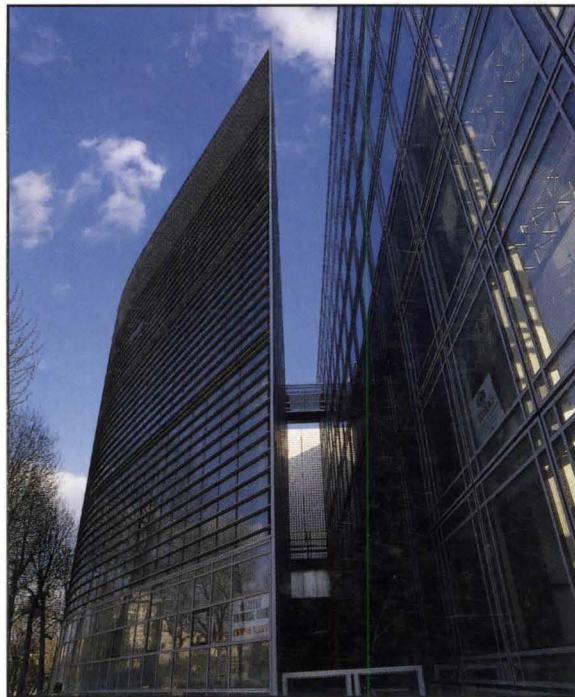


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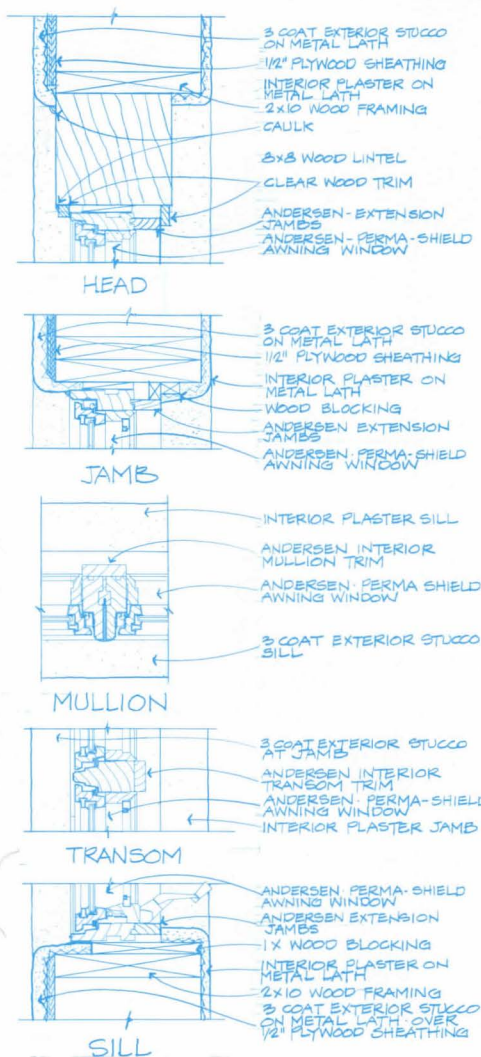
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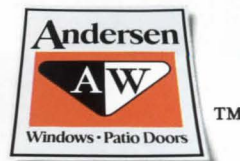
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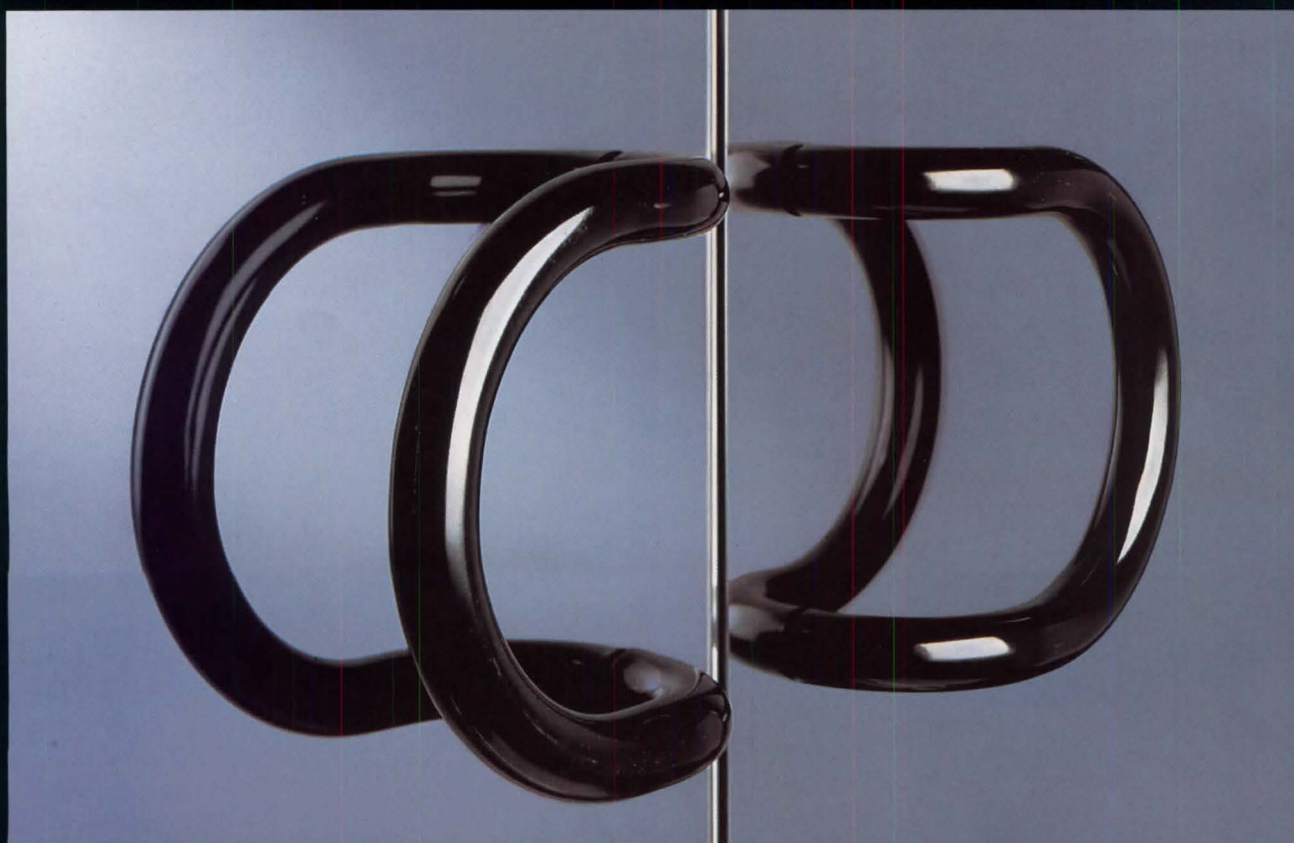
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ABP **NEW ARCHITECTURE IN PARIS***Editor in charge: Daralice D. Boles***67 Introduction**

Modern architecture in Paris is enjoying a renaissance. Established French architects like Henri Ciriani, Henri Gaudin, Christian de Portzamparc, and Jean Nouvel or younger ones like Pierre-Louis Faloci and Francis Soler are responsible for this renewed vitality. *Daralice D. Boles*

**72 Modernism in the City**

The Institut du Monde Arabe or Arab World Institute, designed by Jean Nouvel, Gilbert Lezenes, Pierre Soria and Architecture Studio, is an important work for Paris, noted not only for its technological innovations but for its cross-cultural aesthetic that symbolizes ties between France and the Arab world. *Daralice D. Boles*

**80 P/A Portfolio: An Occasion for Architecture**

Social housing is the crucible in which ideas about architecture are tested in France. This portfolio studies some recent examples in Paris and the surrounding *villes nouvelles*. *Marie Christine Lories*

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For the Café Beaubourg, architect Christian de Portzamparc has reinterpreted café culture in his own inimitable style on a prominent site facing the Pompidou Center. *Marie Christine Lories*

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The checkered history of one Parisian neighborhood illustrates the vicissitudes of urban policy in this city, and the problems faced by architects who chose to follow or break the rules. *Thomas Matthews*

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This progress report on Bernard Tschumi's Parc de la Villette, a P/A Design Award winner in 1986, shows this avant-garde park for the 21st Century is rising rapidly. Two of the 34 "follies," small buildings designed to accommodate a variety of park functions, are illustrated. *Daralice D. Boles*

**98 Monumental Modernism**

In the best tradition of French rulers, President François Mitterrand is busy building his architectural legacy. The so-called *grands projets* are changing the face of Paris. *Thomas Vonier*

**TECHNICS****100 P/A Technics: The Uses of Steel**

Steel, the material perhaps most associated with the Modern Movement, has been used with increasing frequency in various Post-Modern ways. Such uses show that Modernism did not exhaust the material's creative applications. *Thomas Fisher*

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**Cover:** Three new buildings in Paris: The Institut du Monde Arabe by Jean Nouvel and associated architects (photo left, Deidi von Schaeuwen); a "folly" at Parc de la Villette by Bernard Tschumi (photo top right, J.M. Monthiers); and public housing by Fabrice Dusapin and François Leclercq (photo bottom right, Stephane Couturier). Design by R.J. Huff.

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# Cultural Blindspot

In a recently published listing of “what literate Americans know,” architecture hardly counts at all. Why this apparent isolation from the general culture and what can be done?

WIDELY reviewed in the general press this spring, the new book *Cultural Literacy*, by E.D. Hirsch, Jr., is not primarily about architecture. In fact, the notable thing about this book is how little it mentions architecture, since it spells out a body of cultural knowledge that all literate Americans should share.

Hirsch's purpose is to plead for a common core of content in American education, not just disembodied “skills.” But to support this argument, he has compiled a long list of names and terms that the “culturally literate” American should recognize, and this occupies a substantial chunk of the book.

Scouring this list for architects, I find only two (in addition to part-timers Raphael and Thomas Jefferson). They are Frank Lloyd Wright and Christopher Wren. The culturally literate person is supposed to recognize the names of Botticelli, Brueghel, Calder, Pollock, and Norman Rockwell, to name just a few of the two dozen painters listed. But only those two architects (plus the two undoubtedly included for other reasons) need to be known. Cultured people are also, according to this list, supposed to know the names of the three Greek orders, a few stylistic terms such as Neoclassicism and Art Deco, and some architectural elements such as arch and cupola. And they are expected to identify certain individual structures, such as the Taj Mahal and the Eiffel Tower.

The peculiarities of Hirsch's list are easy targets—and have been for many book reviewers: Surely the authors meant to include Michelangelo (another part-time architect) in there with meson and Minerva.

The serious lesson here, however, does not lie in this book's particular inclusions and omissions. The message is that architects and their work count for far less in a literate American's cumulative knowledge than authors, painters, scientists, or politicians. Individual landmarks are more widely recognized than the styles they typify, and the architects who designed them are largely unknown except to aficionados.

The appearance of Wren and Wright in Hirsch's list suggests a valid criterion for inclusion: Their works have special value for the public simply because they designed them. (The same test seems to apply to others he lists, such as composers and authors.) Applying this rule, which architects should be recognized? Certainly Palladio, Richardson, Sullivan, Le Corbusier, and Mies van der Rohe; then there are McKim, Mead & White, Aalto, and Louis Kahn. But the omissions in the list are not limited just to famous individuals: Bauhaus isn't on it; nor is Beaux-Arts; and atrium is listed only as a part of the heart, as if the literate American didn't have to know its architectural meaning.


To a certain extent, the gulf between architectural culture and the general culture seems inevitable. The public has not, in our time, been nearly as knowledgeable about architects as about painters or composers. Familiar reasons have been advanced: Most of the public never consults an architect (as they do lawyers and physicians) or tried designing (as they have probably tried painting or story-writing); architecture is a hybrid activity—part art, part technology, part business—that is hard for the public to understand (How many people can name an aircraft designer, to consider a parallel). Architects have responded to this situation largely by letting their vocation remain mysterious.

The situation has certainly been worsened in our time by the Modern movement's deliberate disconnection of its efforts from the collective memory of our culture. When architects themselves were minimizing the importance of Palladio or McKim, they offered little encouragement to others to remember.

There is no quick solution. The AIA is currently much concerned about “public outreach.” Public membership, one of its ambitious efforts in this direction, doesn't seem to have caught on. The “America By Design” TV series, to be aired this fall, represents a more focused use of AIA's resources (in this case a share of sponsorship). The general feeling in the profession, judging from the recent P/A Reader Poll (May 1987, p. 15) is that “the public image of architects” is one of AIA's most serious responsibilities, and one that earns it low ratings in terms of results. But this is a responsibility that cannot be simply assigned to the AIA. It is the obligation of everyone in the architecture field to see that the public can understand the importance of what architects do and judge knowledgeably how well they do it. ■

*John Morris Diefen*





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## AIA Poll: "Disappointed"

When I read the results of *Progressive Architecture's* survey of The American Institute of Architects (P/A Reader Poll, May issue, p. 15), I have to admit I was a little disappointed. I had hoped there would have been more of an effort or commitment to achieve greater statistical reliability. The findings would then no doubt have had greater impact.

Your readers might be interested to learn that recently the AIA conducted its own survey, one that was carried out by an independent firm whose business it is to conduct representative surveys with a high degree of confidence as measured by statistics. This survey and others conducted by the AIA produced findings that in a number of critical areas differ from your own data.

Nevertheless, whatever their reliability, it is true that exercises of this sort are often useful for those being analyzed. What a survey can reveal is how an organization is perceived and where action might be taken to alter those perceptions when this seems called for. Your survey reinforces my long-held conviction that often the real challenge is not to spend more money, but to communicate more effectively to AIA members and non-members alike the many programs and activities the AIA makes available to them, programs and activities that directly address the very issues identified by both our surveys as being of greatest concern.

For example, in the area of promoting the public image and understanding of architects and architecture, which architects identify as a high priority, your readers can look forward to a major five-part public television series, "America By Design," scheduled to air next September.

Funded in part by major contributions from the AIA and The National Endowment for the Arts, "America By Design" is precisely the kind of creative response architects have every right to expect from the investment they make in the organiza-

tion that represents them.

"Represents" is the key word. The AIA is not a button or magic lever to be switched on as needed. It is not used by the membership. It is the membership, and, as our own survey revealed, the level of satisfaction is almost directly proportional to the members' participation in their professional society—a fact that virtually every survey ever done clearly supports.

Donald J. Hackl, FAIA  
President  
*The American Institute of Architects*  
Washington, D.C.

[P/A's poll was conducted by an independent firm and is statistically reliable. The sample was, quite obviously, the P/A readers who responded, and in this case 925 returns were tabulated. The 601 members in this sample indicated no statistical correlation between degree of participation and perceptions of AIA.—Editors]

## AIA Poll: "Best Thing"

Your Reader Poll's finding (May 1987, p. 15) of "widespread dissatisfaction with the AIA" just might be the best thing that ever happened to it.

My own view of this most unfortunate situation is that the AIA has let itself consist of two worlds. There is on one hand the Institute's very long list of committees, task forces, liaisons, etc., served by the very large staff. They are peopled by expense-reimbursed individuals who too often are out of touch with the members in their own areas, and who constitute a major portion of the delegates to the annual conventions, where an atmosphere of self-congratulation is apt to prevail. Then there is the overwhelming majority of the membership which hears and knows little or nothing of what the staff does, or of what if anything comes out of most of those committees. A local chapter headquarters is not much better informed. I know.

Now, this is a drastically oversimplified and incomplete view, but I am quite sure that the AIA's core problem lies in Washington's self-insulation from the

general membership. I hate having to write like this because I personally know so many superbly capable individuals who are selflessly dedicated to making the AIA work.

George S. Lewis, FAIA  
(Executive Director of the  
*New York Chapter 1969–86*)

## San Francisco Plan's Effect

I just read your short piece on 388 Market in the April issue of *Progressive Architecture* (pp. 108–112).

I must take exception with one of your conclusions, however. The copy says: "The result so far (from the Downtown Plan) has been a set of mostly lackluster buildings ineffectually dimpled and pimpled with knobs and other nameless features. What went wrong? Nothing maybe. The suspicion grows that the fault lies in the basic assumption that design quality could be legislated."

It is a curious statement to me because no buildings have been completed under the Downtown Plan Ordinance approved by the Board of Supervisors in October 1985. One building complying with the Plan's provisions is under construction but that would hardly constitute a "set" of completed buildings.

In addition, I want you to know that at no time during the preparation of the plan or during the process of adopting it did we believe architectural quality could be legislated. Zoning, a planning tool, was always meant to affect the massing and siting of buildings. That is precisely what the Downtown Plan does in a more precise way than previous zoning approaches. The Plan gives priority to urban design: sunlight, sky access, pedestrian oriented activity at street level, maintenance of a coherent street wall, preservation of significant buildings, usable open space, and a visually attractive skyline.

There is plenty of room for good architecture but achieving it, as in the past, remains in the hands of the architect and the developer. At present that may not be a reassuring prospect. In recent months I have visited

several major cities and, from my perspective, buildings elsewhere are not succeeding in design excellence beyond that in San Francisco. It may be cause for some anxiety, but the direct connection between good architecture and the competence of architects still exists.

Dean L. Macris  
Director of Planning  
Department of City Planning  
City and County of San Francisco  
[It is true that no buildings have been completed under the Downtown Plan Ordinance passed in October 1985. The recent buildings mentioned in this article were, however, by the architects' account, designed to conform to the plan's policies on "building appearance," which were published in draft form in May 1981. Its provisions have already affected building design.—Editors]

## Whitney Addition Design

With reference to Daralice D. Boles's piece on the Whitney's expansion plans (P/A, April 1987, p. 27), and as one "who signed a petition against the original scheme," permit me to take issue with the author's conclusions.

Speaking for a number of us who have discussed the revised scheme, we do *not* feel that we "must respect . . . their right to proceed. . . ."

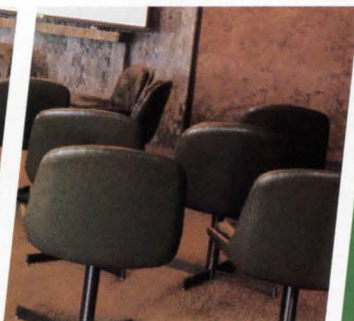
Breuer's Whitney is an officially designated Landmark in New York State and is on the eligible list of the National Register. It is the Whitney Board and their architect who "must respect" this fine building.

The New York City Landmarks Commission will be the judge of whether an aggressively overdesigned penthouse and ineptly unresolved hinge constitute an appropriate way to add to a Landmark. I have every confidence that these devices will be rejected in favor of Breuer's preparation for a neighbor—an understated notch containing one of the most beautiful stairs of contemporary architecture.

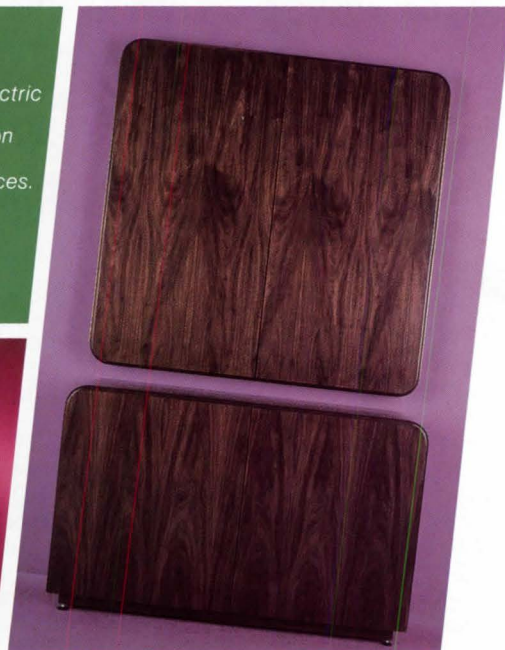
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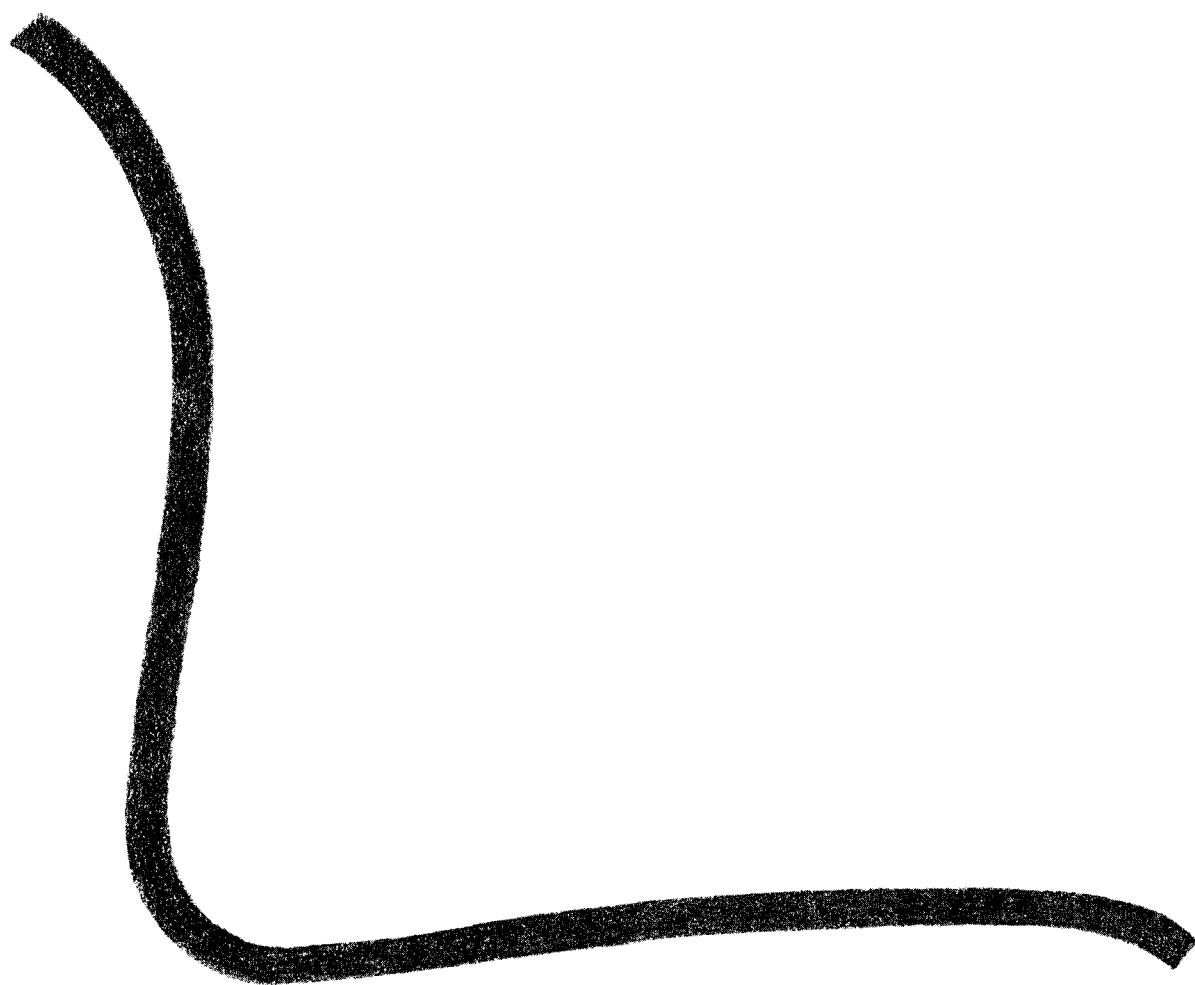
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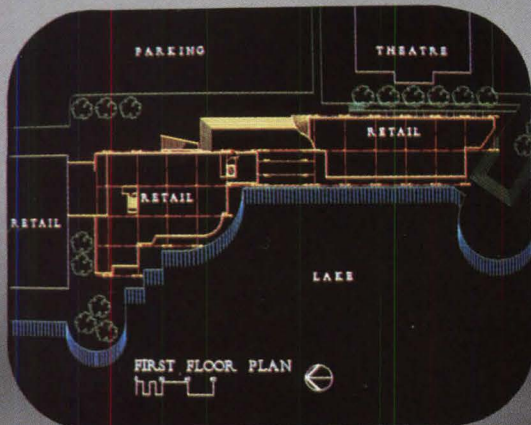
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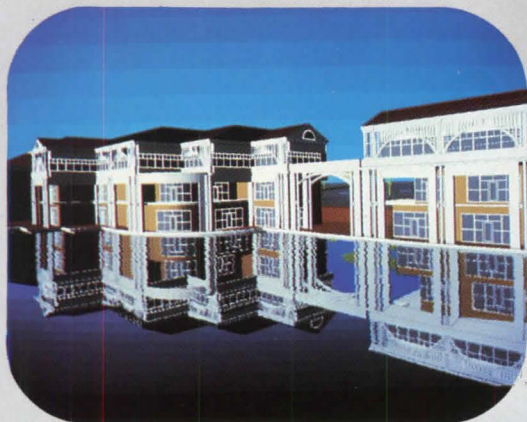
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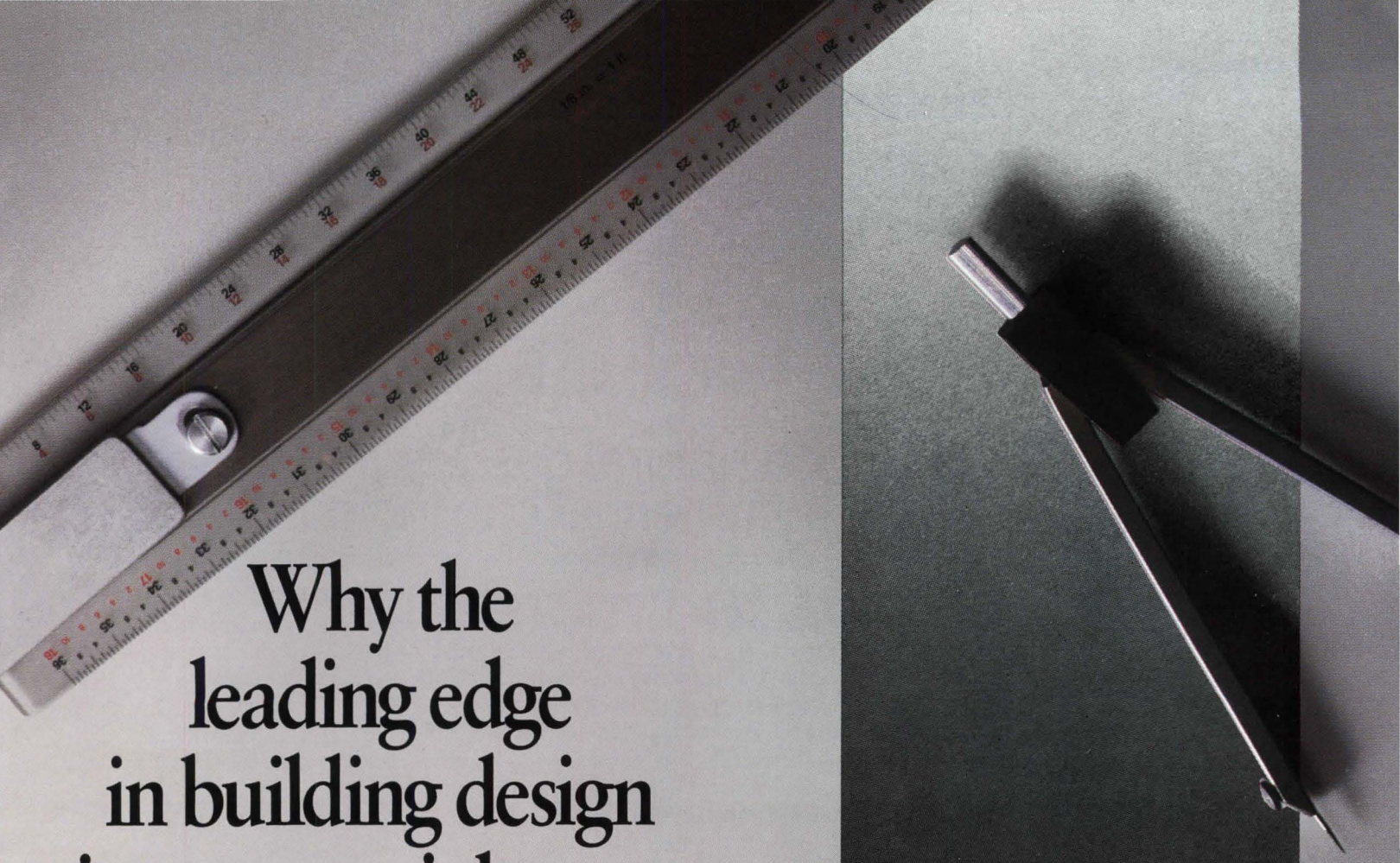
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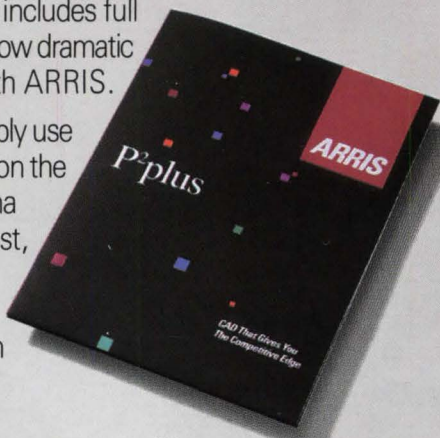
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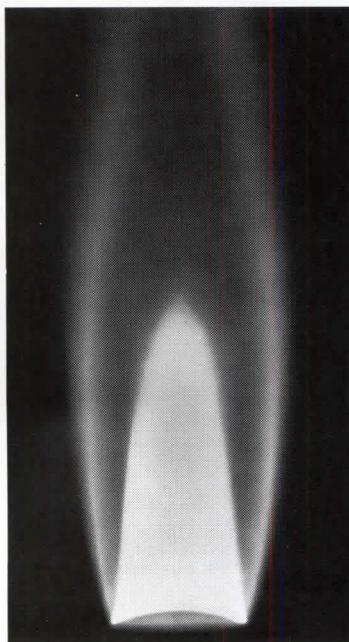


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# P/A Awards Program

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ARCHITECTURE

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## JURY FOR THE 35TH P/A AWARDS

**Progressive Architecture** announces its 35th annual P/A Awards program. The purpose of this competition is to recognize and encourage outstanding work in Architecture and related environmental design fields before it is executed. **Submissions** are invited in the three general categories of architectural design, urban design and planning, and applied architectural research. Designations of first award, award, and citation may be made by the invited jury, based on overall excellence and advances in the art.

**Architectural Design:** *J. Max Bond, Jr.*, Bond Ryder James Architects, New York; *Charles Gwathmey*, Gwathmey Siegel & Associates Architects, New York; *Fumihiko Maki*, Maki and Associates, Tokyo; *Rob Wellington Quigley*, Rob Quigley Architects, San Diego, Calif.

**Urban Design and Planning:** *Diana Balmori*, Partner for Urban Design and Landscape, Cesar Pelli & Associates, New Haven, Conn.; *Peter Calthorpe*, Calthorpe Associates, San Francisco, Calif.

**Research:** *Jay Farbstein*, President, Jay Farbstein & Associates, San Luis Obispo, Calif.; *Michael L. Joroff*, Director of Laboratory of Architecture and Planning, Massachusetts Institute of Technology, Cambridge, Mass.

**Judging** will take place during October 1987. Winners will be notified, confidentially, before October 31. Public announcement of winners will be made at a ceremony in New York on January 22, 1988, and winning entries will be featured in the January 1988 P/A. Clients, as well as professionals responsible, will be recognized. P/A will arrange for coverage of winning entries in national and local media.

*Turn page for rules and entry forms.*

---

**DEADLINE FOR SUBMISSIONS: SEPTEMBER 8, 1987**

---



## Entry form: 35th P/A Awards Program

Please fill out all parts and submit, intact, with each entry (see paragraph 14 of instructions). Copies of this form may be used.

Entrant:  
Address:  
Credit (s) for publication (attach additional sheet if necessary):

Entrant phone number:  
Project:  
Location:  
Client:  
Client phone number:  
Category:

Entrant:  
Address:  
Project:

I certify that the submitted work was done by the parties credited and meets all Eligibility Requirements (1-7). All parties responsible for the work submitted accept the terms of the Publication Agreement (8-9). I understand that any entry that fails to meet Submission Requirements (10-18) may be disqualified. Signer must be authorized to represent those credited.

Signature \_\_\_\_\_  
Name (typed or printed): \_\_\_\_\_

**Awards Editor/Progressive Architecture**  
600 Summer Street, P.O. Box 1361, Stamford, CT 06904

Project:  
Your submission has been received and assigned number:

Entrant:  
Address:

(Receipt)

**Awards Editor/Progressive Architecture**  
600 Summer Street, P.O. Box 1361, Stamford, CT 06904

Entrant:  
Address:

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### Eligibility

**1** Architects and other environmental design professionals practicing in the U.S. or Canada may enter one or more submissions. Proposals may be for any location, but work must have been directed and substantially executed in U.S. and/or Canadian offices.

**2** All entries must have been commissioned, for compensation, by clients with the authority and intention to carry out the proposal submitted. (For special provision in Research category only, see Item 6.) Work initiated to fulfill academic requirements is *not* eligible (but project teams may include students).  
**3** Prior publication does not affect eligibility.

**4** Architectural design entries may include only buildings and complexes, new or remodeled, that are scheduled to be in any phase of construction in 1988. Indicate *schedule* on synopsis page (Item 12).

**5** Urban design and planning entries must have been accepted by the client, who intends to base actions on them in 1988. Explain *implementation plans* on synopsis page (Item 12).

**6** Research entries may include only reports accepted by the client for implementation in 1988 or research studies undertaken by entrant with intention to publish or market results. Explain basis of eligibility on synopsis page (Item 12).

**7** The jury's decision to premiate any submission will be contingent on verification by P/A that it meets all eligibility requirements. For this purpose, clients of all entries selected for recognition will be contacted by P/A. P/A reserves final decision on eligibility and accepts no liability in that regard. Please be certain entry meets above rules before submitting.

### Publication agreement

**8** If the submission should win, the entrant agrees to make available further graphic material as needed by P/A.

**9** In the case of architectural design entries, P/A must be granted the first opportunity among architectural magazines for feature publication of any winning project upon completion.

### Submission requirements

**10** Entries must consist of legibly reproduced graphic material and text adequate to explain proposal, *firmly bound* in binders no larger than 17" in either dimension (9" x 11" preferred). No fold-out sheets; avoid fragile spiral or ring bindings.

**11** No models, slides, films, or videotapes will be accepted. Original drawings are not required, and P/A will accept no liability for them.

**12** Each submission *must include* a one-page synopsis, in English, on the first page inside the binder, identifying the project and location, clarifying eligibility (see Item 4, 5, or 6), and summarizing principal features that merit recognition in this program.

**13** To maintain anonymity, no names of entrants or collaborating parties may appear on any part of submission, except on entry forms. Credits may be concealed by any simple means. Do *not* conceal identity and location of projects.

**14** Each submission must be accompanied by a signed entry form, to be found on this page. Reproductions of this form are acceptable. All four sections of the form must be filled out, *legibly*. Insert entire form, intact into *unsealed* envelope attached inside back cover of submission.

**15** For purposes of jury procedure only, please identify each entry as one of the following: *Education, Houses (Single-family), Housing (Multiple-unit), Commercial, Industrial, Governmental, Cultural, Recreational, Religious, Health, Planning and/or Urban Design, Applied Research*. Mixed-use entries should be classified by the larger function. If unable to classify, enter *Miscellaneous*.

**16** Entry fee of \$60 must accompany each submission, inserted into *unsealed* envelope containing entry form (see 14 above). Make check or money order (no cash, please) payable to *Progressive Architecture*.  
**17** P/A intends to return entries intact, but can assume no liability for loss or damage.

**18** Deadline for sending entries is September 8, 1987. Any prompt method of delivery is acceptable. Entries must show postmark or other evidence of being en route by midnight, September 8. Hand-delivered entries must be received at street address shown here, 6th floor reception desk, by 5 p.m., September 8.

### Address entries to:

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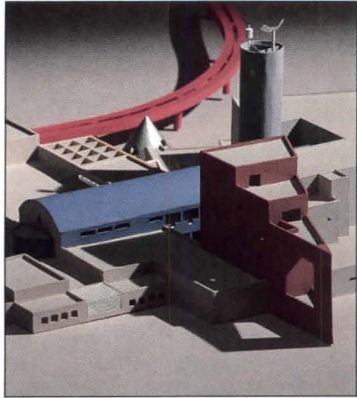
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Robert Reck

**Las Vegas Library and Children's Museum (above), Seattle Art Museum, and Philadelphia's Institute of Contemporary Art are shown in progress, page 35.**

## Litigation against Murphy/Jahn

Just as criticism of Helmut Jahn's design for the State of Illinois Center was beginning to die down, the flamboyant architect's firm has been sued by the State of Illinois itself.

In early April, Illinois Attorney General Neil Hartigan, a political rival of Governor James Thompson, filed a \$20 million lawsuit on behalf of the state charging Murphy/Jahn Inc., joint venture partners Lester B. Knight & Associates Inc., and several other firms that worked on the building with "malpractice" and negligence in the planning and construction of the

(continued on page 30)

## Reviving Atlanta Underground

More resurrection than renovation, the current rejuvenation of Underground Atlanta, which had been previously renewed in the early 1970s, is the most important urban renewal project now under way in Atlanta. The last tenant left Underground in 1981, but the complex of shops and restaurants had ceased to be a popular attraction as early as the mid-1970s, when it earned a reputation as unsafe.

Funded by urban and commu-

(continued on page 30)



Tom Bonner

Richard Meier's site plan for the Getty Center in Los Angeles.

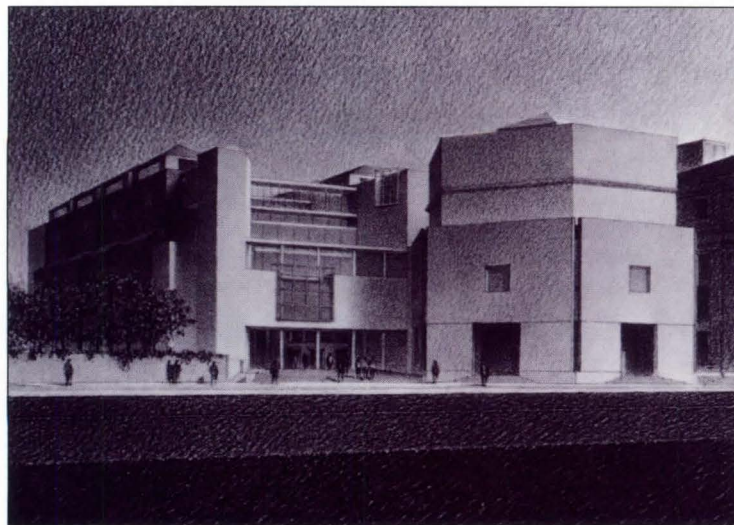
## Plans for the Getty Center Unveiled by Richard Meier

After nearly two years of programming and conceptual design, architect Richard Meier presented his plan for the J. Paul Getty Center to the Los Angeles Planning Commission in May.

The size and cost of this endeavor, and the unusual process used to select its architect, have made it one of the most closely watched commissions worldwide. Sited on a 742-acre preserve in west Los Angeles, the center will consolidate the scattered facilities of the J. Paul Getty Trust. An all-star committee of architecture critics, art historians, and administrators traveled around the world in search of an architect, before selecting Meier in October 1984 over finalists Fumihiko Maki of Tokyo and James Stirling of London.

Meier's site plan for the Center, conservatively estimated at \$100 million or more, describes a campus of low buildings recessed into sloping terrain and clustered around terraced gardens. The campus

(continued on page 28)



Rendering: Paul Stevenson Oles

James Freed's design for the U.S. Holocaust Memorial Museum in Washington, D.C.

## Holocaust Memorial Unveiled, Reviewed

The U.S. Holocaust Memorial Council recently unveiled a new design by James Ingo Freed of I.M. Pei & Partners, New York, for the U.S. Holocaust Memorial Museum in Washington, D.C. The project is to be built on a prominent site on the Mall, one block east of the Washington Monument. The Commission on Fine Arts (the body designated to advise the Secretary of Interior on the memorial's design in the 1980 act of Congress that authorized its construction), however, withheld its approval and asked Freed and his associ-

(continued on page 27)



## Pencil Points

**Robert Venturi of Venturi, Rauch & Scott Brown, Philadelphia, has been selected as architect for the expansion of the La Jolla Museum of Contemporary Art. Other finalists were Mitchell/Giurgola, Moore Ruble Yudell, and Mark Mack.**

**Esther McCoy, architectural historian and P/A correspondent, was awarded the first Julia Morgan Award, for outstanding contributions to the understanding of architecture, by the Graduate School of Architecture and Urban Planning at UCLA and the Association of Women in Architecture.**

**Le Corbusier is to be honored this summer and fall by exhibitions in Frankfurt, Rio de Janeiro, Santiago, Copenhagen, Madrid, New Haven, Bordeaux, Paris, Athens, Milan, Zurich, Ankara. For a complete dossier of exhibitions, colloquiums, and publications celebrating the centenary of his birth, write the Fondation Le Corbusier, 8-10, square du Docteur-Blanche, 75016 Paris.**

**James Ingo Freed of I.M. Pei & Partners has won the Brunner Prize in Architecture from the American Academy and Institute of Arts and Letters. The prize honors his contribution to the art of architecture.**

**Dr. John Whiteman has been named Director of the Skidmore, Owings & Merrill Foundation Institute in Chicago. Dr. Whiteman, a registered architect, planner and professor at Harvard University, replaces Leon Krier, the Center's first selection.**

**The Immaculate Conception Church in Boston has been granted landmark status by the Boston Landmarks Commission. Designation was initiated after its interior was substantially demolished (P/A, May 1987, p. 31).**

**Daniel Kiley, a landscape architect in Charlotte, Vermont, and Jaquelin Robertson, New York architect and dean of the School of Architecture at University of Virginia, have been selected to design a Henry Moore sculpture garden in a 36-acre park south of the Nelson-Atkins Museum of Art in Kansas City.**



St. John of Damascus Church, Dedham, Mass.



Captain Eldridge House, Hyannis, Mass.

## Governor's Awards in Massachusetts

The "call for nomination" flutered out in the form of 10,000 posters. Candidates came in the form of 650 nominees by the general public. And winning designs were lauded in ceremonies and a seven-stop exhibition that opened in June. So went the first Governor's Design Awards program promoted by the Massachusetts Council on the Arts and Humanities, with the assistance of MIT.

Winnowed down from five regions in the state, the award winners were picked for their "quality of design and relationship to their surrounding environment." Gifts to the public was the operative phrase in the descriptive material.

"People need an incentive for good design," explained Adele Fleet Bacow, director of design and development for the Council. "They need to know that the state cares for good design." A diverse array of designs characterizes the final choices. A Bridge of Flowers, perhaps the most down-home winner, is the product of a "proud and generous citizenry" that filled a defunct bridge in Western Massachusetts with a flood of blossoms.

A ventilator shaft, a once-toxic plot of land converted into a park, Faneuil Hall Marketplace, and the "Arts on the Line" pro-

gram for placing art in transit stations show the eclectic nature of the awards. More conventional architectural choices included a handsome Dedham church by Imre and Anthony Halasz, a communal elderly home in Hyannis by Donham and Sweeney, and a waterfront development in Osterville by the Studio for Architecture. While the aesthetic quality of the awards was occasionally uneven, it is to be hoped that the Council will continue its successful work in popularizing the design process with future competitions.

Jane Holtz Kay

## Du Pont Awards at AIA Convention

Two U.S. architectural firms were honored at the AIA Convention in Orlando as winners of a competition sponsored by the Du Pont Company's "Hypalon" roofing division. Entries in this first year of the competition were judged by Laurence Booth, Chicago; Robert A.M. Stern, New York; and Richard Guy Wilson, University of Virginia in Charlottesville.

Winning in the new construction category was the architect-



Larry's Market, Seattle.



Equinox Hotel, Manchester, Vt.

tural firm of Carlson/Ferrin Architects of Seattle for Larry's Market, also in Seattle (Wetherholt & Associates, roofing consultants). The single-ply roof is based on "Hypalon," in a roofing system by J.P. Stevens & Company, the "Hi-Tuff" system. The jury commended the architects, noting that they had "taken bits and pieces out of the existing environment and made a collage of memorable, familiar pieces."

Honored in the reconstruction/restoration category was the firm of Einhorn Yaffee Prescott of Albany, N.Y., for their work on the Equinox Hotel, Manchester, Vt. (Janette Johnstone, historic preservationist). An assemblage of some 20 interconnected wood buildings built between 1800 and 1950, the Equinox had been the victim of time, neglect, and a fire. "The original building was sympathetically brought back to life," the jury commented. "This is a significant building in American history." The complex uses the same system of roofing as the Seattle market.

Jim Murphy

## UIA Awards Announced

The International Union of Architects has awarded five prizes in architecture, criticism, and town planning.

Reima Pietila of Finland is the 1987 recipient of the Gold Medal, highest honor accorded by the UIA to a living architect.

The Regional/Urban Design Assistance Team (R/UDAT) of the American Institute of Architects was awarded the Sir Patrick Abercrombie Prize for Town Planning. The R/UDAT program organizes teams of volunteer architects and planners who provide urban planning assistance to American cities and towns. Over 92 communities have participated.

The Housing Reconstruction Program in Mexico City was awarded the Sir Robert Matthew Prize for the Improvement in the Quality of Human Settlements. The program, sponsored by the Mexican government, is replacing 44,000 buildings destroyed in the September 1985 earthquake.

Christian Norbert-Schutz of Norway and Ada Louis Huxtable, former architecture critic of *The New York Times*, were jointly awarded the Jean Tschumi prize for architectural criticism or education. The August Perret Prize for Applied Technology in Architecture went to Santiago Calatrava of Spain.



**Holocaust** (continued from page 25) ates to reconsider aspects of the design. Members of the commission expressed reservations in particular about the prominence of The Hall of Remembrance, a hexagon that dominates the project's west elevation.

Freed and members of the Memorial Council countered with concerns that the Holocaust museum and memorial—sited between the existing Bureau of Engraving to the south and the Auditor's Building to the north—could become "too much like an office building" and thus inappropriate for its purpose. The Council had given unanimous approval to Freed's design, publicizing intentions to begin construction as soon as possible. Further hearings are scheduled for later in this summer and knowledgeable observers believe that an accord will be reached without major modifications. [In the revised scheme, released as P/A went to press and approved by the Arts Commission, the Hall is set back an additional 40 feet and its height reduced 5 feet.—Eds.]

The program for the 250,000-square-foot building, for which a \$100 million private funding drive is now well under way, calls for permanent and changing exhibits, lecture halls, library facilities and performance spaces. A previous design by Notter Finegold and Alexander, Inc., of Boston (who remain as associate architects) was abandoned by the Council, which appointed Freed last year.

Some critics regard the Memorial's presence on the Mall as inappropriate on grounds of the Constitutional separation between church and state. The Council responds that the design has no religious elements or motifs and is intended to convey universal messages. Other critics have argued that the museum

program is too ambitious for a memorial.

In any case, the presence of the building on the Mall seems now virtually assured; federal land has been transferred and demolition work is under way.

Thomas Vonier

## Bird Houses by Architects

Summer in the Hamptons on Long Island invariably includes a drive to peer through dense leaves for a glimpse, however frustrated, of the newest extravagances of New York's most talked about architects. This summer many designs will literally be in the leaves as the Hamptons' bird population moves into Post-Modern porticos or minimalist archetypal "huts" designed by 50 area firms. They were auctioned off on 30 May at a \$500-a-plate benefit dinner on the lawn of the Parrish Art Museum in Southampton (and on view there through July 12).

Even without Peterson's guide, the leading practitioners were spotted easily enough. Robert Stern gave distinction to the bird kingdom's greatest sage in his "Owlignor House," while Michael Graves recombined parts now familiar from his design for the Whitney Museum addition to create a monumental "Christopher's Wren House," more inspired, despite the title, by Ledoux than Wren. Stern's fetched \$14,000, Graves' a mere \$13,000, followed closely by the exquisite Copper Beach House for a Bluebird by Kliment & Halsband.

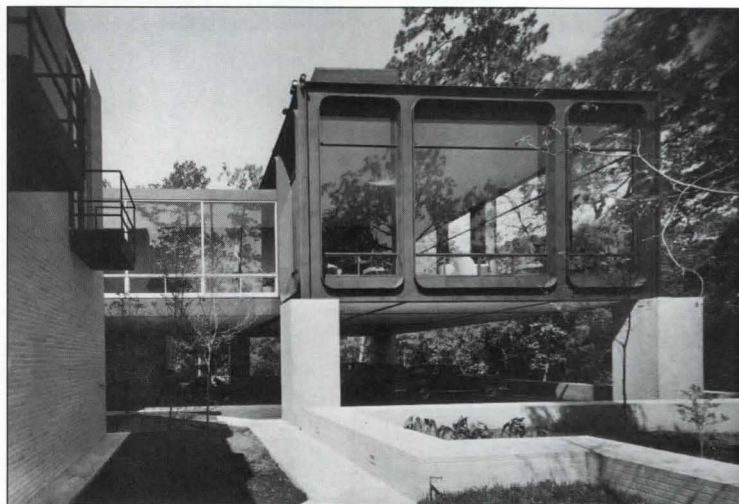
Most, however, sold in the \$1000-\$1400 range. These 56 wooden sculptures yielded over \$153,000 for the museum.

Barry Bergdoll

*The author teaches architectural history at Columbia University.*



Christopher's Wren House by Michael Graves.



Barnstone's Maher House, Houston, 1964.

## Howard Barnstone 1923-1987

Howard Barnstone, FAIA, died, an apparent suicide, on April 29 at his home in Houston at age 64. Barnstone was well-known in architectural circles, and a colorful personality in the city he had called home for nearly 40 years.

A native of Maine, Barnstone attended Amherst College and Yale before two years' military service. In 1948 he completed professional studies at Yale, and in the fall joined the faculty of the University of Houston.

Barnstone brought to Houston a provocative interest in the arts and a progressive intellect. He began practice in 1949, forming partnerships with Preston M. Bolton (1952-1961) and a former student, Eugene Aubry (1966-1969).

Barnstone gained early fame from a series of houses produced in Texas, which were strongly in the spirit of Mies van der Rohe and early Philip Johnson. These precise steel and glass Modernist statements flew in the face of Houston's complacent, eclectic suburbia. By the mid-1960s, his work became more expressively articulated, particularly in its massing and structural expression. His most recent work included the use of historical references. Part of this sensitivity to history was evidenced in his 1965 book (with photographer Henri Cartier-Bresson) *The Galveston That Was*, which was provocative not only in its argument for the preservation of a Victorian legacy, but also in its honest presentation of buildings and their inhabitants. Barnstone's more recent 1979 book reappraised the work of classical revivalist John F. Staub.

During his career, Barnstone won a number of state and local component as well as national design awards. He also served as



Galveston County Publishing Co., 1966.

associate architect for Philip Johnson at the University of St. Thomas (Barnstone and Aubry were architects for subsequent M.D. Anderson Hall and Guinan Hall) and at the Museum of South Texas in Corpus Christi. Barnstone and Aubry also assumed full responsibility for the design and completion of the Rothko Chapel following Johnson's resignation of the commission.

Howard Barnstone's papers and drawings have been given to the Houston Metropolitan Research Center of the Houston Public Library, and a memorial fund was established for the library of the College of Architecture of the University of Houston. **Peter C. Papademetriou**

## Innovations at Lighting World

Over the last six years, Lighting World has grown in size, frequency, and importance. While some of that growth reflects the increasing interest in lighting among designers, much of it has to do with the increasing rate of change within the lighting industry itself. Not all of that change is substantive. There is a lot of pressure, say lighting manufac-

(continued on page 28)



**Lighting** (continued from page 27)

turers, to come up with new products for each show, many of which are refinements or sometimes near imitations of products available the year before. Said one producer, "Ours is a copycat industry."

Still, the number of new ideas and new technologies introduced at Lighting World in New York this May was remarkable. Some of the more innovative products selected by a panel of designers and specifiers for a product preview session included a track lighting system developed by ALKCO in which both track and fixtures are recessed; a track system by Edison Price in which the fixtures can rotate 360 degrees both horizontally and vertically; an indirect fixture by Litecontrol that can be pendant-mounted only 12 inches from a ceiling because of its lateral spread of light; a very small tungsten halogen lamp by GTE; a very small bi-pin metal halide lamp by Osram; a very thin wall box that combines a switch and dimmer by Prescolite; and a very small fixture called Super Beamer by Lightolier that delivers a strong, well-defined beam of light from a miniature tungsten-halogen lamp.

These new products will no doubt have their imitators at next year's Lighting World. But there also will undoubtedly be more of the innovation that has made the lighting industry so fascinating to watch.

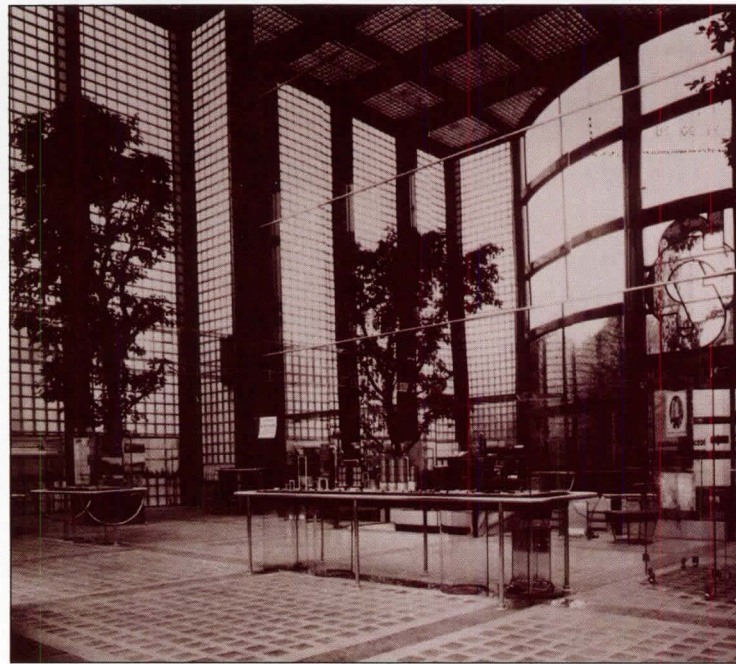
Thomas Fisher

## 1937 World's Fair Examined in Paris

The full complexity of the 1930s, represented best perhaps in the last great pre-War fair, is ripe for reappraisal. "The 50th Anniversary of the 1937 Exposition Internationale" is installed in one of the few permanent legacies of the 1937 fair: the Palais de Tokyo, home of the Musée d'Art Moderne de la Ville de Paris (through August 30).

The show assembles for the first time a rich sampling of architectural projects and period photographs from official archives as well as an evocative assortment of objects and posters from the various exhibitions in the fair's 300 pavilions. This assembly invites a sweeping reexamination of the period's architectural trends and attitudes towards technological advances.

The very mandate of a world's fair provided a challenge to international Modernism as it had coalesced in the 1920s. Each of



Saint-Gobain pavilion at 1937 Paris World's Fair.



Press pavilion beneath the Eiffel Tower.

the 44 countries participating was confronted with the dual-edged invitation to find an architectural image that at once expressed the genius of its particular cultural traditions and celebrated the nation's commitment to modernity. If ten years earlier the 1927 Weissenhof Exhibition in Stuttgart had created the illusion of a monolithic Modernism, in 1937 diversity was openly encouraged. Alvar's textured wooden Finnish pavilion confronted the austere elegance of Jose Luis Sert's Spanish pavilion with its ample use of exterior photo murals. At the very heart of the fair, Le Corbusier's Japanese disciple Sakakura synthesized Modernist forms and materials with Japanese tradition.

Even more telling was the panorama of French regional pavilions on the Eiffel Tower site, where the exhibition's director expressly discouraged the use of the International Style as incapable of expressing the character of France's provinces and declared the fair a potent laboratory for fostering a diverse Modern regionalism. A similar agenda stood behind the call for "exotic decorum" in the pavilions of France's overseas colonies, tellingly assembled on the Ile des Cygnes in the Seine.

Given this quest for expression of national or regional characters and virtues, it is hardly surprising that the 1937 fair was the first international event to assign an official role to the modern industry of advertising. The pavilions themselves took on the character of advertisements even more explicitly when erected by specific industries, including the refined elegance of Le Môme's Palais du Bois (Palace of Wood) and the transparent grids of Coulon and Adnet's Saint-Gobain glass manufactory building, one of many pavilions that took on a magical appearance when lighted at night.

For many, it was this demonstration of technological splendors, the confrontation with radio, still rare in many French households, television, and the display of scientific advances in the Palais de la Découverte (Palace of Discovery) that left the greatest impression. In this anniversary exhibition, the 1937 World's Fair invites a reappraisal of the ambiguous relationship between art and technology as well as between style and politics, at one of the most complex moments of Modernism.

Barry Bergdoll

The author teaches architectural history at Columbia University.

**Getty** (continued from page 25)

itself occupies fewer than five acres of the 110-acre building site, surrounded by formal gardens and protected open space. (Landscape architects Emmet L. Wemple & Associates are assisting the architect for landscape design.)

Visitors will park in an underground garage a half mile north of the complex and travel to it by shuttle bus. Although the plan calls for construction of a new Getty Museum, with 100,000 square feet of galleries and educational facilities open to the general public, the Center also serves a large community of scholars and conservators. The Getty Center for the History of Art and the Humanities, the Getty Conservation Institute, the Getty Art History Information Program, and the Getty Center for Education in the Arts, all will occupy new facilities on site. Only the famous antiquities collection will remain in the present Malibu museum, a recreation of the Roman Villa dei Papiri.

Barring unforeseen difficulties in the approvals process, the Trust expects to begin construction in the summer of 1989, opening in 1993.

Daralice D. Boles

## Arthur Ross Classical Awards

Two architects, two craftsmen, a mural painter, a patron, and the City and County of Milwaukee are the recipients of the 1987 Arthur Ross Awards, presented annually by Classical America.

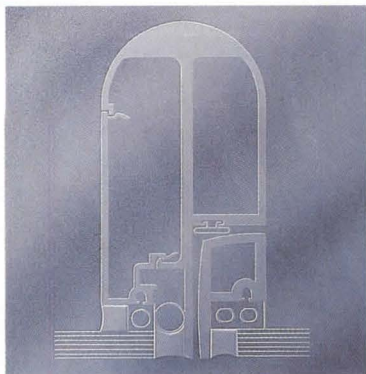
The Bureau of Forestry, Department of Public Works, City of Milwaukee, and the Department of Parks, Recreation and Culture, County of Milwaukee, were honored for the flower beds in the city boulevards and county parks, respectively, while architects David T. Mayernik and Thomas N. Rajkovich won for their 1986 competition-winning design for the grounds of the Minnesota State Capitol. Architect Norman Neuerburg, consultant for the Getty Museum in Malibu; mural restorer Tania Vartan; and craftsmen Tayssir Suleiman and Ahmad K. Suleiman, specialists in ornamental plaster work and scagliola whose work can be seen in the restored Willard Hotel in Washington, D.C., were also honored. Finally, the Board of Trustees of the Henry E. Huntington Library and Art Gallery, San Marino, Calif., were recognized for commissioning the Virginia Steele Scott Gallery of American Art.

Photos: Institut Français d'Architecture



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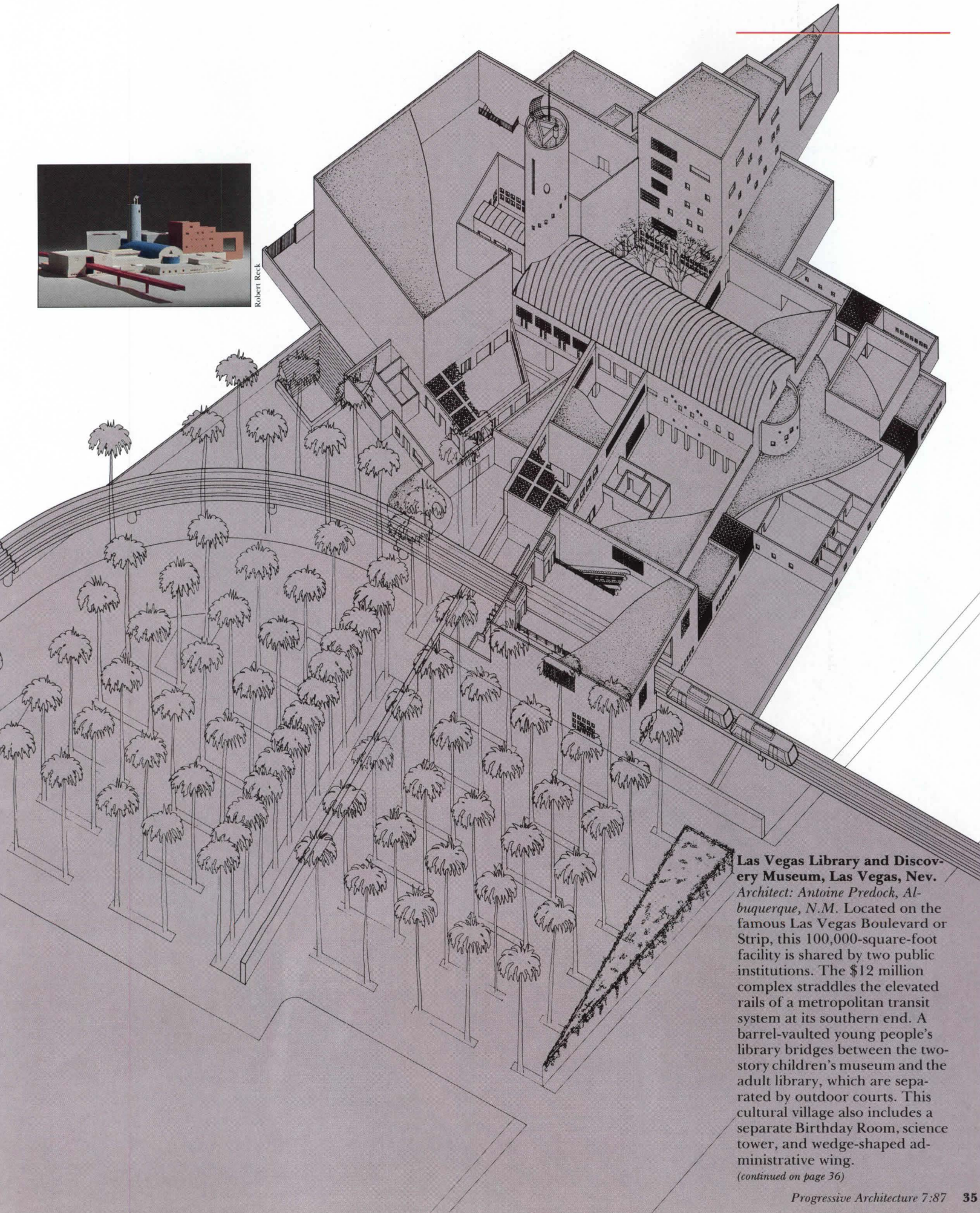


# In Progress

Three museums—in Las Vegas, Seattle, and Philadelphia—fill this month's In Progress.



Robert Reck

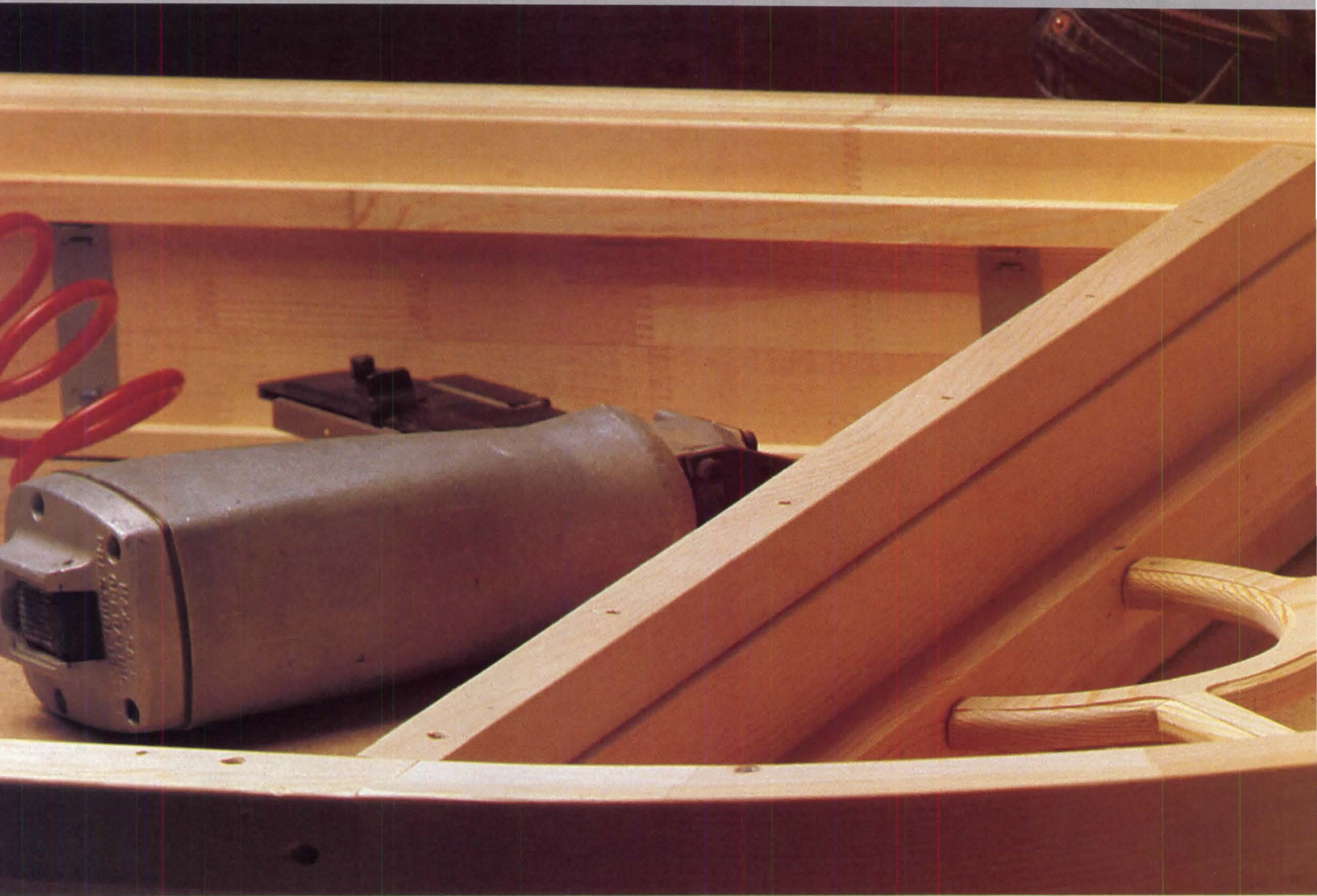


## Las Vegas Library and Discovery Museum, Las Vegas, Nev.

*Architect: Antoine Predock, Albuquerque, N.M.* Located on the famous Las Vegas Boulevard or Strip, this 100,000-square-foot facility is shared by two public institutions. The \$12 million complex straddles the elevated rails of a metropolitan transit system at its southern end. A barrel-vaulted young people's library bridges between the two-story children's museum and the adult library, which are separated by outdoor courts. This cultural village also includes a separate Birthday Room, science tower, and wedge-shaped administrative wing.

(continued on page 36)





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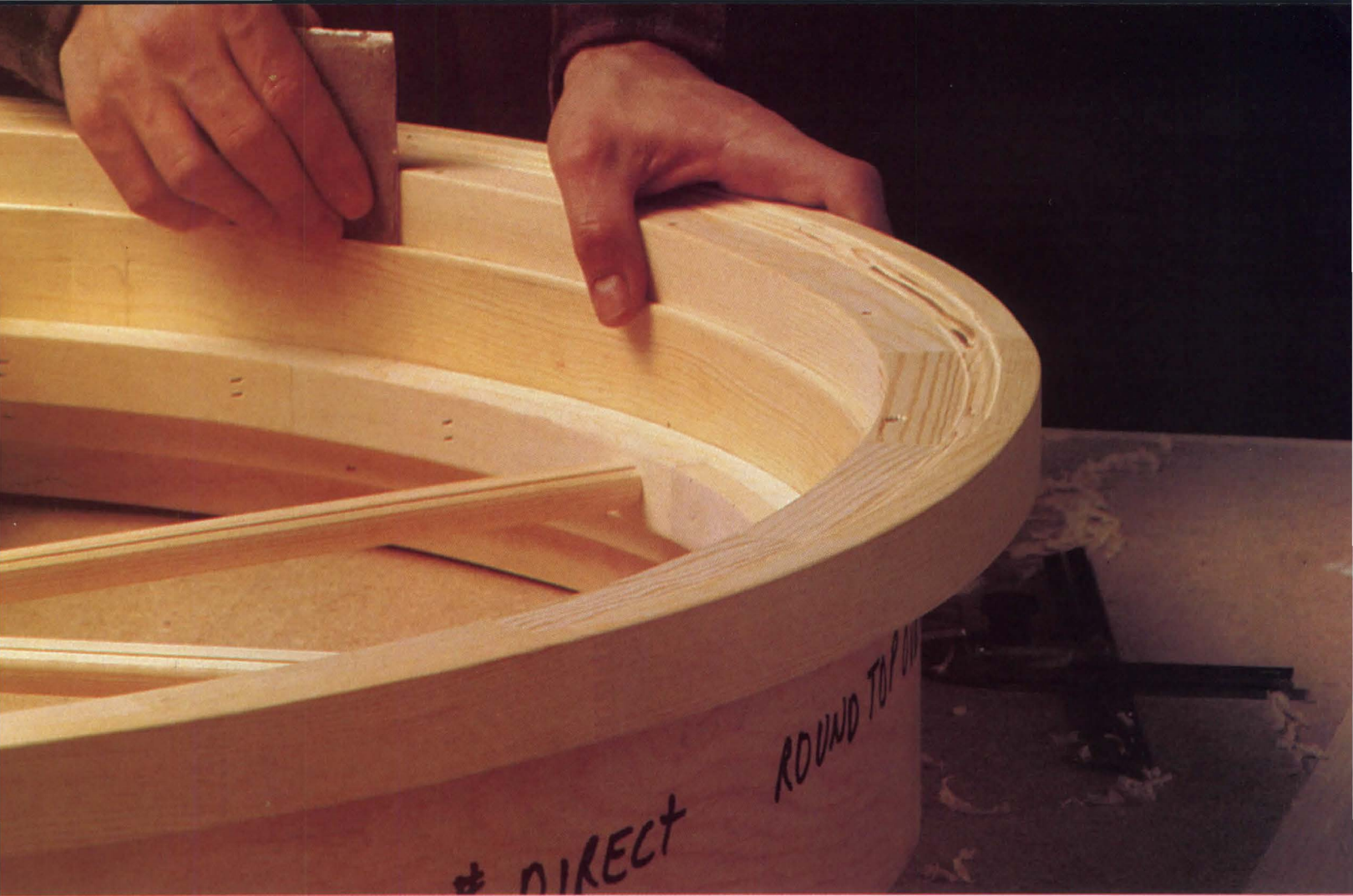
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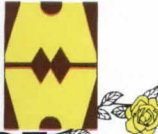
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State

Zip

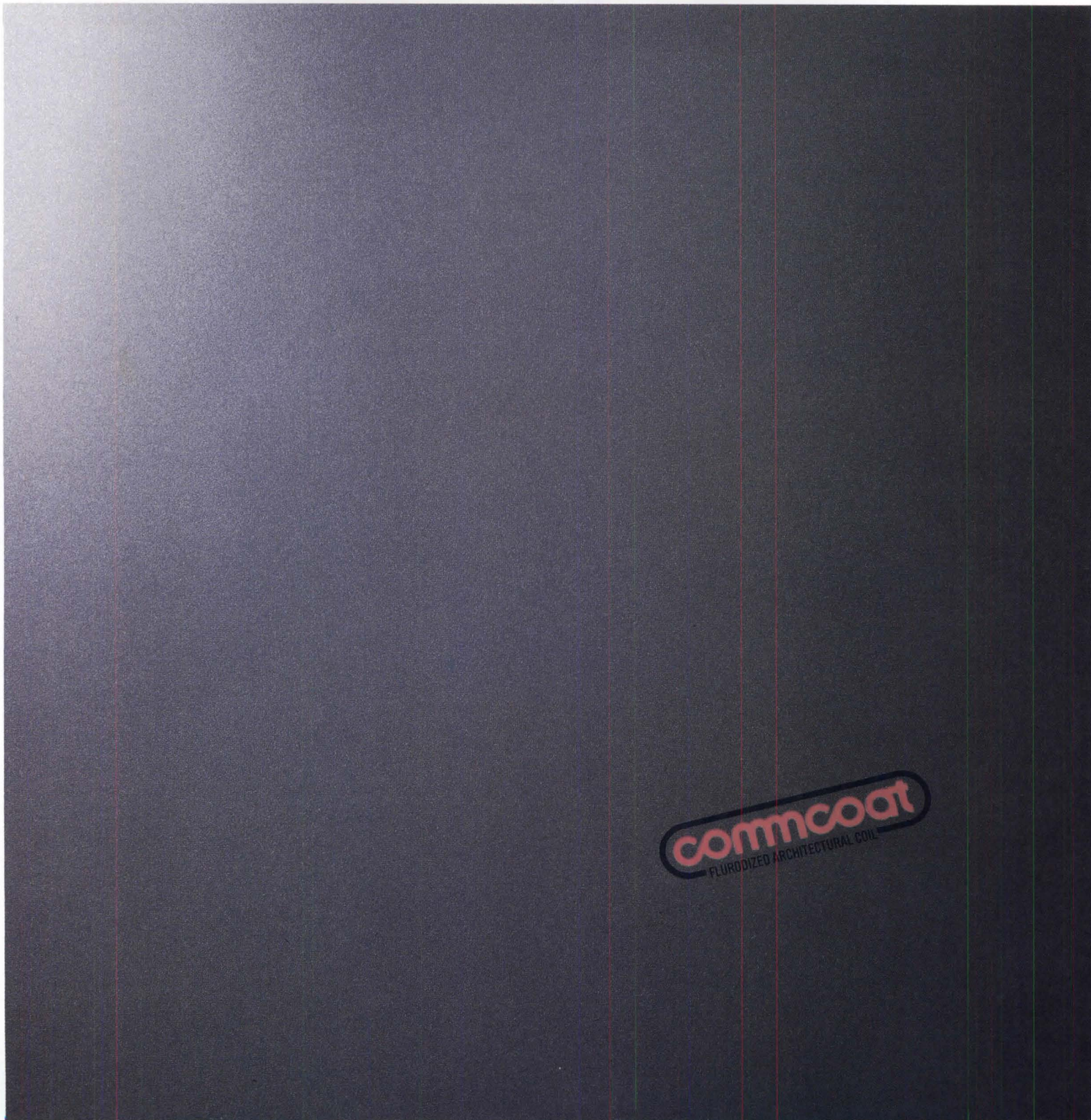
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# Perspectives

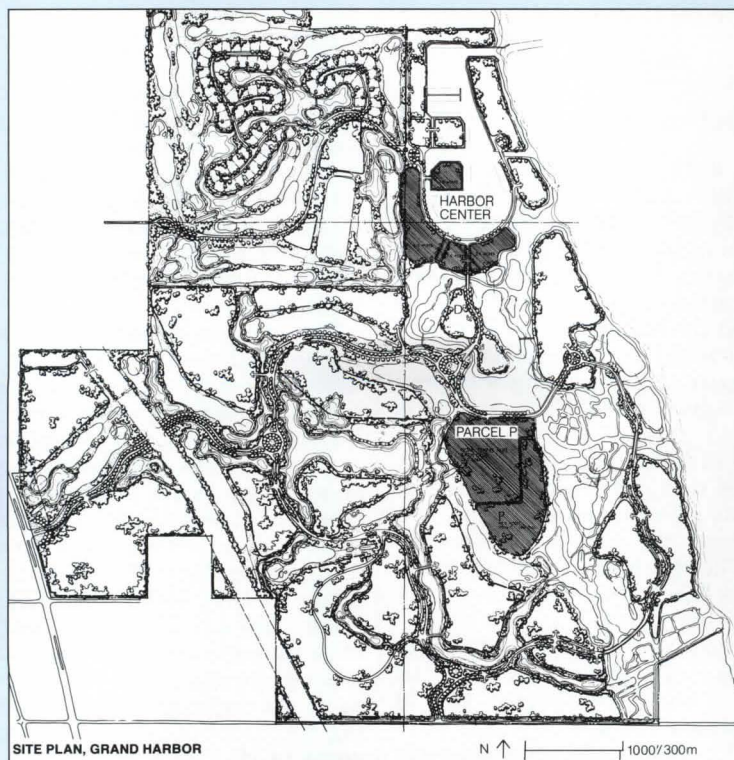
This Florida commercial center and housing development, designed by Robert A.M. Stern Architects as part of a new resort town in Vero Beach, draws upon regional precedents, from Palm Beach to Coral Gables.



Harbor Center, Stern's commercial and residential crescent and marina in Grand Harbor, Vero Beach, Fla.



Crescent elevation, Harbor Center.



Site plan, Grand Harbor, showing Harbor Center, north, and Parcel P.

## Resort Suburb by Robert Stern

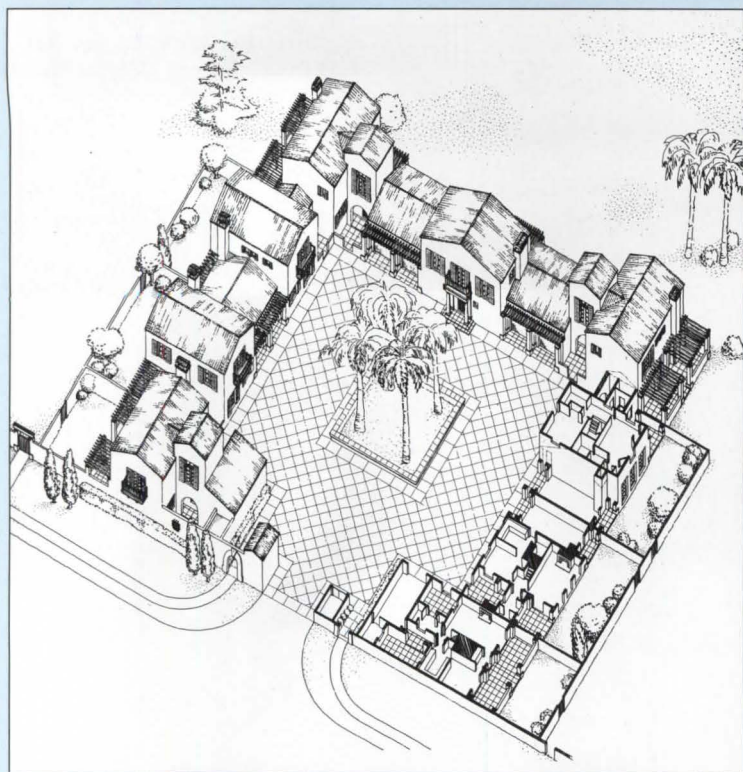
A longstanding fan of Florida resort towns, Robert Stern has finally snared a project worthy of Palm Beach architect Addison Mizner. Not one, but two commissions in the 800-acre Grand Harbor development at Vero Beach, on the Intercoastal Waterway, have given the New York architect a chance to build his own "winter Newport."

Stern's commercial crescent and island, given the rather uninspired signature of Harbor Center, will nevertheless form the heart of Grand Harbor, a resort community planned by Vero Beach-based Schaub Communities around two golf courses and a marina (see site plan, left). Further south on a site designated as "Parcel P," the architect is designing courtyard housing and three country clubs. (Paul Whalen is project architect for both commissions, and Bradshaw, Gill, Furster & Associates, Lauderdale-by-the-Sea, Fla., are landscape consultants.)

Both commissions employ the freewheeling Florida Mediterranean style that Stern described in his television series *Pride of Place* as an "exuberantly detailed fantasy drawn from elements of the architecture of Old Spain and Arabic influences . . . grafted onto the efficient organization of academic French planning."

Accordingly, the commercial  
(continued on page 42)





Axonometric of housing court, Parcel P.



(continued from page 41)

crescent's arcades and small courts shape a "grand but cozy" waterfront promenade.

Eighteen buildings along Marina Drive split up 95,000 square feet of retail space, anchored by a market hall at one end and a large restaurant at the other. The two floors above are occupied by 120 one- and two-bedroom condominium apartments to give the feeling of a

true downtown, says Stern. Materials are stucco walls, clay tile roofs, and shutters.

Three clubs in Parcel P create a second center. The swim, tennis, and golf clubs surround a common walled entry court that also defines the main entrance to the residential community. A total of 67 townhouses, conforming to one of four prototypical plans, are organized around seven auto courts.

Aimed at a mid-range market (\$140,000 to 160,000), the two- and three-bedroom "tennis villas" fill a gap in the Florida market between the typical cookie-cutter condominiums on the one hand and the more pricey detached suburban villas on the other. Harbor Center's condominium apartments, too, are aimed at a slightly different market that Schaub feels has been shut out of the Florida real estate market. **Daralice D. Boles ■**



Site plan, Parcel P.



Golf club, rear (left) and front elevations.

(Advertisement)

## Small Company's New Golf Ball Flies Too Far; Could Obsolete Many Golf Courses

Pro Hits 400-Yard Tee Shots During Test Round  
Want To Shoot An Eagle or Two?

By Mike Henson

MERIDEN, CT — A small golf company in Connecticut has created a new, super ball that flies like a U-2, putts with the steady roll of a cue ball and bites the green on approach shots like a dropped cat. But don't look for it on weekend TV. Long-hitting pros could make a joke out of some of golf's finest courses with it. One pro who tested the ball drove it 400 yards, reaching the green on all but the longest par-fours. Scientific tests by an independent lab using a hitting machine prove the ball out-distances all major brands dramatically.

The ball's extraordinary distance comes partly from a revolutionary new dimple design that keeps the ball aloft longer. But there's also a secret change in the core that makes it rise faster off the clubhead. Another change reduces air drag. The result is a ball that gains altitude quickly, then sails like a glider. None of the changes is noticeable in the ball itself.

Despite this extraordinary performance the company has a problem. A spokesman put it this way: "In golf you need endorsements and TV publicity. This is what gets you in the pro shops and stores where 95% of all golf products are sold. Unless the pros use your ball on TV, you're virtually locked out of these outlets.

TV advertising is too expensive to buy on your own, at least for us.

"Now, you've seen how far this ball can fly. Can you imagine a pro using it on TV and eagle-ing par-fours? It would turn the course into a par-three, and real men don't play par-three's. This new fly-power forces us to sell it without relying on pros or pro-shops. One way is to sell it direct from our plant. That way we can keep the name printed on the ball a secret that only a buyer would know. There's more to golf than tournaments, you know."

The company guarantees a golfer a prompt refund if the new ball doesn't cut five to ten strokes off his or her average score. Simply return the balls — new or used — to the address below. "No one else would dare do that," boasted the company's director.

If you would like an eagle or two, here's your best chance yet. Write your name and address and "Code Name S" (the ball's R&D name) on a piece of paper and send it along with a check (or your credit card number and expiration date) to National Golf Center (Dept. H-447), 500 S. Broad St., Meriden, CT 06450. Or phone 203-238-2712, 9-5 Eastern time. No P.O. boxes, all shipments are UPS. One dozen "S" balls cost \$21.95 (plus \$1.95 shipping), two to five dozen are only \$19.50 each, six dozen are only \$99.00. You save \$43.00 ordering six. Shipping is free on two or more dozen. Specify white or Hi-Vision yellow.

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**"Sacré bleu! I cannot work in this dreadful light."**





**"Voilà, now this is the perfect light."**





# LYTESPREAD.

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That's why Lightolier created a new kind of indirect lighting system. Litespread.

It provides a source of optimum quality light for both the architect who designs the space and the people who work in it.

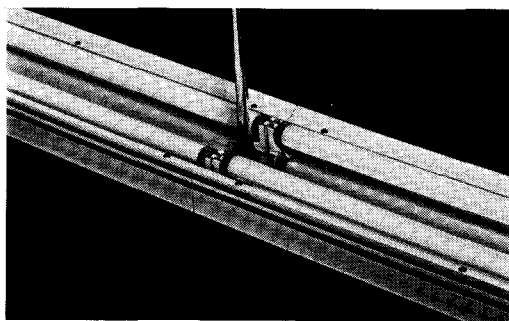
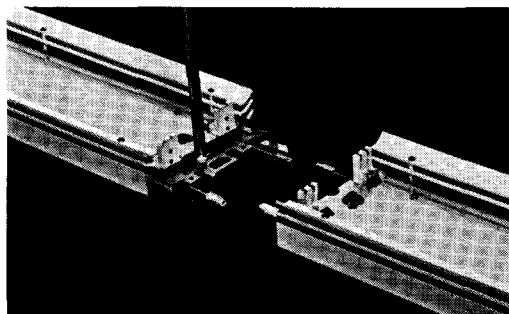
### WHAT IS LITESPREAD, EXACTLY?

It's three, beautifully designed, precision-machined modular systems. They interlock for long runs or may be used individually.

The Litespread series has complete flexibility.

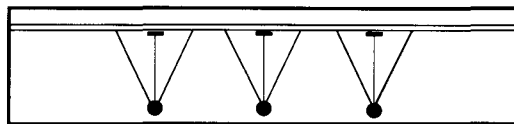
Litespread 6 provides totally direct, general lighting. Litespread 7 offers general lighting, plus spill-lighting along its length. And Litespread 4 is specifically designed for dramatic wall-washing.

All three are literally a snap to install. An innovative locking mechanism and electrical "quick" connectors speed installation and ensure proper wiring connections.

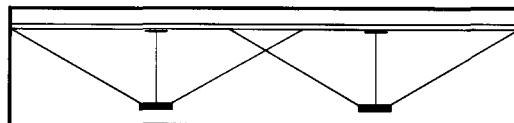


### HOW IS IT DIFFERENT?

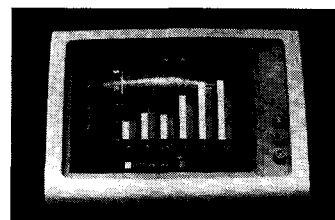
Conventional indirect systems do not distribute light evenly enough to avoid hot spots. Uneven ceiling brightness leads to uneven surface brightness.



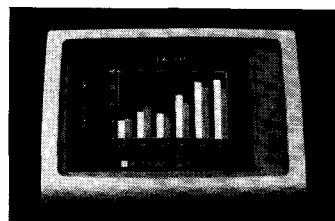
Litespread, on the other hand, gives off a wide spread of overlapping light that creates a soft, even brightness throughout. With no shadowy areas.



### WHAT ABOUT COMPUTER SCREEN GLARE?



Litespread prevents it by indirectly diffusing the light evenly over the ceiling. As a result, brightness contrast between the light and the surface is reduced—eliminating veiling reflections from both printed material and computer screens.



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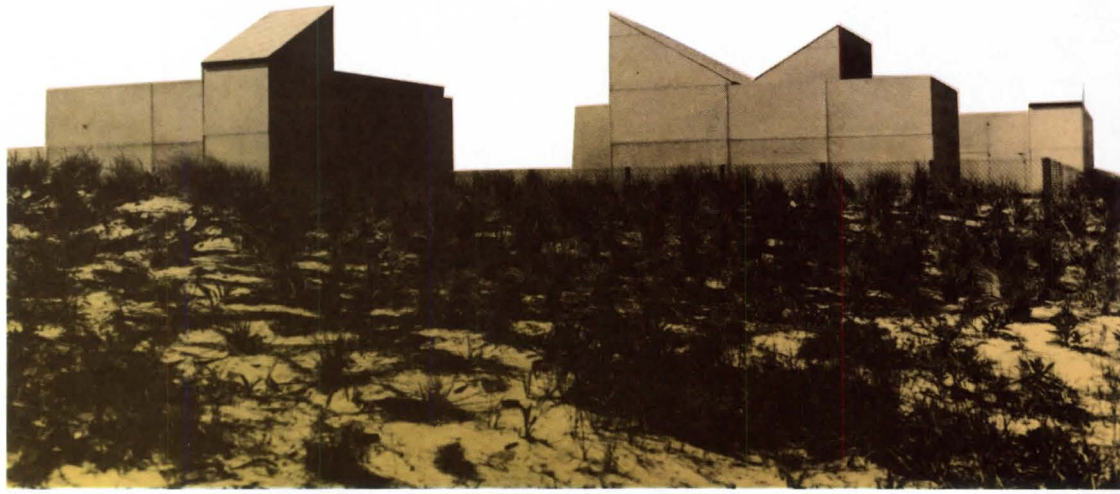
ZCON Builders Building  
Oakland, CA

Architect:  
Sandy & Babcock  
Architects

VUE® Pattern



# P/A Calendar



William Muschenheim, bath houses, Hampton Bays, 1930 (demolished), *Long Island Modern*, August 16.

## Exhibitions

### Through July 26

American Art Deco. Renwick Gallery, Smithsonian Institution, Washington, D.C. Also, **September 26–November 1**, Center for the Fine Arts, Miami, Fla.

### Through July 31

New and Different: Home Interiors in 18th Century America. Museum of American History, Smithsonian Institution, Washington, D.C.

### Through August 7

The Architecture of Herman Miller. Gallery at the Old Post Office, Dayton, Ohio.

### Through August 16

Graphic Madrid: Contemporary Spanish Architectural Drawings. Octagon Museum, Washington, D.C.

### Through September 6

The Golden Age of Ottoman Architecture: Sinan, Sultan Suleyman's Court Architect. The Art Institute, Chicago.

### Through September 15

Mario Bellini: Designer. The Museum of Modern Art, New York.

### Through September 20

Kenzo Tange: 40 Years of Urban Design and Architecture. Ecole Nationale Supérieure des Beaux-Arts, Paris.

### Through September 27

Art Nouveau Bing: The Paris Style 1900. Cooper-Hewitt, New York.

### Through September 30

Robert Adam and Kedleston Hall: The Making of a Neoclassical Masterpiece. Cooper-Hewitt, New York.

### August 3–October 31

Leon Krier and the Completion of Washington, The Octagon Museum, Washington, D.C.

### August 15–October 11

Frank Lloyd Wright and the Johnson Wax Buildings: Creating a Corporate Cathedral. Farish Gallery of Rice University, Houston, Texas (See P/A, April 1986, p. 27).

### August 16–September 20

Long Island Modern: The First Generation of Modernist Architecture on Long Island, 1925–1960. Guild Hall Museum, East Hampton, N.Y.

### August 16–October 18

Machine Age in America, Los Angeles County Museum of Art, Los Angeles (See P/A, Nov. 1986, p. 110).

### August 16–November 1

The Art that is Life: The Arts and Crafts Movement in America 1875–1920. Los Angeles County Museum of Art, Los Angeles (See P/A, May 1987, p. 32).

### August 28–October 25

The Function of Ornament: The Architecture of Louis Sullivan, St. Louis Art Museum, St. Louis, Mo. (See P/A, Nov. 1986, p. 26).

## Competitions

### July 20

Entry Deadline, West Hollywood Civic Center Design Competition. Contact Helen J. Goss, City of West Hollywood, 8611 Santa Monica Blvd., West Hollywood, Calif. 90069 (213) 854-7461.

### July 31

Entry deadline, Prestressed Concrete Institute's 1987 Professional Design Awards Program. Contact Dawn Myers, PCI, 175 W. Jackson Blvd., Chicago, Ill. 60604 (312) 786-0300.

### August 3

Registration deadline, Society of American Registered Architects 1987 Annual Design Awards. Contact 1987 SARA Awards Chairman, Society of American Registered Architects, 320 N. Michigan Ave., Chicago, Ill. 60601-3170.

## Conferences

### July 22–25

American Society of Interior Designers National Conference, Toronto, Ontario, Canada. Contact Communications, ASID, National Headquarters, 1430 Broadway, New York, N.Y. 10018 (212) 944-9220.

### July 27–31

SIGGRAPH '87, Fourteenth Annual Conference on Computer Graphics and Interactive Techniques, Anaheim, Calif. Contact SIGGRAPH '87 Conference Management, 111 E. Wacker Dr., Chicago, Ill. 60601 (312) 644-6610.

### August 2–6

1987 Illuminating Engineering Society of North America Annual Conference, Scottsdale, Ariz. Contact Cindi Altieri, IES, 345 E. 47th St., New York, N.Y. 10017 (212) 705-7269.

### August 5–8

Monterey '87: Influences on Design, Industrial Designers Society of America National Conference, Monterey Conference Center and Doubletree Inn, Monterey, Calif. Contact IDSA, 1142-E Walker Rd., Great Falls, Va. 22066 (703) 759-0010.

### August 6–8

International Perspective on Environmental Graphics, Society of Environmental Graphic Designers' 1987 National Conference, Cranbrook Academy of Art, Bloomfield Hills, Mich. Contact Sarah Speare, Executive Director, SEG, 47 Third St., Cambridge, Mass. 02141 (617) 577-8225.

### August 10–14

Computer Art and Design Conference, School of the Art Institute of Chicago, Chicago, Ill. Contact National Computer Graphics Association, 2722 Merilee Dr., Suite 200, Fairfax, Va. 22031 (703) 698-9600.

### August 13–15

"Architecture and Landscape Architecture," Council of Educators in Landscape Architecture 1987 Conference, Rhode Island School of Design, Providence, R.I. 02903.

### August 16–21

Design '87, Amsterdam RAI Congress Center, Amsterdam, The Netherlands. Contact Secretariat Design '87, QLT Convention Services, Alton House, Keizersgracht 792 1017 EC, Amsterdam, The Netherlands.

### August 17–20

National Computer Graphics Association's Engineering & Manufacturing '87, Bayside Exposition Center, Boston, Mass. Contact NCGA, 2722 Merilee Dr., Suite 200, Fairfax, Va. 22031 (703) 698-9600.

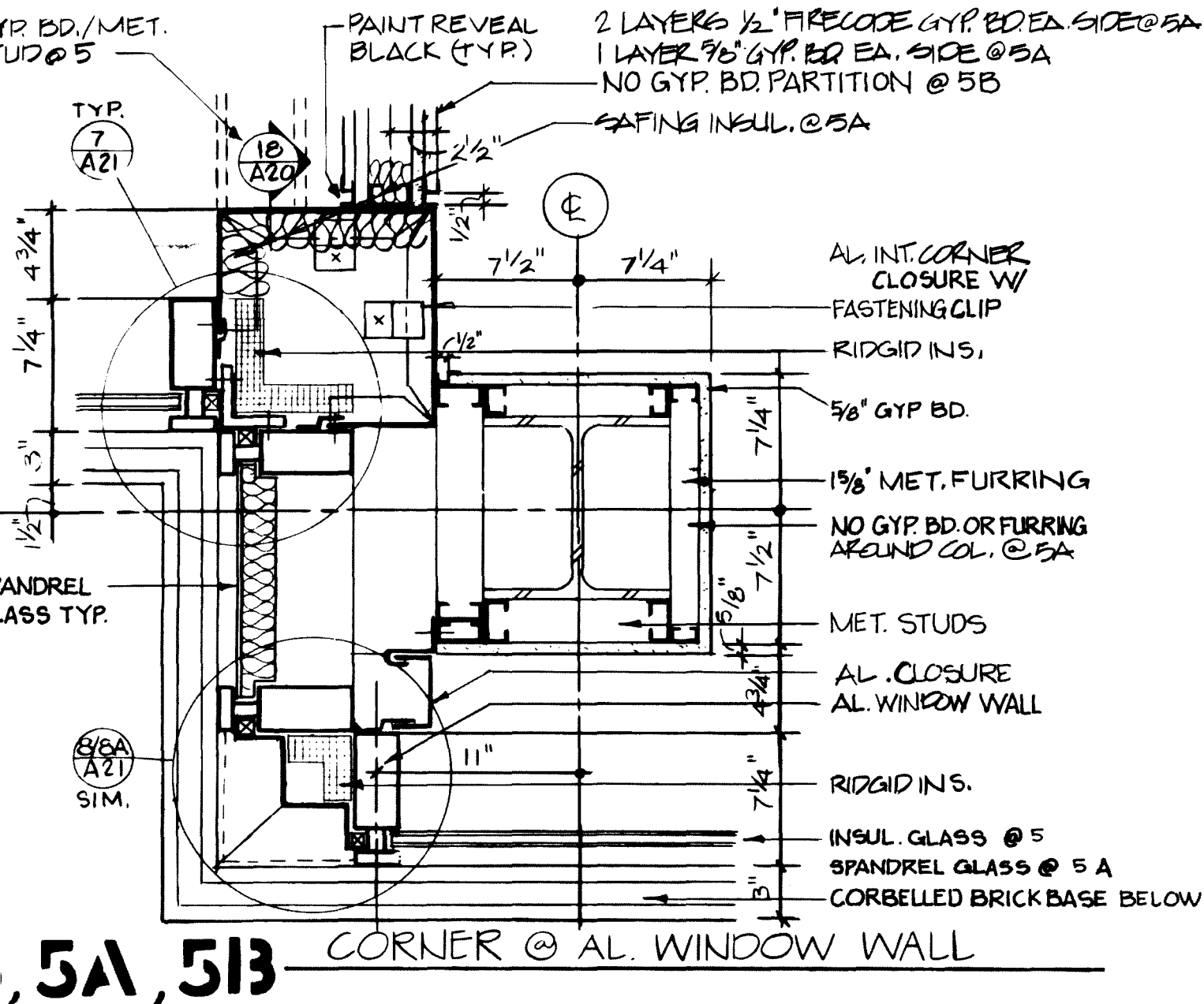
### August 17–20

International Congress of Planning and Design Theory, Boston Park Plaza and Towers, Boston, Mass. Contact American Society of Mechanical Engineers, 345 E. 47th Street, New York 10017.









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Circle No. 314



# Vision Break-through

*When I put on the pair of glasses what I saw I could not believe. Nor will you.*

By Joseph Sugarman

I am about to tell you a true story. If you believe me, you will be well rewarded. If you don't believe me, I will make it worth your while to change your mind. Let me explain.

Len is a friend of mine who knows good products. One day he called excited about a pair of sunglasses he owned. "It's so incredible," he said, "when you first look through a pair, you won't believe it."

"What will I see?" I asked. "What could be so incredible?"

Len continued, "When you put on these glasses, your vision improves. Objects appear sharper, more defined. Everything takes on an enhanced 3-D effect. And it's not my imagination. I just want you to see for yourself."

## COULDN'T BELIEVE EYES

When I received the sunglasses and put them on I couldn't believe my eyes. I kept taking them off and putting them on to see if indeed what I was seeing was indeed actually sharper or if my imagination was playing tricks on me. But my vision improved. It was obvious. I kept putting on my \$100 pair of sunglasses and comparing them. They didn't compare. I was very impressed. Everything appeared sharper, more defined and indeed had a greater three dimensional look to it. But what did this product do that made my vision so much better? I found out.

The sunglasses (called BluBlockers) filter out the ultraviolet and blue spectrum light waves from the sun. You've often heard the color blue used for expressions of bad moods such as "blue Monday" or "I have the blues." Apparently, the color blue, for centuries, has been considered a rather depressing color.

For eyesight, blue is not a good color too. There are several reasons. First, the blue rays have one of the shortest wavelengths in the visible spectrum (red is the longest). As a result, the color blue will focus slightly in front of the retina which is the "focusing screen" in your eye. By blocking the blue from the sunlight through a special filtration process, and only letting those rays through that indeed focus clearly on the retina, objects appear to be sharper and clearer.

The second reason is even more impressive. It is harmful to have ultra-violet rays fall on our eyes. Recognized as bad

for skin, UV light is worse for eyes and is believed to play a role in many of today's eye diseases. In addition, people with contact lenses are at greater risk because contacts tend to magnify the light thus increasing the sun's harmful effects.

## SUNGLASS DANGER

Finally, by eliminating the blue and UV light during the day, your night vision improves. The purple pigment in your eye, called Rhodopsin, is affected by blue and ultraviolet light and the eyes can take hours to recover from the damage.

But what really surprised me was the danger in conventional sunglasses. Our pupils close in bright light to limit the light entering the eye and open wider at night like the lens of an automatic camera. So when we put on sunglasses, although we reduce the amount of light that enters our eyes, our pupils open wider and we allow more of the harmful blue and ultraviolet light into our eyes.

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**I'm often asked by people who read this, "Do those Blu-Blockers really work?" They really do and please give me the opportunity to prove it. I guarantee each pair of BluBlockers to perform exactly as I described.**

BluBlocker sunglasses use ophthalmic-quality CR-39 lenses with a hard anti-scratch coating. Over 85 percent of all doctors' prescriptions are now filled with CR-39. No shortcuts were taken.

The black, light-weight anodized aluminum frame is one of the most comfortable I have ever worn and compares with many of the \$200 pairs you can buy from France or Italy.

The weakest link in any pair of glasses is the hinge. So there's a precision two-way tension hinge that not only bends when you close the pair, but is spring-loaded to bend outward too. You get a completely flexible frame that will comfortably contour to any size face.

There are also two other models. One is a clip-on pair that weighs less than one

ounce and fits over prescription lenses and the second is a precision-molded plastic frame that looks identical to the aluminum model but without the tension hinge. All models include a padded carrying case and a one-year limited warranty.

I urge you to order a pair and experience your improved vision. Then take your old sunglasses and compare them to the BluBlocker sunglasses. See how much clearer and sharper objects appear with the BluBlocker pair. And see if your night vision doesn't improve as a direct result. If you don't see a dramatic difference in your vision—one so noticeable that you can tell immediately, then send them back anytime within 30 days and I will send you a prompt and courteous refund.

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But from what I've personally witnessed, once you wear a pair, there will be no way you'll want to return it.

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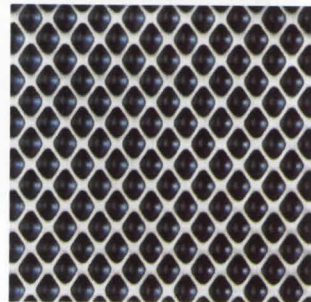
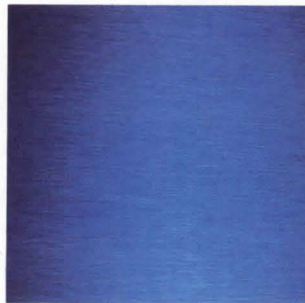
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Corte Madera Town Center in Marin County, CA, is now a marvelous eclectic collection of courtyards and buildings with parapets, cornices, keystones, arches and even a clock tower.

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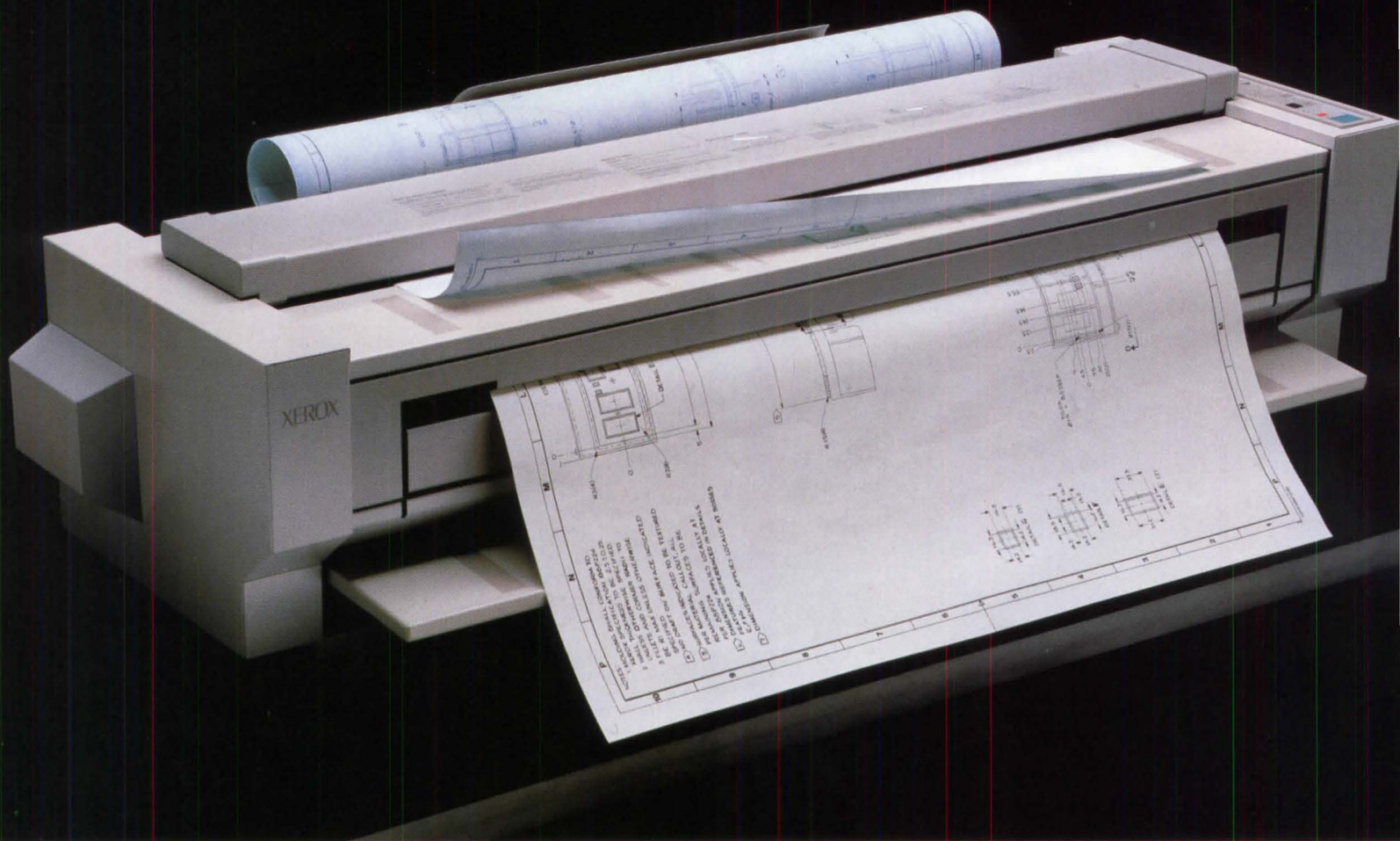
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**Management:** Richard Hunter Cross III suggests ways in which firms might better address the new needs of developer clients.

**Law:** Norman Coplan shows what to watch out for in indemnifying clauses proposed by owners.

## Management: The New Economics of Buildings

The new economics of real estate is driving a revaluation, downward, of the traditional role of architecture in the building process. But the cloud hanging over the design industry—one characterized by oversupply in many regional markets, declining building rates in many building categories, and low or negative real growth in fee structures and compensation levels—has a silver lining. Paralleling the downward revaluations of traditional design services is an upward trend among owners to pay for new and closely derived services. This shifting in values confronts architects with a gut-wrenching question: fight or switch? To fully appreciate these fundamental shifts in clients' value systems, it is helpful to have a rudimentary understanding of the forces driving the new economics of real estate.

### Background

At the macro level, a fundamental adjustment has occurred in the economics of investment quality real estate. This includes office buildings, commercial properties, major residential developments, and mixed use facilities, but excludes custom homes. Most simply, the spread between the cost of capital—roughly approximated by commercial interest rates—and the rate of appreciation in the value of these properties has narrowed. In many overbuilt regions, the traditional relationship between these two factors, where real estate appreciation has outpaced the cost of capital by several healthy percentage points, has even been reversed. For the time being, building depreciation is for real in these markets, and not just for income tax purposes. The implications here are astounding. For the first time (with only a few short-term exceptions) since the Great Depression, investing in the creation of buildings has

become something other than a generally safe bet. In fact it has become very risky, and the margin for error, rather than easing, is continuing to shrink.

As a result, prospective owners, who until recently were assured of handsome increases in the future values of most buildings they created, now agonize about whether the future financial returns from building projects will compare favorably with the costs of money and with the returns from other investment alternatives. The net effect of this squeeze on owners' margins has been to focus their attention more on financial aspects than on the traditional architectural aspects of their projects.

Concurrent with the emergence of these new economics in real estate, a subtle, yet strong and steady groundswell of change has arisen in the ownership of significant properties and development projects in the United States. Historically, the financiers played only passive roles in providing debt financing to building developers. Economic returns fueled by inflation assured handsome and relatively safe returns from real estate loans and still left handsome profits for the developers. So good, in fact, were the returns during the late 1960s that these institutions fought viciously for opportunities to invest even in marginal projects, which led to the virtual collapse of Real Estate Investment Trusts (REITS) in the early 1970s.

When viewed from a longer term perspective, however, the collapse of the REITS was only a minor correction. In a single action, the federal government with the Employee Retirement Income Security Act (ERISA) in 1974 reinjected lifeblood—billions of investment dollars from pension funds—into real estate development. Subsequent tax provisions provided even more breath (through syndications) and momentum. So strong was the stimulus that financial institutions found themselves overwhelmingly attracted to the

(continued on page 58)

## Law: Indemnifying Owners in Contracts

Under the prevailing rule of law, an architect is liable to his client for damages sustained by the client as a result of the architect's negligence. But attorneys for private clients, and many public agencies, apparently feel the need for additional protection by inserting indemnification clauses in the owner/architect agreement. If such a clause merely restates the liability of an architect as provided by law, it is not of significant concern. However, if the indemnification provision subjects the architect to liability for damages sustained by his client, independent of the architect's fault or negligence, then it is of great concern.

In his zeal to protect the owner, the owner's attorney will generally ask for an indemnification that is too broadly or vaguely worded. For example, many proposed indemnification provisions require architects who have allegedly committed errors or omissions to "defend" the owner in a claim against him. Since most professional liability insurers will not provide such a defense, that requirement is unacceptable. It is also common for proposed indemnification provisions to require architects who have allegedly had faulty performance to hold the owner harmless against any expenses, including legal fees, that the owner incurs. This provision, as generally worded, is applicable even to claims ultimately found by a court to be without merit. Is it equitable for an architect to be charged with the cost of the defense of an unmeritorious claim against the owner, or should such expense be deemed a project cost that the owner should bear?

The most dangerous aspects of indemnification requirements, however, are those that impose upon the architect a comprehensive responsibility for the consequences of acts that are not necessarily based on the architect's fault or negligence or that

(continued on page 62)





## Perceived opportunity to create value

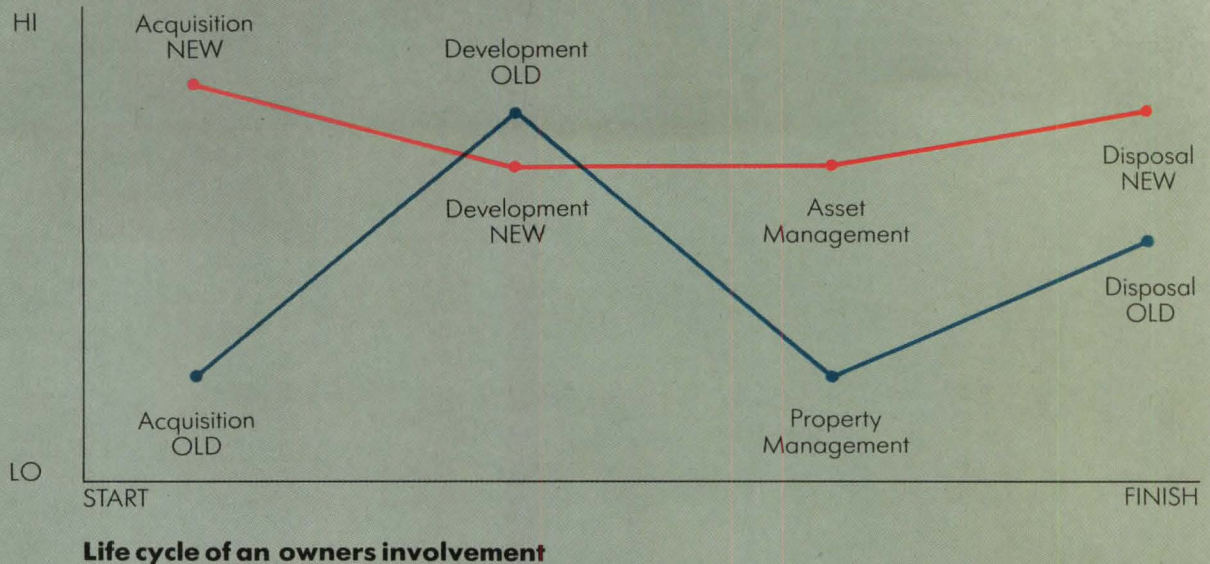


FIGURE 1: OWNERS' OLD AND NEW PERCEPTIONS OF THE OPPORTUNITIES TO CREATE VALUE

**Management** (continued from page 57) benefits of ownership and, as a result, evolved into the nation's strongest cadre of equity developers, both of properties for their own accounts and of properties for pooled funds which they set up as investment instruments for pension managers.

In a replay of the investment frenzy that preceded the collapse of the REITS, the new development community, led by the financial institutions, has created in recent years the worst overbuilt situation in office and commercial buildings in the nation's history. Current inventories in many major cities now represent three to five or more years worth of absorption capacity. In the meantime, vacancy rates stand at nearly 20 percent, up from historical levels of 5–10 percent, and returns to owners have plummeted.

So pervasive has been the influence of the institutions' style on the process of equity development that the traditional profile of the risk-seeking, undercapitalized (or independently financed), entrepreneurial, egocentric, and adventuresome developer—one of architecture's major client bases—has all but disappeared. Even independent developers have taken on the conservative, financially focused characteristics of their institutional counterparts. The result is that the artistic and social aspects of projects have fallen in significance as economic concerns have become first priorities.

### Implications for the Profession

The significance of these shifts is profound enough to command all responsible design professionals to question what architects must do in order to reestablish positions of influence in the

development process for the built environment. The answer lies in repositioning their services to be more responsive to and influential in achieving developers' new primary objectives. Does this mean selling short the highly moral heritage of the profession? Certainly not. Rather, it provides the only insurance that the social and artistic legacy of the architect can regain force and alacrity in the future building process.

• **The Challenge:** The central question is one of marketing, not selling. Unfortunately what most professional firms have adopted over recent years in the name of marketing is not marketing at all. Most professional firm "marketers" start off with the wrong question: "To whom and how can I sell more of what we do?" The right question, which always leads to the right answer, is: "What are the current needs of my prospective clients, and how can I help them?"

The events in the building industry over the past ten to fifteen years have created an entirely new set of answers to this latter question.

• **The Opportunity:** Understanding the new opportunity requires an understanding of the clients' needs in today's real estate creation process. The entire life cycle of an owner's involvement with a property has four distinct phases: finding, developing, managing, and disposal. Traditionally, architects have been involved in only a portion of the second phase, development. But a full appreciation of today's clients' needs carries with it a compelling argument for architects also to expand their roles into the finding, the management, and the disposal phases of the life cycle.

Figure One illustrates how

clients' perceptions of how to create value throughout the life cycle have shifted in recent years. The first point to note in the graph is that clients, by and large, believe that throughout the life cycle there is greater opportunity to create value than before. Historically, the lion's share of value was created and owners' interests were concentrated in the development phase. Now, opportunities for the creation of value and, hence, owners' attention are spread more evenly throughout the entire life cycle.

The second point to note is that the value ascribed to the process of finding attractive properties has skyrocketed. This reflects the fact that most metropolitan areas are overdeveloped at the present time. Competition among developers to identify and secure sites with reasonable prospects for investment is keener than ever. Accordingly, developers' attention is focused, for the time being, on site acquisition. This stands in stark contrast to conditions fifteen years ago when developers focused not on site acquisitions but on creating innovative design schemes—designs that would turn any of the number of readily available sites in most local markets into winners.

The third point to note is that, within the development process itself, the allocations of developers' interests have shifted from design to market feasibility, financial structure, costs, and the revenue stream. Unfortunately, through this shift in interests, design work has been following construction work's general trend toward becoming a lower level, commodity ingredient in the building development process.

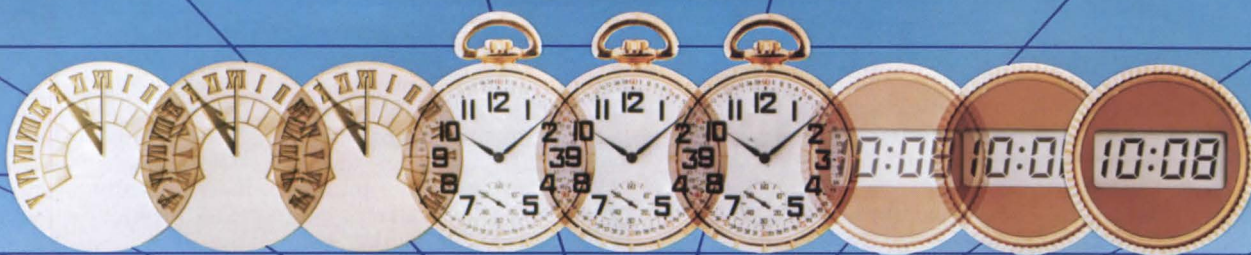
The fourth point to note is the

revolution occurring in the field of property management. With the general slowing of the rate at which new white collar jobs are being created, the absorbing of the baby boom into the work force, the migrating of much of the U.S. heavy industrial base overseas, and the overbuilding in many markets, today's current inventory of structures looks more and more adequate to serve mid-term needs. In such markets, the key to creating value in real estate is in managing existing buildings to maximize their income streams and minimize their operating costs. In many instances, this entails a creative repositioning of a property, usually through an investment in the building itself and an active sales program, to raise the revenue base. Concurrently many owners are investing in new systems and energy-saving measures to lower the costs. All of these functions are being talked about by forward-thinking property management companies under the new moniker of asset management. Aggressive asset management, as opposed to the old concept of property management, is generally believed to be a very significant route to creating value in real estate.

The final point made from Figure One is the substantial increase in the importance of building disposal. Historically, determining the value of any property for any owner was a fairly straightforward calculation based upon simple net cash flow projections. Finding a new owner was a relatively straightforward function of listing a property within the brokerage network. Today, however, valuation is complicated by more ac-

(continued on page 60)





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**Management** (continued from page 58) tive considerations of what a property could be, rather than what it is. And the same building will have different values to different owners depending upon the owners' respective tax positions, sources of funds, existing portfolios of properties, risk postures, and investment horizons. Also today, the brokerage function has become more complex with more and more properties being packaged for targeted trading outside the traditional brokerage network.

#### Specific Prospects

This means that new opportunities abound for architects who choose to respond to owners' and developers' new needs. In the finding phase, for example, progressive architectural firms could build upon their understanding of local markets to become a valuable source of inside information for owners and developers seeking properties. Some firms could even take option positions on properties, invest in preliminary design and permitting work, then package and resell their options to developers, with not only a handsome gain on sale but also with an exclusive re-

tainer agreement for all future architectural services.

In the development phase, architects could conduct rigorous and competitive market research and conduct sophisticated pro-forma financial and risk analyses as part of their services. Packaged in this way, architectural services become directly responsive to owners' primary concerns in the development process. Design services could arrest their slide toward commodity status, and the architect, by seeing the world through the clients' eyes, could recapture a position of substantially higher influence and, presumably, compensation throughout the building process.

The current cadre of property-management-cum-asset-management firms is woefully lacking in design skills. Typically, designers are not brought in until late in the process of evaluating either repositioning options or other value-enhancing strategies for managed properties. Architects with current and incisive understandings of market conditions, of competitive conditions, of the economics of buildings as investments, and of building promotion materials and techniques, however, would

be welcomed by most asset managers early in the deliberations. Not only could architects win significant fees for this type of counseling, but also lock in commissions for subsequent design work.

Packaging properties for disposal requires a relatively high level of creative input that, by and large, is done very poorly by real estate brokerage firms. Yet, few would dispute the value of a thoughtful, complete, and tasteful presentation of a property's current attributes and future prospects. Brokerage houses, however, are now only beginning to understand this aspect of their business. They are not yet accustomed to investing heavily in services and have not yet found architects who are broad enough in their own thinking to be as helpful as they might be in the disposal of properties. The rewards for entrepreneurial architects, however, could be handsome here. Rather than work on an hourly basis, designers might structure their fees as percentage commissions contingent on the sale of the property—a practice that gets around brokers' reluctance to spend substantial sums up front, that corresponds to brokers'

own compensation structure, and that could yield remunerations far in excess of ordinary hourly billings.

#### What Stands in the Way?

The changing needs of clients have been under way for more than a few years now and the signals of these changes, notably architectural compensation, have been painfully clear. Yet few firms have responded effectively. Why? What do professionals need to do so that architecture, in general, can reassume its rightful position of prominence in both our social and our economic systems?

What is needed is an approach in which firms would train professionals in the economics of buildings. They would invest in current "insider" knowledge of their regional real estate markets. They would network outside the architectural community, focusing instead on building owners, developers, and key players in financial institutions. They would invest in tools and capabilities to measure design decisions against financial criteria. In presenting themselves and their work (through brochures, proposals, and job

(continued on page 62)

## What do this Japanese restaurant, furniture store, and office building have in common?

Top — Kyoto Steak House — and right — Barr Office Building, both by Rossen/Neumann Associates, Southfield, Mich. Lower left — Art Van Furniture by Robert L. Ziegelman/Architects, Birmingham, Mich.



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# Trade Show Case

*He designed it for trade shows after one of the biggest embarrassments in his career.*

By Joseph Sugarman

Cliff is a friend of mine who attends trade shows and conventions. One day, in the middle of a large crowd, while he was searching for a paper, the entire contents of his briefcase spilled all over the convention floor. "It was the most embarrassing moment of my business career," confided Cliff, "for at the same time, out fell my red underwear."

Determined not to let this happen again, Cliff decided to design a briefcase that he could take to trade shows and that was actually designed for trade shows. "I was going to design a custom case regardless of the cost."

## EXECUTIVE TORTURE

Cliff designed a case with all Velcro fasteners so there's nothing to snap or unbuckle. He also designed it with the lightest yet strongest material he could find—420 denier nylon—material that could withstand torture and still look like new.

To carry the case, he made two provisions. One is a handle on the top of the case and the other is a strap attached to the sides. If you've ever wanted to use both hands to pick up a brochure at a booth or sign a credit card voucher at an airport, the shoulder strap lets you carry the briefcase over your shoulder with both hands free yet the strap is short enough to hang along the side.

The pockets were also designed very cleverly. First, Cliff designed a large brochure-sized pocket on the outside of the case. This way you can easily pick up brochures at a trade show, stuff them into the case's pocket—all without opening the case. This also comes in handy at an airport to hold your tickets—things you want to reach for easily.

## TWO POCKETS

On the other side of the case are two pockets for convention programs, glasses or letter-sized documents or brochures. And finally on the inside, there are two compartments for holding your larger papers and documents—and large enough to hold one of those new lap-top computers. The flap that covers the top of the case also has a generous amount of Velcro so that regardless of how much or how little you have

in the case you'll always be able to firmly close it and keep it closed.

And that's another point. The case expands up to 4 inches to fit its contents. More importantly, it also collapses automatically so your case never looks too big or too small for what you're carrying. And it's exceptionally light-weight—only 2 pounds 14 ounces compared to the typical 6 pound briefcase. The case measures 12" x 17".

Cliff carried his case with him to trade shows for months but he still wasn't satisfied. He refined it even further by putting a small Velcro tab on the outside pocket to give the case a better appearance while protecting the contents of the open flap and he installed a special inner compartment to hold three pens, his business cards and even a small calculator. Then he framed the entire case with rugged nylon piping—a great looking final touch.

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He finally had achieved perfection. Not only for his trade show activities but for his everyday travel and business use. And it only cost him \$3,589. "I realize that's a ridiculous price to pay for a personal case but when I put my mind to something, I lose sight of the cost."

Cliff used his case for about 18 months before I met him. "A great looking case," I commented. "Where did you get it?"

Cliff told me the whole story. I was so impressed that I gave Cliff a royalty and sold the same case—not at the \$3,589 that it cost Cliff but at only \$69.95. I sold thousands. But I wasn't satisfied.

**It was a real embarrassment for Cliff.**



Spending \$3,589 for a briefcase was ridiculous. "I lost sight of the costs."

I found that so many people were falling in love with the concept that they wanted to use the case in place of their regular briefcase but found the 4 inch width too limiting. Many also wanted real leather instead of the artificial leather I was using. So I've designed three versions.

The first is the same one I've been offering for the past year that originally sold for \$69.95 but I'm dropping the price to \$49.95. The second is the version with some real leather in place of the artificial leather and an expanded 6 inch thickness for only \$69.95 and the deluxe model is the full leather version for only \$99.95—also with the expanded 6 inch thickness. And all versions now come in a beautiful gift box with a \$200 price tag attached to the case.

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**Management** (continued from page 60) interviews) they would focus on the interests of the client, rather than on their own.

Reorienting a firm's fundamental point of view in these ways takes committed leadership, time, and investment. But the risks are low; for those firms that are successful, the payoffs can be enormous.

**Richard Hunter Cross III** ■

*The author is a manager at the Berwick Group, Inc., a Boston-based management consulting firm. He holds Master's degrees from Columbia Business School and the Harvard Graduate School of Design, and an undergraduate degree from the Architecture School of the University of Virginia.*

**Law** (continued from page 57) make him responsible for the acts of others. It is inappropriate for an architect to assume the liability of others or to be responsible for occurrences that may be related to his performance, but that do not necessarily involve errors, omissions, or negligence on his part. For example, the owner or his attorney, in seeking to obtain a maximum of protection, may present indemnification language stating, in substance, that the architect shall "indemnify and save the owner harmless from all claims asserted by any and all persons allegedly arising from or growing out of the architect's performance." Another variation of a broad,

comprehensive indemnification clause is one that states that the architect will indemnify the owner "for any and all claims arising out of the architect's services." An even broader variation of such language is one that provides that the architect shall indemnify the owner "for any and all claims arising out of the work or project."

Many public agencies incorporate in their form contracts similar broad and comprehensive indemnification provisions. For example, The New York State Office of Mental Health provides in its architect/owner agreement that "the architect shall be solely responsible and answerable in damages for any and all acci-

dents and injuries to persons or property arising out of or related to the services to be rendered by the architect and hereby covenants and agrees to hold harmless The People of the State of New York, the OMH and their respective agents, servants and employees from any and all claims, actions, damages and costs of every nature and description arising out of or relating to the services to be rendered by the architect."

All of these indemnification provisions and others of similar nature are highly questionable because they seem to impose a possible liability on the architect that is not based on his fault or negligence. At best they are ambiguous and at worst they could impose a responsibility that is unanticipated, uncompensated, and unfair. The professional liability insurance carriers have urged that architects reject such language. The standard professional liability insurance policy for design professionals excludes from coverage those claims that arise out of the liability of others assumed by the insured. This exclusion is removed by an endorsement that provides coverage for an agreement to indemnify for the liability sustained by others when "such liability is the result of an error, omission or negligent act of the insured, or of any person employed by the insured." Insurance carriers won't provide coverage unless the indemnity provision is limited to indemnifying the owner for all claims arising solely from negligent acts, errors, or omissions of the architect in the performance of professional services.

The owner or his attorney, in presenting such broad, comprehensive language in the owner/architect agreement, may assert that it is the intention of the owner to subject the architect to its application only if a claim against the owner is based upon the architect's fault or negligence. Whatever the owner's intention, though, if it is not stated in the clause, the architect is subjecting himself to substantial risk. If an indemnification clause can be construed to impose a liability greater than what would be imposed by law and that cannot be covered by insurance, the architect should reject it unless he is prepared to accept a risk of unknown limits.

**Norman Coplan, Hon. AIA** ■

*The author is a member of the law firm Bernstein, Weiss, Coplan, Weinstein & Lake in New York City.*

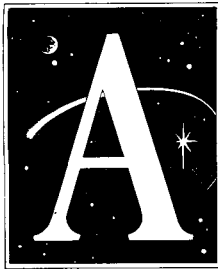
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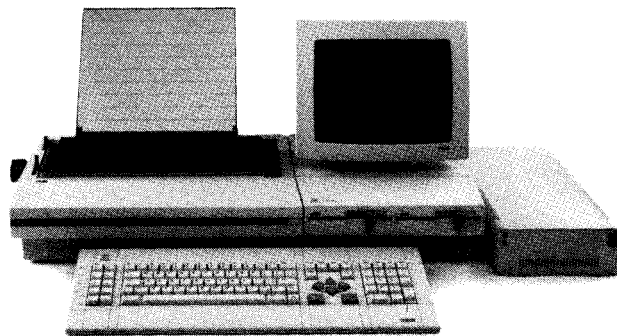
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# New Architecture in Paris

**Modernism is alive and well, and living in Paris. The work of Henri Ciriani, Henri Gaudin, Jean Nouvel, Christian de Portzamparc, and other architects both French and foreign illustrates the range of possibilities in this style, for monuments or modest urban infill.**

"I believe that a people are great when their architecture is great." Standing in the Louvre Museum's Cour Napoléon, now a vast construction site, President François Mitterrand repeated a sentiment he has articulated again and again since his election in 1981. Although he is by no means the first French ruler preoccupied with his architectural legacy, this *architect manqué* has turned a private passion into public sport, with the city of Paris his playground. (See page 98 for a report on Mitterrand's *grands projets*.)

Where the President leads, other politicians follow. The Mayors of Montpellier, Chambéry, and Paris have invited architects Ricardo Bofill, Mario Botta, and Kenzo Tange respectively to design projects for their cities. The Mayor of Nîmes has turned his town into a petite Paris modeled on Mitterrand's *grands projets*, with works by architects and designers Norman Foster, Jean Nouvel, Philippe Starck, Jean-Michel Wilmotte, and many others.

The international attention focused on France through Mitterrand's competitions, and the excitement generated by them within the country, have stoked public interest in architecture. The news-



## Introduction

### New Architecture in Paris



Stéphane Couturier

Henri Ciriani is the dean of contemporary French architecture. His work and teachings have influenced generations of younger architects. He is at once an idealist and a realist, accustomed to the exigencies of public commissions. "To build social housing," says he, "you must know all the rules, and build with the most classic building methods, according to formula." His recent housing project in the new town of Evry-Canal

(above and below) proves he has indeed mastered the rules. The façade's "inverted pyramid defies the laws of gravity," writes the architect. Yet "this weight is light; it is nothing more in reality than captive space . . ."



Stéphane Couturier

paper *Le Monde* alone has five reporters on architecture, covering its political, social, economic, technical, and aesthetic sides. The new Musée d'Orsay includes a mini-museum of 19th Century architecture as part of its vast panorama. The smaller, government-funded *Maison de l'Architecture* puts on modest shows for the public. And the city of Paris plans a new *Centre d'Architecture et d'Urbanisme de la Ville de Paris* to be housed in a 19th-Century building now used to store building department papers. (Architects Reichen et Robert, renowned for their renovation work, have been given the commission.)

Yet, for all this public interest, the practice of architecture in Paris, as in all of France, remains difficult. French architects are dependent upon the government for most commissions, which must by law be assigned by competition. Although the competition system is no longer limited to "experienced" architects, it can be a frustrating process for architects who win, only to see their projects scrapped. Those who do get to build face other problems.

Although a contemporary of Ciriani, Henri Gaudin has built comparatively little, the consequence in part of years spent in the merchant marines. Although most of his completed works to date, like those of his peers, are located in the *villes nouvelles* or new towns, surrounding Paris (page 82), Gaudin is just completing construction of a 40-unit housing project on the Rue de Menilmontant in Paris's 20th Arrondissement.

This small, infill project, recognizably modern yet sympathetic to its older neighbors, is typical of new work in Paris. The street façade (below), with its ground floor shops, lends itself to busy street life. The still, serene courtyard within will remain open to the public if Gaudin has his way. "When I walk in a city, I always wander into the courtyards," says the architect.



Stéphane Couturier

"Forty percent of commissions in this country are given by architects to architects," says Henri Ciriani. "We spend six months making a patron comfortable with an architect he didn't choose."

The problem of getting work in a society where the state is the main patron is even more acute for young architects, a large and growing sector of the profession. According to the *Maison de l'Architecture*, 50 percent of all French architects are under 40. In an effort to introduce young architects to potential clients, the *Ministère de l'Urbanisme, du Logement et des Transports* publishes a series of monographs entitled *Les Albums de la Jeune Architecture* (Albums of Young Architects) that are distributed to the *maîtres d'ouvrage* (project directors) throughout France who invite architects to compete for commissions. "It is essential," writes minister Paul Quilès in his introduction to a 1985 monograph on Fabrice Dusapin and François Leclercq (page 84), "that the project directors, conscious of their responsibility in the renewal of architectural creativity . . . give young architects a chance."





"I design as late as possible," says Jean Nouvel. "I keep my hands in my pockets and look for the image of a building." That approach, coupled with Nouvel's tendency to associate with different architects for separate projects, has produced an unusually eclectic oeuvre that ranges from the exuberant Theater in Belfort (P/A, Feb. 1985, pp. 94-101) to the cool, crisp, Institut du Monde Arabe (page 72). The one common thread in

Nouvel's work is a preoccupation with technological innovation, or more exactly the image of innovation, epitomized by the high-tech gymnasium at Marne-la-Vallée (above and below), designed with Gilbert Lezenes and Patrick Colombier and completed in 1986. The gym is one of a spate of recent projects completed by an architect who for years did more talking than building.



Photos: Deidi von Schaeven



Christian de Portzamparc's 1984 Conservatoire Erik-Satie is considered one of the city's best case-studies in contextualism and a key work in the architect's own stylistic development. Following the completion of this combination music school (above) and elderly housing (visible behind the conservatory, below) Portzamparc won two similar commissions by competition. His Ecole de Danse de l'Opéra de Paris

(Dance School for the Paris Opera) is now nearing completion in Nanterre, while the Cité de la Musique at La Villette (page 98) is moving into design development. Neither commission is as overtly Post Modern as the conservatory, with its pediment, eyebrow window, and keystone-topped gateway. Instead, they shape still stronger statements of a very personal and powerful style that defies categorization.



Photos: N. Barcel

## Il Faut Etre Moderne

Given the predominance of public over private commissions, it is inevitable that architecture in Paris should be highly politicized. The question of style, too, carries political overtones. In few other nations has modern architecture retained the social and political urgency still accorded the style in France. Architecture remains a moral issue for French architects. "Il faut être absolument moderne—it is imperative to be absolutely modern," urges Henri Gaudin, quoting Arthur Rimbaud. "I am against the bearing wall. I am a modernist," proclaims Henri Ciriani.

Yet even Ciriani, the archetypal Modernist and Paris's heir apparent to Le Corbusier, qualifies his allegiance. "Look at the context," says this influential teacher to his many students. "Find the permanent elements and build to them. If there is no permanence, then do as you please." Gaudin distinguishes his own "modernité" from the Modern Movement, which he regards as a "bigger disaster than the war" for France. "We must combat ideas of a universal

architecture—that is an imperialist notion. Architecture is a cultural problem, how to preserve the color, light, smell of a place."

These sentiments of two self-proclaimed modernists show the extent to which Post-Modern theory has penetrated Modern architecture in France. French architects never suffered through the style wars which split other architectural communities around the world. (Indeed, nothing shocked the French more than the 1977 Beaux Arts exhibition at the Museum of Modern Art in New York, a show that touched a real taboo.) Instead, French Post-Modernism as preached by Maurice Culot, Antoine Grumbach, and other theorists took the form of a cultivated discussion of urban morphology and typology conducted in the pages of *l'Architecture d'Aujourd'hui* under the command of Bernard Huet.

To be called "Post-Modern" remains, moreover, the ultimate insult. "Le come-back des has-beens," scoffs arch-modernist Paul Chemetov. "No one in France will claim the title Post-Modern," says François Chaslin, architecture critic for *Le Monde* and the new



## Introduction

### New Architecture in Paris



Renzo Piano's Pompidou Center, designed with Richard Rogers, is Paris's most visited building, exerting tremendous influence on a generation of young French architects who have picked up the style if not the substance of high tech. Although Piano continues to practice in Paris, as well as in Genoa, he does so in a curious vacuum. "Too inaccessible, too sophisticated," says critic François Chaslin of the architect. Piano's

Paris atelier has just completed another major work for the Schlumberger empire at Montrouge, just outside Paris. This factory renovation (above and below), with associates Alain Vincent and Rene Lafon, is an accomplished job. But it is the Teflon tent in the garden that caught French fancy. "Nature and technology, paired," wrote one critic of this high tech folly.



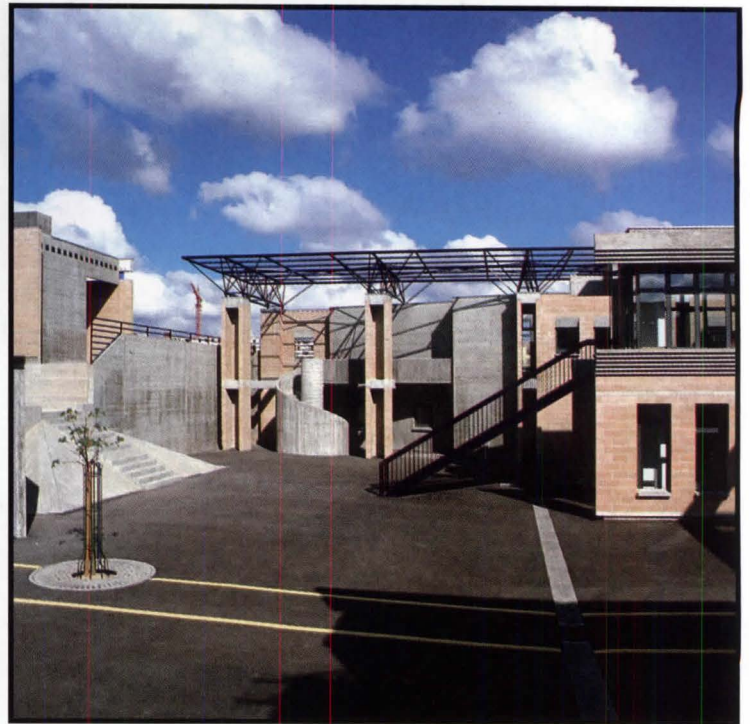
Photos: Norman McGrath

editor of *l'Architecture d'Aujourd'hui*. He points out that there are no French architects in the Frankfurt Architecture Museum, the "Pantheon of Post-Modernism." Only Christian de Portzamparc (page 88), in following his very personal, idiosyncratic style, has earned the epithet "Post-Modern," which he rejects absolutely.

#### Return of the Prima Donnas

Portzamparc, Gaudin, and Ciriani are French architecture's "trinity." It is they who travel to New York or London as its ambassadors. Two months ago the trio journeyed to Tokyo on just such a mission, but there they were joined by two newer faces—Jean Nouvel and Bernard Tschumi.

Nouvel, dubbed a "mediarchitecte" by the media itself, exemplifies a new generation of architects and designers who are as celebrated for themselves as for their buildings. Although furniture and interior designer Philippe Starck is the better known "star" on the international circuit, Nouvel is an increasingly formidable



A young architect who prefers building to talking, Francis Soler won his first competition while still in school, and his entire oeuvre to date consists of public commissions. Chief among these are the Presidential Tribune, the platform at the Place de la Concorde from which President Mitterrand reviews his troops on Bastille Day (not shown), and two projects designed with Jean Bernard for a school and a recreation center in the

new town of Cergy-Pontoise (above and below). Like so many of his peers forced to build in the "soulless" new towns, Soler makes of his school a mini-city, focused on its own piazza. This completed work is the exception to a hard but typical pattern: of eight competitions entered by Soler in 1985, five entries were rejected, and three which won will not be built.



Photos: Marina Faust

figure in France. Proclaiming that "the future of architecture is no longer architectural," Nouvel plays Pied Piper to a "modernity in movement" that owes more to cinema and television than to traditional architectural antecedents. Although increasingly identified with a nascent high-tech movement in France, Nouvel is better defined by his ideas than his buildings, which share no single style.

Bernard Tschumi, whose Parc de La Villette (page 94) is by far the most innovative of the *grands projets*, is not French, but Franco-Swiss, with a practice based in New York. As such he represents a whole cadre of foreign architects in Paris. Renzo Piano, Ricardo Bofill, Gae Aulenti, and even Aldo Rossi, who just won a competition to design housing adjacent to La Villette, pass through the city like so many traveling players, with little or no lasting effect on French production. Indeed, although they like to emphasize distinctions, French architects remain a remarkably unified group. "When Nouvel and I are outside of France, we say the same things," says Ciriani. "Here we stress our differences."





Pierre-Louis Faloci differs radically from his contemporaries in the nature of his commissions, all of which to date have been for private, not public clients. His showroom and offices for Pierre Farro in Paris (left, top and bottom) were designed for an entrepreneur who rents the space for fashion shows and other gatherings. The horizontal and vertical cables support "sails" of parachute material used to partition the space. Faloci's

addition to a vacation house in Antibes (above) is separated from the 19th Century structure by an internal street (below). While his private commissions are the envy of his peers, Faloci sees the situation a bit differently. "I would now like to change scale," he says, "and try my hand in the city or suburbs, designing social housing or public buildings."



Photos: Daniel Osso



### The Long Shadow of Le Corbusier

Ironically, this constellation finds itself all but eclipsed this year by that lone star Le Corbusier. Never far from the minds of French architects, "Corb" is once again front and center as the world celebrates the centenary of his birth. While the Pompidou plans a fall "Corb-fest," duly adulatory, there was more talk this spring anticipating a second show. Under the aegis of the *Institut Français d'Architecture*, an active and important "club," a select group of leading architects will design a project as Le Corbusier would have done, summarizing his influence on their work.

The task is a difficult one for a profession that regards Corbusier at once as hero and villain. Ciriani summarizes the ambivalence of his generation in a description of the Carpenter Center at Harvard, a late commission in which, he says, Corb finally completed a work that refers to no other architecture but his own. Ciriani clearly admires this self-contained creative universe. Yet, at the same time, he shares the now common belief that Corb's urban ideas were not

only wrong, but disastrously so. Much of the damage done to Paris, as to so many other places, in the name of urban renewal is directly attributable to Corb's seductive vision of the *ville radieuse* which promised perfection through the complete eradication of the past.

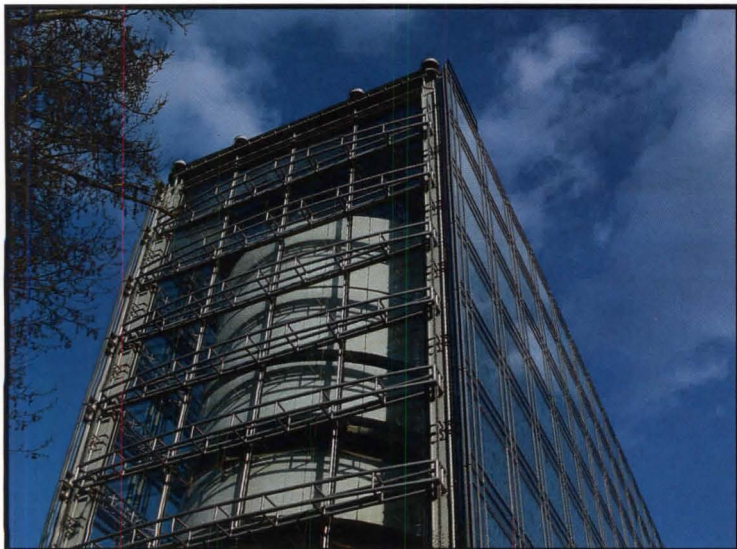
Such surgery is unthinkable in Paris today. While Mitterrand presses for a monumental Modernism at La Defense and the Louvre, most new building is at a much smaller, infill scale. "Innovative structures, cult buildings . . . the city is not made only of these," writes Portzamparc in his introduction to a new *Guide to Modern Architecture in Paris, 1900–1990*, by Herve Martin. "Normal buildings—representative, or 'typological' ones as we say in the schools—are also in this guide, and it is this type of building which our civilization must encourage. Not brutal innovation, but the subtle improvement of that which already exists." To walk the streets of Paris is, says Portzamparc, "a lesson for the architect in relativism and modesty." These sentiments are now widespread in France, and welcome. Daralice D. Boles



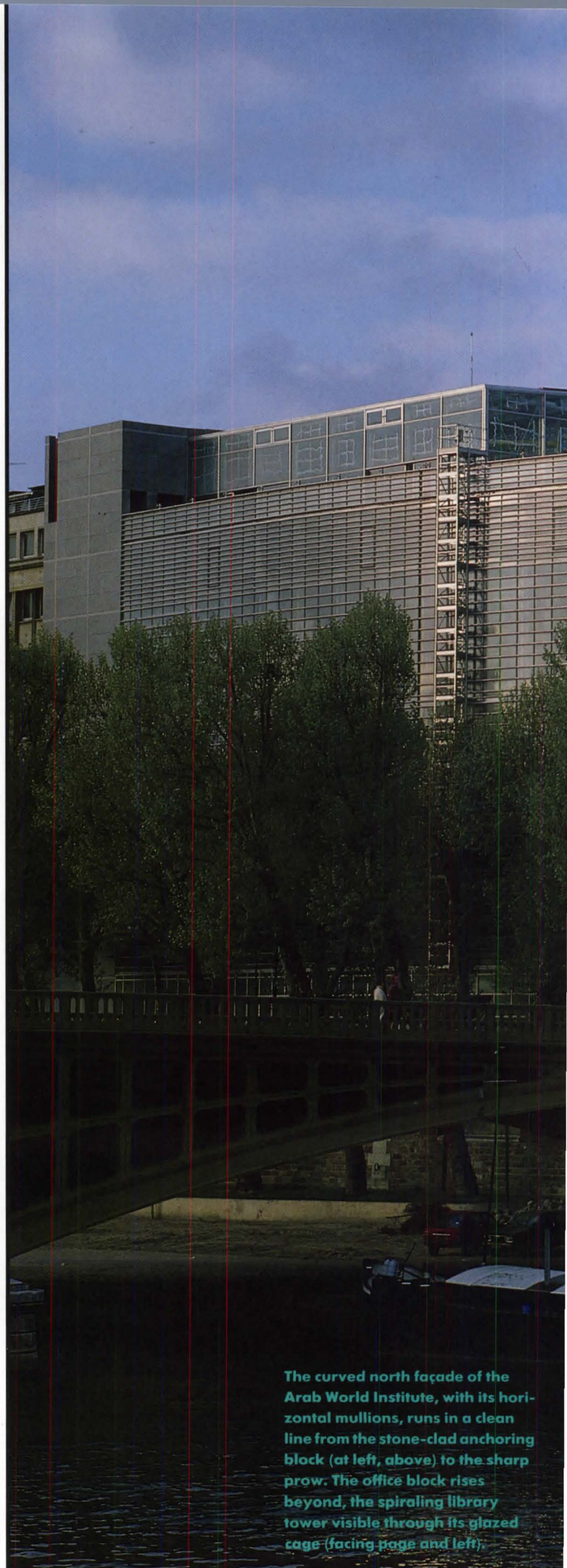
# Modernism in the City

**Architect Jean Nouvel and his associates balance their Institut du Monde Arabe between Arab and western cultures, between old and new Paris. No building so summarizes new French architecture, testing the limits of a building industry more used to masonry than metal and glass.**

NOT since the completion of the Pompidou Center has a building in Paris engendered as much discussion and anticipation as the Institut du Monde Arabe (Arab World Institute, or IMA). As the physical symbol of the sometimes tenuous friendship between France and the Arab world, IMA's political significance is matched by its physical prominence. Facing the Ile Saint Louis at the foot of the Boulevard Saint Germain, IMA tries to resolve a battery of contradictions, balancing old and new Paris, Arabian and western culture, university and city life. The architects—Jean Nouvel, Gilbert Lezenes, Pierre Soria, and Architecture Studio—revel in these dichotomies, which are revealed and then resolved in their design.



Stephane Coururier



The curved north façade of the Arab World Institute, with its horizontal mullions, runs in a clean line from the stone-clad anchoring block (at left, above) to the sharp prow. The office block rises beyond, the spiraling library tower visible through its glazed cage (facing page and left).







The team won a competition for the commission in 1981. They were given a simple program and a complex site. As the headquarters of a foundation organized to "encourage a knowledge and understanding in France of the Arab world—its language, civilization, and development," IMA required a 5000-square-meter museum, a cafeteria, auditorium and reception space, 100,000 book library, and meeting rooms, with support facilities and offices for the foundation.

### An Arab Influence

The building's transparency encourages the sense that IMA is not a gateway but a scrim separating old and new, Arab and European. The building itself is split in two—its curved, northern half following the line of the Seine, the block behind running parallel to university buildings. The driveway between, in line exactly with the towers of Notre Dame, terminates in an internal court surfaced in translucent stone, with a fountain of liquid mercury at its base echoing the fountains of Arabian palaces of 1000 years ago. The balance of court and cathedral—east and west—is IMA's central metaphor.

Other elements, like the court, are also designed to recall specific Arabian precedents. The concrete tower of books, caged in glass and aluminum at the building's western tip, is a modern minaret. Its spiralling ramp and wall have been carefully calibrated to permit views of the Seine on lower levels, rising to the roof tops of Paris above. The basement's "hall of columns," not finished in time for these photographs, promises to be an equally powerful and evocative space (see plan, facing page).

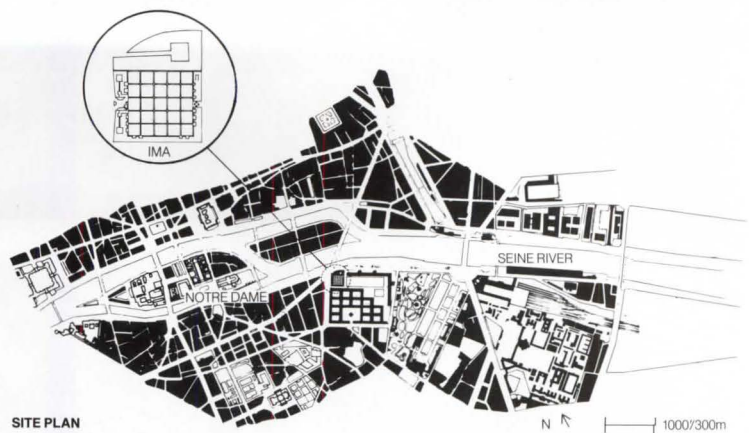
But it is the south façade's extraordinary sun screen that is at once this building's technical and metaphorical tour de force. Its 27,000 diaphragms, organized in 113 panels (page 77), operate on the principle of a camera lens, controlled electronically from a photovoltaic sensor which permits 10 to 30% daylight. The lens' polygonal openings echo Arabian geometries, and the immense 30 by 80 meter façade acts as a gigantic "mushrabiyya" or screen. "Visitors should know that this building is Arabian," says Nouvel.

He and his associates have hit upon the underlying affinity between Modern and Arabian architecture, shaping connections between the two at the abstract level of space and geometry. Compared to this fascinating and subtle interpretation, the Parisian silhouettes painted on the curved north façade to "echo" the old city across the Seine are nothing more than clumsy cartoons.

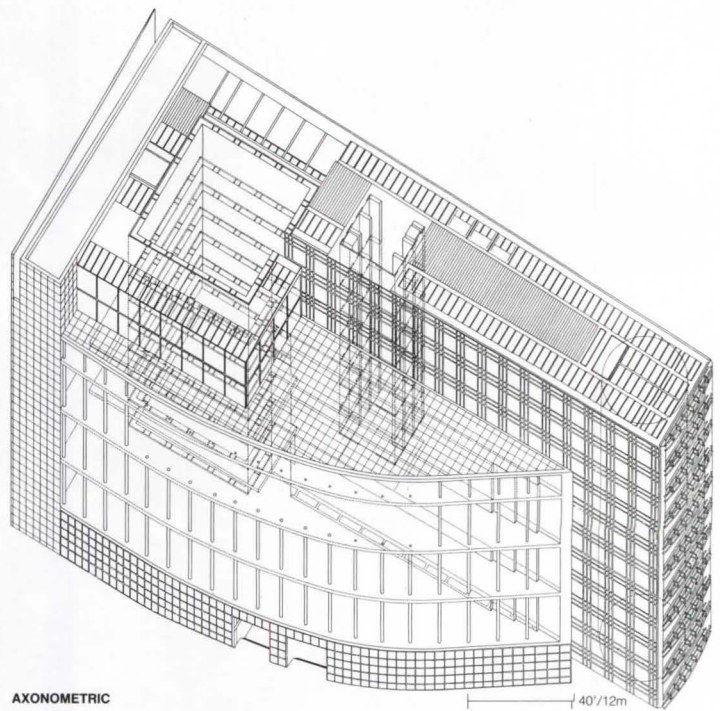
The architects have also tested the limits of the French construction industry, notorious for its shoddy workmanship. The choice of aluminum and glass was audacious in this predominantly concrete culture. But IMA goes further: every structural support is exposed, every joint articulated.

In choosing a curtain wall aesthetic, the architects have also stumbled upon the classic problem of that type of construction: how to make, or mark, the front door. The problem is compounded at IMA, where the apparent entrance—the driveway between the two building halves—is restricted to official visitors. The Seine façade, with its great curve, offers a slippery surface upon which to pin a major entrance, although the architects have done their best by locating the doors where the curve begins. On the south façade, the architects rely on an entry pavilion, set on the street side of the formal plaza, to point visitors literally toward the door (see ground floor plan, page 75). But the distance from pavilion to door seems too great, the line too tenuous; the sign which marked this entrance for construction workers may well become a permanent fixture.

This problem vexes more than it might because the Arab Institute is widely considered to be the best new building in Paris, and certainly the finest work to date of these architects, whether separately or together. To a generation of French architects raised on the Pompidou Center, IMA offers an alternative image of high-tech modernity, one grounded in real technical invention and not in the now tired decoration of exposed ducts. This elegant glass box, set like a mirror before the face of Paris, will change the way the city sees itself. *Daralice D. Boles*



SITE PLAN



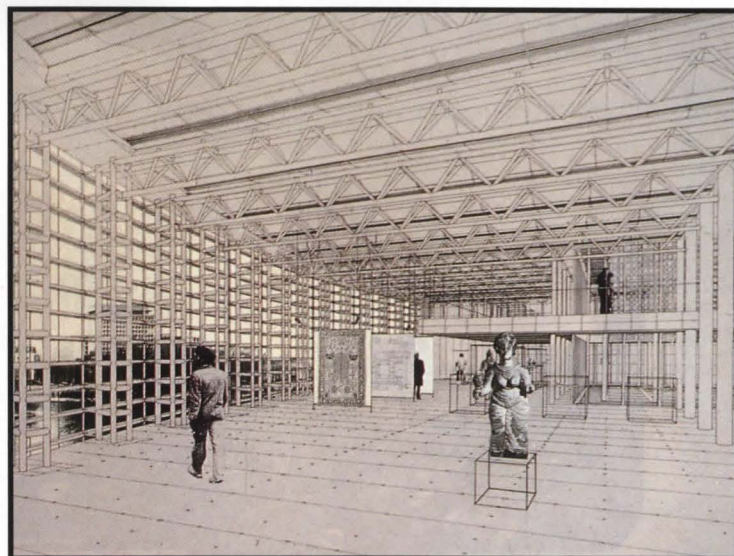
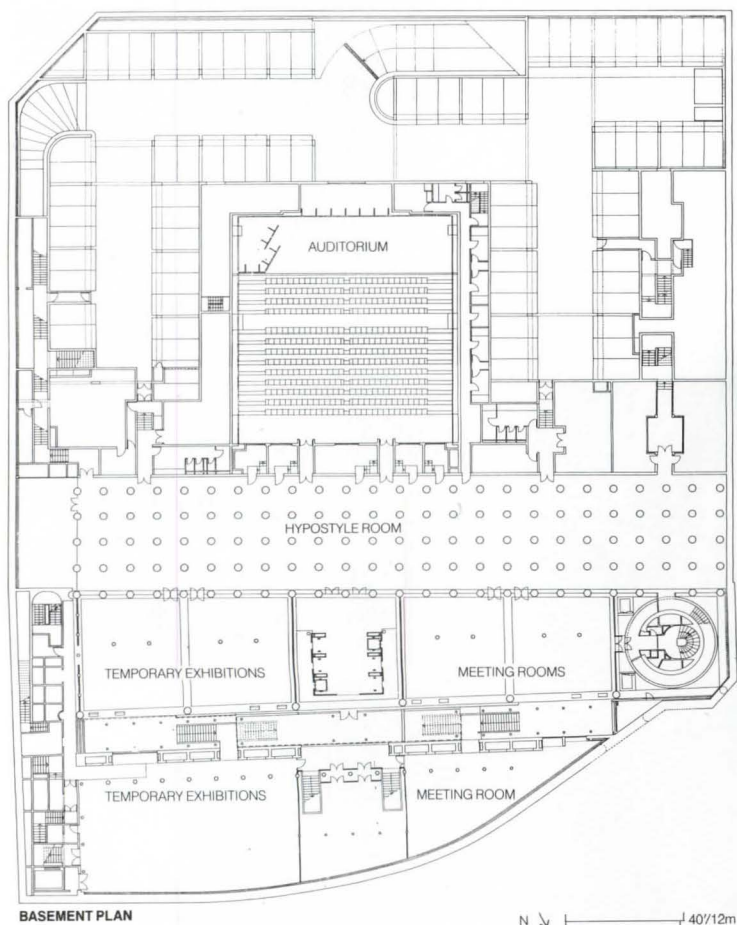
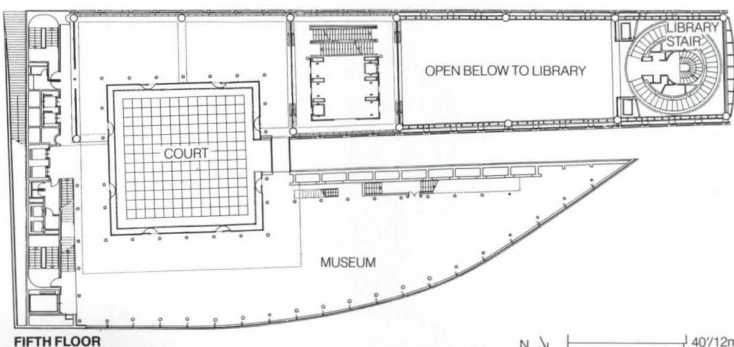
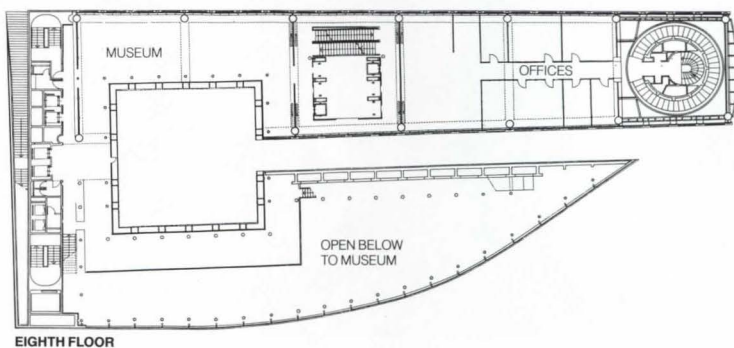
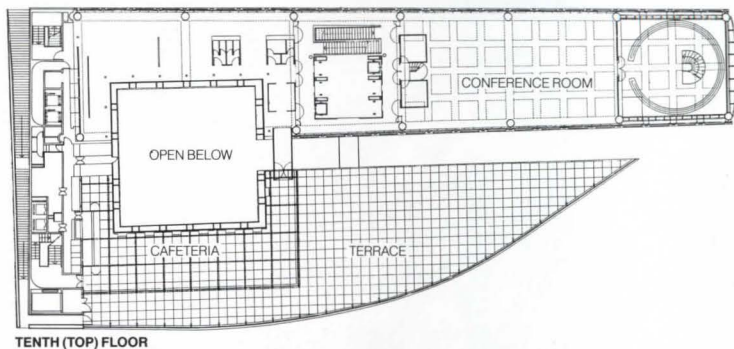
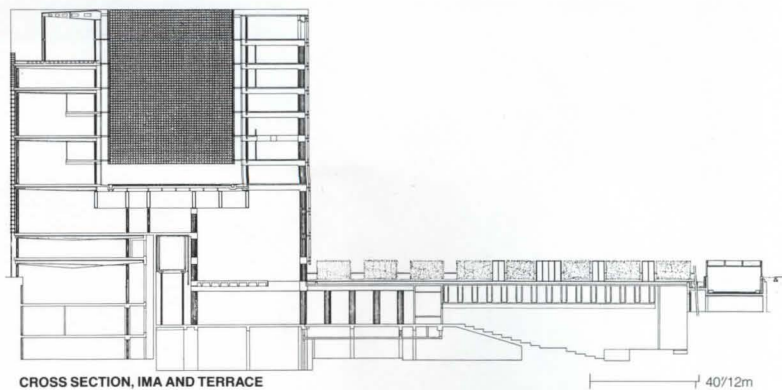
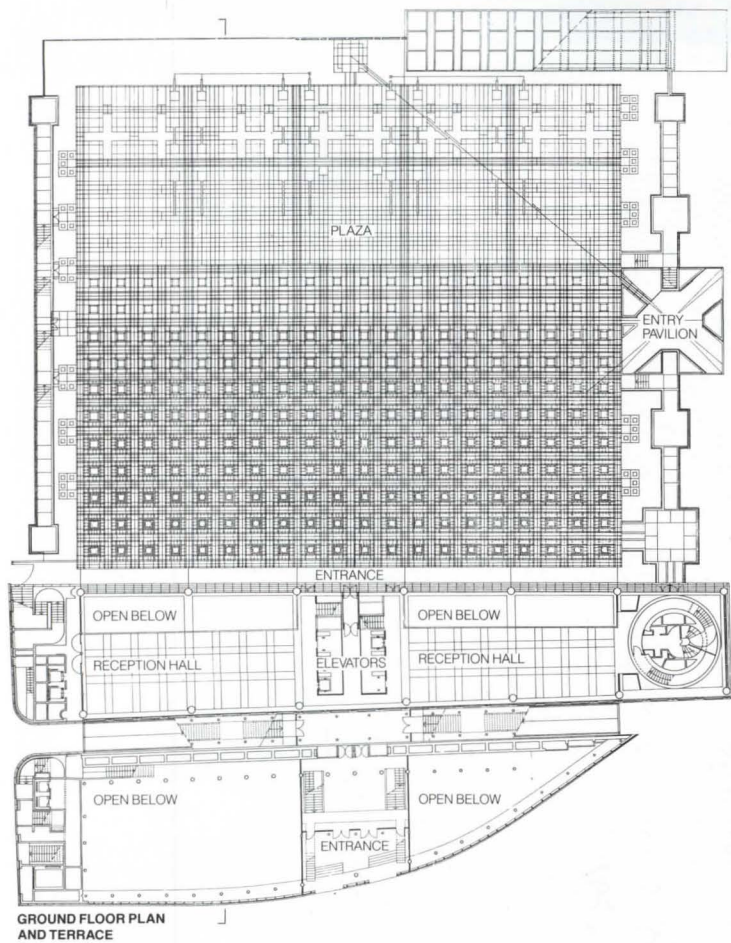
AXONOMETRIC

The site plan (top) shows how IMA fills the open corner of the university's great gridded campus, separated from it by a formal plaza (seen also in ground floor plan and section, facing page). The axonometric (above) shows the great curving façade, internal court, elevator core (rear, center), and the notch that splits the building in two. "The principal material

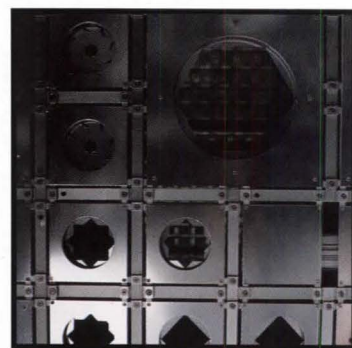
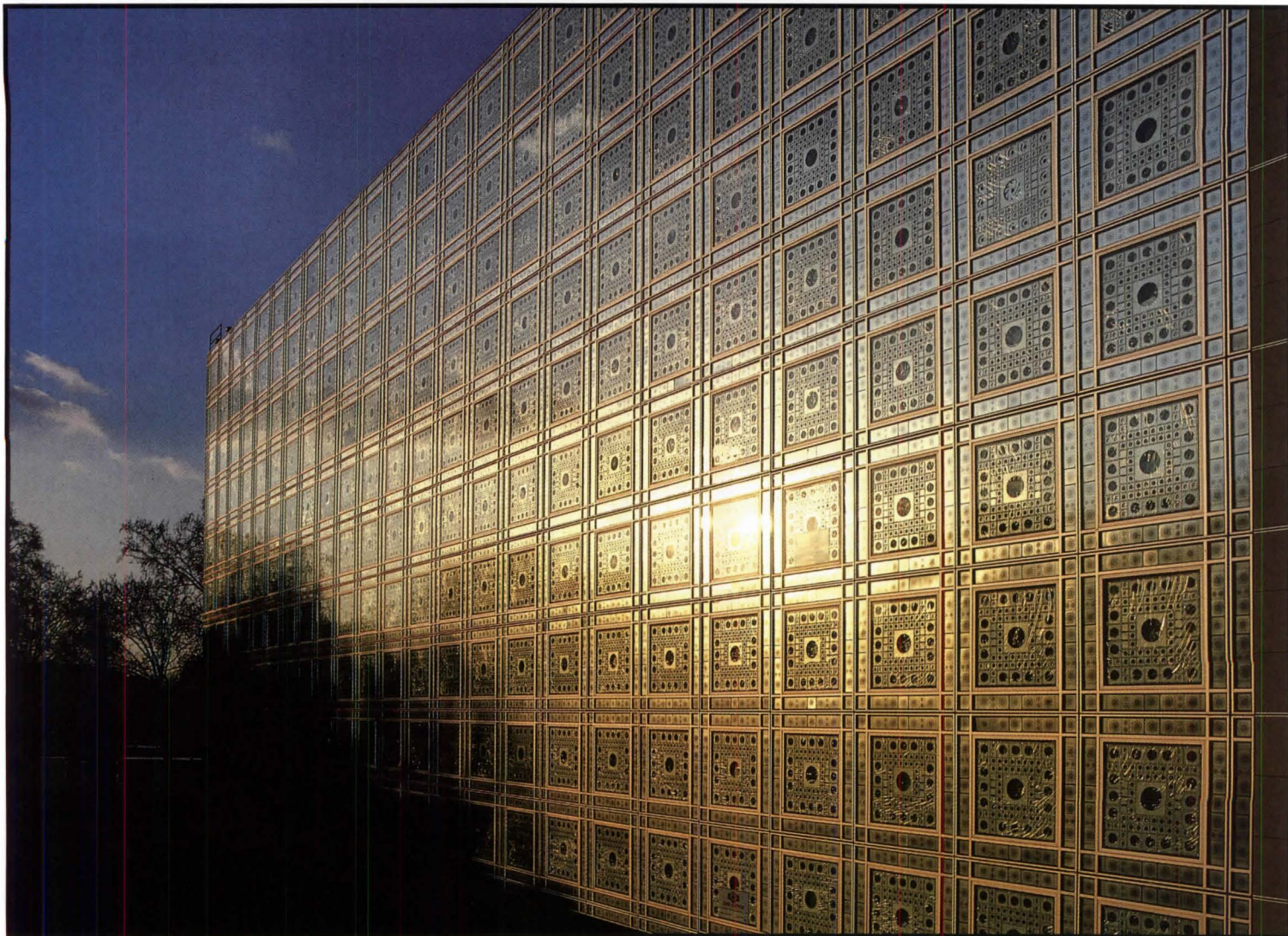
in this building is light, as in Arabian architecture," says Jean Nouvel. The great museum (rendering, facing page, bottom right) sets few obstructions to the northern light admitted through its curved glass wall. Even on upper office floors where the program demanded enclosed offices (below), the walls and doors are of translucent glass.



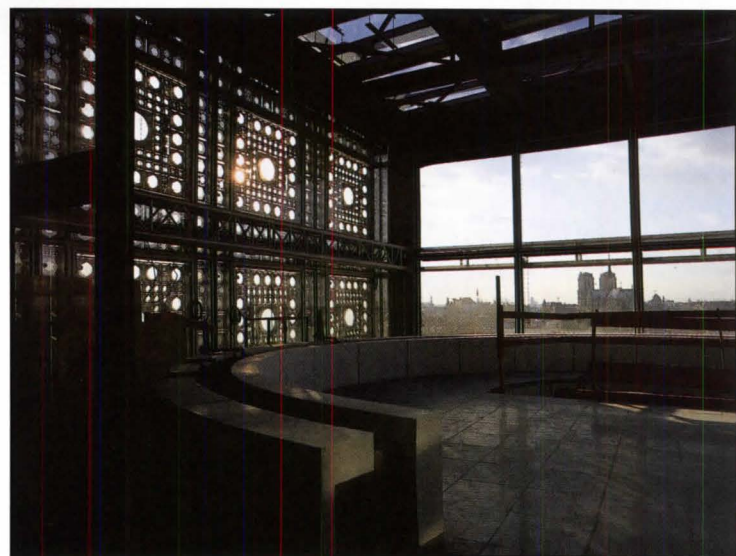




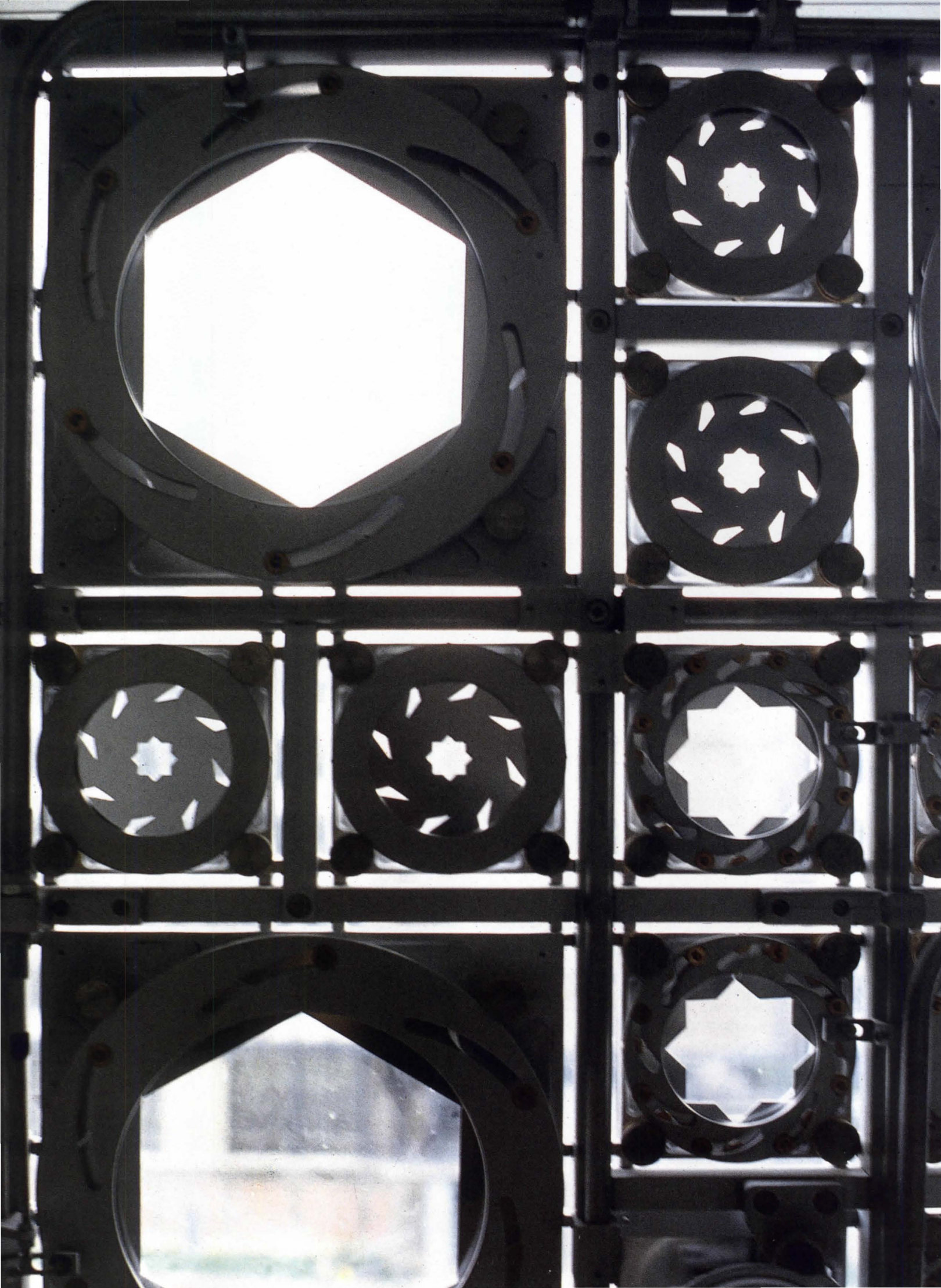




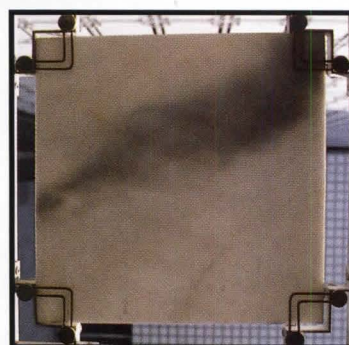
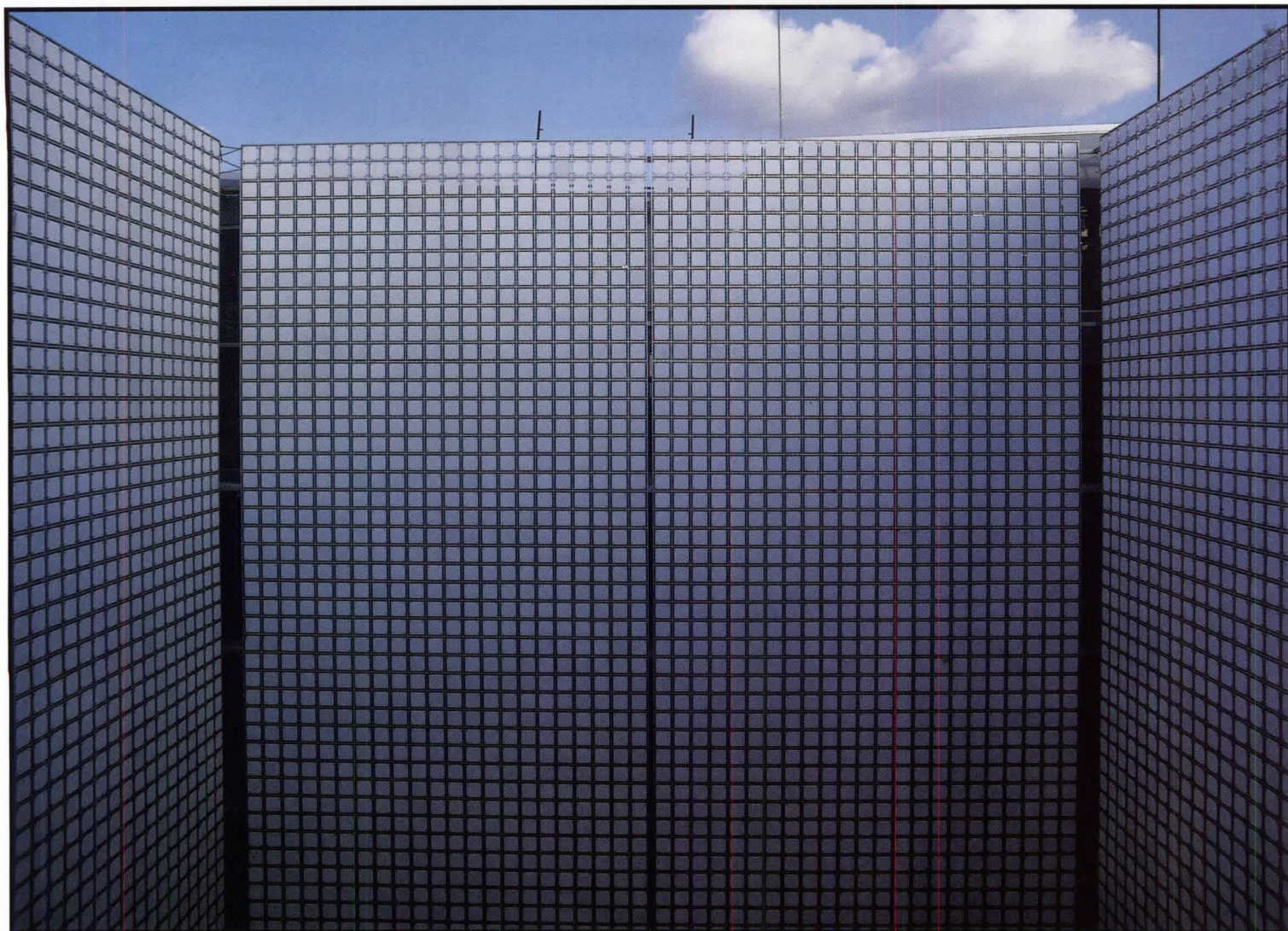
The south façade (above) is IMA's technical triumph and its most literal reference to Arabian architecture. Like a great "mushra-biyya" or Arabian screen, this wall is composed of 113 panels of light-sensitive diaphragms that open and close simultaneously (shown on the interior, facing page, and exterior, above, right). The diaphragms, set between two panes of glass on a frame that is hinged like a door for cleaning, operate like a camera lens, outlining changing polygonal shapes that recall Arabian geometries. Glass walls encase the library tower, whose ramp of books encircles a stair (scaffolding, right).











Enclosed in squares of translucent marble, the central court (above) is a still, serene space glimpsed only between the squares or at the corners. The squares are held by a delicate metal armature that repeats their shape (above, right). At the base of the court will be placed a mercury fountain like those common to Arabian palaces 1000 years ago. The court lets light into surrounding office corridors on upper floors (right), which are lined with translucent partitions. The top floor cafeteria and outdoor terrace (facing page) enjoy spectacular views of Paris, centering on the towers of Notre Dame. The terrace stops short of

the parapet, revealing its elaborate collar and pin connections. (The same detail is used to support the glass curtain wall on lower floors.) Behind the terrace (to the left) rises the top floor of the library/office block.







**Project:** Institut du Monde Arabe (Arab World Institute), Paris.

**Architects:** Jean Nouvel, Gilbert Lezenes, Pierre Soria, and Architecture Studio: Martin Robain, Jean-François Galmiche, Rodo Tisnado, Jean-François Bonne. (Jean-Jacques Raynaud, Antoinette Robain, Adeline Rispal, project architects; Pascal Debard, Jean-Louis Besnard, assistants).

**Client:** Institut du Monde Arabe.

**Site:** narrow sliver adjacent to the Université Paris VI, Faculté des Sciences, facing the Ile Saint-Louis.

**Program:** 25,000 square meters of museum, library, auditorium, conference and meeting rooms, cafeteria, and offices.

**Structural system:** metal structure; curtain walls.

**Major materials:** aluminum, glass.

**Consultants:** François Seigneur, interiors; Anne Fremy, Pierre Martin Jacot, graphics; Louis Gruittet, engineering; M. Armagnac, acoustics; Jacques Le Marquet, Michel Seban, scenography; Gary John Glaser, children's room; Z.A.

Zaidan, architecture; Setec, mechanical; Cabinet Casso Gaudin, security; Epsi, diaphragms. Planitec, bureau de pilotage; Socotec, bureau de controle. Cabinet Sery Bertrand, museum consultants, Light Design, lighting for museum.

**Photos:** Deidi von Schaewen, except as noted.



# An Occasion for Architecture

**All the successes and failures of French architecture can be seen in social housing. Used in the post-war years as the tool for massive reconstruction and urban renewal, social housing is now the means whereby architects repair a fragile urban fabric.**

THERE is a key phrase in the architectural language of France used to describe social housing: *Habitations à loyer modéré* or HLM translates as housing of moderate, or reasonable rent. The HLM are constructed very cheaply (3500 to 4000 francs per square meter) and financed by the state. Out of these exigencies has emerged some very bad building, but also some exemplary architecture.

For social housing is the place where risks are taken. It is here that French architects have traditionally confirmed their theories, identified trends, or established a body of work. "To build social housing is truly an occasion for architecture, the only such occasion, perhaps," says Henri Ciriani (page 81). He adds, "The renaissance of French architecture has occurred in public housing."

## A Long History of Success and Failure

Social housing is no recent institution in France, but possesses its own history, extending back into the 19th Century to the utopian visions of Tony Garnier and Charles Fourier. At the end of the Second World War, however, reconstruction necessitated building as much as possible, as quickly as possible, producing rational, reasonable, industrialized housing. Out of that period came a dictionary of norms, means, and habits. Entirely new cities replaced the ruins of war at Le Havre, Saint Malot and in other parts of the country. Today one can only wonder at the architectural and urbanist decisions made then—at the hesitation, moreover, to promote an image of real modernity when the opportunity was at hand.

It should not be forgotten, though, that the innovative post-war housing projects of Le Corbusier—the *unités*—were and are public enterprises. At Rezé, near Nantes, the same authority that constructed the *unité d'habitation* still manages it, repainting the doors and windows each year in their primary colors. Its officials continue today to launch equally remarkable housing projects, commanded often of young architects. The *unité* at Rezé is doing well, as is the one at Marseilles where all units have been sold. At Bruay, however, the giant is deserted, its windows walled up.

(continued on page 87)

Shown below is a sampling of French social housing, from the high tech picturesque approach of Alain Sarfati at Melun-Senart (top left) to the elegant modernity of Yves Lion at Noisy-le-Grand (top right), from the neo-baroque of Ricardo Bofill in the 14th arrondissement (middle; see also page 90), to Christian de Portzamparc's great crescent at Marne-la-Vallée (bottom).



Dahliette Sucheyre



Deddi von Schawen



Stéphane Couturier

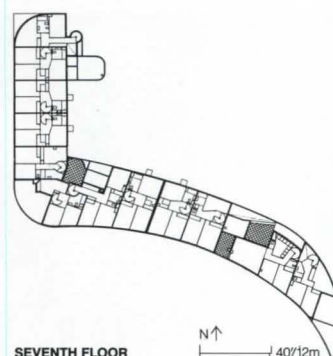
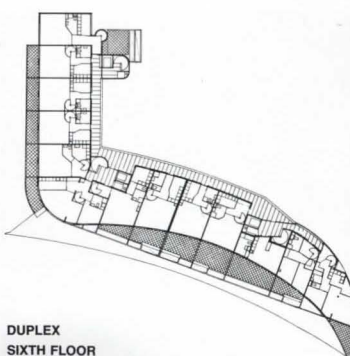




Stéphane Couturier



Stéphane Couturier



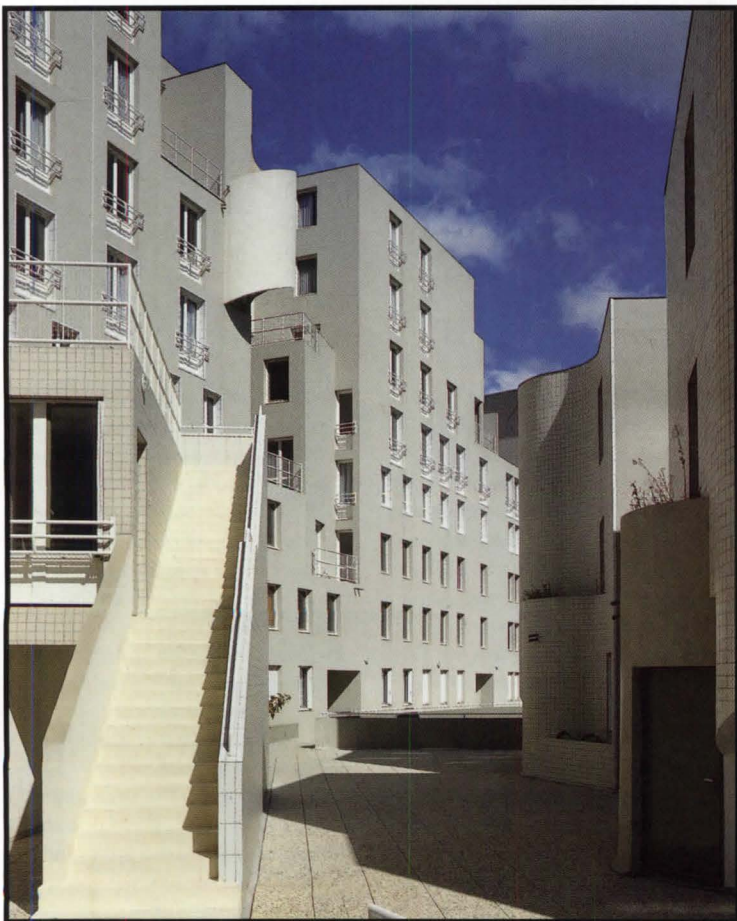
**Housing, Marne-la-Vallée.** Architects: Henri Ciriani, Paris (Jacques Garcey, Jacky Nicolas, Michel Dayot, Dominique Delard, Richard Henriot, assistants). The dilemma presented by this commission to design 156 units is typical of the new towns: Ciriani was asked to design a curved building. Never mind that the curve determined by the town's urban design guidelines is weak—too large for a plaza, much less a crescent. Never mind, too, that housing is fundamentally a rectilinear problem. Ciriani, however, establishes here a serene order that is peculiarly his own. His building is perceived at two scales: that of the monu-

mental curve, understood in its entirety (above), and the more intimate scale perceived by a pedestrian who wanders from light to shadow beneath its generous loggia or passes round to the more informal rear façade (left). "Social housing must express community," says Ciriani. His layered crescent is a buffer zone between public and private space. Behind the outer, monumental curve runs the tangential line of the apartments, with the space between the two taken up by the occasional balcony. At upper floor duplexes the curve is restored (see plans marking the outer crescent, tangent, and inner curve).

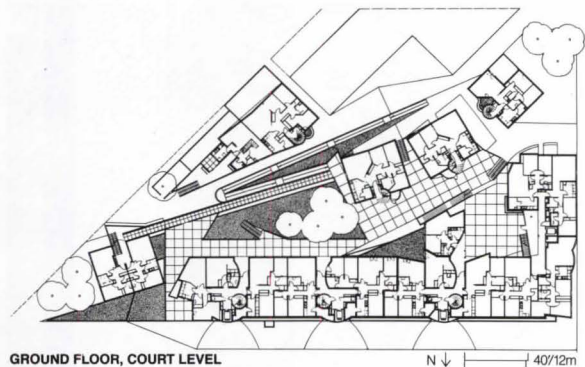




Stéphane Couturier



Stéphane Couturier



GROUND FLOOR, COURT LEVEL

N ↓ 40'/12m

**Housing, Evry. Architect:** Henri Gaudin, Paris. (Isabelle Marin assistant; Jean Caillat and Bernard Darot, associated architects). "Building in the new towns is a nightmare," says Henri Gaudin. "It is impossible to build a city from scratch." His own 100-unit housing project in Evry is a self-contained castle, turning inward, away from the surrounding suburban wasteland (above). Against the outer wall are set smaller discrete structures (see plan, above), shaping a common court between (left). No two units are exactly alike but vary in terms of outline, orientation, and access (left). "I tried to recreate the qualities of

old cities, with their houses that appear at a bend in the road," the architect told *AMC*, a French architectural magazine whose December 1986 issue is a superb summary of social housing in France, as accomplished by architects Gaudin, Henri Ciriani, and Roland Simounet. "In a true city—Venice, Florence, or Paris—it is difficult to differentiate between public and private space. One is never sure where one ends and the other begins . . . I believe that Modern architecture will find itself again in the degree to which it recovers this interpenetration and throws off a stifling segregation of public and private life."

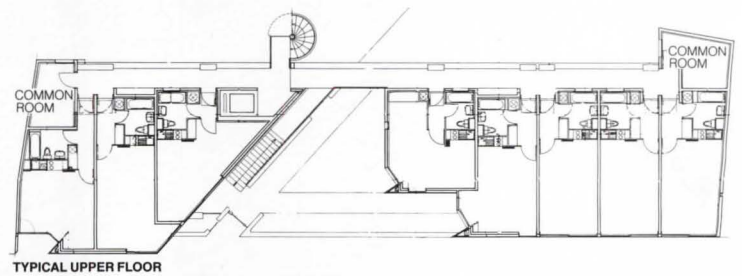
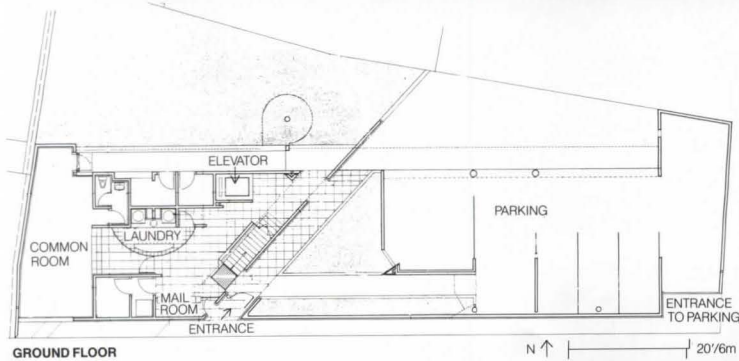








Stéphane Couturier



Stéphane Couturier

**Studio housing for the Ministère des Finances, Paris.** Architects: Fabrice Dusapin and François Leclercq, Paris. Above the disorderly roofs of the 13th arrondissement emerges the superstructure of an elegant white vessel (above). In the street, the line of ordinary buildings is broken by a façade of white marble, set on a pedestal of grey stone. Across this white plane glide the horizontal bands of windows (left). Then the façade breaks, revealing a passerelle. On the rear, facing a courtyard and the sun, a spiral stair curls from deck to deck (facing page) until it reaches a crow's nest from which can be viewed the whole of

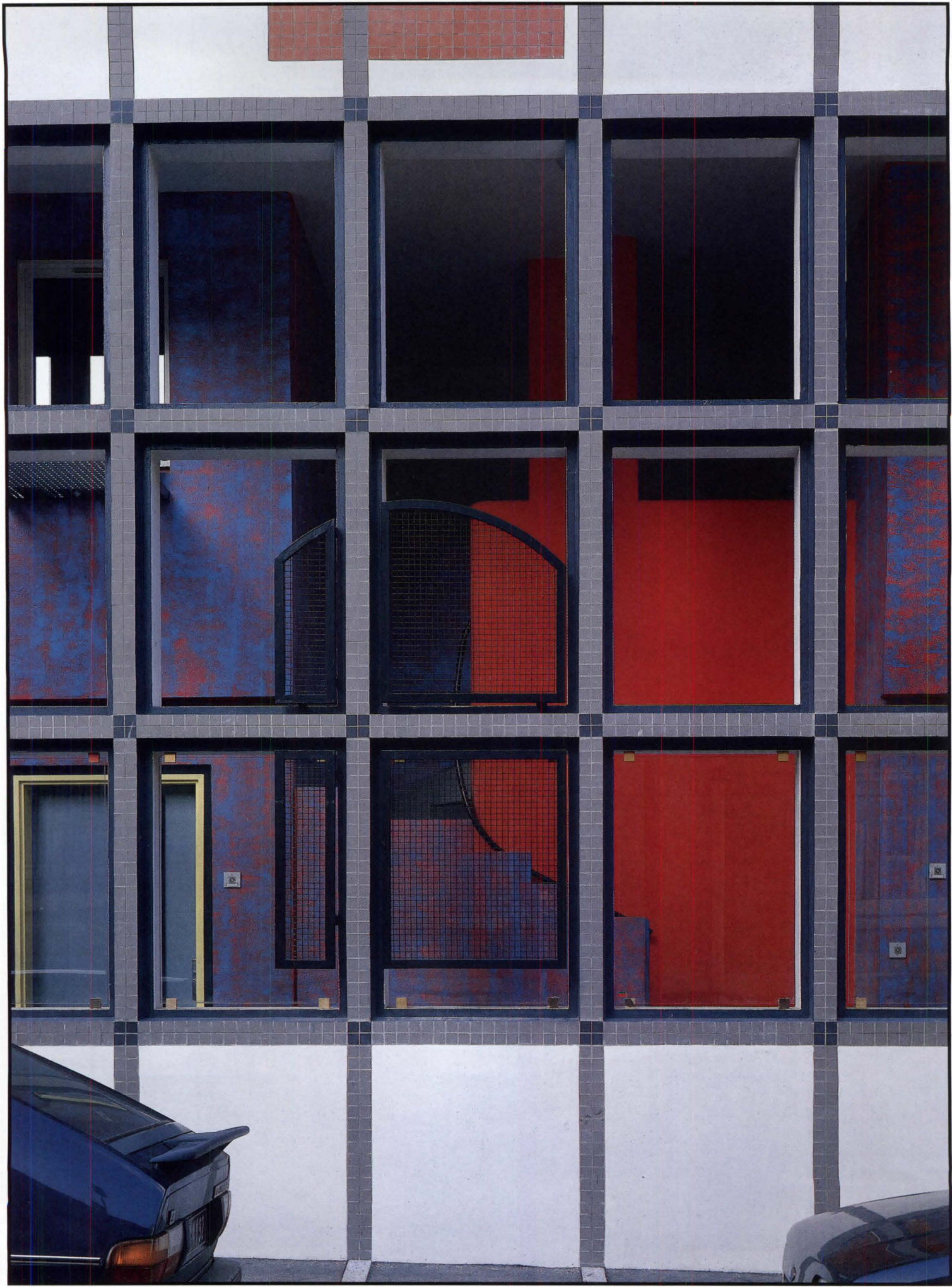
Paris, and closer at hand, the new Finance Ministry (page 99) across the Seine. (The 44 studios are intended as housing for bureaucrats who will work in this new ministry.) This small piece of infill architecture manages to respect its surroundings—the break in its facade, for example, allows the two halves of the building to match misaligned neighbors (see plans)—without sacrificing its own pristine modernity. A great deal is accomplished here with the simplest of means. This pair of young architects who once worked for Yves Lion (page 80) has learned the lessons of modern minimalism well.



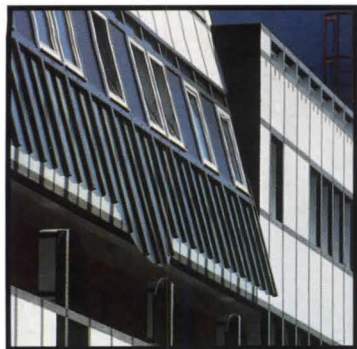




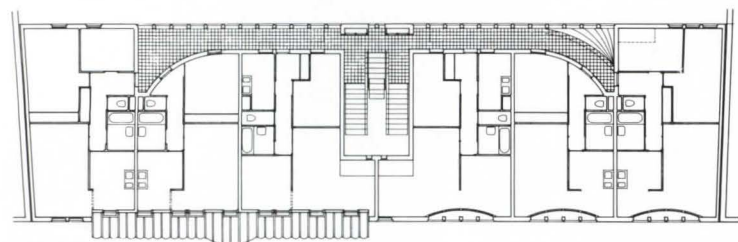
**P/A Portfolio:**  
**Social Housing**



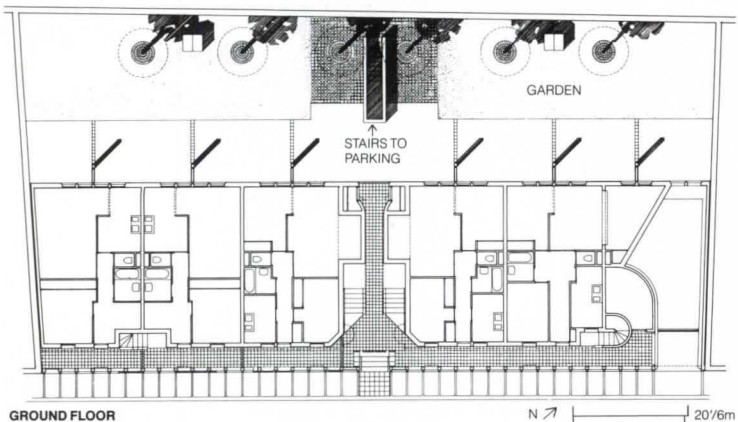




STREET ELEVATION



FOURTH FLOOR



GROUND FLOOR

**Housing, Rue Domremy, 13th arrondissement, Paris. Architects: Architecture Studio (Martin Robain, Jean-Francois Galmiche, Rodo Tisnado, Jean-Francois Bonne), Paris. This 25-unit housing project is typical of a new type of smaller, infill development built within Paris. Set between two older buildings on a narrow street, the façade plays a game of shifting alignments (top, left and right, and elevation). The cool white panels and metal grills of the grid-like street façade contrast bright painted concrete walls behind. The two façades "express the contradictory characters of the building—the public and intimate**

**sides," write the architects. All units enjoy a double orientation. Ground floor units and stairs leading to second floor units open onto a passage which slips behind the street façade (facing page). Upper floor apartments are reached by an open corridor running along the rear courtyard façade. "This is no luxury solution," say the architects, "but the manipulation of cheap means to exciting ends."**

(continued from page 80)

The *grands ensembles* of the 1950s have faced a similar fate. Designed and built in an era of high optimism, when architecture tried to solve social problems, these tower-and-block housing ghettos rose far from the centers of older cities. The *grands ensembles* were confided to respected architects of the day—Candilis, Aillaud, or Dubuisson, for example—who, it was hoped, would reconcile the city and nature. Products of an increasingly industrialized building process, the units themselves were considered by their grateful inhabitants spacious, well-lighted, and comfortable.

But time passed, and this generation of housing too declined. In certain cities, the population housed by the government grew poorer and poorer, and the projects were filled with immigrants living on the fringes of French society. Then last summer, the demolition of one giant block in a Parisian suburb, at Courneuve, was televised. In France, as throughout the Western world, the death of Modern architecture was made a public spectacle.

Those *ensembles* that were not demolished have been camouflaged. Purity has been replaced by the picturesque. Housing blocks were given pitched roofs, balconies transformed into verandas, smooth surfaces given bumps, horizontals applied to verticals and vice versa. Today, the business of "reparations" is flourishing. Rare are those who recognize quality in these forsaken modern ruins; rarer still those who dare propose to preserve them.

The *grands ensembles* were supplanted twenty years ago by the *villes nouvelles* or "new towns." The initiative for these too lay with the state. National plans determined their locations and objectives. Volumes of directives established the plans, expression, and color of their buildings. Housing was to be integrated with schools, offices, factories, streets, plazas, stations, commercial centers, gymnasiums, and theaters. But the new towns have been built piecemeal, by good architects and bad ones. Someday, perhaps, these collections will become cities; today, however, they resemble a catalogue or magazine whose pages have been scrambled.

### Contemporary Attitudes

More cautious than their predecessors, French housing authorities of the 1970s and 1980s have tried not to lead but to accommodate popular taste. Their new model is the suburban bungalow, with its pitched roofs, big garage and little garden. The government has built quantities of these, grouped together in cute villages. As if to make matters worse, some architects took up the signs and symbols of these *maisonnettes* to make a polemical point.

"I had an enormous responsibility when I constructed my first housing block in the new town of Marne-la-Vallée in 1981, then my second housing block in Saint Denis," says Ciriani. "It was necessary to demonstrate that to build housing in the city is something entirely different from the accumulation of little boxes. Houses are an Anglo-Saxon tradition. I don't do houses; I do housing."

Ciriani's influence—incontestable and unmatched—owes its strength to social housing commissions, many in the *villes nouvelles*. Against his Corbusian vision are set the very personal approaches of his peers Henri Gaudin (page 82) and Christian de Portzamparc (page 80). Still others—Jean Pierre Buffi, Antoine Grumbach (page 90), Marie Christine Gagneux and Georges Maurios among them—have developed a new "school of Paris." Two shakes of Mallet Stevens, a dash of Le Corbusier, a hint of Adolf Loos and the faintest taste of Italian rationalism . . . this is their cocktail, flavored finally by a pleasure in public life that is distinctly Parisian.

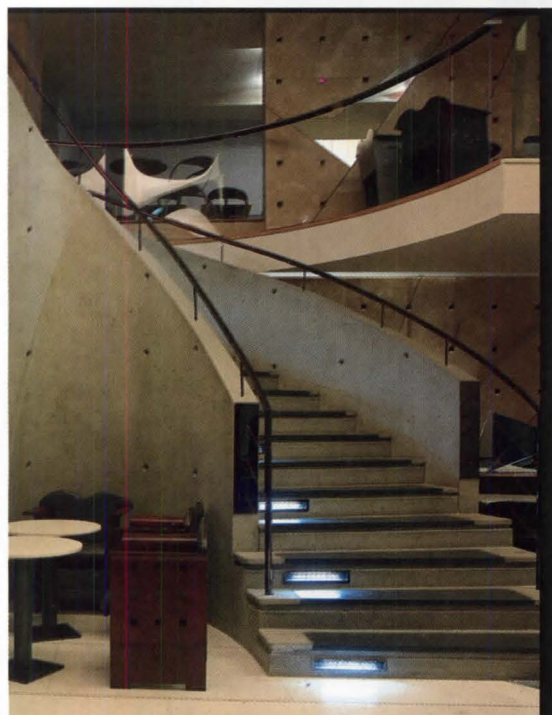
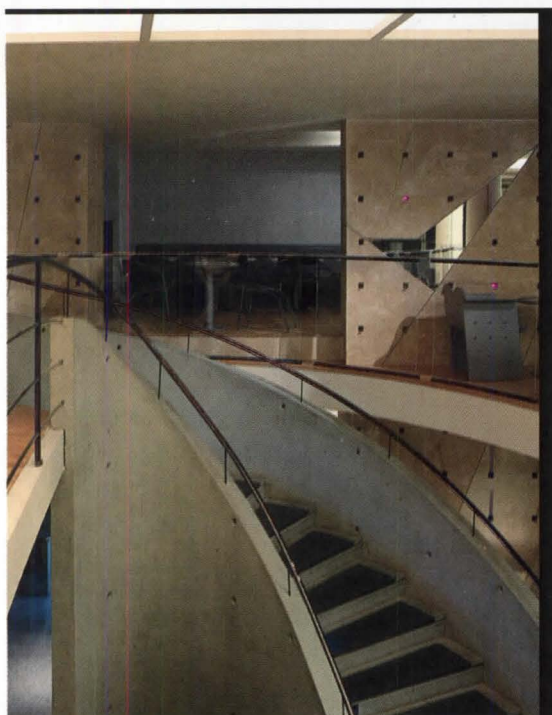
These "contextual" architects fight a real battle at once with the bulldozers in the vast renovation zones and with the historicists. Ricardo Bofill's "Versailles for the people" (page 80) has become the new cliché of social housing—the consummate, and consumable spectacle of instant, inhabited ruins. Also opposed to this monumental strain is the high-tech kitsch of Alain Sarfati (page 80) and others who seek to blend popular culture with industrial production, borrowing and gluing with a picturesque hand.

While many of these architects continue to build social housing in the *villes nouvelles*, others have been fortunate enough to win housing commissions in Paris. Once the tool for massive reconstruction, social housing is now used to heal smaller breeches in a very delicate urban fabric. The scale change is extraordinary—from 150 units in a typical *ville nouvelle* (page 81) to 25 or 40 in a Paris quarter (page 86, 84). But "to build in Paris is to build Paris," says Henri Gaudin. It is a privilege no architect takes lightly. **Marie Christine Loriers**

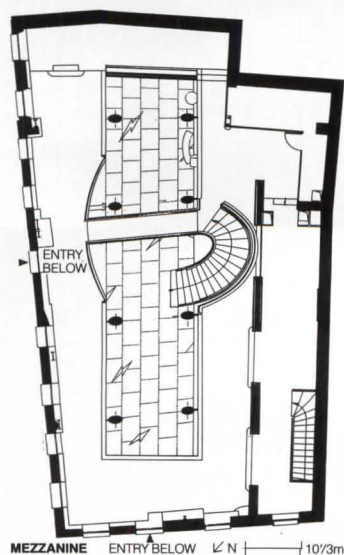
(See author's biography, page 88)



Café Beaubourg

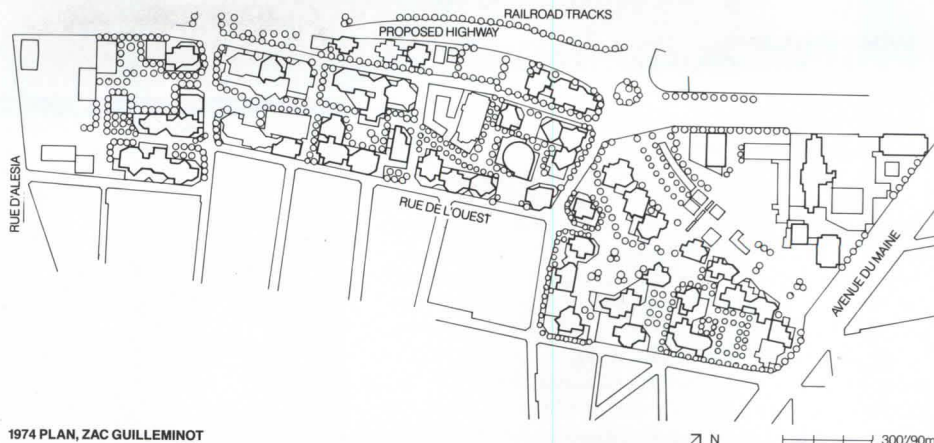


The thick stucco wall that separates the great double-height space from more intimate rooms on the ground floor and mezzanine level is sliced by a web of irregular mirrors, like bits of broken glass (top and bottom left), and punctuated by a grid of tiny square niches, some of which contain tiny colored lights. Basement bathrooms (above right) occupy ancient vaults.



**Project:** Café Beaubourg, Paris.  
**Architect:** Christian de Portzamparc, Paris (Bruno Barbot, John Coyle, Peter Opelix, assistants).  
**Client:** Gilbert and Yvette Costes.  
**Site:** basement, ground, and second floors of three adjacent, older buildings on a street corner overlooking Piazza Beaubourg and the Centre Pompidou.  
**Program:** 5600-square-foot café.  
**Structural system:** existing columns.  
**Major materials:** polished white granite, concrete, glass, wood, acoustic panels.  
**Consultants:** Eclairage Karlikow, lighting.  
**Cost:** 10 million Francs.  
**Photos:** Stephane Couturier.





# Building a City on Shifting Sands

**The turbulent history of one quarter in Paris's 14th Arrondissement illustrates the dramatic shifts in urban policy that have battered this city and the difficulties faced by architects who build there.**

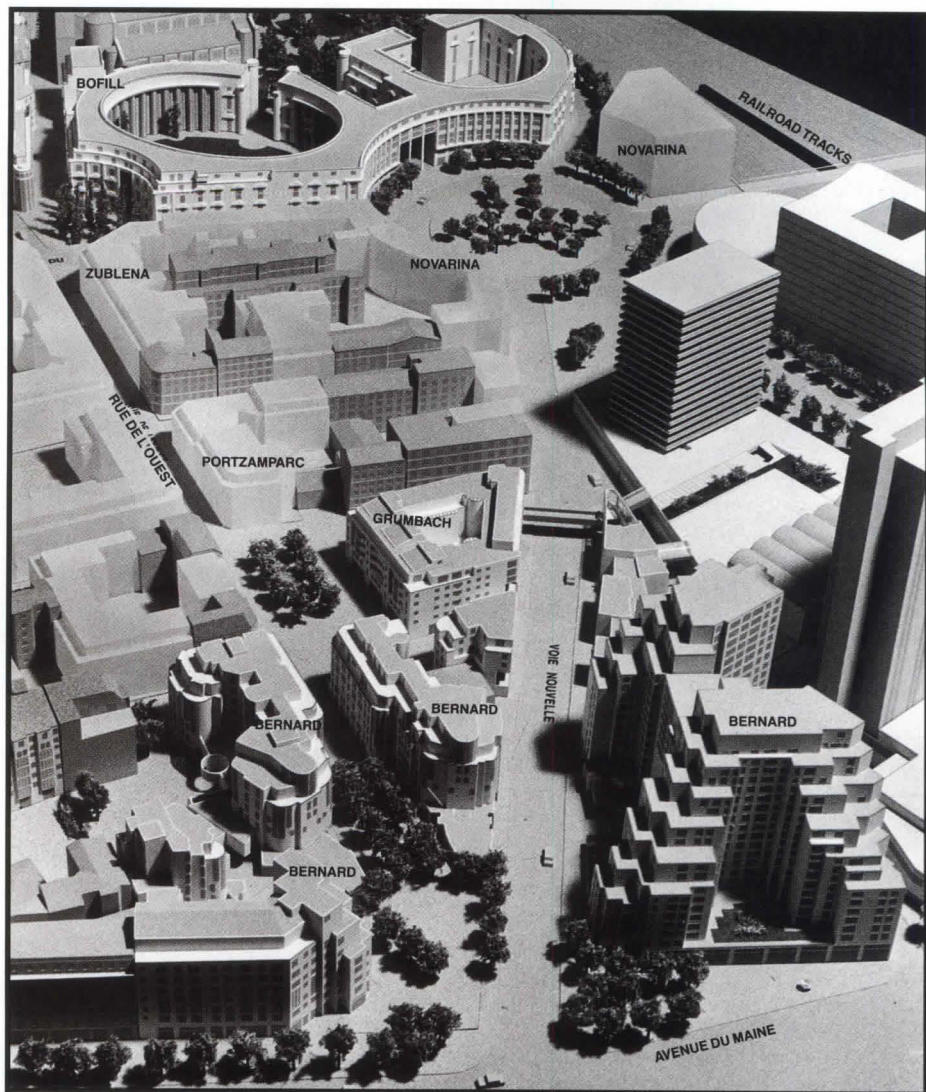
URBAN policy in Paris has changed radically twice in the past 20 years. In the 1960s, city planners abandoned the traditional grid to build with tower and plaza; now a counterrevolution has restored the primacy of street and square. Neither approach has managed to reconcile progress with history. Instead, their conflicting visions have buffeted both the city fabric and its architects with shifting imperatives and contradictory demands.

One renewal project in the 14th Arrondissement—the Zone d'Action Concertée (Zone of Concerted Action or ZAC) of Guillemot-Vercingetorix—has had a particularly turbulent history. Four master plans for its redevelopment have been attempted; each foundered on the past, then undermined the future. Today the ZAC is a 32-acre construction site, with the remnants of a neighborhood clinging to the rubble. The new buildings indicated on the cheerful site plan straggle from foundation hole to finishing trim, with completion of the entire quarter's redevelopment estimated for 1990. After nearly two decades of turmoil, the ZAC is a case study in urban theory and architectural responses.

## The Roots of the Problem

The history of the 14th begins with its annexation to Paris by Haussman in 1860. Rapid development favored light industry and worker housing; dense, low, and cheap. In 1919, the area was declared substandard and slated for demolition; but troubled times delayed intervention, and a complex community evolved, disadvantaged but self-sustaining.

After the Second World War, city planners at-



D. Machet

tacked decaying quarters, determined to transform their anachronistic labyrinths into the clean, well-lit spaces envisioned by the Modernists. In 1961 a revolutionary code, the Plan d'Urbanisme Directeur (PUD), replaced zoning laws rooted in the 18th Century with "dynamic urbanism resolutely turned towards the future." In the 14th, major new office towers and apartment complexes rose to either side of Guillemot-Vercingetorix, which remained the unhappy remnant of an unenlightened age.

The first master plan for the ZAC, designed in 1974 by Maurice and Patrice Novarina (this page, top), embodies PUD's principles of rational planning and standardized construction. All existing buildings would be demolished, most streets suppressed. A continuous plaza raised 16 feet above street level would separate pedestrian and vehicular circulation and serve as a base for isolated towers. Building heights would range from 160 to 275 feet. A new highway would funnel traffic from

**The 1974 plan for a deteriorated section of the 14th arrondissement (top) was modelled on Le Corbusier's plan *voisin*. All existing buildings were to be demolished and replaced with a continuous plaza raised 16 feet from street level. On the platform were placed 160–275 foot towers. The 1979 plan (above) takes the opposite tack, replacing the notion of radical surgery with a more modest proposal that kept as much of the old urban fabric as remained and limited new buildings to the height and approximate size of existing ones.**



## Urban Design: The 14th Arrondissement

the peripheral expressway to the core. The area would form a seamless whole, Le Corbusier's Plan Voisin shifted to south central Paris.

Before the plan could be implemented, however, it was denied. Construction of the Tour Montparnasse, Europe's tallest building at 680 feet, in 1973 had caused enormous public outcry. The council of Paris ordered a review of urban policy, and the Atelier Parisien d'Urbanisme (APUR), a city-planning agency established in 1968, responded with a new zoning guide that repudiated the PUD as a disastrous rupture with the traditional city. The subsequent 1974 Plan d'Occupation des Sols (POS) eliminated podium and tower and reestablished street and parcel as the basic units of urban planning. Contextuality was made the primary goal. New plans for the ZAC in 1975 and 1977 lowered building heights, abandoned the highway, saved the old grid. But from 1974 to 1979, not a single construction permit was issued. Between premature demolition and owner abandonment, the quarter deteriorated; squatters and drug dealers moved in.

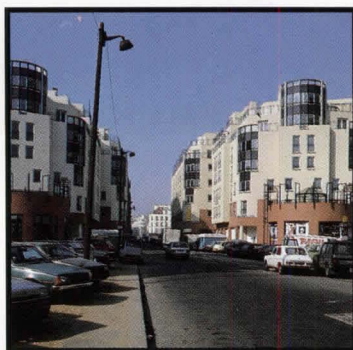
The fourth—and current—plan for the ZAC was drawn up by APUR in 1979 (page 91, bottom). Its respect for historical continuity and its pragmatic diversity represent the triumph of a new traditionalism. Most of the streets and 53 old buildings are preserved; new buildings are aligned with streets, their heights uniformly limited to seven stories; new public spaces are created along street axes. The project is broken into smaller sites and commissions awarded to half a dozen architects. The quarter is to be rebuilt, rather than transformed.

Compared with the liberal zoning of the 1960s, the new plan entails strict control over building design. Heights, setbacks, alignments are all determined by law. Volumes and façades must be approved by APUR; materials, colors, and ornament are negotiated. All the architects working in the ZAC applaud the principle of enhanced contextuality. But most have sought exceptions for their own projects, complaining of imposed compromises and lack of control. Pierre-Yves Ligen, APUR's director from its inception until 1983, is chiefly responsible for the new urban traditionalism. While contending, "we're still far from Hausmannism" he concedes that "perhaps we've gone too far in allowing urban policy to direct architecture."

Set against these constraints is what Patrice Novarina calls the "Concours Syndrome"—the tendency of underemployed architects finally given commissions to pack as much "design" into their buildings as possible, with results expressive on paper but cacophonous on site. "We lack the unity that comes from Academicism," he says. "Only Modernism can supply that discipline, but now everyone wants (pitched) roofs." This absence of a dominant style undermines the contextuality decreed by the zoning laws, creating a tension between architect and urban planner that is legible in the ZAC's new construction.

### Three Responses

A walk through the ZAC clarifies the difficulties posed to architects by these changing imperatives, and reveals three basic responses. The first, essentially passive approach attempts to reconcile contextual antipathies through synthesis, leaving building design hostage to shifting surroundings. The vicissitudes of four buildings by Jean-Claude Bernard around one circle illustrate this dilemma. Bernard recalls their design with exasperation. "I can't count the number of studies we did, while the city changed its mind about the streets around



**Three views of buildings by Jean-Claude Bernard illustrate problems of the old and new plans. A pair of small buildings (top), commissioned after the 1979 plan, were designed to embrace a small square that was never built. Black metal stairs (second from top) are vestiges of the 1974 plan, connecting the elevated platform to the street. Changes to that plan in 1975 forced the modification of another Bernard building (third from top) which was made shorter without a corresponding reduction in bulk. Several blocks away, pieces of the original quarter face Ricardo Bofill (bottom).**

it—three or four years of them."

Bernard's first project (left, third photo from top) was designed to match the scale and plaza of the 1974 Novarina plan. The 1975 revision forced lower heights, unsettling its volumes. When the raised plaza was abandoned in 1979, Bernard was forced to add an awkward transition to surrounding streets (left, second from top). His second building is equally ill-at-ease, borrowing façade motifs and materials indiscriminately from its neighbors. Between these, two smaller buildings were given single-story "prows" to embrace a planned pedestrian street (left, top); now, however, the street is open to traffic and their accommodation seems merely weak. All four share black metal trim in arcs like wickets that relate, if only by repetition, the whole semicircular sweep. In the end, Bernard's devices manage to mediate between neighboring towers on a busy avenue and the smaller scale of the quarter, but only by sacrificing the autonomy of his ensemble's parts.

The second approach is exemplified by Ricardo Bofill, who simply imposed his vision on the broken neighborhood (left, bottom, and page 93, top). When APUR decided the abandoned highway's traffic circle should become a grand urban place, Bofill was given principal responsibility for its design. Andre Schuch, an APUR architect, reports that "Bofill wanted to change everything. We had difficulty keeping him within a philosophy of integration into the urban tissue." Thierry Recevski, Bofill's project manager, counters that the design was subject to so many piecemeal, often contradictory authorities that unity could only be seized by force. Thus, to create a continuous façade on the Place, Bofill built a bridge that encroached on designated public space. A neighborhood coalition brought suit, and won; the offending construction will stand, but the bridge has no legal existence.

Bofill's influence extends beyond his boundaries. The Novarinas were awarded the rest of the Place de Catalogne as compensation for the abandonment of their 1974 plan, but their Modernist style was ruled out. "The city insisted the Place be harmonious," says Patrice, "and when Bofill sold his Baroque idea, we were forced to follow." But Bofill's plan to create a smaller circle nearby was frustrated when city planners refused to force the other buildings involved back from their lot lines. And in an unintended sabotage attributable to the discontinuities of urban planning, the vistas that might glorify his buildings are blocked by pedestrian passerelles that bridge rehabilitated streets.

The third strategy is cooperative, dependent on architects' interaction; its virtues and drawbacks are displayed in the Place Constantin Brancusi. Antoine Grumbach, who affirms "the quality of architecture in a city derives from the constraints imposed upon it," designed the Place and the building on its western side (page 93, bottom). His building, a compact structure bristling with intention, uses gray ceramic brick and green trim to modulate volume into large bays. To unify the Place, he persuaded two neighboring architects to continue his bay motif. But the fourth side has yet to be designed, and Grumbach frets over his inability to impose the crucial continuity, condemning "this ideology of diversity which has nothing to do with the necessary unity of successful urbanism."

Christian de Portzamparc, on the south side of the Place, uses a single bay to organize his entire façade, then seizes other stray motifs and cobbles the quarter's disorder into unity. On paper, his design exudes a self-contained authority. Nevertheless, Portzamparc is unhappy with the project. "The program was defined almost entirely by the city, and the developer was uninterested in archi-



tectural quality." Designed in 1983, it has yet to emerge from the ground.

Bernard, designing one of his small buildings on the north side, had a simpler response. He recalls, "Grumbach gave us a few directives—height, materials, and so on. Then Portzamparc came with his idea. I agreed to continue it on my building, even though the resulting façade is more or less an appliqué." Indeed, the bay distorts his fenestration cruelly, and the green brick accents, used nowhere else on the building, fail to match Grumbach's trim. The gesture is clumsy to the point of mockery, a contextual victim's revenge.

### The Problem Remains

The end result of this design-by-parcel is less an architecture of vision than one of problem-solving. The least agitated programs work best: two buildings by Aymeric Zublena (map, page 91) echo the "Steamship Style" of the 1930s and enhance the quarter without disrupting it. But too often, over-emphasis on self-assertion, exacerbated by excessively literal contextualism, gives the neighborhood an edgy jumbled feeling far from the organic harmony sought in the planning policies. The environment seems less a natural ecology than a zoo. True unity would require either sacrificing the architects to real Hausmannism, or abandoning jigsaw contextuality for the utopian scale of the 1960s.

Director Ligen admits that "the quarter is perhaps too eclectic," but argues that urban factors—parcel structure and function—are more important than the "plasticity" of the architecture. And while the designs strive for individuality, there are important underlying similarities. Widespread use of concrete and ceramic brick create homogeneous textures. Key elements—light tonalities, metal trim, cornice alignment, punched windows grouped to emphasize verticality—are repeated.

Not all common points, however, are strengths. The pervasive weakness on the ground floor, where insets, pilotis, and acentrality diffuse the buildings' force and sense, is distressing in an architecture intended to reconcile private spaces with the street. Few would prefer the 1960s anarchic legacy of office towers and apartment blocks, but the architectural benefits of this new traditionalism are still spotty and hypothetical.

The new urbanism also claims social and psychological benefits. Ligen affirms that "morphology is an important influence on sociology," citing the alienation provoked by cinderblock Modernism. Current policy will "inscribe the necessary mutations of the city within the lines of its history, so that its citizens don't lose their places, their identities." The cultural model seems to be the *vie de quartier* of pre-War Paris, where private and social life mingled freely through public and private spaces, where children played in the streets and mothers met in the market. Can a return to its urban framework recreate the very communities that "urban renewal" helped to destroy?

Few of that model's components, either structural or social, survive. Modern culture emphasizes privacy within the home, mobility outside it; shops have given way to supermarkets, men take the metro to work. Schuch acknowledges that "it's much more difficult to maintain the population of a quarter than its buildings." Despite extensive rehousing programs, the new urban policy accelerates this evolution by decreasing population density and increasing construction costs. Rather than redirect modern life into traditional paths, resurrected elements will make up an urban decor, aesthetic enhancers disguising changes they cannot prevent. Socially, this desire for continuity is fundamentally nostalgic; in consequence, its architec-



Stéphane Coururier



Dérid von Schaeven

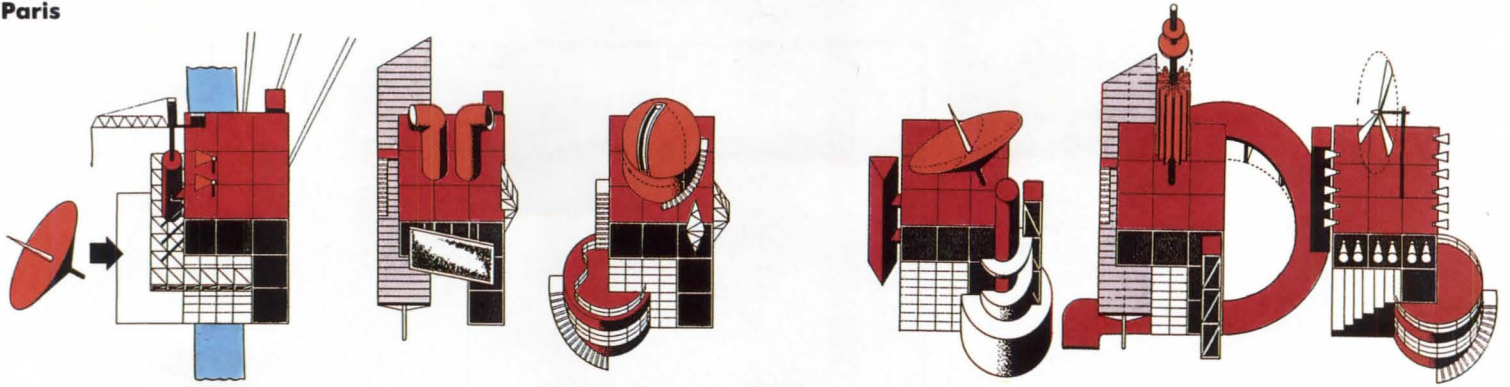
tural embodiment can only be rootless and partial.

Are there alternatives to this conservative, piecemeal urbanism? For now, its hegemony is complete; Ligen notes that "the doctrine has become so accepted that it's hard to remember how revolutionary it seemed at the time" of its development. But behind appreciation for its urban virtues, a vague dissent may be crystallizing. Portzamparc suggests that "one could have imagined a more ambitious enterprise" for Guillemot-Vercingetorix, and looks over his shoulder at the 1960s. "The first plan for Montparnasse wasn't bad; the tower itself isn't bad. But for the rest, they lacked the courage or the talent or the force to carry out a greater vision." Perhaps this "greater vision" will emerge from a more confident future. For now, Paris is content with small gestures, and small gains. **Thomas Matthews**

*The author is a journalist based in Bordeaux; his review of the new Musée d'Orsay appeared in the February issue of P/A (p. 35).*

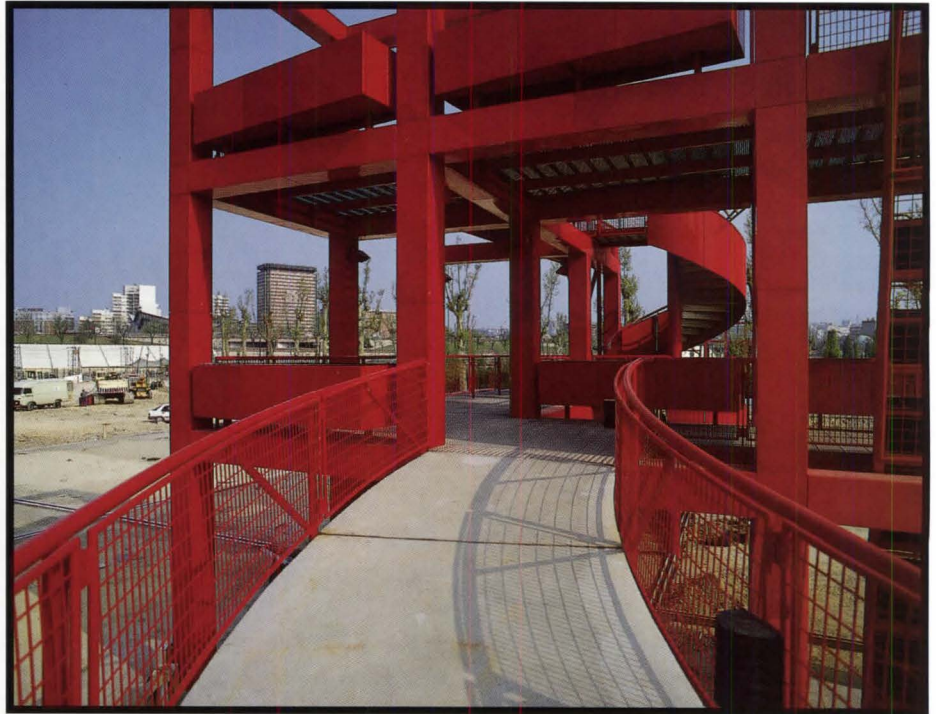
**Ricardo Bofill's Echelles du Baroque (top), the largest project in the renovation zone, has become the model for new architecture in its vicinity. Other architects who are now building on Bofill's circle have followed suit with neo-Baroque designs. Antoine Grumbach, on the other hand, builds to match the older buildings of the neighborhood (bottom). His compact structure bristles with energy, but its effect is undermined by somber colors that clash with the lighter tones of the quarter.**





## The Point of No Return

**This progress report on La Villette, which won architect Bernard Tschumi a P/A Award in 1986, shows the first two of 34 "follies" in an avant-garde park for the 21st Century.**



"EVERY single one of the 'grands projets' (page 98) has been threatened by politics," says Bernard Tschumi. Yet his own "park for the 21st Century," arguably the most theoretical of President Mitterrand's Paris projects, seems to have cleared its political hurdles and now stands a very good chance of being completed as designed, and on time.

The site itself explains why the budget-cutters avoided La Villette. No stone, literally, has been left unturned. Tschumi's 30-member team of architects and consultants, working sometimes with, sometimes against the 300-odd bureaucrats and government architects assigned to the park, saw to it that every element, from covered pedestrian "galleries" (overleaf) to long tree allées to follies programmed for many amenities, went into construction at once. "We had to reach the point of no return," says Tschumi.

That strategy alone, however, is not enough in this city of abandoned construction sites, where presidents and mayors delight in dismantling their predecessors' pet projects. Instead, Tschumi considers the completion of the first three follies, two of which are shown here, as the true turning point. Indeed, the bright red buildings could hardly provide more visible proof that this park is no paper construct. "Not 34 buildings, but one building exploded on the site" is Tschumi's oft-repeated definition. With nine more rising and five in the ground, the sheer density of his design becomes increasingly apparent.

Ironically, Tschumi's scheme only stands to gain from the one cut in the program. Early in the development of his competition-winning scheme—but long after its basic grid of follies was established—other architects, including Jean Nouvel, Henri Gaudin, Cedric Price, and Gaetano Pesce, were invited to design buildings for the park. (Still other architects handled the earlier renovation of existing buildings as a science museum and exposition center, construction of a rock concert hall, and design of a future music city.) However intriguing this melting pot approach might be architecturally, these "extras" sapped the follies of their programs, making them redundant. But the private entrepreneurs who were to fund Nouvel's video arcade, Gaudin's greenhouse, Price's conservatory, and Pesce's children's center have not come forward, and the schemes will probably be scrapped, to the follies' favor.

More successful, potentially, are the many gardens divvied up among architects, such as Peter Eisenman who is working with philosopher Jacques Derrida, and landscape architects such as Alexander Chemetov, son of the well-known French architect (page 99). Tschumi envisions a "cinematic promenade" in which the gardens are viewed frame by frame. "This is no ordinary urban park," says he. The evidence to date supports his claim. *Daralice D. Boles*

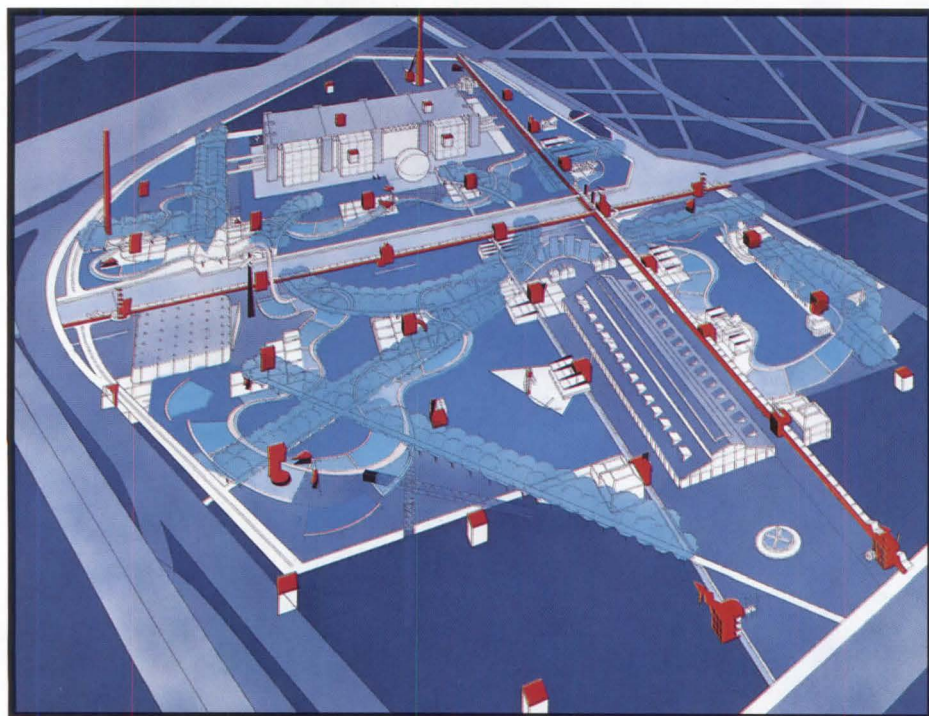
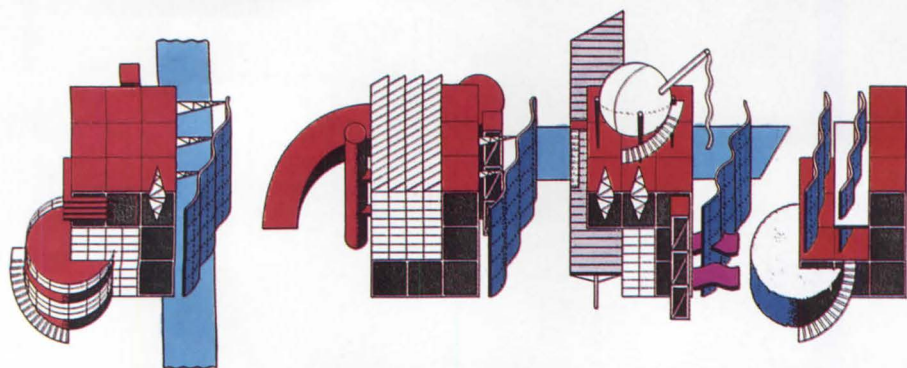
**Distributed over the park on a 400-foot grid, the 34 follies are variations on a pure 36-foot cube. The first to be completed is a belvedere or look-out tower reached by ramp (visible at left, facing page and foreground, above) or spiral stair. Projecting planters on the second and third floors, and canted "water-wheel" planters have not yet been filled.**







# Parc de La Villette



The park plan (above) is composed of three overlapping systems of points (follies), lines (canals, galleries, and allées) and surfaces (landscaping). The transparent canopies of pedestrian galleries (rendering, right) reveal their box beams, designed by Peter Rice. These beams remain constant in section although supporting variable loads, from the light canopies to a canal bridge. The "Bar Folly" (facing page) shows clearly the 3.30m structural grid of the follies, beneath its weathervane.







*Project: Parc de la Villette, 19th arrondissement, Paris.*

*Architects: Bernard Tschumi Architects, Paris and New York (assisted by Jean-François Erhel, Colin Fournier, Luca Merlini, with Alexandra Villegas; Ursula Kurz, landscape).*

*Client: Etablissement Public du Parc de la Villette (Serge Goldberg, president).*

*Site: 125 flat acres, the former slaughterhouses of Paris, in a working class neighborhood bordered by a major highway and crossed by a canal.*

*Program: 34 "follies," of 3000 to 23,000 square feet, for restaurants, cinemas, video arcades,*

*daycare centers, bars, healthclubs, and greenhouses in park, with landscaped promenades. Industrial buildings on site reused as Musée des Sciences et de l'Industrie (Adrian Fainsilber, architect) and as the Grande Halle (Reichen et Robert). Also on the site: The Zenith rock hall (Philippe Chaiz and Jean-Paul Morel) and the future Cité de la Musique (Christian de Portzamparc, page 98). Structural system: prefabricated concrete frame or steel frame. Major materials: red porcelain-coated steel, steel painted red, aluminum, and granite (follies); steel structure, aluminum roof and prefabricated concrete slab*

*(galleries and bridge); aluminum catwalks; reused paving stone; blue terrazzo and aluminum (promenade, furniture).*

*Mechanical system: reused 19th-Century infrastructure consisting of over 5 miles of man-sized ducts; central hot water heating system connected to urban supply.*

*Consultants: Setec, landscape; Tschumi-Erhel, interiors; RFR, Peter Rice and Setec, structural; Setec, mechanical.*

*General contractor: Société Nouvelle Coignet.*

*Cost: \$130 million (first phase).*

*Photos: J.M. Monthiers.*



# Monumental Modernism

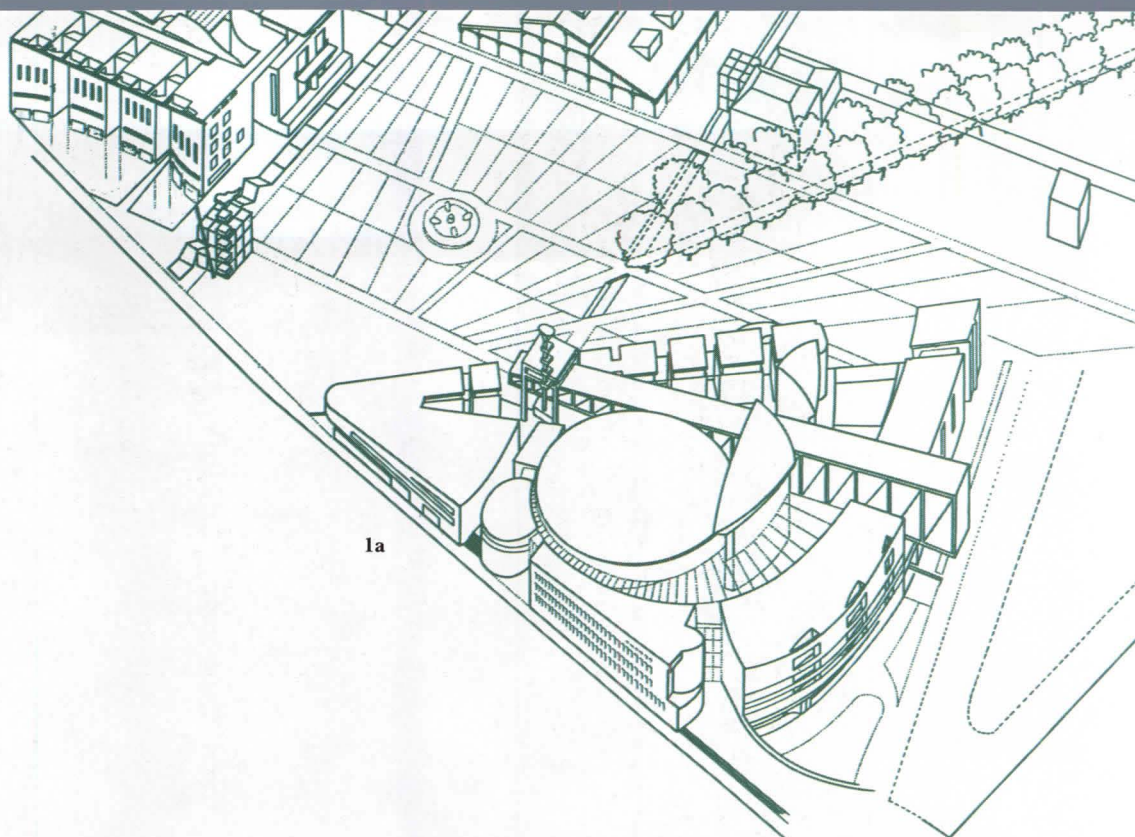
**The so-called *grand projets* of President Mitterrand will have a lasting impact on the city of Paris. Five now under way are considered in this progress report. Two others are also featured in this issue.**

FRENCH kings and presidents alike have shared the desire to leave their mark on the city of Paris, and Socialist President François Mitterrand is no exception. While several of the so-called *grands projets*—including the Musée des Sciences et de l'Industrie at La Villette (P/A, Jan. 1985, pp. 90–93) and the Musée d'Orsay (P/A, Feb. 1987, pp. 35–36), both of which opened this year—were the pet projects of former president Valéry Giscard d'Estaing, it is Mitterrand who claims the credit for their completion.

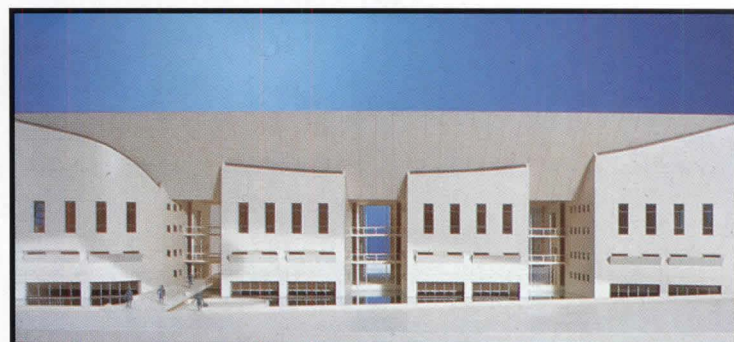
With the notable exception of the Grand Louvre commission, bestowed by Mitterrand directly on American architect I.M. Pei, the *grands projets* have all risen from controversial beginnings as international design competitions, won in most cases by non-French architects. All have survived a seesawing of favor and funding from municipal and national political leaders, although some programs—most notably the Carrefour de la Communication at La Défense and the Opéra de La Bastille—have been cut or modified dramatically in recent months by the conservative administration of Jacques Chirac, the mayor of Paris who was elected prime minister last year. To do unto the city—and to undo what others have planned—is an accepted prerogative of high office in France.

If the free exercise of architectural *droits du seigneur* by French rulers is not new, one must remark on the unprecedented pace with which Mitterrand's projects have moved forward, prompted by the prospect of national elections next year. Ambitious plans to stage a 1989 World's Fair in Paris—a prospect that fueled the building of the *grands projets* for a while—were ultimately abandoned, but the Institut du Monde Arabe (Arab World Institute; see page 72) will open this fall, and the Parc de La Villette (page 94) is moving swiftly towards completion two years hence. The opera house, communication center, and Nouveau Ministère des Finances are all firmly under way. Even the Cité de la Musique, the most recent and therefore most fragile of the *grands projets*, now seems secure, or as secure as it can be in the flux of French architectural politics. **Thomas Vonier** ■

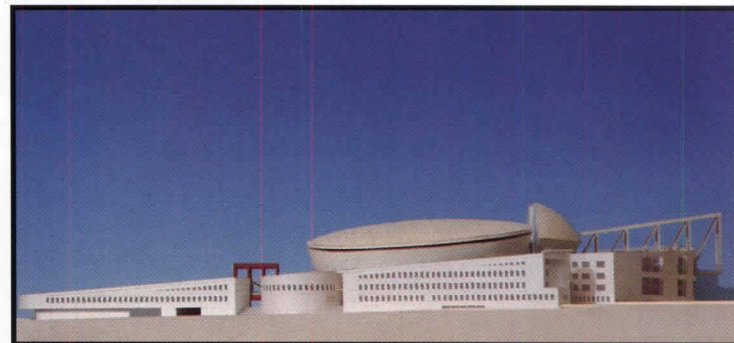
*The author is an architect in Washington, D.C., and serves as P/A's correspondent in that city. Since 1970, he has spent a portion of each year in Paris.*



1a



1b



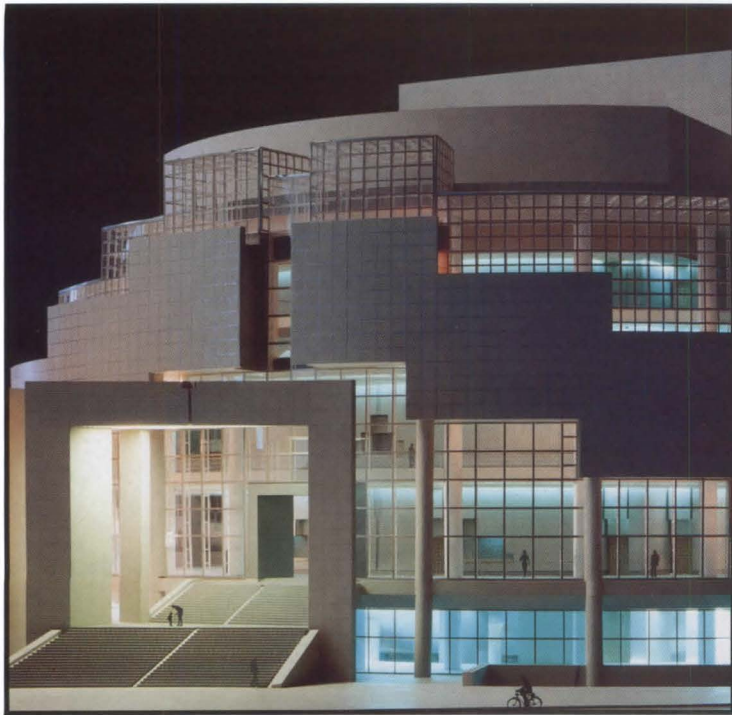
1c

**1a, b, c Cité de la Musique at La Villette. Architect: Christian de Portzamparc.** There is already one sort of "city of music" at La Villette: the textile-and-frame Zenith concert hall by French architects Philippe Chaix and Jean-Paul Morel. But the real City of Music, future kingdom of French composer/conductor Pierre Boulez, will house an extraordinarily advanced complex of music classrooms, special performance halls, student lodgings, and a museum of musical instruments. The site is split in two parts, flanking the Lion Fountain at the park's main entrance, with the conservatory to the west (1b) and public

museum, concert halls, and guest performers' quarters to the east (1c).

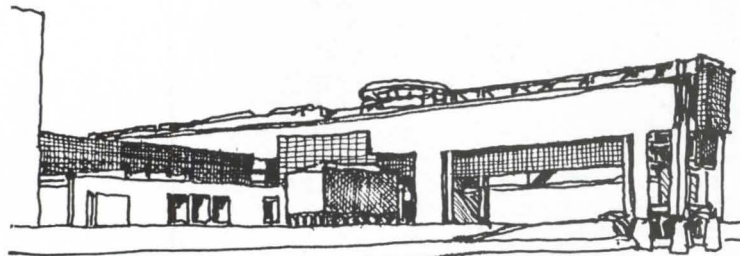
**2 Opéra de La Bastille. Architect: Carlos Ott with NORR, Toronto.** For years the best one could say about this large, shabby site at the Place de la Bastille was that it had La Tour d'Argent, a lively and popular restaurant. Now, nearly three years after work on the site began, that's still the best one can say: after the original restaurant and everything around it was demolished to make way for the opera house, a replica of the Tour is back in service on a site next door. It is the Opéra that has





2

Jean Béraud



3a



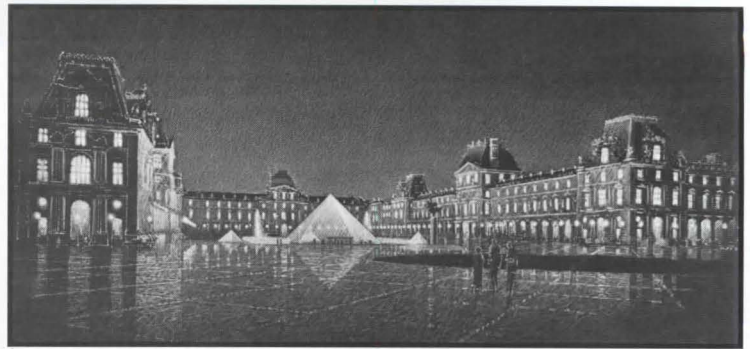
3b

changed. Budget cuts last year scrapped some of the most innovative aspects of the original program, including a moving scenery works and a hall with manipulable dimensions. Thus while the outward appearance of Ott's design will not change much, this "opera of the people" seems destined to become a fairly conventional performance facility.

3a, b Nouveau Ministère des Finances, Bercy. Architects: Paul Chemetov and Barja Huidobro, AUA, Paris, and Arretche & Karasinski, Paris. With parts of Chematov's design now emerging from, and beside, the Seine, one

sees plainly that this project is *big*. The Ministry's new quarters promise to outstrip all other *grand projets* in pure visual and physical impact. It's not only a very large scheme (nearly one-quarter of a million square meters in all), but also a prominent one.

4 Grand Louvre. Architect: I.M. Pei & Partners, New York. Yes, the 60-foot-high glass pyramid is being built in the Cour Napoléon, despite initial public outcry and subsequent technical difficulties with the glazing. No, it doesn't seem to be any better liked by Parisian architects and architectural historians. Yes, the Ministry



4



5

Deird von Schawen

of Finance (see above) will move out of the Louvre, despite protestations to the contrary, so that the entire palace can be turned over to museum use. And yes, it seems reasonable to expect that the Louvre of the future will be a much less trying experience for the projected five million visitors a year who will make use of the elaborate underground facilities now under construction in the courtyard.

5 Carrefour de la Communication, La Défense, called Tête-Défense. Architect: Johann Otto von Spreckelsen, Denmark (left the project in 1986, deceased in 1987). This 105-meter-high open cube

already figures prominently in the pedestrian's nightmare known as La Défense, an island of steel-and-glass high-rise office buildings to the west of Paris. Set slightly off the axis of the Champs-Élysées that runs from the Louvre through the crumbling Arc de Triomphe, Spreckelsen's "triumphal arch of mankind" was to house an international communications complex that would herald the new age of information technology. Now however, the program has been changed to speculative office space, and the building itself may be sold along with the rights to develop office towers on adjacent land.



## P/A Technics The Uses of Steel

**Steel is one of the preeminent modern materials. Some of its recent uses, though, not only question some of the tenets of Modernism, but broaden the expressive potential of the material.**

THE history of steel in many ways parallels the history of Modernism. Steel evolved from cast and wrought iron, materials that, while they looked ahead to the mass production and prefabrication of steel, shared with traditional materials an unpredictable behavior and facility for ornamental expression. Cast and wrought iron were machine-made without being machinelike.

The development of steel over the last century has moved in a very different direction, guided by the Modernist principles of efficiency, functionalism, and exposed, unornamented form. The trend toward efficiency is apparent not only in the development of more efficient steel profiles, such as the wide flange shape, but in the new design methods for steel structures promulgated by the American Institute of Steel Construction, where safety factors are applied to specific loads and resistances to minimize unnecessary use of the material. From an engineering standpoint, the form of steel still largely follows its function.

The Modernist belief in the honesty of materials also has influenced the development of steel. Weathering steel, for example, was not only a response to the high maintenance costs involved in the painting or coating of steel with sacrificial metals such as zinc or aluminum. Its exposed, oxidized surface also appealed to the modern taste for naturally weathered materials.

The standardization of steel shapes further appealed to the Modernist bias against ornament. Just as the casting of iron into molds facilitates an ornamental treatment of its surface, the hot-rolling or cold-forming of steel favors smooth, unornamented surfaces and standardized profiles. Standard shapes, as Mies showed, could be used ornamentally, as when he ran I-beams up the outside of concrete-encased columns to represent the wide flange shapes within. But the extruding and rolling of steel make it nearly impossible to produce architectural ornament as traditionally conceived. Ornament, as the saying goes, isn't in the nature of the material.

### **The Ubiquity of Steel**

Steel has become an eminently modern material, not only because of the principles that have guided its development, but because it is seemingly everywhere in our buildings—in columns and beams,

partitions and floors, cladding and roofs, windows and doors, reinforcing and hardware. The reasons for that are not hard to find. Steel has a greater density, strength, and stiffness than masonry or concrete; greater uniformity and decay resistance than wood; and greater impact resistance and dimensional stability than aluminum. Steel also allows faster erection and greater prefabrication than most other structural materials.

### **Post-Modern Steel**

The ubiquity of steel, though, only highlights the dilemma faced by architects who have begun to question the Modernist ideas that have guided the material's development and past use. Must the form of steel directly reflect its function? Does the exposure of its natural surface constitute the best or even the most honest use of the material? Need the standard shapes of steel eliminate its ornamental application?

Such questions have had a marked effect on the recent use of steel. The apparent decline in popularity of weathering steel, for example, no doubt rests as much upon a growing disinterest in the honesty of materials as it does upon the material's tendency to stain adjacent surfaces.

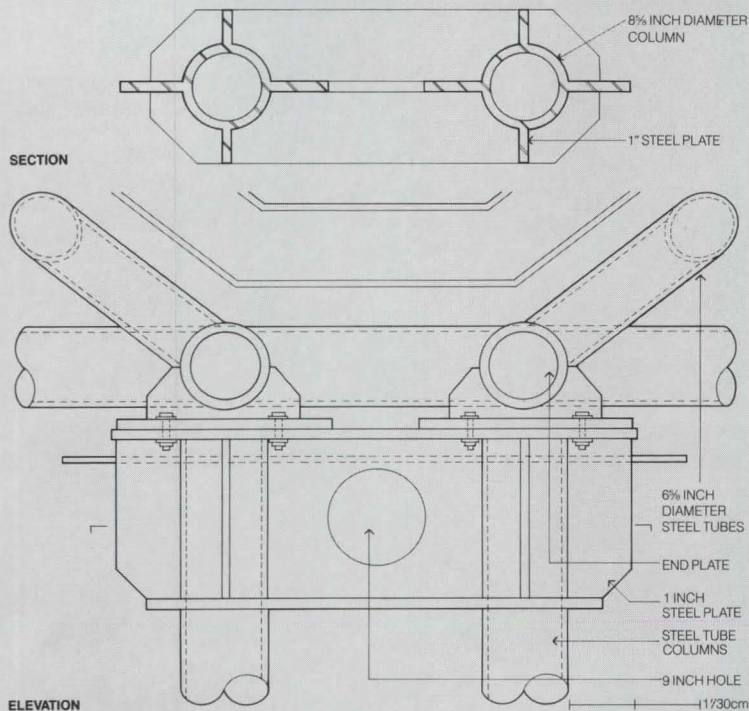
But in most cases, such questions have greatly expanded steel's applications. The following projects indicate the range of ideas currently being explored, some of which focus on the malleability of the material's form, and others on the various treatments of its surface. The development and early use of steel may have been guided by Modernist principles. But, as the details on the next five pages show, Modernism by no means exhausted steel's expressive potential. *Thomas Fisher* ■

### **Acknowledgments**

P/A would like to thank the following people for their assistance: William Noble, Gerrhard Haaijer, American Institute of Steel Construction; E.T.E. Sprague, Steel Joist Institute; John Stover, Metal Building Manufacturing Association; Paul Nimtz, PDN Associates; David Young, Mark Asmus, Bethlehem Steel; Terry Lacer, Metal Sales Manufacturing.

(See Technics-Related Products, p. 106.)



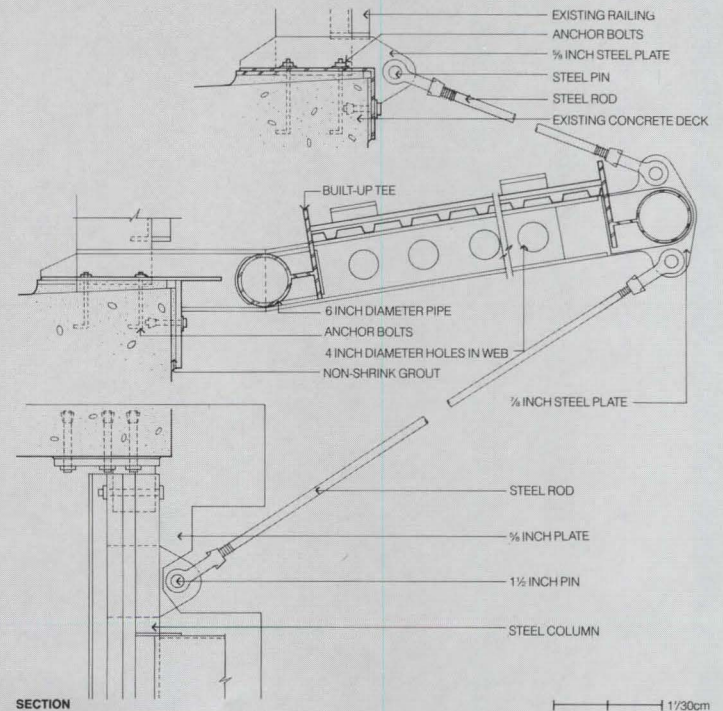


**United Terminal and International Terminal, O'Hare Airport, Chicago, Ill. Architects: Murphy/Jahn with A. Epstein and Sons, Chicago.**

The new United Terminal forms one side of the U-shaped terminal complex at O'Hare airport. The steel framing of the building was almost a given, says Martin Wolf of Murphy/Jahn, "because of the desire to have large spans and extensive areas of glass." The United Terminal consists of a front ticketing lobby covered by a folded steel truss roof and a rear concourse spanned by segmentally arched vaults supported by perforated steel beams. Murphy/Jahn, in the design of the new terminal, departed from the Mies-

ian aesthetic of the firm's other terminals at O'Hare, according to Wolf, because they wanted to "find a more appropriate form, one that better expressed the function of an airport."

The steel detailing on the façade of the terminal (above left) typifies the column and beam connections throughout the building. Clusters of tube columns terminate in steel plates, which in turn support the steel trusswork. Holes, cut into connecting vertical plates or webs, minimize the use and weight of the steel and visually lighten the structure. While most of the steelwork involves stock shapes, the designers, says Wolf, "paid a lot of attention to the steel's appearance." The use of welded or bolted



connections, for example, was decided, in part, upon which looked better in particular locations within the building.

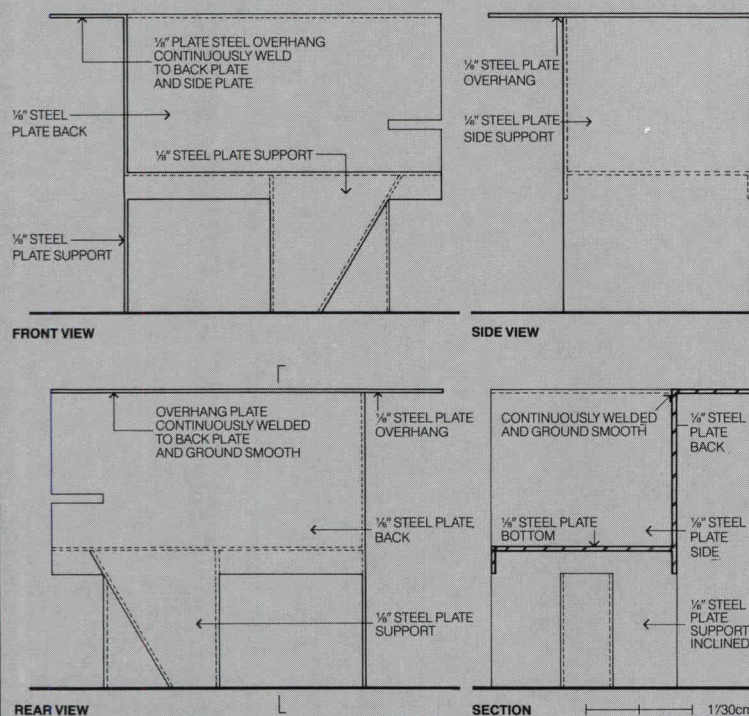
A change in the Chicago building code, prompted by the United Terminal, allowed the exposure of steel. "Five years ago," says Wolf, "we could never have built the terminal this way. But we formed a committee, hired fire consultants, and convinced the code officials that exposed steel is safe when used in conjunction with a supervised sprinkler system."

The temporary International Terminal at O'Hare occupies the rehabilitated first floor of the airport's main parking garage. Covering the terminal's curbside is an undulating steel canopy (above

right). The canopy, with its perforated steel beams, has a family resemblance to the United Terminal across the roadway. But the canopy, in other ways, is bolder, using steel tension cables rather than trusses to support the roof and employing red rather than light gray paint to highlight the steel structure. Both projects, though, show how standard painted steel components can be used to create highly expressive forms and decorative effects. "It's a joy," says Wolf, "working in steel when you can expose it."

Photos: Murphy/Jahn

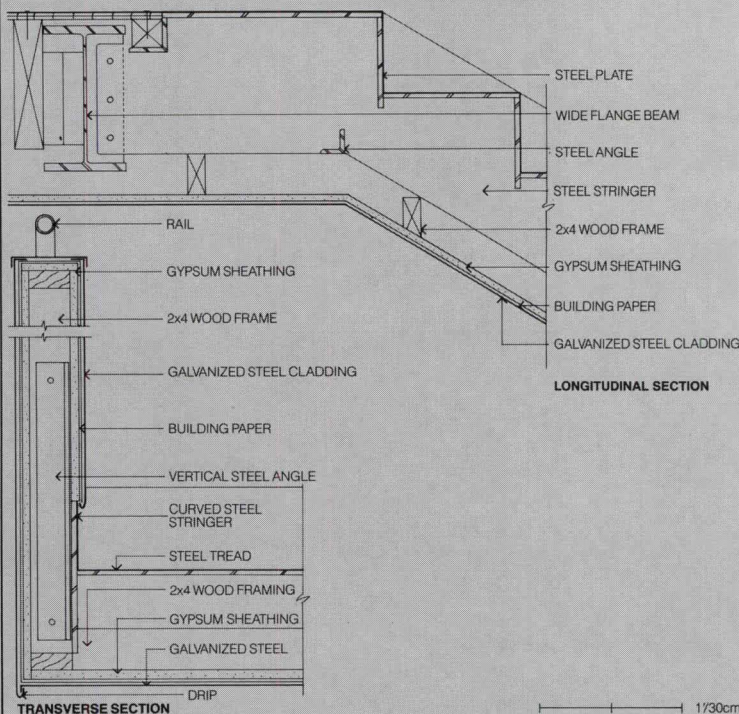




**Loft, New York. Architect: George Ranalli, New York.**

Steel is the material used for the furniture and fittings of this New York loft designed by George Ranalli (above). The pragmatic reason was cost: "I could produce a chair in steel," says Ranalli, "at half the cost of producing a custom wooden chair." But Ranalli had other motives as well. "I became interested in the dialogue between the roughness of steel and the smoothness of other materials, such as the leather for the seat cushions." He designed the chair and table pedestals to be made out of steel plate, visiting several fabricating shops until he found one that had the tooling capacity to break, bend, shear, and flame

cut the steel properly. Ranalli specified how each piece was to be made. "I had the steel bent where the body might come in contact with it, and welded in other places," he says. "The bends are about as tight as you can get without creasing the steel." To highlight the roughness of the steel, he left it exposed, with the ground-down welds revealed as a lighter color against the gray mill scale finish. The steel was finally coated with a clear lacquer to prevent its rusting. This is one of a series of objects and buildings Ranalli has designed in steel. Why the attraction? "It's the dominant material of our society," he says, "and its artistic implications intrigue me."



**Weisman Residence Addition, Los Angeles. Architects: Frank O. Gehry & Assoc., Venice, Calif.**

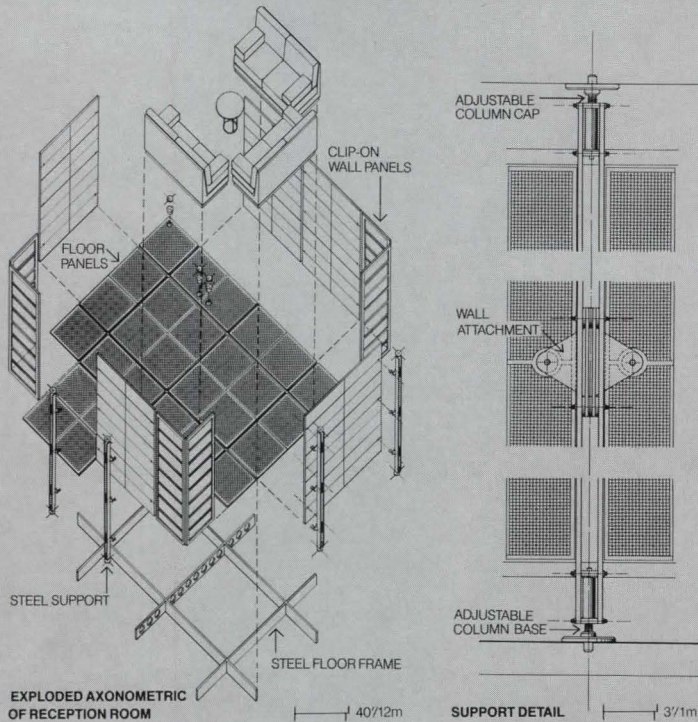
Frank Gehry was commissioned to design an office and maid's room as a second-floor addition to the house of noted art collector Marsha Weisman. A curved stair clad in galvanized steel (above) connects the addition to the backyard and pool. The benefit of a material like galvanized steel, says Robert Hale of Frank O. Gehry and Associates, is that "it allows you to do the most with the least amount of money. It's also a material that can be used on horizontal and vertical surfaces, creating forms that are more sculpturally integrated." The stair is constructed of steel and wood

framing. A folded steel plate forms the treads and risers to which are welded curved steel plate stringers. Vertical steel angles welded to the stringers in turn support an assembly of wood studs, gypsum sheathing, building paper, and galvanized steel cladding. "It's a very low-tech stair," notes Hale. "We even had Bondo added to the gypsum sheathing to get the right shape." The life of the galvanized steel, adds Hale, "is 10 to 20 years, depending upon the climate and how it is installed. But it's easily maintained and repainted with a zinc-based paint." Function aside, the Weisman stair shows Gehry's talent for using common material such as galvanized steel to create elegant, idiosyncratic forms.





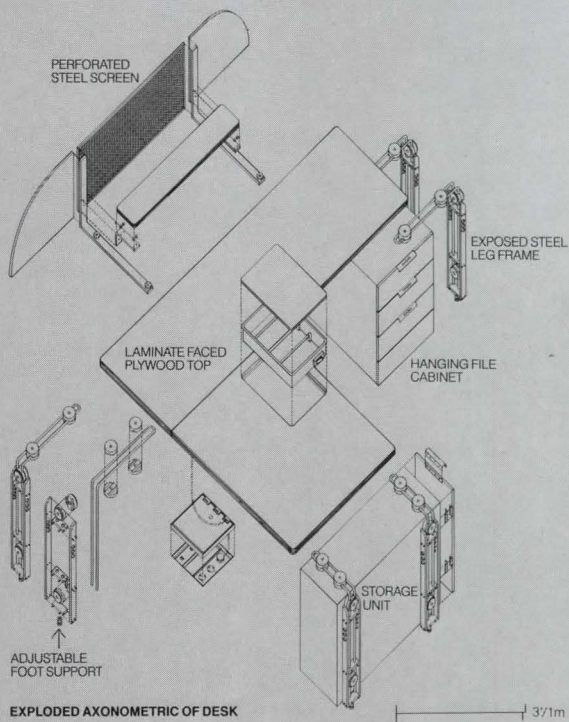
Photos: Richard Bryant



**Shepherds Bush offices, London.**  
**Architects:** Troughton McAslan, Architects, London.  
 Troughton McAslan Architects designed the offices for a marketing and product design business within an existing 25,000-square-foot 1910 warehouse. "The work initially involved only the top two floors," says John McAslan, "although the client intended eventually to occupy the ground floor as well." Because of those expansion plans, and because of the uneven floors and ceiling heights in the warehouse, the architects designed the reception area (above left) as a demountable steel structure with adjustable legs. The floor, consisting of maple-framed panels with carpet insets, was

raised "to accommodate all the wiring needed for the receptionist's desk," says McAslan. The reception room uses standard sheet and plate steel components, although it was all custom designed and fabricated in Wales to reduce its cost.

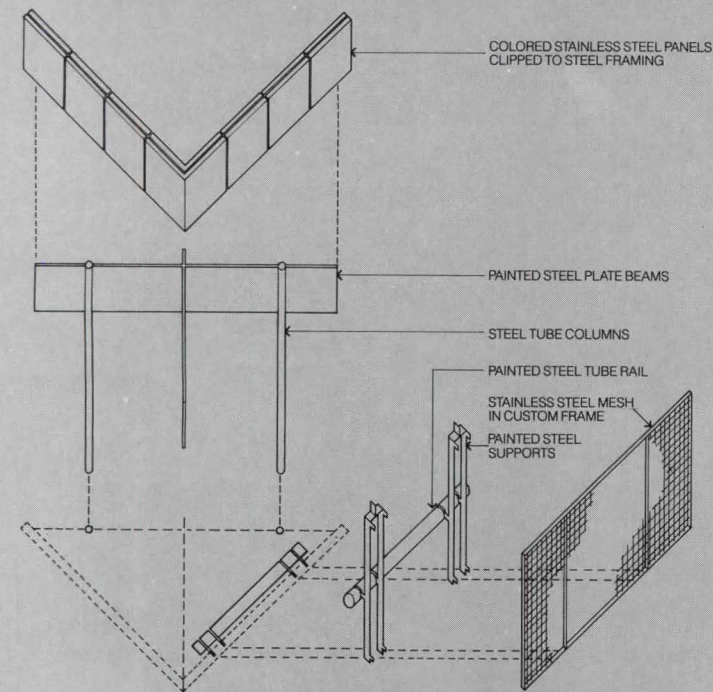
The workstations for the Shepherds Bush offices (above right) employ many of the same principles as the reception room. The furniture has adjustable legs, to accommodate uneven floors, and a steel frame into which various components are plugged. "The client wanted an individual feel to the offices," says McAslan, "and welcomed our designing as much as we could, although it had to be competitive and, because the



project was fast-tracked, quickly built." The architects proved that their workstation design was competitive with other systems on the market and was better adapted to the client's needs, allowing the same frame to be easily converted to a drafting table, light table, manager's desk, or secretary's workstation. "The external steel frame," notes McAslan, "let us develop a kit of parts that could be clipped to or suspended from it. The steel frame even allowed us to use magnets to hold wires to the desk legs." The workstations were designed and built in only nine weeks and, like the reception room, were tailored to specific needs of the client. "The organization of the office," adds McAslan,

"was such that people often worked in groups of four, so we designed the workstations so that they would work in a cruciform arrangement." However, Troughton McAslan plans to refine the idea for the general market. Both the Shepherds Bush reception room and the workstation represent a high-tech and largely British take on a material such as steel—minimizing its bulk and refining its details to a machine-like precision. Implicit in their widespread use of steel framing also is its ability to accommodate change; whether intended for an expanding office or not, it is "designed to be easily demountable," as McAslan puts it.



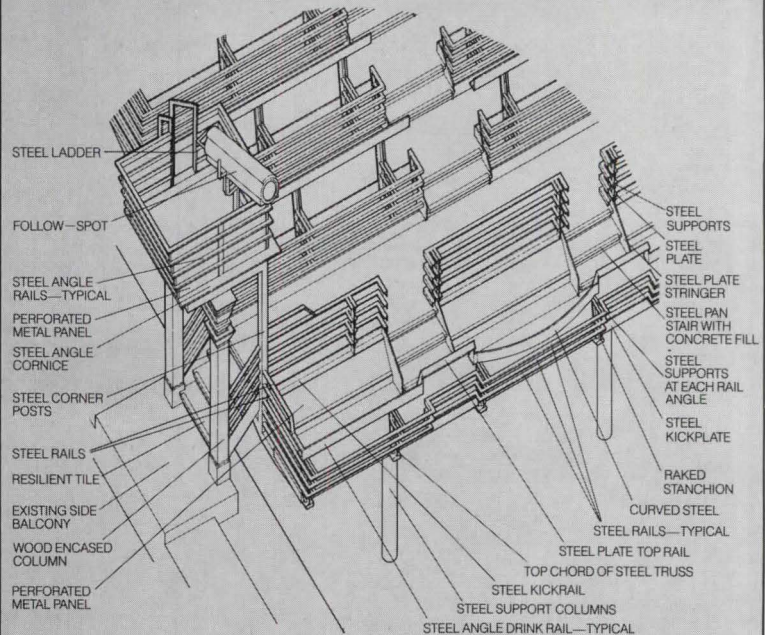
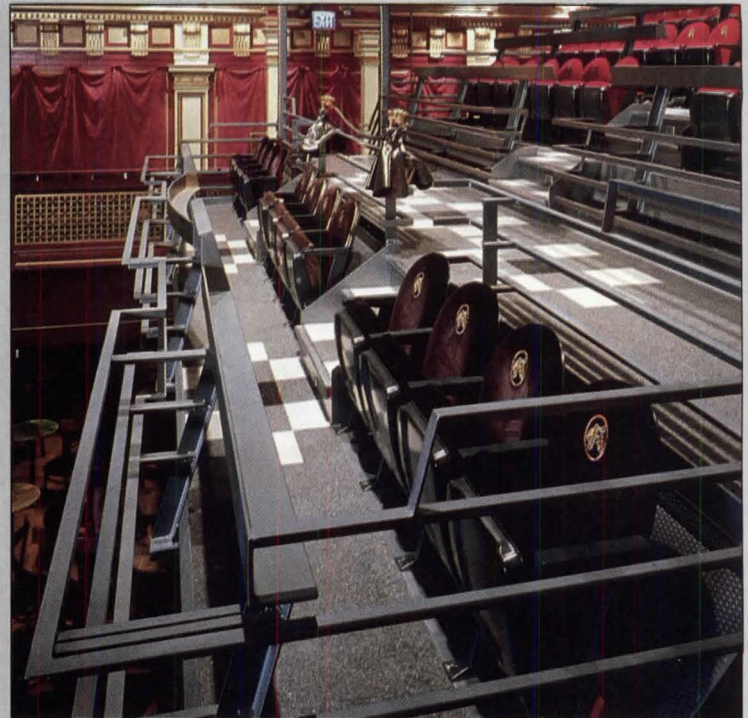


EXPLODED AXONOMETRIC

3/1m

**Micro Mart, Atlanta. Architects:** Richard Rauh & Associates, Atlanta, Ga. In this office for a company that sells microcomputer hardware and software, Richard Rauh & Associates have combined rough-faced concrete block walls with steel, aluminum, glass, and glass block entrances (above). "The client," says Richard Rauh, "wanted a high-tech appearance, but his budget allowed us to use materials such as stainless steel only at the entrances where people would see it." A wall clad in stainless steel panels defines the rear entrance. "Because of the expense of stainless steel," says Rauh, "we switched to aluminum panels in the parapet." A triangu-

lar canopy projects from that rear wall, framed with tubular steel columns and steel plate beams and clad with blue stainless steel panels. "The colored stainless steel," notes Rauh, "had to be handled carefully because it scratches easily." The beams, cut from a piece of plate steel, were field painted purple. Under the canopy are black painted steel uprights that support a custom fabricated stainless steel mesh and painted steel tube handrail. The project shows the variety and color that can be achieved with steel and how even the most expensive steel components, when used judiciously, can be justified on a low-budget project.



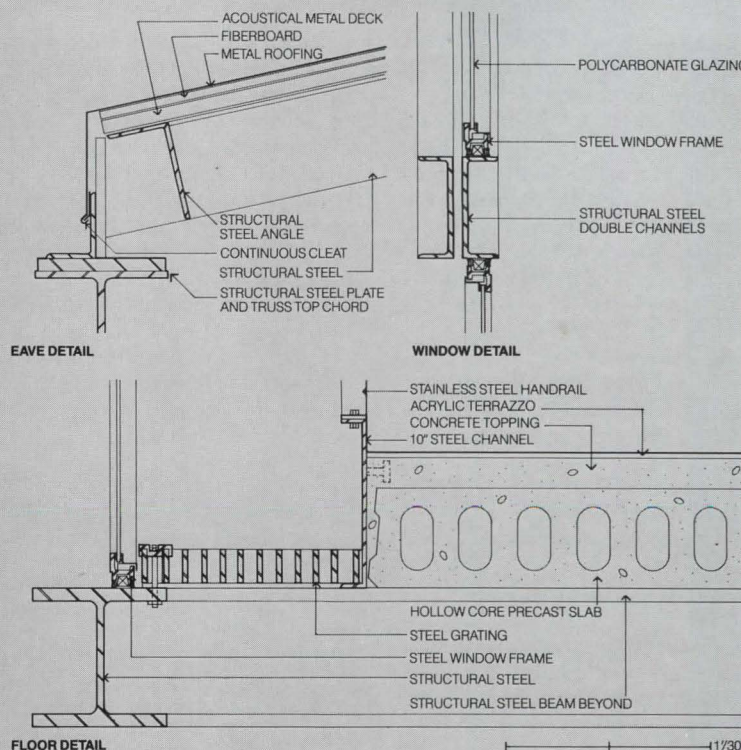
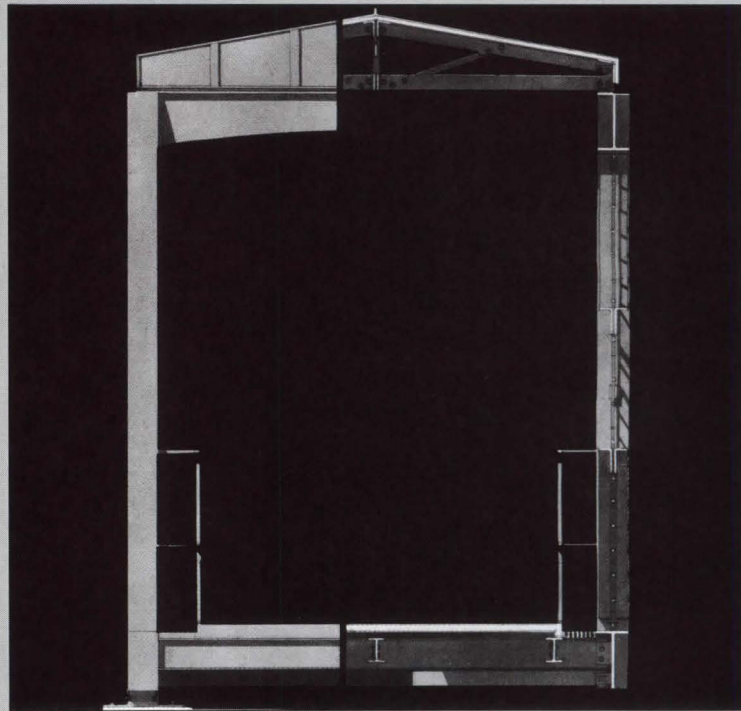
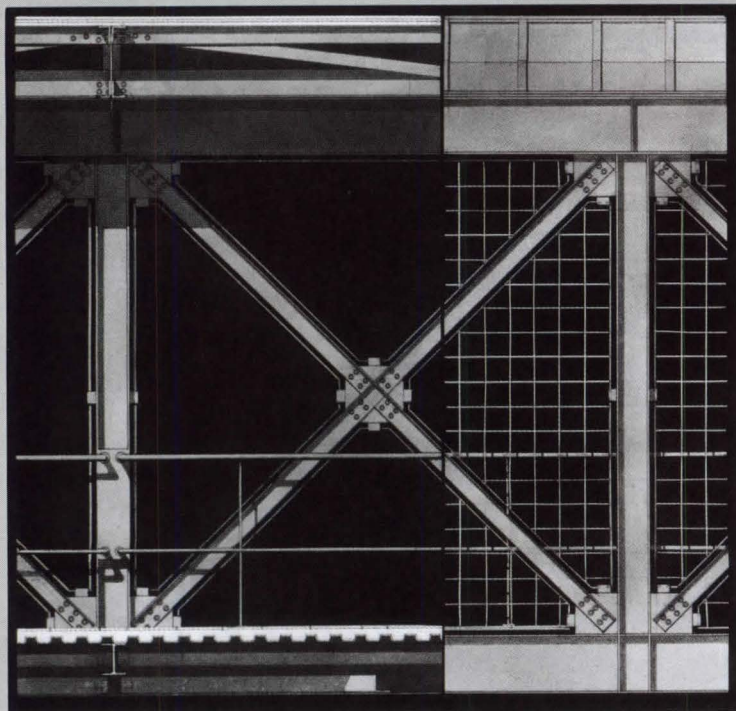
AXONOMETRIC OF BALCONY

3/1m

**Club Fugazi, San Francisco. Architects:** Holt & Hinshaw, San Francisco, Calif. Club Fugazi is a cabaret theater operated within an early 20th-Century building owned by a San Francisco community group. The club operator needed more seats, but adding them posed a dilemma: if any substantial structural changes to the building were made, the entire structure would have to be upgraded to meet the California seismic code, making the project too expensive. What architects Holt & Hinshaw did was design a seating section elevated above the floor of the theater (above) and supported by its own seismically independent steel frame. The sloped seating plat-

form rests on a series of parallel steel trusses, which are supported by wide flange beams rigidly connected to four columns. The columns stand on a grid of steel beams in the basement ceiling that distribute the point loads of the columns evenly along the foundation wall, adding negligibly to the load on the foundations. All of the steel used in the rails and platforms of the seating section are stock. To speed construction and disrupt operations as little as possible, much of the structure was prefabricated off site and delivered in large sections. Club Fugazi uses steel in a constructivist manner, managing to look carefully considered and ad hoc at the same time.





**Malden Center MBTA Headhouse/ Pedestrian Overpass, Malden, Mass. Architects: TAMS/New England Architects, Boston.** The commuter train tracks in Malden, a suburb of Boston, are separated from the Malden Government Center Complex by a depressed roadway. The architects—Tams/New England—were commissioned to design a new train station and to connect it via a pedestrian overpass to the government center plaza and, thereby, to the town's main street. "The design," says Chris Iwerks of TAMS/New England, "went through several phases before the present scheme was chosen. There were questions about connecting the station to a future

office building on the other side of the tracks as well as questions of the alignment of the station and of its architectural expression." The final scheme, about to go out to bid, takes two very different approaches to the idea of a bridge. The headhouse over the tracks is a steel-framed building clad in concrete and treated in a very formal manner, like a gateway. A concrete and brick clad tower, containing the vertical circulation, separates the headhouse from the pedestrian bridge. The latter is all steel and treated in a manner reminiscent of a 19th-Century through-truss bridge. Iwerks makes it clear that the design of the pedestrian bridge was considered as much from an architectural

as a structural standpoint. "We had considered a bridge structure with diagonal struts," says Iwerks, "but its scale was too different from that of the headhouse, so we went with an x-braced bridge, which is an older type and somewhat more complicated." Other aspects of the bridge, such as the emphasis placed on its roller supports and on its bolted connections, reveal Iwerk's interest in early Modernists such as Peter Behrens who bridged the disciplines of engineering and architecture. "In his essay 'Art and Technology,'" notes Iwerks, "Behrens discusses the difficulty we have in dealing with questions of proportion and composition in a material as visually thin as steel.

He says that 'just as it seems false and contradictory to clad daring steel constructions with stone in order to turn them into romantic knights' castles, so it is equally wrong not to recognize the need to subordinate constructional questions to the natural laws of art, principally the demands of proportion.'" It is not the revival of a historical engineering form, but the application of traditional proportions to it that makes the pedestrian bridge at Malden, in the end, so compelling.



# Technics-Related Products



**The Durasteel™ prefabricated steel modular parking booth** is constructed entirely of galvanized steel, with 14-gauge exterior pans and 16-gauge interior pans. The booth is the first in a line of prefabricated steel buildings. The 2-inch insulated walls and 6-inch insulated ceilings exceed industry standards. Commercial sliding windows, a 1¾-inch aluminum tubular sliding storefront door, high security laminated hookbolt deadlocks, and 1½-inch insulated floors complete the prefabricated unit. The booth is available in standard sizes from 3' x 5' up to 6' x 8'. Porta-King.

Circle 139 on reader service card

**Low Rise Building Systems Manual** offers architects and engineers the most comprehensive review of current design practices for all types of nonresidential buildings up to three stories high. The fully illustrated, 300-page publication features how to calculate floor loads and seismic loads when designing multistory metal buildings. In addition the manual offers a section on how metal buildings are manufactured, sold, and erected. The manual can be obtained for \$20 by writing to the Metal Building Manufacturers Association, 1230 Keith Building, Cleveland, Ohio 44115.

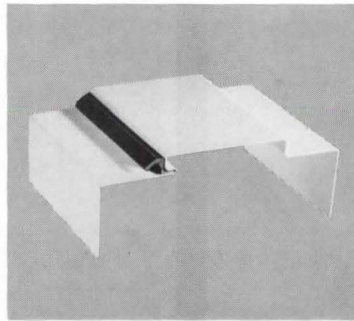
**Noise-Lock®** acoustical and airtight doors are now being offered as separate construction components. Fabricated from 18-gauge galvanized steel and filled with an incombustible sound-absorptive/thermal

dampening, the doors have a Sound Transmission Class Rating of 42 and a structural capacity to withstand air pressures up to ten inches water gauge. The doors come in seven models each shipped ready for installation, outfitted with heavy-duty latches, pull handles, and hinges. They are available through a network of area representatives. IAC.

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**Chateau series** architectural roof panels combine contemporary appearance with lasting performance. The series is available in Batten and Narrow Seam Systems. The architectural panels are manufactured from galvanized steel and are designed for application over a continuous decking covered with 30-pound roofing felt. The decorative water-shed system is available in a range of colored finishes warranted for twenty years against erosion and color changes. ARMCO.

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**StopLock™** frame incorporates factory-applied mechanically fastened weatherstrip to prevent loosening and performance failure associated with stick-on weatherstrips. The kerfed, reversible door frame is the newest addition to steel door/frame systems for pre-engineered buildings. The foam-filled, high profile weatherstrip assures positive contact for a tight seal. Standard height is 7'0", with 42-inch strike height. The assembly can be ordered in factory painted Tru-White or Bronze. CECO Corporation.

Circle 142 on reader service card



**Steel mezzanine products** are presented in a new eight-page, full color catalogue. The brochure explains and details the manufacturer's mezzanine applications, components, turnkey services, user benefits and specifications. The mezzanines are offered in three basic styles—Free Standing, Catwalk, and Full Mat—which can be combined or altered to fit specific application needs. The company offers each line in single or multilevel systems. Each mezzanine is custom designed to assure its structural safety. Cubic Designs.

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**Steel-rite** is a foolproof reinforcing steel placement system that maintains reinforcing bars in the positions detailed by the architect. The system assures proper concrete coverage of re-bars, as specified by the ACI Code. The foundation hangers and spacers, slab, beam, and column chair components are made of injection-molded styrene and polyethylene, designed to resist the pressure of concrete placement. Steel-Rite reduces the need for additional reinforcing steel to compensate for poor re-bar placement. Charles F. Wheeler & Company.

Circle 143 on reader service card

**Exterior metal faced insulated building panels** can clad an entire outside wall or be fabricated for spandrels or window in-fills. The expanded polystyrene core is sandwiched between plywood or Masonite backer-boards, with enamel-clad aluminum on the

outside and a choice of aluminum, Masonite, or fiberglass-reinforced plastic (FRP) on the inside. Smooth and embossed finishes come in a variety of colors. The metal panels are independently tested for transverse loading and meet local building codes. Branch River Foam Plastics.

Circle 144 on reader service card

**Corrstan® Multi-Mil Coating System** is described in a new full-color case history of Scott's Paper's 50MW cogeneration facility in Chester, Pa. The document outlines the need for the proper protection of metal siding against industrial pollution, corrosives, impact, and abrasion. The case history sheet details the plant process, Corrstan performance characteristics, and the extensive successful experience of Corrstan's manufacturer in cogeneration installations. It may be obtained by writing Steel-ite, Inc., 1010 Ohio River Boulevard, Pittsburgh, Pa. 15202.

**Fashion metal roofing systems** offers six standard mansard designs including concave and convex panel systems. All of Fashion's architectural metal roofing, facing, and mansard systems are designed for "no-adaptor" installation. The specified galvanized steel panel sections are factory formed and cut to length for each installation. Eight Kynar® colors and two woodgrains are offered as standard. Special colors are available at no price penalty when quantity permits. A non-prorated (labor and materials) warranty covering color coating and film integrity is available upon request. KIDDE.

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**Stile™ tile-like metal roofing** combines the versatility of pre-painted steel with the look of tile. The 26-gauge galvanized steel base conforms to ASTM specification A-642. It is layered with zinc, an epoxy-based coating, and a surface coating of Fluoropon®, a fluorocarbon resin-based coating. The one meter covering width is available in standard



lengths of three through 16 feet at one foot increments. The roofing and component accessories are manufactured in five colors. Metal Sales.

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**Privacy Paneling**, a color-coated galvanized steel fencing, is presented in a new four-page two-color pamphlet. The design and structure, in 6-foot and 8-foot heights, provides security and privacy without blocking ventilation for residential and public applications. Detailed drawings show exploded views of the use of installation hardware and an overview of installation on rails and on uneven terrain. The low maintenance roll-formed design is available in fade- and chalk-resistant color-coated finishes. ROHN.

Circle 214 on reader service card

**The Systems Information Guide** cites the economic advantages of computer aided building systems. The custom manufacturing abilities of computer aided design and engineering, combined with the system's mass produced components, are described and illustrated in the four-color brochure. The seven-page guide details the three basic structural systems with photos

and diagrams. Thermal tables are provided for a variety of roof and wall systems. A free copy of the brochure is available by writing Atlantic Building Systems, Dept. AT-10285, POB 2020, Cathedral Station, Boston, MA 02118.

**The Walkerdeck** cellular deck matches the structural demands of the steel frame building with the communication and electrical requirements of the automated office. Designed foremost as a distribution system, Walkerdeck provides maximum cellular capacity to handle ever-increasing cabling requirements. The system's preset inserts are designed to work with all major communication and data systems. With presets two feet along each distribution run, services can be changed with minimum disruption. WALKER.

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**Metal building systems** product brochure offers detailed information on a variety of metal construction systems. The three-ring binder details the EPICORE Concept 2 floor system. The long span composite slab system utilizes the EPICORE composite floor deck of dovetailing rib configuration as the key to perma-

nent and positive reinforcing steel form. The brochure includes sections on roof, acoustic, form, and the composite floor decks, all available in a complete range of depths, profiles, and material thicknesses. Epic Metals Corporation.

Circle 215 on reader service card

**Spherobot** is the latest of Stephane Du Chateau's space frame systems. Two main components compose the basis of this design. First, a hollow spherical forged steel node with a detachable cap that is secured to the main part of the node through a bolt. Second, round connecting tubes that can be tapered to meet specific project requirements. The tubes' ends are drilled and threaded to allow for concealed bolted connections. The Spherobot system provides for greater ease of horizontal, as well as bidirectional connections. Unibat of America, Inc.

Circle 148 on reader service card

**The Comprehensive Design Guide**, for architects, construction managers, and facilities management personnel simplifies the design and detailing of detention equipment. The booklet clarifies the varying

elements of prison and jail construction. As a result, the 60-page design guide helps save time and cost. Model specifications emphasizing single source accountability for all facets of the detention industry, and suggested detail drawings are featured. The guide is available free of charge by writing Sonny McDowell, vice president-sales, Grayco Steel Corporation, P.O. Box 1346, Myrtle Beach, S.C. 29578-1346.

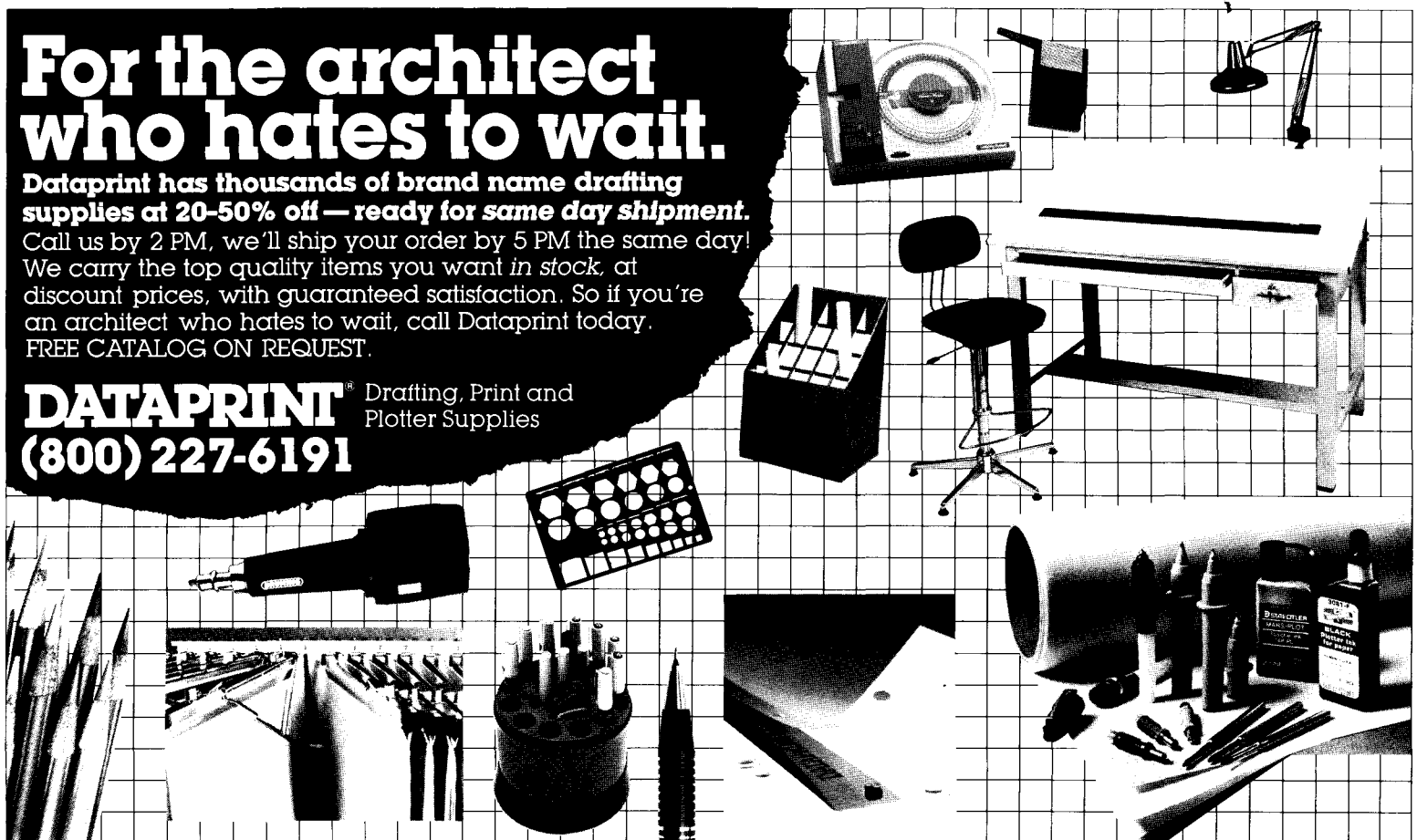
**Metal Buildings Systems Catalogue** closes their 20-page brochure with a description of the manufacturer's research and testing facilities. The page-long outline underscores their commitment to new concepts, products, and practices. The four-color brochure details the current line of building, roof, and wall systems available through independent building contractors. The catalogue features the Landmark® metal buildings. The system's large open bays (up to 50 feet), straight columns, and open web trusses provide an economical framing solution for both large and small building projects. Butler Manufacturing Company.

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(See P/A Technics, p. 100)

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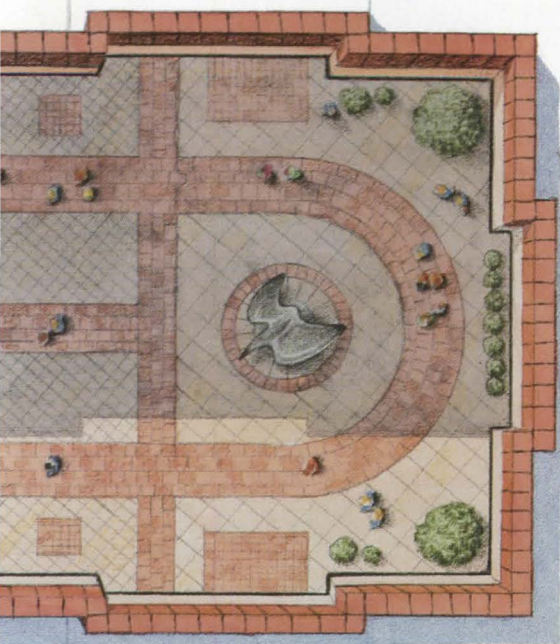
In short, he's been given everything he needs to do the job. Properly. The very first time. So it'll last as long as it's intended to. Which happens to be a long time, indeed.

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\*Hypalon is a registered trademark of DuPont.



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checks the not-so-big things. Like the width of the weld on the sheet edge.

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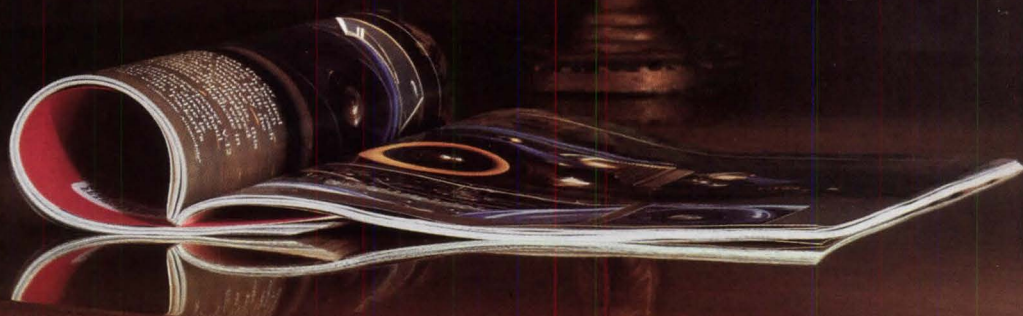
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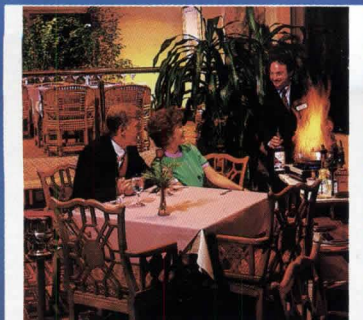
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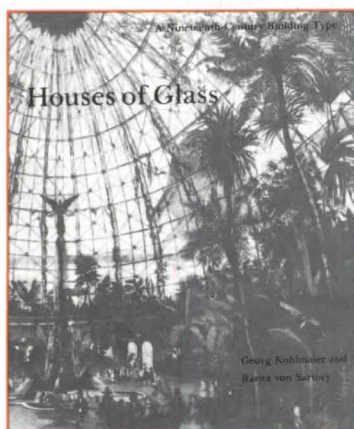
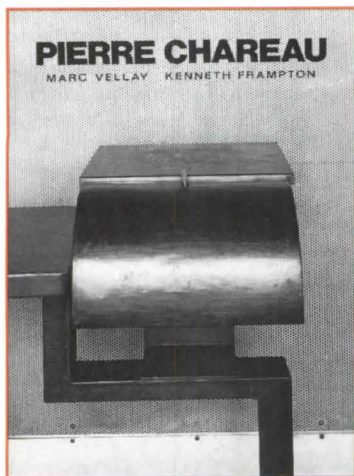




# Books

**Pierre Chareau** by Marc Vellay and Kenneth Frampton. New York, Rizzoli International Publications, Inc., 1986. 348 pp., 377 illus., \$50.00.

**Houses of Glass: A Nineteenth-Century Building Type** by Georg Kohlmaier and Barna von Sartory, translated by John C. Harvey. Cambridge, The MIT Press, 1986. 641 pp., over 700 illus., \$65.00.



## Pierre Chareau

The contents of this beautiful volume grow increasingly sumptuous with every turn of the page. It must be stated at the outset that this is a coffee table book with aspirations. A mere 20 percent of the pages have text; the remainder are adorned with high quality black-and-white and color photographs documenting the career of architect, furniture designer, and *ensemble* Pierre Chareau.

Until very recently, Chareau's name was familiar in the United States only to a small cadre of devotees who make trans-Atlantic pilgrimages to his *chef d'oeuvre*, the Maison de Verre (1928–31), arguably the first project to utilize industrial materials (glass block lenses, exposed riveted I-beams, and Pirelli rubber flooring) in an exclusively domestic context. The latent sensuousness of these materials was brought to the fore and successfully juxtaposed with hand-crafted furniture and colorful tapestries. Chareau's ingenuity dominated all aspects of design: Furniture and foyer alike were animated by secret pockets and movable parts. The house put the factory aesthetic on the map while making it eminently livable. Parisians are more familiar with Chareau the furniture designer (due in large part to the permanent collection displayed at the Musée des Arts Décoratifs), but on the whole little critical and historical attention has been paid to this 20th-Century master because of the paucity of his output and of the overshadowing dominance of his colleague, Le Corbusier.

Coauthor Vellay, the grandson of the Maison de Verre's original clients and heir to the house, rectifies this historical omission. Though he shares authorship credit with Kenneth Frampton, it is obvious that the latter was responsible only for a concluding essay. Vellay's firsthand experience with Chareau adds a personal and loving tone to the book, and his competent research makes it academically

feasible, giving it qualities that save it from being simply a coffee table *catalogue raisonné* or a collector's vanity book. The book opens like a fairy tale. A full-page soft-focus portrait of Chareau is followed by a biography and eulogizing accounts by those who knew him. The character of Chareau the man emerges: Vellay is tender and sentimental about his protagonist, and we are empathetic.

An iron and wood office table photographed against perforated sheet metal graces the glossy book jacket. The uninited would have no precise idea of what this object is or how it works, but neither could they resist reading on. Without too much effort, they would learn about Chareau's forebears in the furniture world, about his own contribution to the decorative arts, including an introduction to some theoretical debates of the 1920s and 1930s, and why and how he is considered a precursor. While much of the material is not news to those who know their art history, neither is it too general. Only facts relevant to Chareau are included, leaving huge discussions of the *zeitgeist*, or the "crazy years," to others. A complete chapter (2½ pages) is devoted to Dalbet, Chareau's collaborator and guru in metalwork; and it is true, as the author says, that "it is high time he is given his rightful place." The exact contribution of Bernard Bijvoet, Chareau's collaborator on architectural projects, remains sketchy. Either Bijvoet's input was strictly structural or else he needs his own cheering squad.

My criticisms, however, have to do with organization rather than content. Like a thorough detective, Vellay used everything he could find—Dalbet's diaries, correspondence, (complimentary) passages from magazine articles, and an exhaustive catalog of Chareau's designs with physical descriptions and references to their installation. But, discussion of an object or project in the text sometimes does not refer to its illustration,

and the illustrations in general have a mysterious organization all their own. (Also, photographs are sometimes misattributed to the supplier rather than to the actual photographer.) Inconvenience blossoms into sheer frustration, though, when one tries to use the chapter headings or index.

Frampton's concluding essay uses personal history to mythologize rather than demystify the man. He begins by recapitulating his well-known article from *Perspecta* #12, the first serious study of the Maison de Verre of any length or impact, and one certainly worth reiterating in book form. It is clear, though, that Frampton wrote the book's essay before reading Vellay's text, or he might have saved his breath on some of the background setting. But after being the responsible historian, he takes off on some obtuse tangents. He makes a complicated yet interesting and valid case for the Maison de Verre as a Duchampian "bachelor machine," but then why does he compare Chareau's professional descent to that of Picabia's? He also likens Chareau to Des Esseintes, symbolist J.K. Huysman's obsessive nut whose "interior" decoration precluded the necessity for contact with the external world. These analogies seem more concerned with the current interests of the author than with adding a truly fresh perspective to our understanding of Chareau. Frampton touches on Chareau's career after the Maison de Verre, but dismisses those works as crude *memento mori* to lost glories of a bygone era. But one could question if they are really as nostalgic and degenerative as Frampton would have us believe. Just as one must maintain confident loyalty to Chareau in order to unite the pre- and post-Maison de Verre phases of his career, the reader can only synthesize the two dissimilar approaches in this book—Vellay's and Frampton's—by a generous leap of faith.

(Books continued on page 118)



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## Houses of Glass

Perhaps the ephemeral nature of glass inspires designers to sheath books on the subject in equally precious material. The handsome vellum dust jacket of *Houses of Glass* is suitable for framing, but given its fragility it can hardly protect the voluminous text within. The book by Berlin architect Georg Kohlmaier and sculptor Barna von Sartory is an exhaustive history of a 19th-Century building type. In over 600 pages, the evolution of glass and iron structures from hothouses to the great exhibition halls to privately owned orangeries is traced. Only the first 120 pages are devoted to the authors' thesis. Appendices (mostly on J.C. Loudon, en-visioner of agricultural utopias set in and around greenhouses), a catalog made up of measured drawings, illustrations and discussion of over 100 plant houses, and another couple of hundred pages of photographs and plans follow. The authors have no polemic about glass—technical data, utopian theory, and cultural indicators are all put forth with equal competency and enthusiasm. This tome does not make for casual reading; rather it will find its way to the technical reference shelf as a valuable resource for architects, landscapers, and engineers. However, don't let this dry synopsis or the price put you off. The prose is lively (and beautifully translated), sprinkled with poetry and literary allusions and well illustrated (in black-and-white, but who needs color pictures of glass?). Despite the textbook thoroughness, the book inspires musing on larger questions: We are led to consider the inherent contradiction between the paradisaical nature of glass structures and the industrial methods by which they were conceived. We are also acutely aware that the poetic manipulation of glass by someone like Pierre Chareau is indebted to earlier greenhouse builders who always considered themselves exempt from stylistic strictures and invented a new aesthetic by default. Finally, we can't help but observe how many glass schemes of the last century were never realized and the chilly reception given to Miesian boxes today. Is glass architecture destined to remain an unrealized utopia or is it just breakable?

**Rosanna G. Liebman**

*The reviewer is an architectural historian and photographer in New York who is currently writing a history of Pierre Chareau in America.*

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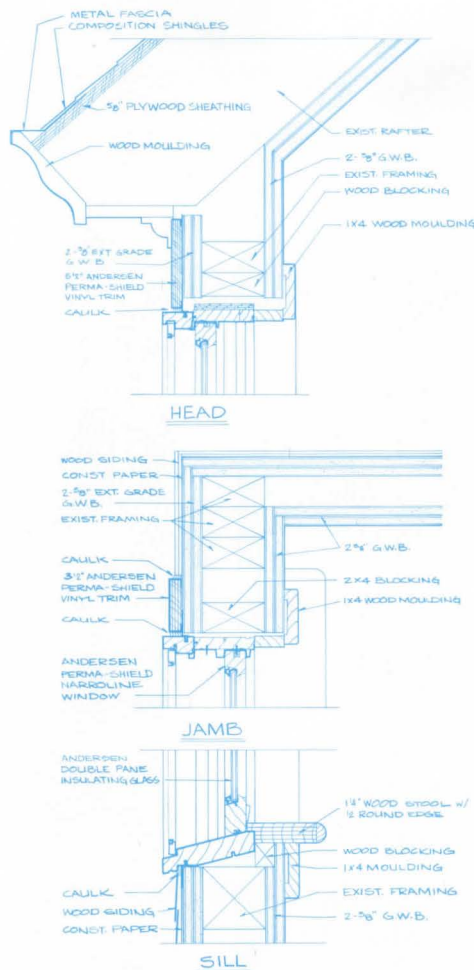
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Parliament House, Canberra, Australia, under construction. Mitchell/Giurgola/Thorp, Architects.

## Architecture on Three Continents

A preview of the new Australian Parliament House, by Architects Mitchell/Giurgola/Thorp, will show the dramatic forms of this landmark, one year from completion. Back in North America, the Mississauga City Hall in Ontario has been completed according to its competition-winning plans by Jones & Kirkland—who were also honored for this scheme in the P/A Awards program. And P/A will take readers on another visit to Barcelona, this time for a Profile of the prolific firm of Martorell-Bohigas-Mackay.

## P/A Technics: Signage

Electronic signage will get special attention in this updating.

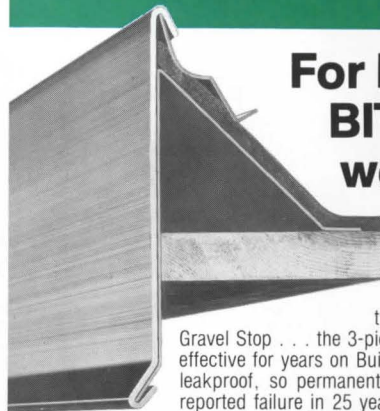
## P/A Reader Poll: Use of Computers

Reader opinions and expectations will be correlated with their experience with computers.

## Future Issues

September will bring P/A's annual special issue on Interiors. A special 13th issue in Mid-October will present an improved version of last year's Information Sources guide. The December P/A will be a special issue on houses.

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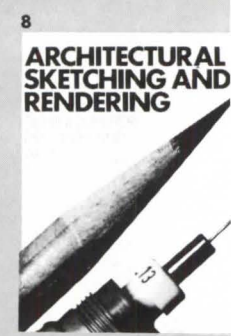
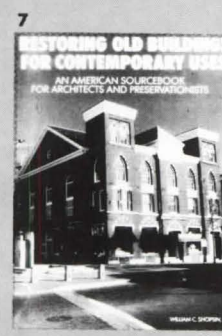
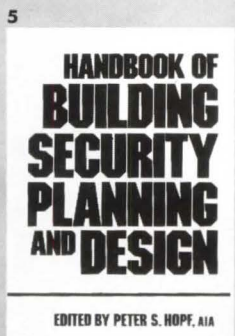
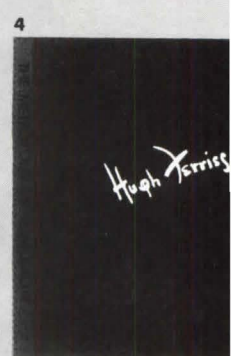
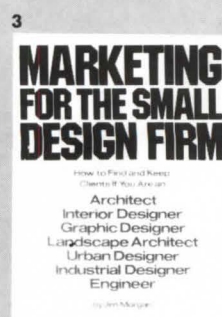
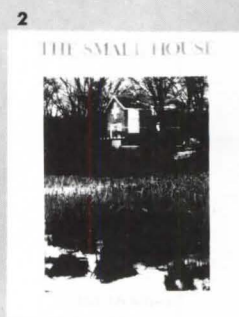
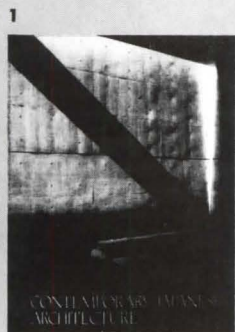
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# P/A

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physical security of all types of buildings—individual chapters on variety of building types—information on different areas of security.

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by Jeremy Robinson, 168pp., illus.  
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by Wm. C. Shopsin, AIA, 208pp., illus. (\$29.95)

Case studies of five very different kinds of preservation projects are the book's centerpiece. Each study analyzes projects that are representative of the type of work available to the general architect today. Includes a directory of preservation organizations and agencies.

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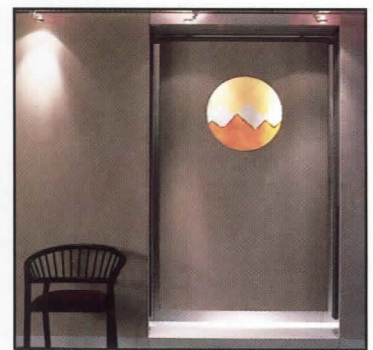
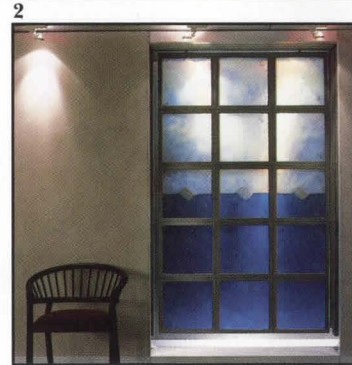
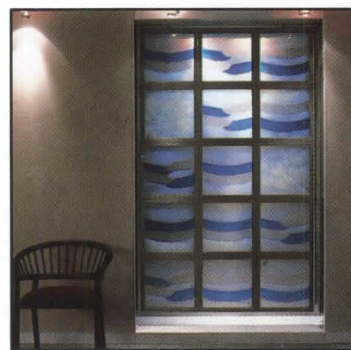
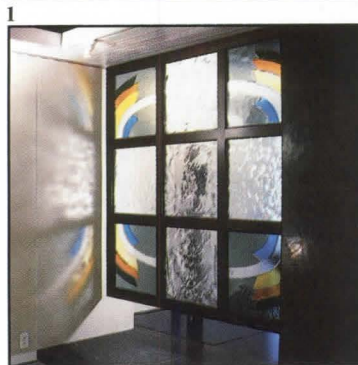
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# New Products and Literature

106 Technics-Related Products  
126 New Products and Literature  
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## Varilite Glazing

Varilite (1, 2) is a type of variable transmission glazing that switches instantly from a translucent milky white color to a transparent material with the application of a small electrical current. The product is based upon a breakthrough in the manufacture of liquid crystals, involving their encapsulation within a flexible polymer film. In their normal state, the spherical crystals scatter light that strikes the film. But when the film is laminated between conductive surfaces, such as glass, acrylic, or polycarbonate, and a few milliamps of electrical current are applied to both surfaces, the liquid crystals

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The panels come in any length and up to a width of 36 inches. They also can come in any thickness, color, or shape. Among the benefits of such glazing is its ability to vary the intensity of light, the transmission of solar energy, and the clarity of view through the material, making it ideal for applications where privacy, security, or daylight control are concerns. Taliq Corporation.

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## Leucos Glass

Italian-made decorative glass tiles, called Leucos (3, 4, 5, 6), are now available in the U.S. The hand-made translucent tiles come in a variety of geometric and free-form patterns, and in a range of colors. There are three sizes of square shaped tiles as well as a rectangular and round shape. What distinguishes the product is not just its decorative qualities, but its thermal and security advantages. The tiles' black, rigid nylon frames, which can accommodate up to seven layers of glazing, allow insulating, shatter-proof, and bullet-proof assemblies. IPI.

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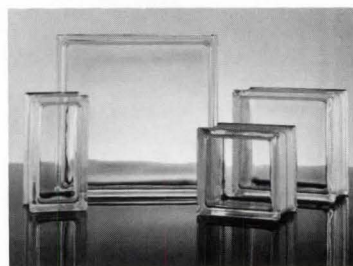
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**Intracase casegoods** is a moderately priced system in stock, ready for shipment in nine to fifteen days. The group consists of low-glare mahogany and oak and three high-gloss colors: light gray, medium gray, and light beige. A group of envelopes with interchangeable pedestals allows creation of furniture to meet specific requirements. Intrex Furniture.

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**Porcelain door and furniture trim** is available in a variety of patterns and hand-painted designs. Imported from England, this new porcelain line meets standard American hardware specifications and can replace existing installations. Christensen Hardware Corporation.

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**A new PC GlassBlock® unit, 4' x 8'**, completes the Standard Series in the company's VUE® pattern. Other sizes are 6-inch, 8-inch, and 12-inch square blocks. The new size allows for tighter curves in panel construction and wall partitions. The Standard PC GlassBlock units are suitable for interior and exterior walls, partitions, and window applications and can be used in conjunction with Hedron I® glass block hexagonal units. Pittsburgh Corning Corporation.

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**The Kallikrenos™** six-foot-long tub has waste and overflow located in the center. The 20-inch-deep tub has a six-jet whirlpool system and is sloped at both ends so that it can be used by one or two people. There are controls on each side for each bather. Kallista, Inc.

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**The Stefano arm chair, Model 565**, of laminated beech wood is available in 34 standard finishes. It is suitable for reception, healthcare, and general institutional use. Loewenstein/Oggo.

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**Pearlescent exterior and interior wall finish** is composed of acrylic polymer resin, organic and Pearlescent-based pigments, and quartz sand aggregate. It is premixed and integrally colored for ease of application and requires no priming over uniform, sound surfaces. Pearlescent has excellent weathering characteristics and resists fading, chipping, and peeling. There are eight standard colors: light gray, beige, light blue, light green, gray, tan, blue, and green. ISPO Incorporated.

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**The Breuer seating collection** of bent aluminum includes a dining/desk chair, a lounge chair, and a chaise longue with seats of natural or painted wood slats, or upholstered in fabric or leather. The designs were developed by Herbert Beckhard of Beckhard Richlan & Associates, based on a chaise in the Museum of Modern Art's exhibition of Breuer furniture. The frame is of polished aluminum with solid wood slats and arms. An indoor version has fabric- or leather-covered seat and back with stitching reminiscent of the wooden slats. Cadsana.

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**Hand-made clay tiles** consist of three groups. The Gallery Collection comes in 11 standard colors, with custom colors available. The Heritage Collection of glazed and unglazed tiles is suitable for floors, patios, and walls, both indoors and out. The Sandstone Collection is topped with colored sand, which is covered with a clear glaze. All are available in 15 sizes of squares, rectangles, and hexagons. Since the tiles are hand made, no two are exactly alike. Epro, Inc.

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**The IBD Network Profile** lists all IBD members alphabetically by state and city for easy reference. All members have met stringent educational and professional practice requirements and passed a rigorous testing program. The 150-page book profiles 500 design firms. Forty color pages highlight the work of leading design firms. The cost is \$75 (\$45 for IBD members and students), plus \$7.50 shipping and handling. National Office, Institute of Business Designers, 1155 Merchandise Mart, Chicago, Ill. 60654.

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Circle 116 on reader service card

(continued on page 128)



**Span seating**, designed by Burkhardt Vogtherr, is intended for heavily trafficked public seating areas such as airport lobbies and shopping malls. It has heavy-duty carbon steel construction and unique diagonal upholstery detailing. There are two-, three-, and four-seat versions. Upholstery is offered in any of the fabrics or leathers from the Brayton Textile Collection. Brayton International.

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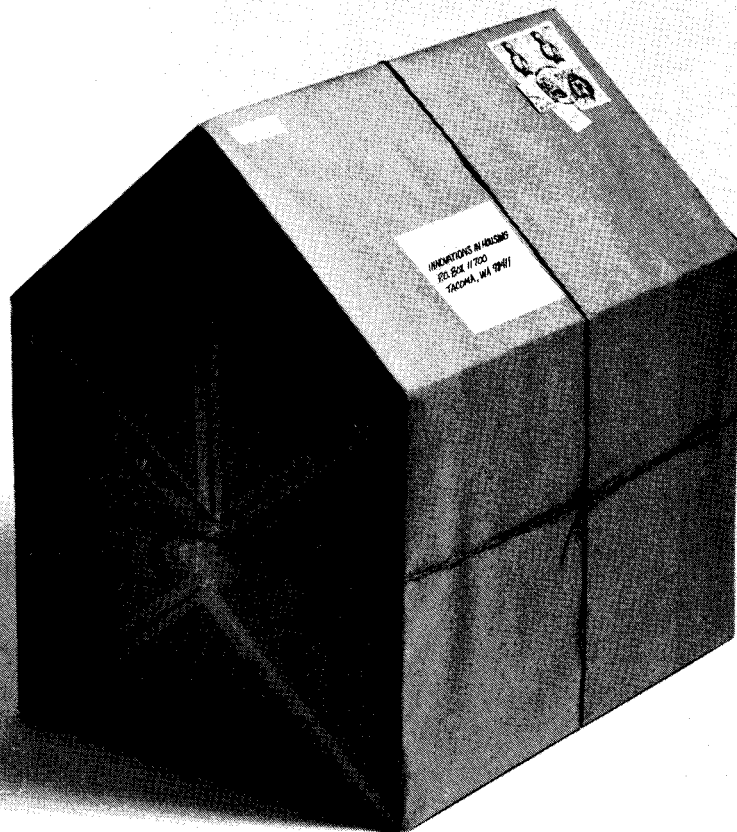
**10 Important Guidelines to Selecting a Business Interiors Firm** covers capabilities, training, service, people, budgeting, references, products, and followup. It can be used by companies looking for a new office interiors firm or as a reference guide to review the current firm's products and services. The Ohio Desk Company.

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**Futura 2000 solid vinyl siding** in a five-inch panel with shiplap design comes in seven contemporary colors. The siding has an embossed random wood grain, a low-gloss finish, and a positive locking system for easier installation. CertainTeed Corporation.

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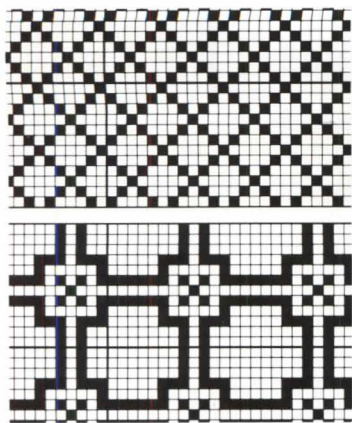
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### Ceramic mosaic design guide

illustrates 150 patterns and borders in clearly drawn diagrams for 1' x 2' Master-Set® mounted mosaic sheets. Combinations of two or more tile sizes are shown in the 32-page guide in overall patterns, 12-inch borders, and 1-inch hexagon overall patterns and borders. American Olean Tile.

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**The Rodeo Collection** is fabric suitable for upholstery for office and hospitality/institutional contract seating and for wallcoverings. The group includes Antwerp, a Teflon-treated 100 percent worsted wool satin; Citadel, imported wool blend in a multicolor birdseye texture; Glasgow nylon/wool blend twill pattern; Westwood modified flame-stitch jacquard of wool and nylon; and Belfast 70 percent wool, 30 percent acrylic knit solid backed with 100 percent polyester. Momentum Textiles.

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**Contract carpet** in three different textures is made of BASF Zeftron 500® solution dyed nylon yarns for color- and light-fastness and durability. Produced in coordinating colors, the group includes Encore dense cut pile, Harmony cut/uncut texture, and Sievalle tailored level loop. Miles Carpets Inc.

Circle 118 on reader service card

**Silver Slicks** reproduction system is said to offer image clarity as sharp and clean as premium silver film at a cost by blueprints of 5 to 25 percent above diazo prints. Silver Slicks are optically clear, without shadows, textures, or cloudiness often found in diazo films. Exposure time, depending on equipment, is six to fifteen times faster than diazo. Drawings can be produced to any size, including 8½" x 11" for convenient filing. They will not fade, yellow, or smear. Du Pont Company.

Circle 119 on reader service card

**CAM-TURF playground surfacing system** has a thick, safety-tested shock pad that absorbs most of the blow from a fall. The surface remains soft and pliant, even on coldest days, and offers consistently good footing, wet or dry. It is easy to maintain, requiring only occasional hosing off. It resists wear from foot traffic, airborne pollution, and ultraviolet degradation and is unaffected by water, rot, mold, mildew, and bacteria, says the manufacturer. CAM-TURF Corporation.

Circle 120 on reader service card



**Hospital/institutional service fittings** use ceramic Perfect valves, which have been tested for over 2,000,000 closing/opening cycles without a failure. The heavily chromium-plated lavatory/sink fittings have four-inch and six-inch wrist handles with rigid/swing connection on six-inch goosenecks. Water-conserving and spray outlet nozzle options are available. Speakman Co.

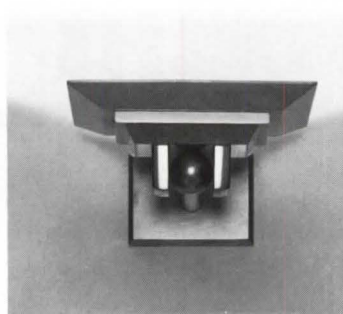
Circle 121 on reader service card

**Textiles for Walls** commercial interior collection of paper- or acrylic-backed fabric includes 35 designs introduced at NEOCON. The group includes a tapestry in seven colorways; a hand-woven silk in two colorways; and a linen/cotton/poly blend in seven colorways. The wallcoverings, intended for executive offices, restaurants, and hotels, meet the ASTM Class A fire rating. BFGoodrich, Wallcovering Products.

Circle 122 on reader service card

**A voice alarm** for Halon 1301 fire suppression systems is intended for use in computer and control room areas where background noise would make a conventional fire alarm confusing. It is activated when one of the system's fire detectors goes into alarm. The first voice message is "Fire Alert"; the second is "Fire Warning." If the countdown continues toward discharge, operators are instructed to leave. A message to secure the area is broadcast at halon release. Ansul Fire Protection.

Circle 123 on reader service card



**Prometheus Wall Bracket**, designed by San Francisco Architect Eric Stanton Chan, is sandcast brass or bronze, hand-finished in polished brass, polished bronze, or sand-etched bronze. It provides indirect upward illumination using a 300-watt tungsten halogen source and an asymmetrical reflector. Boyd Lighting Company.

Circle 124 on reader service card

**Thin tiles of natural granite and marble** are offered in 13 new colors. For commercial and residential applications, the tiles are ⅜- or ½-inch thick in 12-, 18-, and 24-inch squares and 12" x 24" rectangles. International Granite & Marble Co.

Circle 125 on reader service card

**Sunshine Rooms® Solarium** eight-page brochure includes photos and information about the many applications of the three designs: Jamaican II, Sundance II, and Horizon II. It provides details of the Tear Duct™ weepage control system and internal shade track. There are 42 models in the line and a free-standing option in each series. Sunshine Rooms, Inc.

Circle 202 on reader service card

**Each of five new chair series** is offered in three styles: high-back swivel, low-back swivel, and guest chair. Arms are fully upholstered or contoured natural wood in medium oak or walnut with satin lacquered finish. The chairs are shown in the 1987 Advantage Seating Guide, a full-color brochure that also includes the company's proven sellers, such as a secretarial posture chair. Anderson.

Circle 203 on reader service card

**Tempered glass doors**, sidelights, transoms, cladding, handrails, door hardware, and custom designs are presented in a 12-page color brochure. Photographs of products and installations and detail drawings illustrate the features and special benefits of the glass entryways and other products. Structural Glass Systems, Inc.

Circle 204 on reader service card

**Comfort-Seal™ shelters** for the medical services industry provide protection to patients being transported from a medical building to a mobile diagnostic unit. They fill the gap between a building and a mobile unit after the unit has docked. Each shelter is custom-designed and manufactured to accommodate the characteristics of each building and the mobile unit that serves it. Inflatable shelters, shelters that roll on extending frames, and curtains that slide on overhead tracks are just three examples. Frommelt Industries, Inc.

Circle 126 on reader service card

**Banner™ systems** are dramatic and cost-effective ways to add color, dimension, and visual excitement to commercial spaces. A four-page brochure provides information about custom silk-screening and three-dimensional Design Accent Banners. In-house custom printing enables designers to specify virtually any type of logo or pattern for banner applications. There are 30 standard colors and a nearly unlimited number of custom colors in either cotton or polyester fabric, both available as Class A material. Integrated Ceilings.

Circle 205 on reader service card

**Mark III overhead doors** for coolers or freezers on refrigerated loading docks or other areas with limited ceiling heights are described in new data sheets. There are photographs of key engineering features with related information on construction details. Specifications are provided for both cooler and freezer doors, with standard sizes listed. Drawings show front elevation and vertical and horizontal sections for a typical door. Jamison Door Co.

Circle 206 on reader service card

**Two new freestanding ranges** feature cast iron solid cooking elements that provide even heat distribution and ease of cleaning. Other features of the ranges are self-cleaning oven, custom broil control, black glass oven door, and removable full-width storage drawer. Whirlpool Corp.

Circle 127 on reader service card

**The Roof-TK Fire Scanner™** reduces the hazard of smoldering fires caused by torches used in modified bitumen roof applications. When a hot spot is found, the scanner provides visual and audible alarms. Tests are conducted two to three hours after work is completed. Prospect Technologies.

Circle 128 on reader service card



**FastSpace Economy Panels** offer acoustically efficient space division for office planners. The panel has a 1½-inch-thick high-density fiberglass core that provides greater sound absorption. The core material has the added benefit of full surface tackability and a Class A fire rating. Panels are offered in standard heights of 48, 60, 66, and 72 inches and widths from 12 to 72 inches in 6-inch increments. There are five frame colors and six fabric colors that can be mixed or matched. Panel Concepts.

Circle 129 on reader service card

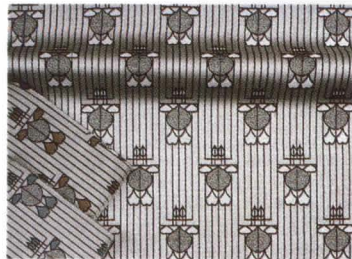
**The Lateral Files and Storage System** coordinates with Haworth's complete line of office furniture and seating. There are two-, three-, four-, and five-high files in 30-, 36-, and 42-inch widths, and storage and wardrobe units. All units are 18 inches deep. Files can accommodate side-to-side or front-to-back filing of both standard and hanging files, including letter, A4, legal, foolscap, and standard computer paper sizes. A positive interlock prevents more than one drawer or shelf from being opened at a time. Haworth, Inc.

Circle 130 on reader service card



**Ergomatic task, management, and visitor chairs** have softer, high-density molded seats and backs for greater comfort and support. Newly designed handles make seat-height adjustment easier for either manual or gas-lift systems. Ergomatic chairs upholstered in Danish Inuk fabric of 70 percent wool and 30 percent viscose in six designer colors can be quick-shipped within 24 hours. The entire line is also available in 64 additional Inuk or Dundee 100 percent wool fabrics or it can be custom upholstered. Functional Office Furniture.

Circle 131 on reader service card



**Liebespfeil (Cupid's Arrow)**, from the Archives Collection, is a reissue of a design by Josef Hoffmann in 1904. It is a stylized pattern of arrowheads transformed into heart-shaped components on a vertically lined background. The fabric is a cotton and viscose blend and is available in three colorways. Unika Vaev-USA.

Circle 132 on reader service card

**Digital plotter Model 5200** is equipped with an eight-pen carousel that can handle fiber, ink, ceramic, or ball point pens of varying sizes, colors, and thicknesses. Automatic capping seals the pens when they enter the carousel, preventing them from drying out when not in use. The plotter features pen speeds of 20 IPS and resolution of 0.001 in. The plotter language is HP-GL compatible. RDK Instruments.

Circle 133 on reader service card

**The Smart Shade®**, an insulating shade for residential greenhouses and commercial buildings, operates automatically by converting the energy in natural daylight or artificial fluorescent light into mechanical power. Smart Shade incorporates Hunter Douglas's Duette, a honeycomb-shaped polyester fabric that creates a dead-air space near a glass surface to provide insulation. A tiny computer moves the shade up or down, depending on time of year and time of day. As the shade is raised, the lightweight honeycomb cells collapse and stack neatly. The shades conform easily to curved greenhouses, skylights, or inclined windows. Comfortex Corporation.

Circle 134 on reader service card

**The Ray System** low-voltage lighting consists of interchangeable components that create a miniature light source. A variety of barrels allow the fixture to function as a spot, flood, projector, wall washer, and fiber optic illuminator. Components include a choice of mounts, lenses, and transformers. Light Solutions, Inc.

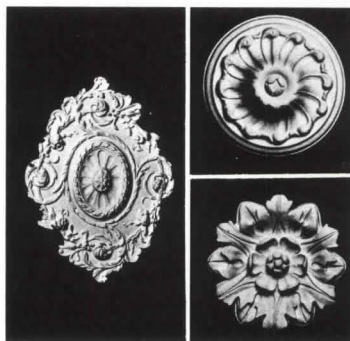
Circle 135 on reader service card

**Curved slope 1500 C.S.** is a thermally broken curved slope glazing product for low-rise commercial buildings. It is available with a 15-degree slope and can be installed on projects requiring one, two, three, four, or more bay projections with or without end walls. Curved slope 1500 C.S. accepts one-inch insulating glass and sun-control shading with cloth shades. Kawneer Company.

Circle 136 on reader service card

**GL Marble** consists of a thin sheet of natural marble laminated to fiberglass for light weight and easy installation. It is described in a new 16-page full-color brochure that includes general specifications. Marble Technics Ltd.

Circle 207 on reader service card



**Architectural Accents** brochure shows a wide choice of cornices, panel moldings, ceiling rosettes, niches, and corbels. The products are made from polyurethane of approximately the same density as pine, according to the manufacturer. The material is easy to cut and shape and is lightweight for easy installation. Westgate.

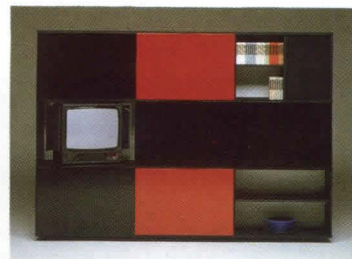
Circle 208 on reader service card

**Econo-rail handrails** in wood, aluminum, brass, and stainless steel are described and illustrated in a 12-page brochure. Details show profiles of rails and balusters. Panels are glass or wire mesh. Also included are brass and aluminum handrail brackets and brass flush or ball fittings. Newman Brothers Inc.

Circle 209 on reader service card

**The Classic Series of Ritter Medical Products** consists of 7 power tables, 4 manual tables, 12 physician's stools, 17 units of modular cabinets, 2 chairs, and more than 50 accessories. A 20-page catalog contains complete descriptions, photographs, and specifications. A chart shows the six upholstery colors and six panel colors available. Midmark Corp., Ritter Medical Products.

Circle 210 on reader service card



**The Soffio di vento**, made in Italy by Acerbis International, is a versatile shelving unit. It serves as a bookcase or provides space for a bar, TV, stereo equipment, or personal computer. Shelves pull out on telescoping glides, and there is a revolving tray for bottles. Doors slide from one compartment to another to conceal or expose contents. Atelier International.

Circle 137 on reader service card

**Obtaining Predictable Concrete Finishes** brochure details how and why specific concrete form materials should be incorporated into job specifications. The brochure helps to identify and avoid the most commonly encountered problems by specifying the best forming material for the desired concrete finish. A section is devoted to architectural finishes. The three Simpson concrete forming panels are described with technical information on each. Simpson Timber Company.

Circle 211 on reader service card

**Therm-L-Brush II** gasketing material for fire doors will contain smoke as hot as 410 F for at least one hour, according to the manufacturer. It seals the required gap around elevator lobby doors without diminishing the ability of the doors to open and close freely. Therm-L-Brush II helps to reduce the chimney effect of the elevator shaft, which conducts heat and smoke from floor to floor. Sealeze Corporation.

Circle 138 on reader service card

**The Tecton Series of grilles and panels** combines eight grille designs from the Lattice Series with four panels and four grilles from the original Tecton group. Grille designs are created by carving grooves that are perpendicular or oblique. There are several woods and a choice of stains and finishes. The company can supply grilles in custom designs, sizes, materials, and finishes. A 20-page brochure illustrates the series in color, indicating sizes and wood species available. Customwood.

Circle 212 on reader service card



# P/A Job Mart

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### PROJECT DESIGNER

Well-established 85-person design-oriented A/E/P firm has immediate opening for project designer with strong design and delineation skills, architecture degree and registration, 5 to 8 years diversified design experience, health care experience a plus. Send resume and salary requirements to SFCS, 14 West Kirk Avenue, Roanoke, Virginia 24011. EOE.

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Principal in high quality design firm in Carnegie Hall doing residential, retail and theater work seeks Associate or Partner with the capacity to participate fully in the firm's growth. Must be experienced architect with respect for careful detailing and the craft of building. Responsibilities would also include some administration and financial organization. The unusually high scale and highly visible projects have created a solid foundation for expanding this nine-person office. Personal attention to varied projects, many in the arts, has been a hallmark of the firm. Would be open to incorporating a compatible existing practice. Please send letter of interest to:

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Someone who wants to be part of a well established, growth oriented midwest consultant firm. We need the right person on a permanent basis to head up a restaurant/specialty store design team. Preferably a source knowledgeable individual who knows the practical ways to get things done. Salary negotiable. Leadership and client skills a must. Please send resume to Progressive Architecture, Job Mart, Box 499.

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The Pennsylvania State University, Department of Architecture, seeks applications for junior and middle positions in architectural design, beginning January, 1988. Emphasis on design guidance and criticism, with ability to lecture and offer seminars on architectural theory, or architectural technology. Requires advanced degree in architecture, or equivalent professional education, practice and teaching. Candidates with professional registration and previous teaching experience will be given preference. Salary and Rank commensurate with qualifications. Applications must be postmarked by October 1, 1987. Submit curriculum vitae and names and addresses of references to: HEAD, DEPARTMENT OF ARCHITECTURE, THE PENNSYLVANIA STATE UNIVERSITY, 206 ENGINEERING UNIT "C"-PA, UNIVERSITY PARK, PA 16802. AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER.



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The Chairperson is expected to provide effective leadership to achieve the goals of excellence set forth in the recently developed Strategic Plan. The Plan calls for substantive improvement in the quality of teaching, research, and service.

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The Search Committee will begin to consider nominations and applications on 1 October 1987 and continue until the position is filled.

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The position requires at least three years of prime responsibility in the construction of first-class, full-service hotels with a degree in Architecture Engineering or Construction. The ideal candidate would also be a Registered Professional. Compensation includes competitive base and insurance with bonus, car allowance, and relocation.

Send resume or letter, or call:  
Michael Lawrence or Leslie Braun — **Interstate Hotels Corporation, 218 Frick Building, Pittsburgh, PA 15219, 412-227-6700.**

An Equal Opportunity Employer



**Project Estimator:** Estimate budget/bid for construction projects and purchase materials. Must speak, read, write English/Korean fluently. B.S. in Civil/Architectural engineering and 1 year experience required. Job site and interview, El Monte, California. \$2,542/mo. Send this ad and your resume to Job #TC 4923, P.O. Box 9560, Sacramento, CA 95823-0560 not later than August 1, 1987.

### INTERIOR DESIGNER

Well-established 85-person design-oriented A/E/P firm has immediate opening for lead interior designer/architect with proven ability to work on diversified projects. Minimum 8 to 10 years experience with architectural background required. Send resume and salary requirements to SFCS, 14 West Kirk Avenue, Roanoke, Virginia 24011. EOE.

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### Advertising Rates

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Check or money order should accompany the advertisement and be mailed to Mary Miller, P/A Classified, 1100 Superior Ave., Cleveland, OH 44114 (Telephone 216/696-7000, Ext. 2584).

Display style advertisements are also available in fractional page units starting at 1/4 page and running to full page.

Insertions will be accepted no later than the 1st of the month preceding month of publication. Copy to be set due seven days earlier.



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