right, overview with original Schinkel museum far left in photo, theater at right. Below, street level gateway.





94 ARCHITECTURE/SEPTEMBER 1985







Above, entry terrace with another constructivist canopy. Across page, 'central pantheon... is but a void... a nonspace,' writes Stirling.

aligns with the axis. The free flow of space in the entrance hall dilutes interior traces of an axial plan.

The rotunda, focus of Schinkel's Altes Museum, is still at the core of Stirling's design. However, it is reduced to an outdoor roofless drum. And unlike the Schinkel prototype, Stirling's design has no facade. Instead, its front-receding in a series of terraces, ramps, solids, and voids-moves the visitors in, around, and across the building and site. Though the front appears informal, it suggests a progression. Passing under a Propylaeum-like gateway at the foot of the site, visitors disembark from vehicles or approach from the northeast corner and proceed up a ramp to the entrance terrace. There, off to one side, a constructivist canopy marks the main entrance. If one approaches on foot, however, exiting the underpass crossing the eight-lane artery at the gallery's northwest corner, the first sight of the museum is its parking garage and theater entrance.

During many trips to the museum, I heard visitors complain about the disorienting nature of the approach to the entrance, one commenting, "Such an important museum should have an easily identifiable entrance." Many pointed to Stirling's inspiration, Berlin's Altes Museum, with its colonnaded facade and ascending monumental staircase, or even Stuttgart's old Gallery, as examples of more appropriate entrances. Most visitors, however, appreciated the footpath's changing directions for the varied views it gives of the gallery, its visitors, and the city.

The plan of the new gallery's exhibition rooms replicates the U-shape of the old museum's forecourt. But, instead of a forecourt, the exhibition rooms embrace sculpture terraces. To give further definition to these terraces, Stirling employs a historical masonry coving. The orientation and focal significance of the old gallery's equestrian statue are duplicated by the new gallery's Propylaeum-like constructivist gateway. The new theater wing mimics in scale and materials the extended wings of the existing gallery, giving definition to the site's northwest corner.

The gallery's contrasts, the casual and unconventional versus the traditional and monumental, evoke in Stirling's parlance a sense of the "monumentally informal." This is most evident in the juxtaposition of the bright-even garish-colors of the tubular metal hand railings and constructivist details against the solid, banded masonry walls and Boullesque neoclassical geometric forms. Frivolous, punk, flamboyant, and unfortunate were adjectives I heard used to describe the metal details of the building. Others considered them fanciful and fitting contrasts to the masonry walls. Most visitors gave Stirling high marks for the masonry's contrasting shades and classical elegance, whose forbears, in faded form, can be seen in offi-













This page: left, southeast view; below, lobby. Right below, an upper level gallery; right, part of enfilade.

cial and religious buildings throughout the state of Baden-Württemberg, of which Stuttgart is the capital.

From its inception, many of the gallery's residential neighbors feared it would be physically overbearing. Most now appreciate the museum's successful adaptation to the hillside site and the domestic character of its rear and west facing facades. One resident who thought the gallery would "insult the neighborhood" was particularly pleased with the open spaces, terraces, and footpath linking it to the surrounding community.

For most visitors, informal would not be adequate to describe their emotions on entering the gallery. "It looks like a circus tent," I heard one visitor say about the lobby area. Others were elated by the "free spirited" environment and "open, naturelike" feeling given by the skylights and S-curving window. Children, in particular, were delighted with the grass green flooring and bright colors of the elevator assembly. Some visitors commented on how alive and exciting the lobby seemed when compared to the sedate, even stuffy, lobbies in many of Europe's museums. As if to recall these sedate forebears, components such as the squat, oversized columns of the lecture theater and hypostyle temporary exhibition hall are employed by Stirling to underline the monumental.

The temporary exhibition hall is the most troublesome room in the museum. It is one vast space divided only by oversized, concrete columns abutting drywall partitions. Overhead are huge, high-tech-looking air handling systems beneath a dropped, metal gridded ceiling partially concealing fluorescents. The informality verges on carelessness.

Movement toward the splendid second level permanent exhibition rooms is facilitated by the curving and converging geometry of the entrance lobby, and the skylit, brightly colored metal and glass elevator. The approach, by either the elevator or a returning ramp, culminates on a mullioned second floor landing that juts into the first of the exhibition rooms. On their way visitors were overheard wondering aloud whether spaces would become more "bizzare and frivolous" or more "refined and serious."



ARCHITECTURE/SEPTEMBER 1985 99



Except for the green mullions on the overhead daylighting system, and the occasional yellow mullioned sculpture court window or door, the permanent exhibition rooms present a more formal, restrained appearance than the spaces below. Here, the influence of Schinkel is clear. The rooms are regularly proportioned. Postmodern neoclassical elements form the architraves of the connecting portals. The historical coving evident on the sculpture court is repeated while the masonry base replicates in color and material the masonry used on the gallery's exterior.

The last of the serially arranged exhibition rooms opens on to a bridge that provides a transition between the old and new galleries. A monumental column similar to those on the entrance level marks the terminus of the new gallery. At the bridge's opposite end, a stylized Corinthian-columned portal establishes the boundary of the old gallery. Overhead skylights provide an airiness to the bridge, which heightens the contrast between the white walls of the new gallery and the deep maroon of the old gallery's first exhibition room.

Throughout the new gallery, Stirling uses techniques that are trademarks of his earlier projects. Function is evident—movement and direction are underscored. Masonry and glass are employed in a virile manner, industrial products are utilized in unconventional ways.

The new Staatsgalerie, which opened in early March of 1984, has been variously



Top, highest level of central rotunda; above, ramp opens onto drum's main sculpture garden, seen straight-on, across page.

termed "Third-Reich architecture," "grandiose postmodernism," "brutal," "playful and frivolous," "misanthropic," "urban," "sensitive," and "eclectic." In spite of, or perhaps because of these criticisms, visitors from all over Western Europe arrive by the busloads. The architecture, more than the art, is the object of their pilgrimage. The museum has made its pre ence felt, fulfilling Stirling's definition of monumentality. He has given Stuttgart ar the art world a new landmark. DougLAS A. GREENAWAY

An architect now practicing in Washing ton, D.C., Mr. Greenaway was in Stuttga from August 1972 until September 1984 as a consultant.



West Germany





Old and New Melded In a Museum for Architecture Itself

A tighter fit between client and architect is hardly imaginable.

The sequence of events began in the late 1970s when the city of Frankfurt approved a plan to create a German architecture museum as part of an effort to finally put the country's financial capital on the map as a center of culture. The idea was to transform the Shaumainkai, a street of staid villas lining the banks of the Main River, into an avenue of 12 new museums without destroying the Schaumainkai's restrained old world feeling. As happened in almost every German city of any size, most of the buildings in Frankfurt that survived the bombs of World War II soon fell victim to a blitz by city planners who buried the past under a hodgepodge of resolutely banal International Style buildings.

By the time the riverside museum development plan was approved, German sentiment had shifted to cherishing and recycling older buildings, and Frankfurt had appointed as director of its future architecture museum Heinrich Klotz, a prominent architectural historian intent on reinvesting modern architecture with meat and meaning. As a building type



without prototypes, Klotz felt his museum should serve first and foremost as an essay on the essence and evolution of architecture and become itself a display of key ideas about urban design, about how buildings can relate to history, to nature, and to their built surroundings.

Klotz's obvious choice of architect was Oswald Mathias Ungers, known principally as a theorist, who wrote in the introduction for a recent book on his own work (the most of which is projects): "An architecture that does not derive its themes from itself is like a painting that tries to be nothing more than a photographic reproduction. The theme and content of architecture can only be architecture."

The principal theme of Ungers' design is a hierarchy of spaces or rooms within an ever-smaller progression of spaces or rooms, similar to the ever-tinier Chinese dolls within dolls.

Ungers' starting point was an existing 1901 villa on the site, which he says he used as a "found object of no particular distinction in itself to create an experience similar to that of a city with a surrounding wall where perceptions of what is inside and what is outside are constantly shifting and being transformed."

Opposite, vaulted new wing connected to old villa by skylit halls. Above, new arcade wraps around villa, of which only exterior walls remain.





Playing on theme of 'the house within the house,' exterior arca is echoed in interior perimeter corridor, left, leading to anothe permeable hallway surrounding central element, opposite, which at top floor becomes miniature house and the collection's large model, above left.



But while a city wall is generally quite ancient, the one Ungers wrapped loosely around the villa-to create between itself and the villa, a vestibule, circulation, and narrow gallery space-looks spanking new. Its sandstone block is meant to echo the color of the riverbank and is punctured at regular intervals on the Schaumainkai side to create an arcade, which appears somewhat awkward as pedestal to the gray and white Italianate facade of the old building that is the museum's first display. In the toplit galleries between wall and villa the architect's attempt to incorporate the materials and colors of both also produces no more than a pastiche.

Order, however, coupled with a less hard-headed sense for the ambiguous are the hallmarks of Ungers' understated effort. The solid looking villa has, in fact, been eviscerated to leave only its skin, which forms a shell within which are modular, partially moveable partitions forming passages and rooms. At the core is a square whose top three floors rise within the villa walls to form a gabled house the most basic of architectural forms topped by a skylight.





Above, at core of new vaulted wing interior is outdoor space in which a tree rises through and over the building. Right, at periphery, open-to-sky niches for displays. Opposite, one of four identical corner spaces.



Unfortunately, during a recent visit to Frankfurt, construction work on the skylight closed the top three floors of the museum. The experience of the first two I found somewhat marred by narrow hallway exhibit spaces; an overly high secondstory rail that obstructed views of the central square for people of merely ordinary height; and a haphazard arrangement of objects in the central square, whose shape is inherently suited only to a limited range of displays.

Splendid, however, is the glass roofed atrium space at the back of the villa where its garden once grew. At its center is another square, not a room this time, but a space open to the sky in which a chestnut tree thrives and spreads its branches.

At the main facade, then, the villa we think we are entering is really just a thin wall, enclosing ever smaller, denser spaces; entering the atrium eventually leads to an outdoor room recalling the original garden. There are innumerable things within things in this small museum and seldom are they what they seem.

Built into the wall surrounding the atrium space, finally, are several roofless niches for exhibiting architecture as it would be seen outdoors. The number and types of *exhibits* of architecture that can withstand the elements are, of course, rather limited.

In the end, the ideas developed here by Ungers have appeal and cohesion. What one misses is the intuitive and sure touch of the mature artist, something approximating a leap from logic to faith, that might have transformed this very good building into a great one. A.O.D.



ARCHITECTURE/SEPTEMBER 1985 107

Canada



Abstractions of Industrial Forms In the Countryside

From a broad, treeless plateau above Que bec's St. Maurice River, the land unexpectedly sinks down a wooded crevice that cuts a sensual swath to the wide water Nestled within this ravine near its top is an odd building apparition: Freestandin aluminum space frames, looming above a grassy mound, suggest a form, while a large, steel water wheel and tapered stee smokestack-both painted an improbable deep red-intimate function. There is a curious horizontal facade of concrete stone, and glass next to the wheel on the downslope side, and glass doors are sun in either end of the earth mound. In all, it looks like a 19th century industrial ghost whose ectoplasm cross-circuited with something high-tech during a haunting.

This friendly ghost is an interpretation by the Quebec City architectural firm of Gauthier, Guité, Roy of an *ensemble du haut-fourneau*, or blast furnace complex that occupied this site 100 years ago. It the major built feature of Parks Canada small Forges du Saint-Maurice National Historical Park near Trois-Rivières.

The blast furnace complex, two forge that were sited below it in the ravine, plus housing and support buildings, forme an industrial community that from the 1730s to the 1880s turned local iron ore into farm implements, pieces of ordinance household objects, steam engine parts, train wheels, etc. When the land was mad a park in 1973, all that remained of the ironworks were vestiges of buildings-littl above their foundations-and several archeologically rich areas. Parks Canad first considered and then rejected leaving the vestiges exposed, which would hav meant their further deterioration, and like wise decided against a literal recreation of the buildings. The latter would have

Left, east elevation of Les Forges, with concrete water trough, steel water whee aluminum space frames, and tourists on exterior walkway. Far right, an uphill vie of the same facade from the spillway. Above right, the subterranean main entrance from the northwest approach give little hint of what lies within.














Left, massive gears and shafts within the building drive a long bellows, at top of photo. Left below, a long view of the interior centered on the stone remnants of the blast furnace directly under conica exhaust snout, with bellows at right. Interior space frame is same system that forms superstructure, right.

necessitated choosing a single historical period from 150 years of heavy use during which this industrial building underwent many modifications.

As built, Les Forges' aluminum superstructure with a light bronze anodized fir ish merely suggests roof forms of the long gone building for which no detailed data exist. Encased below in an earth-sheltere building are the remains of the blast fur nace. Its stone base lies excavated in situ and in its center you can see a hardened mass of iron from the last casting in a crucible surrounded by its brick lining and embedded tips of the old bellows. A giant new steel bellows connects by mas sive shafts and gears to the water wheel which is positioned just outside and can be seen through the long, east-facing with dow. Catwalks let you climb over the machinery and descend to the base of the furnace. All reconstructed components, painted red, are readily distinguishe from the historical vestiges.

On the periphery of this utilitarian exhibit space are mounted industrial an household items excavated in the park. Other exhibits explain the function of tl ironworks, tell its history, and put it into Canada's historical context.

The blast furnace—the functional core—remains central to Les Forges, bot historically and as interpreted in Gauthie Guité, Roy's new enclosure. Les Forges is a strange building/machine in a magnificent park. Minimalism and interpret tive honesty reinforce its historical significance. ALLEN FREEMAN



Canada

Small Urban House Set in a Walled Oriental Garden

A great many architects, after receiving major commissions, are reluctant to return to the kind of work most of them started doing—houses. But Canada's Arthur Erickson, Hon. FAIA, is different; he exults in designing one or two each year. "They give a greater chance to explore details than a large building," he says. "You can deal more intimately with landscape and get into different uses of materials."

But houses also can present myriad problems. Nothing in a house is typical. There are always exceptions to the rule, he says. "You have to disguise the extraordinary anguish you went through."

One of his latest houses is for a Chinese doctor and his family in western Canada. The extremely tight, one-quarter-acre setting in an existing neighborhood offered a real challenge to Erickson, most of whose houses are on large, wooded lots with dramatic views. In addition to the challenge posed by the constricted urban site was the clients' wish for as much sun and light as possible, as well as a garden environment and privacy.

Erickson turned to China for a solution, invoking memories of a recent trip where he was especially taken with the Sung Dynasty houses in Soochow Province. They are of post and beam construction and have, he says, "a sense of austerity" created by a simple palette black enamel posts, white-washed walls, and black stone floors. "This is a great setting for green and light, which is what you want for a garden," he notes.

Erickson was equally impressed with Soochow's urban gardens. "The fascination with a Chinese garden comes from looking through a series of rooms," he says. "Each has a different idea—plants, water, reeds—and it is possible to see parts of several from a single vantage."

So it is with this deceptively sized, 5,000-square-foot house. The post and beam system creates a number of linear modules, allowing pierced walls to extend from the house. Thus, from the entry, one can view private, walled gardens on one side and a pond that wraps around the end of the house on the other. (Strings



overhead discourage birds from diving in after the fish.) The water is flanked by planted berms, creating a sense of privacy that is augmented by a vine-covered board fence about six feet high in front. Entry is through a plain door in the fence, across a bridge over the water and onto a covered entrance to the house. These "events," as Erickson calls them, create a sense that the constricted outdoor space is much larger.

Inside, the linear, modular plan creates

a series of rooms, each of which has a different view outside, the glass walls serving to increase the apparent interior space. All rooms are based on the approimately 14x20-foot module. Between the living room at one end and the double module garage at the other are a family room, kitchen, dining room, and a one half module, cross-axis entry through the house from the bridge. A six-foot-deep space across the front serves as a deck extend the living and dining rooms and









Across page: top, simple fence provides privacy in urban setting; bottom, water and glass walls are used to increase apparent size of small lot. Top right and left, greenhouse-like projection over water extends living room views of heavily planted berms. Above, stylized moongates give privacy to walled gardens. for an enclosed breakfast nook in the kitchen. At the rear, a similar space, under a skylight, contains stairs, powder room, laundry, and storage. Upstairs are four bedrooms, whose windows on the south wall are covered with moveable wooden screens in a small grid pattern.

Since much of Erickson's work these days is in concrete, he welcomed the opportunity to use wood once again. The framing, including magnificent round posts, is fir, weathered to a seacoastal gray, while the trim as a warm, orange cedar. The single-pitched roof is covered with a Japanese clay tile, gray in color and resembling aluminum. A wavy pattern at the roof's edge reinforces the Oriental heritage of the house.

Inside, the workmanship—like the reveal at the bottom of the walls and dining room floor's tiled border—is exquisite. Equally delightful are the small treats, such as the whitewashed light well filled with plants, rocks, and a pool at the end of the entry axis. The effect is that of an illuminated natural landscape, almost like a painting. CARLETON KNIGHT III

Norway

Alternating Solids and Voids in a Hotel on a Pier

Trondheim, the third largest city in Norway, has a historic city center with a Gothic cathedral and a baroque street pattern. The city was founded around 1000 A.D. at the mouth of the river Nid, the port of Trondheim until the end of the 19th century. Rows of warehouses bordering both sides of the river, dating from the 13th century, still form one of the most unusual elements in the townscape, despite frequent fires over the years.

The new Royal Garden Hotel is situated where seven warehouses were destroyed by fire in 1967. In them, the wealthiest warehouse owners had their living quarters.

With 300 rooms, six restaurants, convention facilities for 600 persons, an airbus terminal, shops, swimming pool, etc. (adding up to 23,000 square meters), the hotel is several times bigger than any other building in the neighborhood.

Of course, this posed the main architectural problem, to be solved without falling into a nostalgic trap by architects Sverre Clausen, Lars Fasting, Per Knudsen, and Per Kalmar Lund. How, for instance, could one avoid the dull impact on the surroundings of 3,500 square meters of hotel space? The basic idea, which gave the hotel its pattern and form, lay in turning the rooms "away from the town and river." The architect thus shielded the rooms from the traffic noise. Most are in three rectangles with glazed courtyards between them. Separated from these rectangles by another (entrance) court are the convention hall and restaurant.

All these elements are connected by an internal street running through the building on the ground floor. The hotel blocks are connected by bridges across the courtyards. The southernmost glazed court is mainly a sound barrier and energy collector. It also serves as an intermediary between the hotel and the warehouses further up the river. The northern edge of the convention hall is as low as possible to fit with two 18th century buildings.

The hotel is not a copy of the old warehouses but is related to its milieu by the way it is organized, adding volume to discrete volume. The building surfaces are treated to relate to the surrounding buildings with painted walls. The concrete is a warm granite color with vertical, shallow mullions, and the warm rose color of the aluminium profiles of the glazed walls, together with a faint shading of the glass, serve to soften the contrast between alternating closed and open volumes.

The possibility of looking into—and through—the hotel makes people more aware of it than if it had been a conventional, closed form.

To suit neighborhood of riverfront warehouses, huge hotel is broken down into discrete volumes separated by glazed courts, as seen at night, below. Right, morning view; below right, in context.

















Atrium courts with connector bridges to adjacent buildings serve as collectors for solar energy, create sound barriers and a variety of garden-like social spaces. Above left, a court whose theme is the desert; left, 'water garden.'

The structure is concrete, in situ below and prefab above the ground floor. The building is on friction piles, 30 meters deep. All bathrooms are prefabricated and mounted together with the main frame.

The glazed courts have a strong influence on the hotel's heating and airconditioning sysems, which were designed to work in tandem with solar energy. To meet demand for warm air in winter, a heat pump system makes use of the warmth of river water. It provides approximately 50 percent of the hotel's heating. The rest comes from electricity and fuel.

The courtyards are fire-rated as outdoor areas. This is obtained by hatches for fire ventilation in the roof and gables. ULF GRONVOLD

Mr. Grønvold is editor of Bygge Kunst in Norway.

116 ARCHITECTURE/SEPTEMBER 1985



weden



ejuvenation of Once-Unloved arliament Building

nen it was completed in 1906, the Swedparliament's neobaroque style was usidered already antiquated, as eclecsm was attacked by a generation of hitects who introduced national romansm. Moreover, critics felt that the gaudy lding overshadowed the nearby genu-Swedish baroque Royal Castle, which I dominated the heart of Stockholm ce the 17th century.

Over the years, repeated suggestions to ise the parliament's design died aborn. Then in the early 1970s, the Swedish liamentary system was changed from o chambers to one, which renewed dission of the building itself at a time of ong reaction against urban renewal and ring down old buildings. Ironically, the liament was now seen as a symbol of ory and Swedish democracy, and the ision was made to rehabilitate it rather n build anew. AOS (Ahlgren-Olssonow) was hired as architect.

tenovation has connected into one comx the parliament building and the old ional bank, both set on a little island ween the mostly 17th century old town the northern part of the 19th cenv city, and both designed by the same



Top, long view of old parliament's main facade, formerly its rear elevation; center, foyer of new chamber rises over old National Bank; above, new chamber.

architect. AOS also linked to them, via a small covered bridge, a former government office building at the edge of the old town. Today it is used for members of parliament.

When a bell tolls for roll call, members can quickly run from their offices to the chamber, now situated on top of the old bank building in a new semicircular space that rises like a souffle over its baking dish, the copper roof forming a crust. The parliament's former back is now its front elevation when seen over the water; its former main entrance is now the rear door. AOS, one of Sweden's strongest design offices, won its reputation for its new rather than renovated buildings, and the new parts of the parliamentary complex are the best. The chamber room is pure and light, the walls covered with birch panels. The foyer, following the semicircle of the chamber, is glazed to give a broad view of the city.

The old complex, much as it was maligned in the past, has extraordinary interiors whose high point is the monumental stair rising from the former main entrance. The original, restored pistachio green color is, however, a little too sweet.

Overall, the old interiors have been respectfully and competently treated, though the entrance hall of the chamber building has some bothersome features. After the former banking hall's vaulted ceiling was lowered to make room for the chamber above, two paintings, one at each end of the hall, were set into the present flat and raw, neobrutalist ceiling where they don't belong. Also distracting are the lighting fixtures, and, in some places, overly bright illumination.

There is no doubt that the Swedish parliament now has a building that is in most ways suitable, in many respects beautiful. It synthesizes old and new elements into a cohesive building complex. EVA ERIKSSON

Ms. Eriksson is editor of the Swedish magazine Arkitektur.



New Zealand



Office Building Echoes The Outlines of a Valued Victorian Villa

New Zealand architects have been sadly deficient in making assured and distinguished architecture in the city. With his recent building at 99 Boulcott Street, Wellington, Gordon Moller has attempted to assume this responsibility with some force. Moller's reputation is based on his ability as a designer of houses, using a style loosely based on the traditions of the arts and crafts. He was undoubtedly assisted in negotiating the quantum leap from down-home to downtown by the presence on the site of one of New Zealand's best known listed buildings, Plimmer House, once the home of a national eminence, now a top-class restaurant, and considered representative of all that was valuable in the Victorian urban villa.

Hemmed in on all sides by thoroughly undistinguished commercial egg crates, the little building had taken on an air of comic poignance in recent years, sitting forlornly in the middle of its narrow urban lot like a dusty old history book on a shelf of computer manuals. Its future had been the subject of several proposals in the past, including moving it to a new location, and (from Moller himself) enshrining it in a glass box with a highrise building directly above it, like a speckled egg tucked into the belly of a haughty hen.

Ultimately, common sense prevailed-

Plimmer House has been carefully shunte to the front of the site (vastly enhancing its impact on the streetscape), leaving su ficient room for an office block at the rea and a small courtyard between the two.

Moller was anxious to reinforce the preence of Plimmer House in a "positive" way, and rather than crudely reflect the old building in a new mirror-glass facade he has chosen to gently reflect the new in the old. The new building attempts contemporary abstraction of its elderly companion, a brave undertaking in the cutthroat climate of speculative office building, and one which offers the stree considerable reward.

For the passer-by, according to Moller "the brain goes on holiday" when it perceives the domestic-scaled rooftops, win dows, and verandahs; the building is "friendly" and engenders a friendly response, with associations made—not no mally expected of working environmentsof hearth, home, and perhaps, leisure.

Moller has a particular definess of touc with small buildings, and by so astutely breaking down the volume of his six-stor building—"medieval" staircase tower, ver tically disconnected verandahs, and a gabled-village penthouse—has achieved in a commercial building, an optimism and humanity of scale matched only by Roger Walker's Wellington Club of mor than a decade ago.

There *are* negatives, certainly. The courtyard between the two buildings is considerably undersized and underartic ulated, a bleak and awkward place; cor rugated iron might have been more appr priately scaled than wide, metal-pan roc ing; the rear of the building is depressing ordinary (somewhat expediently ration ized by Moller as a deliberate reflection of the "ordinariness" of the rear of Plin mer House); and inside—apart from th penthouse, occupied by and individual tailored to the requirements of the builting's owners—it's very much business-a usual for the occupiers.

Nonetheless, the gestures and directio of 99 Boulcott Street represent an impotant landmark in the embryonic develo ment of New Zealand commercial arch tecture. The gestures it makes and the directions it indicates are worthy of co tinuing investigation. GERALD MELLING

Mr. Melling is editor of New Zealand Architect.



each House That aricatures Some ashionable Icons'

some 15 years now, Roger Walker been at the forefront of new direcis in New Zealand domestic architece. Ever anxious to, as he puts it, "stay ead of the team," Walker has estabed a reputation as a "free-form" fanst of considerable dexterity. He designs h astonishing speed, complexity, and npleteness (finished working drawings ely deviate significantly from initial tch plans), from a seemingly endless ertory of ideas and innovation. His ponses to all those contradictory quesis posed by any architectural problem immediate, intuitive, and confident. d, more often than not, highly comic. Only the utterly humorlessness could train a grin on being confronted with lker's latest stand-up routine—a holibeach house at Omaha Beach (some kilometers north of Auckland) for an rertising couple in need of occasional ef from metropolitan stress. At first nce, this little cottage may appear an irely hybrid and alien traveler in its urbanized beachfront company; on ection, however, it has trod a welln and familiar path.

ts L-shaped plan, mono-pitched roof, ple construction methods, and materiall spring from the New Zealand traon of direct and pragmatic domestic d architecture. And the accretions aging from, or adhering to, its basic





shell—carports, parapets, porch, verandah, ablutions—also fall under a vernacular umbrella of additive building.

At this point, however—as in all of Walker's work—a transition takes place from "ancient" to "modern," and with rare wit and intelligence. Fashionable icons are stretched to the point of satire; trendy images are stretched to the point of caricature; materials are stretched to the point

Alien or funky as it may look, it's an offspring of pragmatic shed architecture.

of failure; and the mouth is stretched into an involuntary smile . . .

This is, after all, a house for advertising executives. What better way, then, to announce one's arrival than with a pedimented parapet fronting the street, topped by a seagull weathervane? What better way to nonchanantly enter the house than under the extravagant public curve of a transparent polycarbonate porch roof? What better way to casually protect the Porsche and the Lamborghini than under the gently spreading canopies of barrel vaults propped up on grotesquely oversized pink columns? And what better way to energize the ubiquitous corrugated iron than by painting it, sheet by alternate sheet, in pink and white stripes? Clearly, Roger Walker understands the world of advertising.

The plan inside is simplicity itself. The L shape is divided into sleeping and living accommodations and begets a private, sun-oriented courtyard for both areas. The rough bones of the roof structure are all exposed and topped with a ceiling of corrugated iron (yes—painted pink and white!); and a curved verandah/pergola arches assertively from the low eaves of the mono-pitch out into the courtyard, a framework for future vines.

Roger Walker continues to challenge the rest of "the team" to match his ability as a form maker, to bring the inanimate so thoroughly alive, to transform the banal into the personal. And, above all, to have fun doing it. G.M.

Australia

Melbourne's Varied, Vigorous Program Of Social Housing

You would expect to find enlightened public housing policies in Australia, a country whose belief in equal opportunity and resistance to authority or class privilege is unmatched. As emigré architect Harry Seidler, Hon. FAIA, put it, "If you act superior here, people just laugh at you."

Perhaps many Australians empathize with the dispossessed because of their forbears' origins in exile as convicts and colonials. Then too, the Antipodes never had a nobility or feudal system to inculcate ideas of God-given superiority, as did even such socially committed countries as Holland, Sweden, and China.

The most impressive of Australia's lowincome housing programs is in Melbourne. In contrast to Sydney, which is the Victorian capital's only real competitor and is known for its more hedonistic and esthetic leanings, Melbourne has earned a reputation for being more inclined toward (and emotional about) social, political, and intellectual concerns. Maybe the combination of climate—less clement than Sydney's—and topography—inland, flat, gridded, devoid of Sydney's hills and ocean views—drives people inward and makes them more "serious."

During a recent visit to Australia, Haig Beck, editor of *UIA International Architect*, went so far as to describe Melbourne's ongoing experiment in subsidized housing, and especially its infill construction, as "the most important thing to happen in social housing in world architecture." He admits that some of the new schemes are "horrendous," and any visitor with average sight would agree.

But the overall quality and scope of the program and its attempt to lift the stigma from public housing are impressive. Included is housing for the elderly and granny flats, self-build and self-help construction, architect-designed small and scattered infill projects, plus rehabilitation and restoration.

Most notable in the renovation category is the ministry's work in historic Emerald Hill (right), with its landmark Victorian and Edwardian buildings, wide streets, striped verandahs, delicate iron tracery, broad bays and patterned brickwork. Gov-



Typical renovation in Emerald Hill, an area of Victorian and Edwardian buildings.

ernment efforts here have provided 99 units for people of low income, many of whom were original tenants and are now assured of tenure and improved dwellings. The ministry has also upgraded rooming houses in the neighborhood and rehabilitated some 60 first floor commercial spaces and selectively leased them to provide a range of shops and services. The ministry's proudest concept, inf projects scattered in working class neig borhoods all over the city, was the brai child of former director John Devenish who, a little over a year ago, left to hea Victoria's public works department. Devenish hired young local architects, most of them among Melbourne's selfproclaimed avant-garde, to produce expe imental schemes, which he sees as a "re olutionary concept [that] is dramatical changing the old order where the rich nacular working class housing is the ingboard for infill: top, a group of four R. Pierce; center, one by Peter Crone quietly into its surroundings; bottom, ee by Maggie Edmond and Peter Corin accentuate to the point of caricature ments of nearby houses.

the best and the poor get the leftovers." The program had its genesis in a recition that giving the poor the leftovers s, over time, very costly, in financial d other ways. During the '50s, large as of the city's inner suburbs were clared "slum reclamation areas," and ners were forced to sell their houses he ministry, which cleared and replaced m with depressing giant slabs. Forced abandon highrise construction by pubprotests in 1971, the government proeded to carpet the metropolitan fringes h low density, look-alike, sprawl. This the one happy consequence of leavremaining inner areas intact, and it s there that Devenish concentrated his orts when called to head the ministry er launching a far smaller program as using director in Sydney.

n Melbourne, he bought up widely scated sites, kept his projects small to minze their effect on the neighborhood, I tried to tailor designs to needs of parlar tenants. Single parent families, for ance, are generally assigned to medium sity housing close to the city center, uiring little maintenance or commuttime, and some prospective tenants preselected and act as clients for the hitect. Projects vary in size from a sinhouse up to 60-unit apartments, the ferred density being 12 to 20 units. The "Australian dream" remains the estanding house, and many of the miny's dwellings, though attached, are igned to look like single-family houses. ch unit has private front and rear rances, a square of green at both, as ch privacy and as few communal spaces possible. Though budgets and programs stringent, strong emphasis is placed the look and identity of each resiice, and the ministry provides its archits, whether on payroll or in private ctice, ample artistic freedom. In Ausia, unlike North America, a majority oung architects gets a start working for ernment, but the latitude permitted m by the housing ministry in Melırne is unmatched even in Australia.



Australia





Peter Elliott's 37 rental units, mostly town houses with ground floor entry courts and rear yards around a central courtyard, tries to reinforce the urban character of mixed industrial area.

About half the designers have chosen to exaggerate and abstract into a contemporary, often quirky idiom the architectural elements of existing, working class housing stock, with its patterned brickwork, bay windows, gabled roofs, verandahs, and metal overhangs. Venturi's influence is evident.

The acknowledged guru of Melbourne postmodernists is the eccentric and iconoclastic Peter Corrigan, now in his early 40s, who says, "I look for the grist of art in my own community. I'm the opposite from the architect/artist." Influenced by Duchamp's art of found objects, a need to make architecture less expensive, and wish to elevate the ordinary and commo to art, Corrigan's work tends toward stron colors, everyday materials, and "bush car pentry." Ironically, if not surprisingly, his buildings fit into their assigned neighbo hoods with less ease than those of Peter Elliott, Peter Crone, and others whose work is more restrained, and, in the end more sensitive and pleasing.

Devenish says of the designs produce for his program: "As a large number of architects is involved, the quality is vari able, but the overall standard is significantly superior to mass produced housing." His successor, Tony Arnel, concludes, "The new infill housing is popular with the ministry's clients and rarely identified as public housing. The image of the ministry has changed from a bureau cratic monster that destroyed vast areas of inner Melbourne to a sensitive and socially aware organization." A.O.D.



Country House By 'the Timber And Tin Miesian'

Glenn Murcutt's place in contemporary Australian architecture has been likened to Aalto's in his native Finland during the 1950s. The 44-year-old Murcutt runs a one-man office—he doesn't even have a secretary—and his work has consisted exclusively of single-family houses and pro bono designs. He talks of himself as "operating below the radar level." Still he is probably the only architect in Australia who enjoys the unalloyed respect

Above, incorporated into the design is a chimney, sole remnant of a farmhouse. Entrance, in shadow to the right of chimney, is de-emphasized on south facade. of colleagues and critics. And while the majority of Australian designers has been captivated by fancies of the moment, Murcutt remains a modernist, a rationalist whom Alison Smithson has called "the timber and tin Miesian."

Murcutt readily acknowledges his debt to Mies and the Farnsworth house but sees the latter as "too simplified for this country where people need openness and informality but also privacy. The son of an inventor/builder/joiner, Murcutt has a down-to-earth practicality that would have seemed remote to Mies. Murcutt sees his houses as "contraptions doing particular things in the activity of our lives, keeping us comfortable [though none has airconditioning], making us aware of the outside and its changes."

As poetic as they are practical—and probably more so at base—Murcutt's architectural sensibilities are rooted in the land-







Photos left: main exposure is to north with double-hung, sashless windows, sun control blinds, sliding doors. Right, house leaves landscape little disturbed.

scape of his native country, which he regards as its only truly unique feature and the basis of its culture. "You must touch the land lightly," he says, while likening his buildings to the angophora tree, a type of eucalypt that he describes as "delicate in the way it's put together, strong in form, with a feathering quality at its edges, able to breathe."

Murcutt's most recent building is in virgin country about an hour's drive from Sydney, in Jamberoo, an area of farmland and gullied forests. The site was once occupied by a farmhouse, of which only the fireplace remains. It has been incorporated into the design of the new dwelling, partially restored and outfitted with new flues. The house, meanwhile, slips between it and broadbranched trees.

Murcutt disturbed the site as little as possible to preserve a small plateau made earlier, from which the land drops steeply to the east and north. On the northwest it is bounded by a woods. Murcutt lifted the building to barely touch the ground, making it seem to float over its site. He reinforced the horizontality of the landscape through the building's longitudinal axis and detailing that allows the outer walls "to read as planes suspended rather than walls." He says he tried to respond to the toughness and delicacy of the site "without resorting to an over romantic use of color and nature of material identification."

Because the client wanted a "building to last 100 years," Murcutt used corrugated iron ("iron bark," he calls it) except for stairs and bridges, which are tallowood, and wall linings, which are Western red cedar and pine. It was understood, Murcutt notes, "that the roof would have to be replaced in the 100year consideration."

Apart from dining and living spaces, the house has two bedrooms, two lofts, storage rooms, and verandahs. With windows restricted to the north, anodized aluminum blinds create a permeable veil between inside and out and control both light levels and thermal loads. They create of this poetic gem a most pleasant machine for living. A.O.D.





Australia



Vaulted, Clearly Laid Out Prison Within a Moat

It is fitting, perhaps, for this exemplary prison to have been designed in Australia a country initially settled as a dumping place for British prisoners. Articulated b airy vaults and balconies and built of ligh materials, the Parklea prison breaks the mold of prisons as we know them-omi nous, somber citadels, silent and inward looking except when erupting in violence It is the work of New South Wales government architect J.W. Thomson.

A maximum security facility for 220 inmates, Parklea was designed in respon to a recommendation of the 1978 Royal Commission in New South Wales Prison that called for a system to "demonstrate to the prisoners and the public that tho whom society decrees should be punishe will lose only their liberty."

It is a complex of clearly organized spaces, making it easy for staff to respon to emergencies quickly. The prison is divided into four zones: housing, recrea tion, work, and visiting areas. This reduc staffing needs by allowing unused areas to be unguarded, though a control build









at the hub of the four zones monitors movement of prisoners, vehicles, and ods between zones. Vaults large enough accommodate vehicular gateways mark main entry, an exhibition area, the ff gym, auditorium stage, and mechanl room.

Prisoners are housed in units of 12 gle-occupancy cells, each having a winw and a view. The self-contained cellck units share a common room, kitchand laundry; their roofs are grassed r, giving inmates an outside area that ks out over the landscape. Together h the multipurpose building containing ching, medical, and religious facilities, cell blocks form a large secured quadgle with a number of recreational areas. Among the several security requirents was a six-meter wall surrounding entire complex and manned by armed rds in towers. The N.S.W. government hitects took an inventive approach in rpreting this regulation. They designed ree-meter-deep, 12-meter-wide dry

moat and placed the wall in it, "to reduce the visual dominance traditionally created by prison walls," they say. The lowered six-meter wall also enables people inside to see out and breezes to waft through the buildings. The moat serves as both an internal and external "no man's land" to improve security and provide drainage for an adjacent dam.

A moat, symbol of medieval mansions, thus transforms Parklea into something that looks like a secured metal and glass castle. Other elements at the prison similarly serve ironic dual functions. Those airy-looking, corrugated metal vaults, for instance, which make this complex look so unprison-like, are also very hard to climb.

In awarding architect Thomson a national award for Parklea prison this year, the Royal Australian Institute of Architects' jury praised "attempts to grapple with the inherently inhuman aspects of the brief for a high security prison and produce a building which speaks of hope and optimism." A.O.D.



Across page, views of entrance from out and inside. With airy vaults, light materials, surrounding wall set into ditch to meet security requirements yet be unobtrusive, Parklea is divided into four zones with a central monitoring building (this page, above). Twelve units of single occupancy cells have rooftop open areas.

Ireland

Shopping Arcades Skillfully Sketched Into a Sturdy Setting

The task of architect John O'Reilly & Partners was to weave a series of shopping arcades, together with a supermarket, apartments, and parking, into a venerable fabric of a district in the south of Dublin rich in both flavor and history. It is a fine piece of weaving indeed and a notable, if small scale, urban design achievement.

The district in question is Rathmines, about two and a half miles from the center of the capital. Established as a fort (*rath*) in the 13th century, it became a town in its own right in the 19th. Absorbed into the Dublin city borough in the 1930s, Rathmines declined during depression and war but in the 1960s began a return to prosperity and growth that has accelerated ever since.

Rathmines' principal landmark is an 1899 city hall and clock tower by Sir Thomas Drew. The painfully assembled 3.6-acre site for Swan Centre, as the mixed use development was named after a river that has gone underground, is almost in the shadow of the tower.

In this situation, O'Reilly has pointed

out, "to simply implant an unrelated shopping center," however well designed, would be an affront to the residents (and potential customers). "Neither is it adequate that the building should be merely inoffensive."

Instead, a new center in an established district "must have a positive appeal founded on the unique character of that particular neighborhood. It should have a form that is totally new yet, in a subconscious way, is familiar to the people of the district, a form capable of inducing a sense of déjà vu by the language of its architecture.

"Such a language cannot be derived from copying or pastiche but must be founded on lyricism, caprice, and inspiration. It must use references to evoke images rather than to make them."

One such reference was making the streetside element of the development two stories, with storefronts below and windows above, as in surrounding shops, some quite old. Another was putting gables atop entries to the two arcades that penetrate the block, echoing a pre-existing gable midway between them and joining with it to pay respects to the nearby city hall.

Another reference was use of high laminated wood arches to frame the arcades and the mall that joins them at midblock. Arches in each of the three segments of











Top, in elevation and photo, Swan Centre penetrating row of shops along Rathmines Road. Entries are beneath first and third gables (the center gable was pre-existing). At far left is the town hall with its clock tower. Across page, dome peeks over old facades. Above, apartments.





Left below, typical arcade view. Left, escalator from arcade to upper gallery. Note variations in color. Above right, design development of the clock, startin with city hall tower. Right, the result.



U-shaped shopping continuum are of d ferent colors to impart individuality.

The most whimsical, and most effective, reference is the centerpiece of the glazed dome that joins the north arcad to the mall and links the shopping to th 11 duplexes that were built along the si street as part of the development. The centerpiece is a clock especially design and made for Swan Centre. O'Reilly de scribes it as follows:

"The assembly comprises an artificia weathered 'roof' in the form of a coppe cupola surrounded by a weathervane an the cardinal points; a rotary calendar which registers the date against a fixed pointer; three clock faces mounted on spherical framework which encloses th gear wheels; a carillon of nine bronze bells mounted on a horizontal fixed whe and a three-legged pedestal encasing an alternately rotating pendulum of three stainless steel spheres. The entire surmounts the central column of a precas concrete cantilevered spiral stairway."

The clock is a delight and a popular success. It also manages to recall the h toric tower nearby without quite imitat ing it. DONALD CANTY, HON. AIA





Japan





Brooding, Domed Museum in a Sea Of Marshland

Deposit 50 yen in the observation deck binoculars for a squint at a forlorn and seemingly unremarkable landscape — mi upon square mile of alder, ash, and ban boo grass — and consider yourself fortunate to spot even a single bunting or woo pecker before your three minutes are u A visitor, unaided, would scarcely realize the scientific importance of what he was seeing. To put that landscape in its proper perspective and indeed to suggest its cosmogonic significance are the functions of the Kushiro Marshland Museum, designed by Kiko Mozuna.

Kushiro is a coastal city of about 200,0 in southeastern Hokkaido, at about the same latitude as Portland, Me. Despi the presence of various industries, the ar is still underdeveloped by Japanese stan ards, and just outside the city lie 1.1 mi lion square miles of rare marshland, muc of which was designated a "natural mor ument" in 1967. The marsh is home to life forms that date as far back as 100 million years as well as more familiar sp cies of wildlife including the Japanese crane. In the summer, gasses produced by the marsh often blot out the sun. To describe this landscape, Mozuna quote a passage from the creation myth recorde in Kojiki, Japan's oldest surviving work of history: "A space where darkness pre vails and that is not yet heaven or earth

The municipal museum and observatory stand on a plateau that overlooks the marsh. The main part of the museu is a three-story, steel and reinforced con crete structure. A two-story, tile-clad bas that tapers slightly upward is surmounte by a domical form covered by copper panels. In plan the base is a square with its corners cut, but the cornice continu out at these points in prow-like projections. The exterior of the building suggests a cross between a beached vessel of the early ironclad variety and the hea quarters of some medieval religious-mil tary society.

Passing a pair of rusticated columns, one enters the museum at the southwes ern corner and arrives at the first-floor lobby. Occupying its center is what appears to be the hull of a ship. This is







Across page, view from desolate-looking marsh. This page, closeups: insert, arcade columns; left, entry; above, domical roof with observatory.



Left, museum's 'womb-like' interior, bisected at vertical midpoint by a second story walkway. Audiovisual materials enci cle the space at this level; marsh can be observed from third level and roof.

the underside of a tiered structure on which is arranged a representation of th marsh. This marsh in miniature, where specimens of the region's flora and faun are displayed, is covered by a lid that mirrors the stepped structure below. Th result is a three-story, womblike space. On the second floor exhibit area encircling this space are audiovisual materials, and from the third floor as well as the roof, the marsh, which has already been experienced in microcosm, can be observed at full scale.

This miniature marsh is not exactly a taxidermic tour de force, and factual in formation about the marsh is meager. A trip to this building ought to be supplemented by a visit to the Kushiro City Museum, which has excellent backgrour material on the region.

Mozuna's works are always small world that reflect or comment on the larger world; perhaps his best known building is his mother's house, which he calls the Anti-Dwelling Box and which is intende to be a three-dimensional mandala. Her in the museum, the microcosm is both : recapitulation of the world immediately outside the building and a symbol of ini tiation. A ritual return to the womb implies, in Mircea Eliade's words, "the abolition of past time"; it represents a going back to the original creation of th world. It is the architect's intention to suggest by a womblike spatial configura tion that the visitor to the marsh is in a sense returning to the beginning of time

At a purely architectural level, this space serves to intensify the experience awaiting the visitor on the roof. Even someone inured to the wide open spaces of Hokkaido will be struck by the expansiveness of the wilderness that stretches in all directions after being in the highly contained hall. It is a measure of the build ing's success that one is disturbed by th commonplace sight of the road leading toward Kushiro and the plumes of smok discharged by the city's industriesreminders of some of the less salutary choices we have made since a beginning that offered a wealth of possibilities. HIROSHI WATANABE

Mitsuo Matsuoka ¢ Shinkenchiku

apan

mall Apartment uilding with the rofile of a City

nd prices in Japanese cities, particuy Tokyo, are inflated, driving up inhernce taxes to the point that people finding it very difficult to maintain perties with single-family houses intact er several generations. Lots, small to in with, are carved into even smaller cels and sold off to pay taxes, or houses razed to make way for apartments l condominiums that make more econic use of the land. The NC House, igned by Itsuko Hasegawa, which reced an aging single-family house with arden, reflects this trend. But while ny Japanese condominiums and apartnts are designed in the manner of a ge house (they are referred to as "manns"), the NC House is a statement that apartment building is a collection of ts as well as a whole. Hasegawa, in ect, has created a model for a small , one in which order and variety are ely balanced.

AC House is a 12-unit, reinforced conte building constructed with a loan from metropolitan government on a very tricted site in Nakano Ward in Tokyo. e architect sees the overall building m as a straightforward solution to the blem of maximizing building volume. this project she was her own client.) e building coverage is 60 percent, the ximum allowed, and the rate of total or area to lot is approximately 160 pert, the maximum legal limit being 200 cent.

A Tokyo ordinance requires a unit in apartment building of a certain size to e, as a means of escape, at least one m with a window facing either a street in outdoor passageway at least 6.6 feet e leading to an open space or a street. newhat illogically, the 6.6 feet is measd perpendicularly from the face of window at its center to the property s that an architect has the option, ch Hasegawa has taken, of making building zigzag in plan, leaving a paseway that is at points less than 6.6

h zigzag plan, peaked roofs, varied nings, NC House resembles series of ers, uses maximum building volume.



Katsuaki Furudate



feet wide and at other points more; the required distance in that case is measured on a diagonal.

The units are small, ranging in size from 325 to 443 square feet, each with a walk-in closet, a kitchenette, and a bathroom, but compared to the "one-room mansions"— averaging 150 square feet—that are pro-liferating in Japan, they are generous. A movable stand of perforated aluminum can be used to screen the bed area.

The triangular balconies, shielded by perforated aluminum panels, face east and afford a view of skyscrapers in the Shinjuku area. These panels as well as the screens employed in the corridors serve to partially mask neighboring houses and apartments without entirely eliminating views or hindering natural ventilation and the entry of sunlight. Japanese building codes require a very large amount of window area for rooms intended for human occupancy, and this in Hasegawa's opinion weakens unnecessarily the sense of spatial enclosure. It was her goal to somehow retain this feeling of enclosure while satisfying natural lighting requirements, and this she has accomplished by means of the hexagonal room configuration and the layering of screens and windows.

The four units on the third floor each have three pyramidal roofs. Originally, four of the 12 were to have been skylights, but budgetary constraints forced Hasegawa to make three of them blind for the time being. Below, rear elevation; right, view of screened triangular balconies from octagonal room with minimal furnishings. Across page, view of differing facades.

From the street the NC House appears as a collection of towers, each with its own distinctive fenestration and roof. One's sense of scale is confounded by the different sizes of openings—the small square windows in what turns out to be the stairway, the fixed windows in the shape of paired equilateral triangles, the circular and rectangular balcony apertures, and the rectangular, sliding windows—so that it is possible to forget its diminutive size and imagine the building to be a city in its own right.

Unlike some Japanese architects who present reams of theoretical rationalizations for every project, Hasegawa has written relatively little in defense of her designs. However, she has by now produced a significant body of work shaped with a distinctive sensibility. Her buildings often have a naive, archaic quality that is belied by the modernity of the industrial materials employed, and she will join discordant forms with remarkable insouciance. Her architecture is both soft in the sense of comforting and toughminded, even to the point of harshness. The NC House exhibits all these qualities and is an important addition to the oeuvre of one of the most interesting architects practicing in Japan. H.W.













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Greece



Restoration and Exploration of The Avant-Garde

Two efforts of great significance in recent Greek design are currently occurring in Athens. One is the restoration by "unknown" architects of the Acropolis and Plaka. The other is comprised of new, mostly small work by relatively young architects who attempt to blend traditional Greek elements and methods (including technological and financial) with those being explored by the so-called international avant-garde.

The Parthenon, the Erechtheion, and the whole "rock" of the Acropolis are undergoing substantial preservation, while the "Old Town" of Athens (known as Plaka) by the foothills of the Acropolis is once again breathing fresh air, as a result of restoration and pedestrianization, an being relieved of the plague of neon sign discotheques, noise, and air pollution tha fouled its environment until two years ago The work includes sensitive preservatio and restoration of several neoclassical buildings of historic significance that es caped speculative demolition.

The visible forces of implementation have been the ministry of culture and ci ilization, headed by actress Melina Mercouri, along with the ministry of cit planning and environment, with architec planner Antonis Tritsis as director.

The destruction of the Greek enviror ment took place between the late '60s and mid '70s and was caused by specula tive building practices, a bloated and in potent (or unwilling) bureaucracy, antiquated building codes and regulations, along with inequitable, peculiar financing methods. Financing is still nonexistant for small to moderate scale projects



vosite, Erechteion being restored; above, lestrianization of Plaka; right, Athenfacadism in University Street.

ile the occasional loans available ough the few lending institutions have n given as a rule for industrial or tourlevelopment projects. The individual her or the small scale developer has nake ends meet with capital available n personal sources, often selling off erited land in the provinces, which ned the doors of the booming urban rtment construction market. Reaching beak between 1967-74, it has recently ved, but not before crowding Athens other Greek urban centers with thouds of unfinished multistory domino ctures known as "polykatikies." is extraordinary that within this unorable development climate architects able to perform at all and that some e created design of great appeal.





Above, small, inexpensive house in Mytica by Angelos Altsitjoglou and Yannis Koukis, with strict geometry, strong color, fluid interior spaces; right, bar-cafe in student district of Athens by 'Bauhaos' group, a Greek high-tech interior—exterior is neoclassical restoration. Opposite: above, Nicos Theodosiou's Raffina house, influenced by '83 exhibition of and discussion by U.S. 'stars,' including Hejduk, Meier, Pelli; below, strikingly sculptural, passive solar dwelling on north of Peleponnese by Alexandros Tombazis.



Angelos Altsitjoglou and Yannis Kouk are two among many promising newcon ers. Their small, inexpensive house at Mytica is the result of a severely adher to geometry, along with a strong conce for creating interior spatial continuity, harmony between external volume and t restless landscape, and use of color.

Similar qualities are to be found in the Zachariades house in Anavyssos, where the L-shaped plan and simple circulatic articulate the mass, with the exterior state case creating a gesture of embrace accord modating the life of the family outdoor

One of the youngest and most promi ing groups has chosen as its name the wo Bauhoas (a parody of Bauhaus), meaning in Greek "to build in the Chaos," th chaos of Athens. Andromachi Damala Nicos Georgiadis, Tota Mamalaki, and Orestis Vigopoulos, members of Bauhao search within the so-called internation avant-garde.

Their small 1984 commercial buildir in Kifissia was an initial exercise in nor historicist postmodern iconography, whi they abandoned in favor of a more incl sivist attitude as reflected by their 1985 cafe-bar in the student district of Exarch in Athens. Here they have combined th clichés of Leon Krier's massiveness and grid fenestration and Arquitectonica's constructivist screens, plus Corbusian memories, imaginatively intermarrying past with present.

The restored neoclassic exterior with pale pink on refreshed stucco engages an agreeable dialogue with the Greek hig tech of the interior. The project is appipriate for a neighborhood whose cafes hosted poets of the past, whose memories it carries, while nurturing youthful poets of the future. These two projects exemplify an inner struggle and search for evolution, new to recent Greece.

The dialogue on esthetics and an ap propriate architecture for Greece advanc slowly, on a project by project basis. Cr ical debate, conferences, and manifeste are rarities here as is so, perhaps, in ma other small countries where language, i lation, and a small population prevent co tinuous publication and widespread ci culation of esthetic discussion. Archite tural evolution in Greece is the result o individual, rather than group effort. It slow and rests on solid ground, devoid moves of desperation or group theatric and cult psychology. Two architects with exemplary work o have followed such a course are Nicos eodosiou and Alexandros Tombazis. Theodosiou's house at 10 Galinou St., hens, is probably the urban counterrt to the house in Mytica. A cubic mass th solids overpowering voids, it follows e continuous system of town building d transcends the two-dimensional fale design, which was typical of similar pjects of earlier years. In responding to toric imagery that had been generated response to climatic considerations, eodosiou employed small windows and tected openings, interlocking past with esent in a logical, pleasing way.

He was not as severe in his subsequent use in Rafina. It was influenced by the 33 Athens exhibition, "Contemporary rections in Architecture," followed by a ference and panel discussion, includ-John Hejduk, FAIA, Richard Meier, IA, and Cesar Pelli, FAIA.

The iconographic collage of the Rafina use (i.e. inclusion of pediment in the rance) and the disposition of the plan senman rotation) represent recent stern importations. It marks the introduc-1 of the postmodern on Greek soil and es the question of whether future Greek hitecture should be of pure logic and eekness of the 10 Galinou house or vitate toward the intellectual and mal gymnastics of the Rafina project. The architecture of Alexandros nbazis is especially interesting for lressing the issue of continuous evolu-1. His works are personal resolutions, h project building on the last. At 46, nbazis has the most voluminous and erse portfolio of Greek architects. op among his recent creations is his n solar energy house on the north coast Peloponnese. Tombazis' exercise on eny efficiency resulted in a new form of ouse devoid of the "hippie" look of he energy conscious architecture. The se transcends mechanics to become a lptural entity harmoniously integrated n its magnificent landscape.

n his vacation house on the mountain Katara, Tombazis created an interpreon of the traditional without resorting nitations. The same is true of his house kegina, which is in an urban vernacucontext. Tombazis is at the moment only the most productive but also most inclusivist and evolutionary nitect in Greece. A Greece devoid of fanaticism, political or stylistic, open to criticism, and the possibility of equitable architectural commissions could produce high caliber architecture on a wider scale than is presented here. Small countries where individuality is as strong as it has always been in Greece provide opportunities for the survival of small scale architecture, works of human scale, the poetics of humanity. ANTHONY C. ANTONIADES, AIA

Mr. Antoniades is professor of architecture at the University of Texas, Arlington, an architect registered in Greece as well as two U.S. states, and author of Contemporary Greek Architecture.







Hungary

Community Centers Carry Forward a Vernacular Tradition

In his two recently completed rural community centers, Imre Makovecz follows a century-old architectural tradition in Hungary. Ever since the 1880s Hungarian architects have used the local vernacular as inspiration to develop a national architectural language. The movement had its ups and downs after World War I but never completely disappeared, even during the years of modernism. Since the 1960s when criticism of the modern movement became widespread, the regionalists-Imre Makovecz, Joseph Kerényi, and a group of young architects in the city of Pécs-formed the strongest and most promising opposition to the anonymous, bland modernism of the government-run architectural bureaus.

Neoclassical postmodernism, one of the West's answers to the modern movement, never became popular among the Hungarian architectural avant-garde. To them, neoclassicism is reminiscent of 19th century Habsburg imports, Nazi monumentality, and the Stalinist imposition of classical orders. Like their predecessors who also had to work in the shadow of a large neighboring power, they prefer to create buildings that have a local flavor and express Hungary's national roots. The pioneering figure of this regionalist movement is 50-year-old Imre Makovecz.

His community centers in Zalaszentlászló and in Jászkisér fit effortlessly into the townscapes because they succeed in respecting the traditional proportions of the Hungarian village house: approximately a one-to-one ratio between the plain, whitewashed, stuccoed walls and an underscored dark (purplish-gray slate) roof. The traditional coloring continues in the interior where white painted plaster walls and dark stained wood ceiling and framing members are contrasted.

In Zalaszentlászló Makovecz faced a difficult site problem; two structures were already on the lot. The old community center, though outgrown in size and worn,

Top, Zalaszentlászló center from street; center and bottom, 4,000-square-foot, two-story space for reception area, bar, and varied types of performances.





a beautiful example of a traditional age house. The flat-roofed, nondescript e from the 1960s was to be replaced, the proprietor did not want to close uring construction. Makovecz decided save the old community center and it as a fitting street facade. The cafe, ich remained operational during conaction, was totally submerged into the w building Makovecz built around it. The result is a U-shaped plan that welnes and embraces the visitor. A tradinal village arcade runs around the rance court, providing shade and protion from the rain. As one faces the artyard from the street, the wing on left reuses the old community center a base with its simple old windows. e new, tall roof structure above it closes the village library on the second or, while the old house beneath serves village's elderly as a meeting place. the tall roof continues beyond the old lding it creates a 4,000-square-foot, twory space that has a reception area, bar, 1 multipurpose room for performances, etings, or dances. The existing cafe is orporated into the center portion of U, untouched behind the arcade; above under the new roof, is the youth club

t overlooks the multipurpose room. hind the arcade in the right wing will a country inn of 12 guest rooms with vate baths. Without the proposed inn, building is 11,000 square feet. Besides its traditional proportions,

ors, and welcoming arcaded courtyard, most remarkable thing about the buildis its use of real trees for structural port. To quote Makovecz, "I tried to ng the long-lost forest back into the age." The trees cut in the forest were ned by the village's agricultural co-op, kovecz personally selecting each. Even dressed lumber came from this forand the logs were cut into shapes by cal farmer who owned a small saw-1. Since the county authorities were inst funding the community center and ause the village had very limited finanresources, the lumber was donated much of the labor was volunteered carpenters, masons, electricians, or anywho could handle a shovel or paint sh. Thus, in addition to its architecil interest, the Zalaszentlászló commucenter became the symbol of local ory over central authority and plans remote from the community.



Top, Jászkisér center exterior; center and bottom, community hall separated from single-story rooms by screen wall with arches, reminiscent of Romanesque church arcade.

Makovecz is best known for the considerably larger community center he built in the city of Sárospatak (see Sept. '84, page 108), also in spite of official skepticism. Since then, he has been sought out by many communities. One that treasures his ingenuity is the small village of Jászkisér, where to save money he reused the exterior walls of an abandoned warehouse and raised above it a tall roof to create a two-story community hall. The new interior wall that is perforated by traditional arched openings—and is reminiscent of the screen wall of the nave



Corridor between Jászkisér hall and service spaces—library, clubroom, etc.

arcade of a Romanesque church—separates the double-height hall from the singlestory service spaces, including the library, club, and toilets on the first floor and offices on the second. The second floor also juts into the two-story hall to provide balconies for additional seating. There is little on the simple exterior except the arched glass facade of the two-story entrance lobby that would augur the serendipitous delight of the interior space. Makovecz is convinced that the townscape of the Hungarian village that has been destroyed by 30 years of insensitive, centrally planned, and locally misunderstood "prototypes" could be restored in 10 years if each town and village had an architect who comprehended local roots and whose decisions needed approval not by remote bureaucrats, but only by the local community. JOHN MACSAI

A native Hungarian, Mr. Macsai has his own firm in Chicago and visits Hungary regularly.
ugoslavia

arefully Crafted otel Recalls digenous Forms

e modern state of Yugoslavia has strugl with the political, cultural, and archiural changes brought by independence n the heavy, neobaroque hand of the osburg Empire, the Nazi architecture Albert Speer, and dogmatic pseudossicism of the Stalinist era.

oday there continues in Yugoslavia a rch that started in the late '60s for an hitecture derived from the local soil building tradition. Zlatko Ugljen has n at the forefront of this search with extensive list of built work, including els, houses, public buildings, sculpture, special structures such as his Aga in award winning Mosque in Visiko. host all his work is in his native Bosniazegovinia.

The Feroelectro Motel, a state-run yearnd tourist facility situated more than ile above sea level a few miles southt of Sarajevo, is a rich example of jen's search for an architecture based ndigenous traditions.

is lowrise and of modest size, with e 100 beds. Its public spaces are on levels, all oriented toward deep ches and balconies. These, along with loor enclosures and *devanhanas* (livrooms), are defined by Bosnian eaves corners, plus white stone and whitehed walls. The exterior materials are ied inside in an architecture that aps handcrafted, one that will weather under the deep snows of the severe hian winter.

he building evokes images of the essenwooden houses of the Dinaric region, broad, high roofs, often joined to the nd by ice and snow. It is not unlike herds' huts, byres, and stables, in using basic forms and proportions and essing a protective relationship with contours of the land.

the furnishings, all designed by the arect, are a continuation of the textures, rs, and materials of the building itself. supporting system, a combination of ing wall and wood frame, remind one e work of Alvar Aalto, hundreds of s further north in Finland. Well-hewn finished wood members are at once tural and decorative, juxtaposed ver-





tically, horizontally, diagonally, or splaying out from a concrete or masonry support, suggesting a connection both with Aalto and the traditional architecture of the Balkans.

This building shows a respectful break from the modernist masters who influenced the young architect and many of his contemporaries in postwar Yugoslavia. It stands without the crutch of postmodernism, or any other current Western movement. Theo DAVID

Mr. David is chairman of graduate architecture at Pratt Institute and practices in New York City and Cyprus.



Qatar







uge, Cellular Uniersity with Towers hat Catch the Wind

he originality of the university is that reates a new image in the eyes of the intry without disguising the past," notes mel el Kafrawi, architect of the Unisity of Doha. "Middle East architece," he continues, "is not just minarets d arches. It is developed with a pround understanding of local climate and terials."

ts wind towers capture breezes that cooler than at ground level, the garis and fountains of its courtyards cool air, while the courts themselves proe private, quiet spaces, respites from interminable desert.

Kafrawi used each of these devices at a university, which is 15 kilometers of Doha on an elevated site that tself provides drama. Inaugurated last bruary, the first phase, comprising 000 square meters of space, includes a n's and women's college, science, engiering, administration, service, and cann buildings, plus a library and exhibin facility. The smaller second phase, w under construction, will house a comter center, sport facilities, a mosque,

t, light filtering through towers. Above ht, external court. Moushrabias screen ernal circulation; wind towers are modd on Doha's old 'tower of wind' houses.







and Islamic center, plus other social and cultural activities.

Integral to the university's inwardlooking plan are courtyards, partially covered, cooled by central wind towers that suck up warm air. Linked to the corridors and stairs, they are intended for casual meetings and encounters.

The repetitive modular grid of the complex is based on a juxtaposition of two forms, a square whose sides measure 3.5 meters and an octagon with 8.4-meter-wide walls. The octagonal shape was chosen because it is a convenient support for the square wind and light towers, minimizes heat absorption by shortening the time the sun will shine on any given side, and permits any number of desk configurations.

The wind and light towers atop each white, precast concrete building are not only functional but give the university its singular image, one that translates ancient Arab forms into a contemporary idiom. Wind towers notwithstanding, however, the client decided to fully aircondition the complex, with Ove Arup of London serving as engineer.

A final touch is added by the *moushrabis*, carved timber screens that act as light filters, provide privacy, and enrich the visual texture and character of Doha's new university. A.O.D.

Right, beehive complex with towers on precast buildings forming courts.





No more reaching into dark cramped holes



BOOKS

Vorld Architecture: Building in Berlin

erlin: An Architectural History. Archioctural Design Profile. Guest-edited by oug Clelland. (St. Martin's Press, \$14.95 aperbound.) Post-War Berlin. Architecural Design Profile. Guest-edited by oug Clelland. St. Martin's Press, \$14.95 aperbound.)

The two principal destroyers of cities re modern wars and modern city planing. Berlin suffered a surfeit of both and division to boot. Yet Berlin can still laim to be, if not *the*, at least *a* capital f modern world architecture. The city hat gave us Schinkel, Behrens, Poelzig, fropius, Mies, Mendelsohn, and Scharoun now building major oeuvres by James tirling and Hans Hollein. It seems always to have been exceptionally architecture onscious, presumably because each of s distinct historic functions called for istinct architectural expressions.

Berlin is a mere 750 years old, origiating in the early 13th century from two nall towns on opposite banks of the Spree iver. Neatly frugal, the growing commerial center was designed mostly by neatly rugal Dutch and Flemish architects.

Today, only the Marienkirche remains f the Gothic days. Built in 1260, it was rastically remodeled in 1790 by Carl otthart Langhans, who also designed the randenburg Gate. This is apt, because ne medieval merchant town had scant istoric significance, while the Berlin of ne late 18th and 19th centuries was a ost unusual city: After the 30 Years Var, the Great Elector Frederick William ivited victims of religious persecution, otably French Huguenots, to boost his rmy and economy. This led to a spirit f tolerance and rationalism, which, in rn, found expression in a gentle neoassicist architecture, heralded by the randenburg Gate.

One of Berlin's first architects of the nlightenment was Friedrich Gilly who ame from Paris where he had sketched the buildings of the French Revolution ith their aspirations to classical greatess. When Gilly died at age 28, Karl riedrich Schinkel took up the torch. A entury later, Schinkel's Neue Wache oyal guard house) was Mies van der ohe's principal inspiration.

The Germans called their chaste, almost rical neoclassicism *Biedermeier*. It is akin the French empire style and connotes

Commercial sector of West Berlin today. tio tio a modest humility that royalty shared with the upper bourgeoisie, which one would not expect in martial Prussia. It was the

style of the first half of the 19th century with its proliferation of science, the founding of the university, new libraries, museums and opera houses, Napoleon's triumphal entry through the Brandenburg Gate, and the abortive revolution of 1848, which was much evident in liberal Berlin.

With the steam engine, the railroads, and modern commercialism-the Gründerzeit, which Americans know as the age of the robber barons-came hectic growth, soot, and ostentation, Berlin's tenements seemed particularly miserable, her massive eclectic villas and apartment houses particularly gaudy. But turn-of-the-century Berlin also produced some quiet elegance, for instance Alfred Messel's Wertheim department store. Most of all there was Peter Behrens' sophisticated industrial architecture, products, and graphic design, which created the corporate image, if you will, of A.E.G., or Allgemeine Elektrizitäts Gesellschaft. Mies, Gropius, and Le Corbusier worked at various times in Behrens' office. Behrens may be as important to the development of industrial design as the more notorious Bauhaus. He certainly linked design more directly to the requirements of industrial production.

Berlin, or rather the revolutionary ferment that prevailed in Berlin after the Kaiser's capitulation in World War I, gave enormous impetus to the world revolutionary ambitions of modern art and functional architecture and design. But it was mostly talk, propaganda, manifestos, and posters. Little was built, and, with the exception of some mostly appalling housing projects (notably Siemenstadt by Walter Gropius, Hugo Häring, and Otto Bartning) and some lovely buildings by Erich Mendelsohn, virtually nothing modern was built. The modern commotion had little physical impact on Berlin. It was only after World War II and Berlin's devastating destruction that modernism came home to roost, as it were.

All this and glimpses of what grew out of the debris of the Thousand Year Reich can be found in a medley of essays assembled by Doug Clelland in two "Architectural Design Profiles," supplements to *Architectural Design* magazine. [*Postwar Berlin* accompanies Robert Geddes' essay, "The Forest Edge."] The essays are by various English and German authors and are of uneven quality. Some are a bit pretentious, stretching and squeezing a few innocent facts to support some dubious, highfalutin thesis, such as pre- and post-Einstein concepts of architectural fullness, if you can figure that one.

But on the whole, and despite skimpy illustrations, these design profiles are often fascinating and informative, though they do not add up to a coherent history of Berlin architecture as well as they might. That remains to be written. Clelland's anthology is most helpful in the issue on postwar Berlin because we don't know as *continued on page 154*

ARCHITECTURE/SEPTEMBER 1985 153



Books from page 153

much as we should about the architecture of the two Berlins of today.

In Soviet occupied East Berlin, reconstruction is meant to symbolize the *Proletkult* glory of Communist Germany. Its architecture began with tirades against the International Style, resembling those issued decades later by the postmodern American architects of capitalist luxury villas. Contrived in a spirit of denunciation of past sins rather than faith in a better future, many new East Berlin buildings, too, resemble much later postmodern edifices in America. Senseless turrets and other historic "quotations" heap kitsch on architectural banality.

West Berlin architecture obviously aspires to symbolize the vigor and social concern of capitalist democracy and does so with self-conscious earnestness and much trial and error. The first impulse, when reconstruction began in the 1950s and '60s, was to continue International Style city planning where the 1933 Charter of Athens of the Congres Internationaux d'Architecture Moderne left off. Le Corbusier, with customary modesty, offered to rebuild all of devastated Berlin all by himself in the image of La Ville Radieuse. He had to settle for a smaller version of his Habitation in Marseilles. which the irreverant Berliners call die Wohnmaschine, or "living machine."

Housing developments were built on Bauhaus planner Ludwig Hilbersheimer's insipidly rigid grid. The Hansaviertel of 1957, a model neighborhood of model houses and highrise apartment houses designed by 48 architects from 13 countries, also disrupts the traditional street pattern. Gropius-Stadt, a decade later, has all the coziness of Pruitt-Igoe. Many repairable ruins of what was still left of old Berlin, such as the Anhalter Bahnhof, a grand railroad station designed in the manner of Schinkel, were demolished in the name of progress. Mendelsohn's splendid Universum cinema on Kurfürstendamm barely escaped the wrecking ball with some defacing dents and bruises.

The departure from modern orthodoxy came in about 1970, somewhat earlier than elsewhere. Now the few remaining survivors of better days are treated with respect, restored, and adapted. Even more importantly, the traditional pattern of streets and avenues, plazas and parks—the urban structure that is as important to any city as bones are to the human body—is carefully maintained and enhanced.

West Berlin's outstanding buildings of the past 40 years—Hugh Stubbins' Congress Hall (Berliners call it "the pregnant oyster"), Egon Eiermann's addition to the Kaiser Wilhelm Gedächtniskirche, Hans Scharoun's Philharmonic, Mies's National Gallery, or Stirling's Science Centers, are no longer isolated exhibits. On democracy's side of that awful wall, architecture, good and not so good, is again forming itself into a kind of vessel that West Berlin's humanity is filling with all of humanity's meanness and beauty, foibles and wisdom, with the Berliners' unique humor and spirit, and with amazing vitality.

Damn bombers and planners, *Berlin* bleibt immer noch Berlin, as the old song has it. Berlin remains Berlin.

Wolf Von Eckardt, Hon. AIA

Mr. Von Eckardt is a design critic formerly with the Washington Post and Time magazine.

Bernini. Franco Borsi. (Rizzoli, \$75.)

A new book about Gian Lorenzo Bernini has been needed. Unarguably one of the artistic giants of the 17th century, the man yet remains an incompletely understood and slightly unsympathetic figure. Certainly many of his masterpieces spring easily and agreeably to mind: first of all, perhaps, the delightfully inventive fountains in Rome's Piazza Navona, Piazza Barberini, and Piazza di Spagna; second, the spectacularly life-like sculpture-Saint Teresa, just for starters, swooning in ecstacy; third, the magisterial interior decorative elements such as, in St. Peter's, the baldacchino and the Cathedra Petri; and then the architecture of the Chigi Chapel in Siena, the colonnade defining Piazza San Pietro, the perfect little church of S. Andrea al Quirinale—and so much more.

Yet thinking of his work as a whole, one habitually contrasts it with that of his contemporary Francesco Borromini, and, considering the contest, most architects today side with Borromini. Bernini was the accomplished politician, darling of a succession of popes and welcomed (for a time) even to the court of Louis XIV; but Borromini was that more likeable character, the self-reliant individual. Bernini was the inspired conservator of an artistic tradition, Borromini the stylistic revolutionary. Bernini was the representative of his time, Borromini a rebel: two geniuses, but only one hero.

Even within Bernini's own body of work, there are contrasts that prevent a simple characterization. Son of a sculptor, he was himself a sculptor first and a brilliant one, daring to capture impressions of movement in unprecedented ways: in his precocious early works for Cardinal Borghese, for example, the David at the tense moment just before hurling the stone, and the Apollo and Daphne "caught" in virtuoso carving just as Daphne is transformed into a tree-nothing conservative here! Turning later to architecture at the request of Urban VIII, he proved himself brilliant in that field as well but restrained from his earlier flamboyance. As Franco Borsi explains in this excellent new book,

"In sculpture it was easier for Bernini to give way to . . . sensualism, to the ambiguity of spiritual pleasure and of the pleasure of the eyes. . . . Architecture, though, set up other difficulties. The 'pleasure' of architecture is a pleasure of Reason, which is too often the enemy of Faith; and Bernini feared too greatly what abandoning himself to that might mean."

While it is true that Bernini's last works seem the most sober and ordered of his works, even to recognize a change of attitude during his lifetime is an oversimplification. For, as Borsi also makes clear, there were, from Bernini's beginnings, inclinations—such as the sculpture's involvement in the space around it—that implied "latent qualities that could be brought out to the fullest only by architecture."

A book of considerable scope is necessary to present a fair picture of this complex career, and Borsi's Bernini, with almost 400 pages and more than 400 illustrations, has it. Borsi has not taken the easy course of relating what his subject did first, then what he did next, but instead has organized his material in sections that explore different aspects of the work. These include: centrality; the defiance of statics; Bernini's use of materials; his attitude toward the classical orders, or "Going Beyond the Rules"; and "Bernini, the friend of water." There is also a helpful section explaining the artist's workshop and his manner of working with the disciples and collaborators necessary for such a quantity of production, and there is an extensive illustrated catalogue raisonné of all the architectural works.

This thematic organization, however, assumes previous familiarity with the work discussed. Borsi's book does not therefore replace the more readable profile written by the late Howard Hibbard (and pub lished in 1965, despite the dust jacket claim that Borsi's is "the first major study to appear for over a quarter of a century").

The Borsi book is much more thorough, however. Its text is perceived and, as translated by Robert Erich Wolf, frequently eloquent, although there is a scattering of words (such as "elocutio" and "astanza") that have been left in Italian, some ("introibo" and "involucrum") in Latin, and some others ("non-finito") and "gracilely") in a curious not-quite-English limbo. These do not often obscure the author's meaning, however, and they add a nice dash of Italian seasoning.

Those interested in Bernini's work will for the foreseeable future, find Borsi's book indispensable. Even better, though, is Borsi's book preceded by Hibbard's. STANLEY ABERCROMBIE, AIA

Mr. Abercrombie, a former senior editor of this magazine, is editor of Interior Design magazine.

Books continued on page 15



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Carlo Scarpa: Opera Completa. Francesco Dal Co and Giuseppe Mazzariol, editors. (Electa, Milan, \$60. Rizzoli International English translation scheduled for October 1985 publication, \$29.95, paperbound.)

Carlo Scarpa was still sending waves through the architectural community at the time of his death in 1978 after a traffic accident in Japan. Indeed, since that unhappy event worldwide interest in his work has continued to accelerate, and the volume under review, soon to be followed by a paperback edition, is ideally suited to reflect the many-sided career of a uniquely versatile designer.

When I first met him, at breakfast on the roof of the Daniele Hotel in Venice in about 1950, he seemed a brilliant exponent of the specialized art of museum installation and exhibition design. This remains the master key to understanding other aspects of his career, particularly the ability to link the past and the present and to reinterpret historic spaces and incorporate new concepts and objects. It is powerfully represented by his masterpiece, the Museo di Castelvecchio in Verona. But exhibition design is by no means the whole of his career.

It was this skill, however, that brought him in 1951 the commission to install at Venice the triumphant retrospective exhibition of Frank Lloyd Wright's work. Scarpa was then associated with Wright in the projected building on the Grand Canal. More significantly, it turned him to more explicitly architectural problems, and to a relationship with Louis Kahn, Paul Rudolph, and other American architects with whom he found a sympathetic design relationship.

In the present volume, in Italian, the essays by Vincent Scully and Bruno Zevi, Hon. FAIA, trace this evolution, largely focused in the early 1950s. Elsewhere Zevi has given this ultimate appraisal: "Scarpa was a genius in creating dissonances between what was there and what he put in it. His sense of contrasting materials, diagonals, corner windows, modern frames behind old frames is supreme."

The book is divided into five sections: biography, works, critical interpretations, Scarpa documents, and various chronologies, bibliographies, and other research tools. While lacking ultimate critical evaluations that can only come from a more unified appraisal of his entire career by a single voice, this book will stand for many years as the best available source. It does include Sergio Polano's "catalog"—a 52page synopsis of Scarpa's work. The format is appropriate and the illustrations excellent, the drawings in color providing a unique insight into the creative process.

Equestrian statue Cangrande della Scala, 1956, at Museum of Castelvecchio, Verona.

Most of all, reflective of Scarpa's comprehensive design concerns, there are brought together here examples of his work in glass, ceramics, furniture design, painting, industrial design, graphics, landscape design, and sculpture. One may still wish further details on individual projects (and Licisco Magagnato's *Carlo Scarpa et le Musée de Vérone*, published in 1983 by the Institut Culturel Italien de Paris, provides just such an account of the Castelvecchio museum), but this is the indispensable comprehensive survey of the whole and provides guidance to the more specialized accounts of the subject.

Born in 1906 in Venice, educated there, and associated with this north Italian region for most of his professional life, Scarpa absorbed the tradition of Palladio but not his architectural forms. He was initially—indeed, it lasted lifelong attracted to Vienna, to Hoffmann and Olbrich, and to the *de Stijl* architects; and this, certainly, was a background to his response to Wright.

Emerging from architecture school in 1926, he escaped the fascist era and the war and from 1937 to 1947 worked as a designer in the Venini glass works on the island of Murano. In the orbit of Paolo Venini and Adriano Olivetti he became associated with such figures as Guiseppi Samonà. This was the high period of exh bitions design, with shows of Klee, Mondrian, Bellini, and other artists and the periodic exhibitions at Venice and Milan which culminated in the adaptive design *continued on page 15*



oks from page 156

he Abatellis Museum in Palermo and Venezuela pavilion in the Biennale 35-54).

n 1958 he began work on the Castelchio museum, which was completed 1964. Comparisons with Kahn's Kiml museum have been attempted, but Kahn influence seems more generald and, as Scully has suggested, more tinent as seen in the Brion cemetery Treviso with its elaborate reinforced crete elements. The integration of the w elements of this museum with the toric monument and the reflection of museum's principal works of art in context of their new installation are outstanding features of this project, which so much in Scarpa's earlier eer had prepared him. His drawings this museum illustrate the marvelous hness of imaginative resources, the merous alternatives, the cool interior d exterior spatial qualities, the colordecorative use of marble (almost an no of Murano), and, of course, the cisive placement of the famous equesan statue of Cangrande with its imagitive concrete base, the hub around ich the rest of the installation revolves the link between the old and the new. Two family cemeteries, the Brion at tivole (Treviso) and the Galli (near noa), designed a decade apart, illuste his debt to Kahn and his reversion the earlier influence of *de Stijl*. Their sterious scale in some way translates o a sort of monumentality. In these rks and his museums and such public ildings as the bank in Verona, Scarpa s been fortunate in leaving a heritage accessible works that makes up for the s of so many temporary achievements in his exhibition designs. Already they ve made their way into the itineraries architectural travelers, for whom this ok will be indispensable.

ederick Gutheim, Hon. AIA

: Gutheim is a teacher, writer, and unner in Washington, D.C.

var Aalto. Edited by David Dunster. . Martin's Press, \$19.95.)

Carefully edited to select the essential ildings from Aalto's extensive work, and provide the supporting drawings and scriptive data, this Academy Architecal Monograph deserves an important ice on any shelf devoted to the Finnish ister. The color photographs are welme, those of interiors especially so. For e most part, the photographs and the eption of the book should be credited Steven Groak, and an important conpution to the text has been made by a archivist of the Museum of Finnish chitecture, the late Mrs. Raija-Liisa inonen. Within its self-imposed limits, this monograph puts Aalto in the appropriate national and historical context. Its principal fault is probably due to the editorial circumscription—a neglect of work since about 1960 of many international buildings and of numerous unexecuted projects. FREDERICK GUTHEIM, HON. AIA

Erich Mendelsohn. Bruno Zevi. (Rizzoli, \$12.50.)

"The enigma of Erich Mendelsohn has not yet been completely understood," Bruno Zevi says in the opening sentence of this book. Mendelsohn's work, indeed, is difficult for many of us not only because of its distance from the mainstream of modern architecture but also because its character changed drastically as Mendelsohn matured and as he moved-or was driven-from Berlin to London to Jerusalem to the U.S. Had he not died in 1953 at the age of 66, his career, Zevi suggests, might have continued to a further stage synthesizing the previous work and reflecting, more than before, his closeness to the organic architecture of Frank Lloyd Wright, his "only constant source of inspiration." There is a poignant quotation from Mendelsohn himself just before his death: "If I had the chance, I would begin again, letting my earliest sketches guide me, considering all I have done since a preparation for a final, creative period."

Lacking this final chapter, Mendelsohn's story seems to read backward, beginning with astonishing creativity and individuality—the fantasy sketches, the famous Einstein Tower in Potsdam (designed when he was only 33), the powerful factory buildings in Luckenwalde, the stores for Shocken—and then thinning out to the arid, conventional work of his American years. Yet, seeing the work chronologically, one can see traces of the early energy and lyricism even in the last works; one believes there really could have been an impressive finale to this career.

Some compromises with the early vision were necessary, however. The early sketches are thrilling but violent gestures that are at the greatest possible remove from the Miesian ideal of architecture generated from structural logic. They leave unanswered the question, "how is it constructed?" Indeed, in all of Mendelsohn's built work, only the Einstein Tower came close to a three-dimensional manifestation of the sketches, for Mendelsohn's expressionist vision of architecture, unlike Wright's organic architecture, was *literally* organic: It might have grown more easily than been built.

This was its fatal flaw, but also its magic, and also the reason for its value to us today in suggesting a tantalizing alternative to the rote of most modernism and the superficiality of most postmodernism. *continued on page 161*

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ks from page 159

e of the most infallible ways of becoman architect," Zevi says, "is to study e sketches."

he book is composed of a brief introtion, theoretical and polemical, foled by a chronological presentation of ects and buildings with brief descrips. Appended are a biographical out-, a list of Mendelsohn's works, and a lography. STANLEY ABERCROMBIE, AIA

aissance Paris: Architecture and

wth, 1475-1600. David Thomson. (Uniity of California Press.)

reat cities have always represented rs of time, materials, needs, skills, and es—they are museums of architectural ory. Paris has remained nearly everys favorite city, and a prime source for itectural study, at least since the leadip of the university in the 12th cen-Notre Dame and medieval churches streets, with overhanging houses that k the special parts of the Left Bank the Ile de la Cité, are part of the ge of Paris. But what comes between image and 17th century absolutism n all roads led to the capital and hande residences (hotels) were constructed ot so clear. Modern architects seem ave focused their interest on the -19th century city planning of Hausin's radiating boulevard system, while modernists look fondly on early archiural drawings.

avid Thomson opens our eyes to the s of the Renaissance period, slipped ween the medieval and the modern we cherish today. To be sure, few uuments survive, apart from the Louvre the Tuileries, and it is not easy to onstruct the houses in our minds, parlarly the interiors of the 16th century. astiano Serlio has left us drawings and as to show the forms of town houses, as Androuet du Cerceau, but there is > left of furnishings.

Ithough royal architects Pierre Lescot, ibert de l'Orme, and Jean Bullant were ienced by Roman monuments in their gns for the palaces, and Pont-Neuf was tement in the Roman manner of Henri prestige, Thomson holds that the spirit ifinity with, but independence from, ent culture gave 16th century Paris a ificant sense of national artistic and stic freedom.

homson admits that the architecture enaissance Paris is "not the story of herent stylistic development." He ots if a really comprehensive archiiral history of the period will ever be en because of the lack of records documentation and the destruction ost of the houses. In spite of this, ook gives the reader a vivid picture iris in the 16th century as it endured ound social, political, and cultural changes on the way to France's becoming a modern nation. He gives to admirers of the City of Light insights into a significant century in its architectural history. SARA HOLMES BOUTELLE

Ms. Boutelle is founder/director of the Julia Morgan Association in Santa Cruz, Calif.

Dublin 1660-1860. Maurice Craig. (Dublin: Allen Figgis & Co., £5, Irish.) The Architecture of Ireland from the Earliest Times to 1880. Maurice Craig. (Batsford, \$50.) Georgian Dublin: Ireland's Imperilled Architectural Heritage. Kevin Corrigan Kearns. (David & Charles, \$31.50.)

Round towns, spirit groceries, and ball alleys are categories of buildings peculiar to Ireland, but in addition, as well as more familiar, are friaries and castles. One could go on to describe Irish architecture, a world unto itself. But the vernacular is not all. Ireland's formal architecture stands with the world's best, and Georgian Dublin has been accurately called "the most complete and coherent system of 18th century street architecture left in Europe."

Maurice Craig makes the most of these indigenous characteristics, and never for a moment are you likely to think you are anywhere but in Ireland. Dublin 1660-1860 (first published in 1952 and now in paperback) is a classic, and it is the best place to begin an exploration of this fascinating and rewarding subject. His more recent book, The Architecture of Ireland from the Earliest Times to 1880, is likewise the most comprehensive, more reflective of environmental and urbanistic factors, and still selective enough to deal with this long history at manageable lengtheven including the important buildings of Northern Ireland. Craig writes with charm and wit; his scholarship is sound; and he is interested in archeology as in the building arts, but only as both are related to architecture.

Reading about Irish architecture is no substitute for going there, but if you go, I recommend that you read both of Craig's books. They will give you a basis for selecting from the wealth of surviving architecture, of emancipating yourself from the universal lack of erudition in Irish guidebooks smothered in history, genealogy, and similar matters (even the Automobile Association's knowledgeable production-although I hasten to add that an Irish "Pevsner" is being prepared). You will be making the best use of your time by knowing what to look for. Tourism authorities in Eire aren't yet very aware of the value of their architectural resources, and one only hopes they wake up before they have utterly vanished.

This brings us to Kevin Kearns' tour de *continued on page 163*



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ks from page 161

e, Georgian Dublin: Ireland's Imperl Architectural Heritage—an Ameris view of the inside of historic prestion in Ireland, a sad but enlightening y. Kearns is a cultural geographer who hes at the University of Northern Collo. He has spent 12 summers in Irel on research undertakings, three of n a bit more specifically related to book. Wisely, and fortunately, for acceptance of his conclusions in and, this "foreigner" has enlisted a e range of local informants. He meets arely such arguments as that the Georbuildings of Dublin are a foreign ort and thus "not Irish," and successy disposes of this perpetual canard. result is a vigorous book that is withequal in any country as a monograph istoric preservation and one that no vidual in Ireland could likely have writ-As a contribution to the art of pres-

ntion, its value reaches well beyond n studies. n hardly 50 pages Kearns describes

orgian architecture in Dublin suffitly to show what is to be preserved why. He relates preservation activito cultural values and shows why Dubneeds its own unique preservation strat-Most of the rest of the book deals the law, politics, administration, econics, and public education aspects of ervation. Kearns wants to use the great Georgian buildings in imaginative and enious ways, and he presents this task challenging manner. He has a firm p of planning and urban morphology. also deals with the essentially archiural question that is central to Dub-Georgian buildings, but too often red by preservationists everywhere conservation of interior architecture decorative art. Some of the best secs of this book are devoted to detailed iles of individual preservationists at k in the rent controlled slums of north lin and descriptions of local preseron societies. This is a work of politirealism that could actually turn things ind in Dublin at this critical moment. have only a few difficulties with rns' book. Can one preserve only rgian buildings? All architecture of e, from eighth century Viking archeical remains to Barry Byrne's church ork, should be preserved. And given Ireland is governed, this seems inesıbly a national rather than a municiask. Certainly a case can be made Renaissance Ireland's buildings as a rate category, as Craig does, but both ire and law are a seamless web and ind's experience with classifying its itectural inventory argues that the e difficulties will be encountered if nological categories are introduced. DERICK GUTHEIM, HON. AIA

Mississauga City Hall: A Canadian Competition. Edited by Peter Arnell and Ted Bickford. (Rizzoli, \$14.95.)

Rizzoli, publisher of this book, is rendering the profession a service in its documentation of significant architectural competitions. The third in the series, this book focuses on the architectural selection process for a new city hall and civic square in Mississauga, a city located southwest of Toronto. Each of the 246 submissions by Canadian architects is considered briefly, with in-depth attention given to the designs of the seven finalists, including the winning design by J. Michael Kirkland and Edward Jones.

The same general documentation is evidenced in the fourth book in the series entitled A Center for the Visual Arts: The Ohio State University Competition. The winner was Trott & Bean and Eisenman/ Robertson.

The Architecture of Castles: A Visual Guide. R. Allen Brown. (Facts on File Publications, \$21.95.)

Buildings reflect the society that produced them and cannot be understood without a knowledge of that society, says the author of this book. He emphasizes that castles-medieval monuments-were symbols of a new ruling class and a new military and political system introduced in England at the time of the Norman conquest. Headquarters for local and estate management, also housing lords and ladies and officials, castles were not only fortresses for defense and offense, but also residences in time of both war and peace. This lavishly illustrated book outlines the development and decline of military medieval architecture, discussing in detail eight representative castles in England and Wales. The author has written other books on castles and is a recognized authority on the subject.

Gothic Architecture. Louis Grodecki. (Rizzoli, \$18.50.)

This renowned book is a redesigned paperback of a work first published in Italy in 1976, with an English translation published by Abrams in 1977. With the equally well-received Late Baroque and Rococo Architecture (1972) by Christian Norberg-Schulz, also recently republished by Rizzoli, the two represent the first paperbacks from the acclaimed "History of World Architecture" series. All 18 volumes in the series will be presented in redesigned and inexpensive format, making it possible for the books to attain the wide readership that they deserve. Each of the volumes, newly designed and including many pages of full-color reproductions, is written by a recognized authority for the period it covers, and each contains extensive documentation, bibliography, and index. 🗆

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Letters from page 10

fees, financing costs, professional fees, project administration, interest, and a permanent endowment, the last two being almost \$9 million all by themselves.

Regarding the "300 change orders," there is always an implication that each of these caused an increase in the cost of the building. Not so. In the first place, we should not have used the term change order in this context. Actually, it is the practice in negotiated, fast-track construction jobs to confirm follow-up plans and details with "field instructions." These are. for the most part, clarifications of the engineering drawings to assist coordination among the mechanical trades. Does a pipe go over or under a duct? Does a conduit go right or left of a column? Throughout the construction phase, the on-site architect was receiving pats on the back from all of the contractors for providing such thorough documentation of field conditions, and many of the "field instructions" produced actual reductions in cost.

Thus, the vast majority of the "300 change orders" were really field assists, and when the Ordway is formally completed, formal change orders that authorize a change in the contract price will number three or four, and the amount will be less than a half a million dollars.

The only reason I am being tedious about all of these numbers is that constant repetition brings a sense of reality to unreal circumstances and might lead to a general conclusion that the Ordway's board of directors or staff, or the design professionals or the general contractor, were not minding the store. Quite the reverse is true.

In any case, the city has ended up with a beautiful building that is not only an esthetic addition, but actually works. Since opening, the Ordway Music Theatre has provided pleasure for over 350,000 people, and, as noted by the mayor in a recent speech, "None of the megabuck downtown developments has done so much to transform downtown as the recent opening of the Ordway Music Theatre."

H.P. Blodgert Jr. Vice President, Ordway Music Theatre St. Paul

Education of an Interior Designer: Jeanne M. Gerarve's letter in the July issue (page 6) is a perfect example of a little bit of knowledge being dangerous. She forgets ("like a doctor who specializes in a certain field of medicine, so the interior designer is a design professional who specializes in one aspect of design, that of interior architecture") that the doctor is licensed by the state first as an M.D. and then again in the specialty. The correct analogy to be drawn would be: first be licensed by the state as an *architect* and then specialize in interior design.

The mere fact that she intermixes inte ior design and interior architecture indicates that she is definitely not qualified to serve the public in her selfannointed profession.

William Krisel, AI Los Angele

Blast Effects Research: Herb Caen, in the San Francisco Chronicle, noted that "one of the best touches at the AIA Co: vention was handsome photos of the Sa Francisco skyline labeled 'Not Designed to Withstand Nuclear Blast.'" I wonder his reaction would have been different i he had known that the group sponsoring the exhibit was adamantly opposed to AL being involved in a research project tha would study blast effects on buildings. I seems important that architects have avai able as much information as possible in order to design structures that will best protect the public in unusual circumstances.

ances. Henry G. Meier, FAI Director, East Central States Regio Indianapol





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DEATHS

Frederick H. Hobbs Jr., FAIA: Recognized for his work in the field of continuing education, Hobbs founded the Columbus, Ohio, firm of Tully & Hobbs in 1941. He served as president of the National Architechtural Accreditation Board, president of the Ohio Board of Examiners and Architects, and on the board of National Council of Architectural Registration Boards. He died early this year in Columbus at the age of 75.

BRIEFS

Housing the Homeless Conference.

Sponsored by the AIA housing committee, the conference on Oct. 24-26 in Washington, D.C., will examine how architects and others can successfully provide shelter for the homeless. After a basic overview of the homeless-who they are, where they live, what is being done-there will be a more in-depth look at projects and tours of three types of shelters: emergency, special needs, and longer term. In addition there will be a discussion of financing, networking, funding, zoning, and how to get involved. The speakers will be distinguished persons from all facets of housing the homeless. For more information, contact Ravi Waldon at Institute headquarters, (202) 626-7429.

Hawaii College Design Competition.

Hawaii Loa College near Honolulu is conducting an open, one-stage, two-board concept international competition for the design of a center for the media arts. The building is to combine media and performance spaces in a 75,000-square-foot building with a construction budget of \$6.5 million. The college will award \$15,000 to the winner and enter negotiations for the commission while reserving the right to require the winner to team up with a Hawaii architect for production and contract administration. Jurors include Arata Isozaki, Hon. FAIA, John Andrews, Hon. FAIA, Michael Pittas, Hon. AIA, John Mara, AIA, and John Morris Dixon, FAIA. Registration deadline is Oct. 7. Due at that time is a \$75 check payable to Hawaii Loa College. Send to Michael Robinson, AIA, Competition Adviser, Hawaii Loa College, 45-045 Kamehameha Highway, Kaneohe, Oahu, Hawaii 96744.

Competition for Downtown Houston Park.

Central Houston Civic Improvement, Inc., is seeking entries in an open, two-stage national design competition for a 10-acre urban park on the edge of the central business district. The site includes a quarter mile of Buffalo Bayou, downtown Houston's major water amenity. First prize is \$20,000, second prize is \$10,000, third prize is \$5,000, and there will be two fourth

Loeb Fellows Announced.

Harvard graduate school of design has named 10 architects, landscape architects, planners, and design professionals Loeb Fellows for the 1985-86 academic year. They are: Michael Adlerstein, AIA, senior architect/planner for the National Park Service in the New York/New Jersey region; Simone Auster, vice president of Community Development for the Greater Boston Chamber of Commerce; Christopher S. Clews, founder and president of Learning Structures, Inc; Rolf Diamant, senior landscape architect for National Park Service in Boston; J. Stewart Johnson, curator of design at the New York City's Museum of Modern Art; Haig Khachatoorian, vice president of Nexus American; Doug Michels, senior designer, Hellmuth, Obata, & Kassabaum in Washington, D.C.; John M. Syvertsen, AIA, principal of the Chicago firm Hammond, Beeby & Babka; Elbert L. Waters, senior planner for the City of Miami; and Geraldine Weinstein, director of horticulture for New York City.

Lighting Fixture Design Winners.

Daniela Iafelice of the Cleveland Institute of Art, Lynn Betts Johnson of California State University at Long Beach, and Charles Reay Jr., of the University of Michigan are the first, second, and third place winners of the Genlyte lighting fixture student design competition. Their designs were judged on the basis of originality, appearance, and presentation, as well as performance and manufacturing cost. Genlyte is a lighting manufacturer.

Urban Design Competition.

Five teams will be selected to participate in a one-stage competition sponsored by the city of Oceanside, Calif., for the design of a new civic center. Each team will receive a \$7,500 honorarium. Interested architectural teams should submit qualifications in October. For more information, contact William H. Liskamm, FAIA, Competition Adviser, City of Oceanside Community Development Commission, 322 North Cleveland St., Oceanside, Calif. 92054.

Wood Design Award Program.

The American Wood Council has set Oct. 15 as deadline for submissions in its third biennial national program honoring design excellence in recently constructed buildings. To qualify for the program, buildings must have been completed by 1980 and demonstrate structural uses of wood. For more information, contact AWC, 1619 Massachusetts Ave. N.W., Washington, D.C. 20036.

Illinois Medal in Architecture.

Charles Luckman, FAIA, has been awarded the Illinois Medal in Architecture by the University of Illinois at Urban: Champaign school of architecture. This the highest honor given by the architectural school, recognizes outstanding achievement and service to the architec tural profession. Luckman is a 1931 graduate.

Pittas Wins Urban Scholars Fellowship.

Michael John Pittas, Hon. AIA, has been named the recipient of the urban schola fellowship awarded by the New School for Social Research. Pittas will resign as dean of Otis Art Institute Parsons School of Design for one year to take advantage of the fellowship.

Architecture Student Officers.

Scott Norberg, a graduate student at the University of Nebraska college of architecture, and Whitney Powers, a recent graduate of the Mississippi State University school of architecture, have assume office as president and vice president, respectively, of the American Institute Architecture Students.

ASCE Reference Guide.

The 1984 edition of the American Society of Civil Engineers' index provides a guide to papers and technical notes from *Civil Engineering*, manuals and reports special publications, and conference papers. Copies are available for \$20 from ASCE Publications, 345 East 47th St., New York, NY 10017-2398.

Energy Information Clearinghouse.

The Conservation and Renewable Energy Inquiry and Referral Service offers, amo others, the following publications free of charge: Land Use & Site Design for Energy Conservation, Site Planning for Solar Access, and Regional Guidelines for Buil ing Passive Energy Conserving Homes. Information is also available on photovoltaics, wind, and geothermal energy. For information, contact CAREIRS toll free at 800-532-2929 (800-462-4983 in Pennsylvania and 800-233-3071 in Hawa and Alaska).

Building Product Directory.

Masterguide, the official specifying and buying directory of AIA, is now availab from the AIA Bookstore for \$29.95. Eac edition offers over 500 pages of building product and service information, org nized according to the industry standar coding system. It is printed in five region editions. To obtain copies, contact Kat leen Knepp at Institute headquarters.



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Furnishings

As resources for design and objects of design. By Nora Richter Greer The Italian firm Zabro's newest addition to its Nuova Alchimia collection is a chair that also can be a table (1). Made of lacquered wood, the table top tilts up to reveal a dramatic, abstract hand-painted pattern. This becomes the chair's backrest. When flipped down, the top rests on leather covered arms to become a round table. Ron Rezek Lighting + Furniture's desks, drafting tables, and return tables (2) come in varying heights and are made of plastic-coated steel, topped with Colorcore laminate. Each table is held together by crossed tension wires and compression rods, giving the set a high-tech image.

Acerbis International's Morphis table (3) is an experiment in geometry. Rather than having a typical table base, each leg of the table is a rectangle connected to a half-circle connected to a cylinder. In contrast is the Howe Furniture Corporation's Donahue table (4). Here the table top rests on two solid blocks of wood, each of which is embellished by corner columns with recessed reveals. The table is available in high or low models, squares or rectangles, in four natural wood finishes (light oak, mahogany, walnut, maple) or eight lacquered finishes. The bold Arno up-lights (5) accommodate incandescent, fluorescent, or halogen bulbs. Designed by Allison Duke for Ron Rezek Lighting + Furniture, the fixtures are offered in a variety of finishes, including gold leaf and silver leaf. Thema's delicate Lisa folding chair (6) has a tubular steel structure that is stove-enamelled with epoxy powders or chromed. The seat is beech plywood covered with rubberized fabric in black, gray, or yellow; and the backrest is beechwood covered with rubberized fabric. \Box





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Fireman's Fund Employers Insurance Company, De Pere, WI, shows how CORIAN custom-fits a wide variety of creative designs. Champ Parish Raasch & Associates, architects.



CORIAN solidity and impermeable seams allow for maximum hygiene at Guy's Dental School, London. Derrick Graham, architect.





Products

A selection of notable offerings and applications. By Lynn Nesmith







The Herman Miller Ethospace office furniture system (1) was designed by Bill Stumpf and Jack Kelley to provide workers with more control over their own work areas. Interchangeable wall tiles in various sizes, colors, fabrics, and glazings snap into steel frame wall panels measuring 38, 54, and 70 inches in height and 24, 30, and 48 inches in width. Rectangular, peninsular, and corner work surfaces are hung from the structural frame and have sloping "waterfall" edges. (Circle 201 on information card.)

Kurt Dalbanco's colorful collection of wall-mounted and desk clocks (2) is comprised of six varied designs in two sizes. The three shown here—the Moon-Tic, Wall-Tic, and the Tech-Toc—are batterypowered and have a semi-transparent etched plastic facing with a black rubber frame. The image on the face is hand printed by a successive color screen process. (Circle 202.)

Designed by Ann Maes for Sointu Inc., tubular fireplace tools (3) are made of steel with a black enamel finish. The set measures 26 inches in height and includes an L-shaped poker, tongs, a broom, and a blowpipe for rekindling coals. (Circle 203.) *Products continued on page 176*

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Storage Units.

AS-MP mobile pedestal storage units are mounted on either glides or casters and have a range of drawer arrangements and interior compartments. Units have nylon bearings for small drawers, fully extendable suspension arms on steel ball bearings for large drawers, and individually adjustable base glides. They are available in several sizes and colors. (Artopex Canada, St. Martin, Quebec. Circle 205 on information card.)

Bath Fixtures.

Waterfall Roman Tub Faucet set has square handles, square escutcheons, and an eight-inch-wide curved waterfall spout. A matching four-inch-wide spout is available for lavatories. (Harden Industries, Los Angeles. Circle 206 on information card.)

Window Shades.

Duette dual-pleated window shades are available in sheer or opaque fabrics in 39 colors with or without metallized finishes. Constructed of either a honeycomb or cellular configurations, the blinds have coordinated hardware with hidden cords and nonvisible seams or tapes. (Hunter Douglas, Inc., Maywood, N.J. Circle 208 on information card.)

Roof Covering.

Tropic Top roofing is made of lightweight metal with a baked-on colored finish designed to look like thatch. It is fireproof and waterproof. (Symbol, Inc., Orlando, Fla. Circle 207 on information card.)

Marble Tile.

Natural marble tile in 10 colors, including filled tavertine, pink, green, gray, black, tan, and white, has slightly beveled surface edges and a polished finish. Twelve-inch-square tiles are recommended for interior and exterior walls and interior floors. (American Olean Tile, Lansdale, Pa. Circle 209 on information card.)

Retail Display Systems.

Marlite Displawall slotted system is constructed of ³/₄-inch medium density fiberboard panels in standard 8x4-foot configurations with extruded vinyl groove inserts. Panels are available finished with wood veneers, decorative high pressure laminates, brushed aluminum, clear mirror plexiglass, bronze mirror plexiglass, or paint grade, and vinyl inserts are offered in six standard colors. Grooves can be carved along the 8- or 4-foot side of the panel to create horizontal or vertical applications, and nonstandard spacing between grooves is also possible. (Masonite Corporation, Dover, Ohio. Circle 211 on information card.)

Brick Pavers.

Chamfered brick pavers, designed for commercial and residential applications, are available in reddish brown or buff in several sizes. The chamfered edges of the molded pavers are designed to be laid tightly without mortar. (Glen-Gery Corporation, Shoemakersville, Pa. Circle 212 on information card.)

Interior Panel.

Alucobrite is a lightweight, mirror-finished composite panel for interior and signage applications. It is made of two sheets of aluminum with a thermoplastic core and can be bent, curved, angled, or folded for various configurations. The material is available in two thicknesses and in sheets four feet wide and stock lengths up to 12 feet, as well as custom sizes. (Consolidated Aluminum, St. Louis. Circle 210 on information card.)

Composite Stone Flooring.

Granitech-One is a natural stone surfacing constructed of granite, quartz, and other hard aggregates and fillers bound together with clear granite-epoxy binder. It is struc-

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rally an epoxy terrazzo but is designed ith a granitelike appearance. (Fairfield cientific, Inc., Fairfield, Iowa. Circle 213 information card.)

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ustom Skylights.

cylights and glass structures are fabriated to individual specifications with sine, double, or triple glazing. Units are vailable in five colors of acrylic glazing nd tempered, wired, or laminated glass five colors. Four frame finishes are fered. (Bristol Fiberlite Industries, Santa na, Calif. Circle 226 on information ard.)



Furniture System.

Plumline modular flatfile storage units (above) are available with two drawer sizes—21x25x2 inches or 25x37x2 inches. Four drawers and an interlocking frame made of lightweight steel rods make up one unit. The drawers are made of pressure treated fiber with reinforced metal corners, and the standard metal frames come with a red baked enamel finish or custom colors. The storage units are designed to be arranged to create taborets, desks, or counter-height work areas with the addition of optional laminated tops. They can be placed side by side or stacked floor to ceiling. (Wave Pad, San Francisco. Circle 215 on information card.)

Lighting Series.

Pan-A-Lux indirect lighting wall fixtures for high intensity discharge measure 10³/₄x1³/₂x5¹/₂ inches. The sculpted urn fixture is made of polished extruded aluminum with a glass-reinforced polymer housing. The reflector assembly has stepped parabolic and ellipsoid sections designed to provide precise control of light distribution. (Rambush Co., New York City. Circle 216 on information card.)

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