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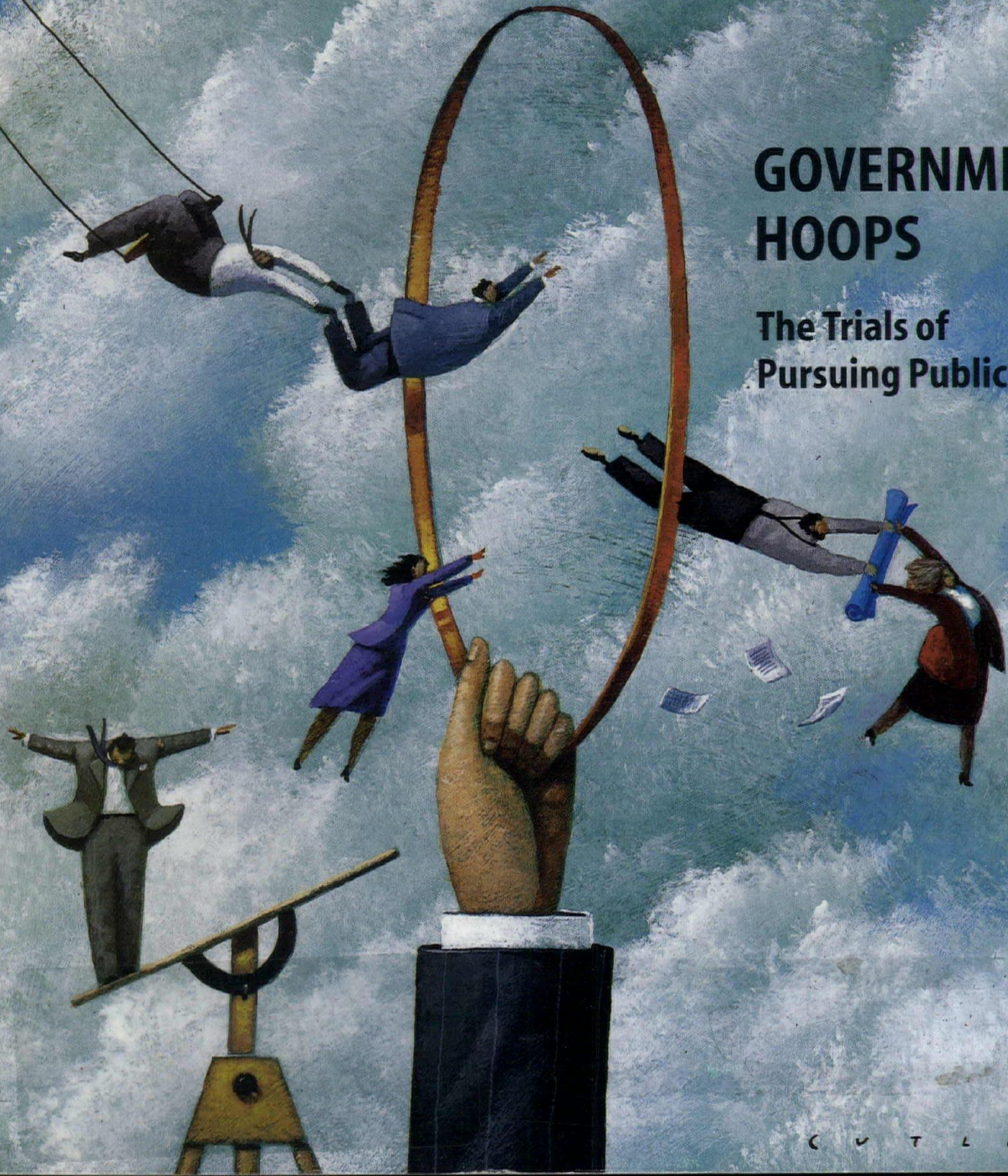
A Penton Publication February 1995

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- Process: Rock and Roll Hall of Fame
- Gothic Revival Interiors
- Las Vegas Strip Reshaped
- Four Swiss Firms

## GOVERNMENT HOOPS

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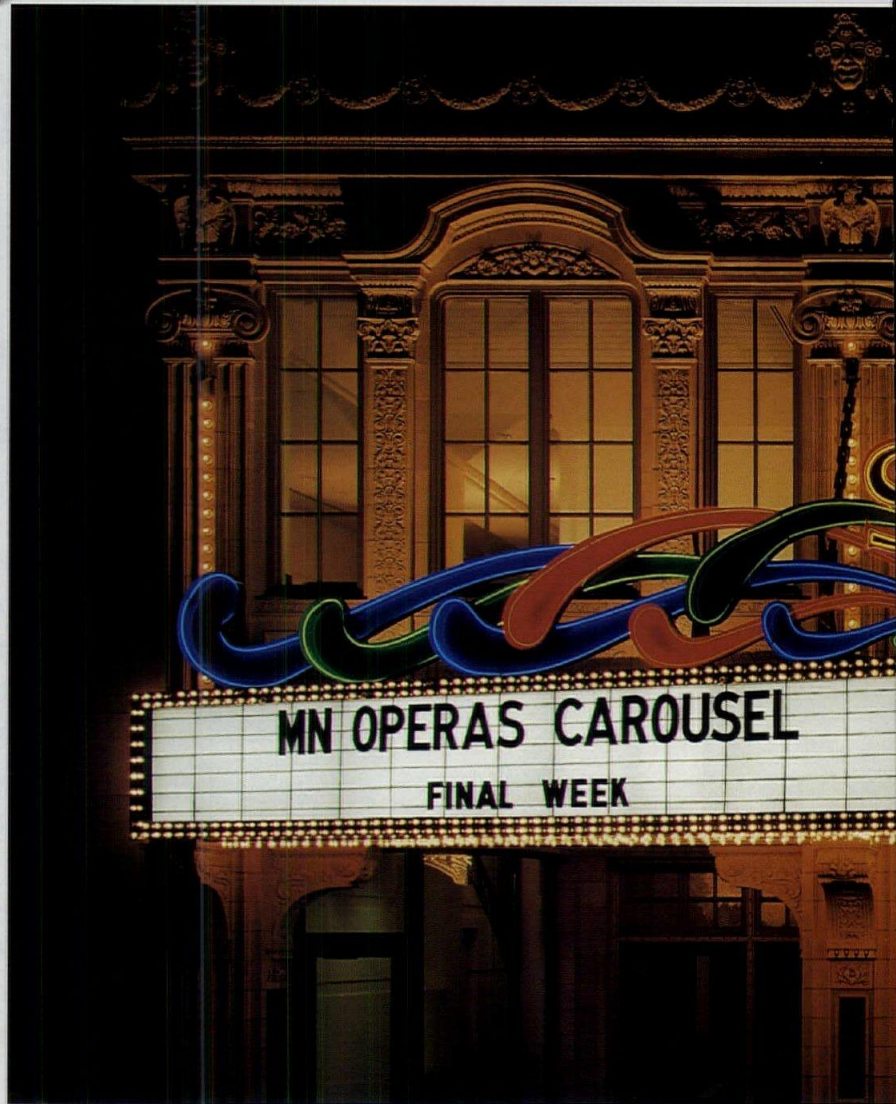
When it opened in 1921, the State Theatre in Minneapolis was hailed as the most luxurious showplace between New York and San Francisco. Sixty years later however, when planning began for a \$130 million office/retail complex for the site, it appeared this grand old theatre would go the way of the silent films it once screened.

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Illustration by Dave Cutler.  
Cover design by Julie Anne Yee.

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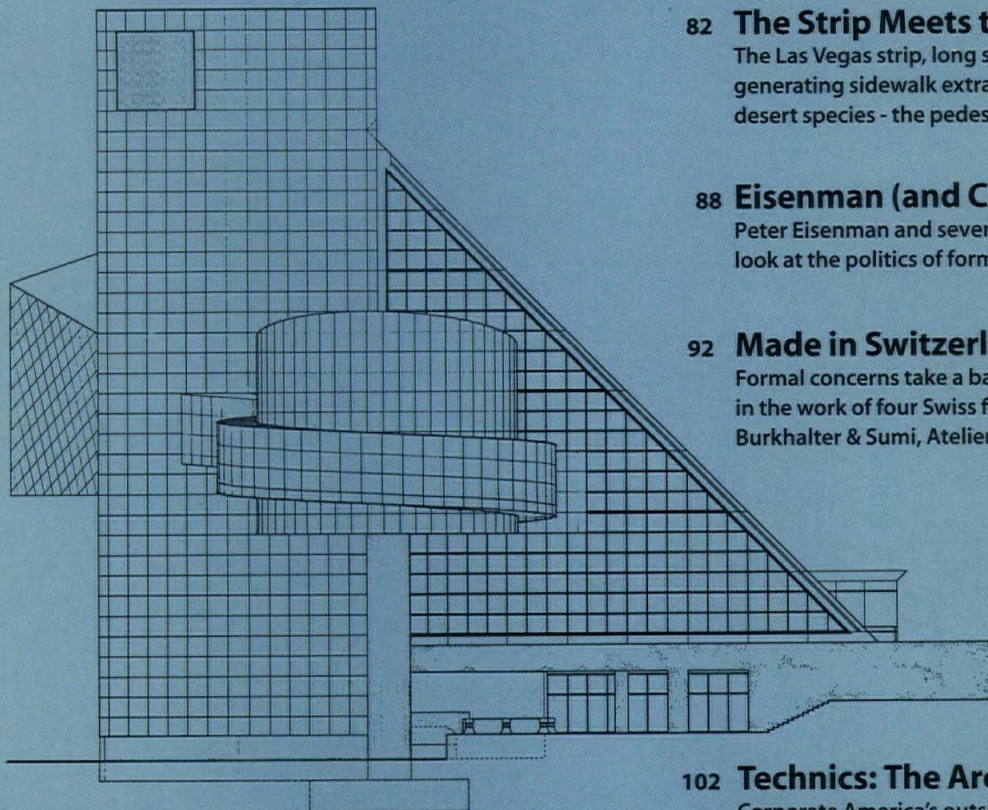
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# The Prevailing Political Winds

Whether or not the new Republican majority in the U.S. House of Representatives realizes its goals to shrink government, this recent shift in the political winds will undoubtedly have both short- and long-term implications for architects. The short-term effects are easier to spot. Consider housing: the one architectural element specifically called out in the Republicans' Contract with America is the construction of more prisons, while, at the same time, the reorganization and reduction in size of the Department of Housing and Urban Development – if not its elimination – is clearly on President Clinton's agenda. Likewise, the Contract's call for a reduction in capital gains taxes, if it prevails, will probably spur increased construction activity related to privately held assets, while its call for reduced government will no doubt bring a reduction in the amount of publicly sponsored work.

But of even greater import for the profession are the longer-term implications of these changes and the larger meaning of people's anger at government. If shrink the government we must, then it should be done by careful design, sorting out the things that might be better done by the private sector and crafting public/private partnerships to take over some of the bureaucracy's duties. Such good design, though, cannot be done overnight (or even in 100 days) and it may not result in immediate savings. More likely, the government will shrink by benign neglect, a strategy followed in the early 1980s, where existing programs were simply starved of funds. Not only can this deferred maintenance ruin the house of state, but it may once again force higher taxes at the state and local levels, push some cities further into insolvency, and leave many needy people out in the cold.

Whichever tack is taken, architects must beware of the real temptation on the part of the government to extend its low-bidder mentality to professional services. This may not require an overturning of the Brooks Act, with its requirement of qualification-based selection. As the cover story in this issue documents, some state governments have found ways of getting around such hurdles through design-build competitions, in which architects must do tremendous amounts of work up-front with slim chances of getting a commission or of being compensated for that work even if they get the job. What

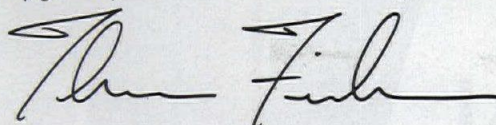
if all levels of government adopted such a strategy? What if, in other words, architects stood a good chance of losing money going after half of all the nonresidential design work? If the legal profession faced such a prospect, how long would it take before a bill was introduced before Congress outlawing such tactics? How long will it take this profession?

## What do the recent Republican sweep and the public's current anger with government mean for architects?

The difficulty here is that the problem may be bigger than the government. As some policy people have observed, the widespread desire within the electorate to cut taxes and federal spending stems from a larger transformation in our economy, one that may be beyond the power of the government to affect.

In his recent book *Arrogant Capital: Washington, Wall Street, and the Frustration of American Politics*, Kevin Phillips argues that people's anger at government stems in large part from the declining living standards and stagnant incomes of the middle class, which have very little to do with federal policy and mostly to do with what Phillips calls the "financialization" of the economy. "For the first time in modern U.S. history," he writes, "stock prices decoupled from the real economy, enabling the Dow Jones industrial average to keep setting records even as employees' real wages kept declining." No amount of cutting taxes or eliminating programs on the part of the government, reasons Phillips, will be enough to counter this economic shift. Indeed, he suggests that only by *increasing* government investment in and incentives for certain things like worker education, infrastructure repair, and equipment and workplace improvements, will our productivity rise and with it, our incomes and standards of living.

Analyses such as Phillips's provide, I think, a strong rationale for investing in architectural, engineering, and design services, even in this era of budget cuts and design-build competitions. Such services are not a commodity, as some government bodies seem to think, but are, in fact, productivity enhancing tools. Better working environments are as central to the improved performance of a (downsized) workforce as are training classes and software programs, and we must make the point, as loudly and clearly as possible in Washington as well as in every statehouse, that cutting corners in such productivity-related areas is a very costly way to try to save money. We must show that design is an investment, not just an expense. □



Thomas Fisher



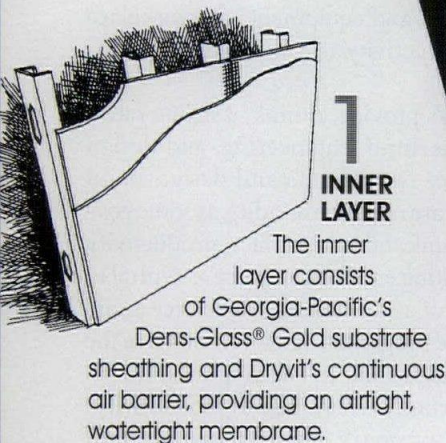
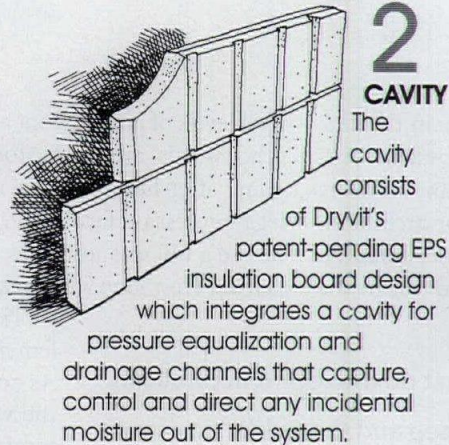
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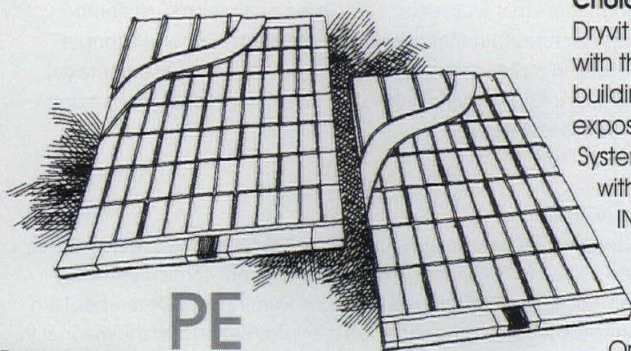
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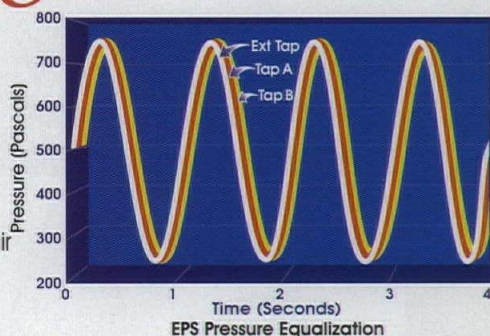
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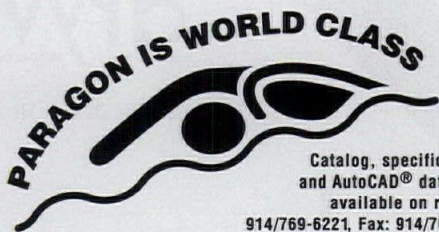
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Seth Joseph Weine  
New York

### AIA Revisited

I have read Michael Crosbie's article "AIA Revisited" in the December, 1994, issue of P/A. Although Michael brings out some interesting points of where National AIA has gone from April to December, I am confused about why he chose certain information and the manner in which he decided to present it to the public.

I have just completed my first year as the New York Regional Director on the National AIA Board of Directors and have been an intricate (*sic*) part of many of the decisions by the Board over the past eight months which the article covers. I would like to give you some key insights as to Mr. Crosbie's misconceptions.

The Anorexic Institute of Architects: I believe that all firms in the early 1990s have been looking to "right-size." With the introspection of the AIA, it was clear that it was time for National to do the same.

All right-sizing does affect to a degree the morale of the staff. This is not new to AIA or any other company. However, your article neglects to point out that with the layoffs and reorganization, those new people such as Nancy Somerville, now Vice President of Government Affairs, and many other staff members I personally know, have increased vigor and enthusiasm for the job they are doing at the Institute.

With the right-sizing of a corporation there will always be those disgruntled employees who are laid off or are in fear that they will be laid off, but the Institute, in my opinion, has moved towards right-sizing in a very humanistic and sensitive way, not at all unlike a parent who must discipline their children for the good of the child. It might not be the exciting thing to do, but it is done for the good for the broader picture. It is interesting that you highlighted in red the quote "The layoffs, according to some, have sent staff morale through the subbasement and have caused some senior staff to feel that their talents are not being best utilized." Are we taking our journalistic license to make a situation look worse than what it truly is? It is interesting that Mr. Crosbie did not take advantage of showing our 50,000 members the positive side of right sizing.

Benchmarking and Outsourcing: I can tell you that the Board of Directors deliberated a full morning's session on Masterspec and other outsourcing initiatives. All of the questions from accessing control, partnership agreements, quality, costs, and availability to our members were scrutinized vigorously. Only when the Board felt truly confident that outsourcing would not present one glitch to our members' services did the Board vote to approve such a measure.

The Board is very conscientious in making sure that the members indeed get the best services they can at the lowest prices and the Board is committed to following through on every decision with this in mind.

Is This the Real Thing?: I must truly take exception to the slanted way Michael Crosbie has written this portion of the article. He wrote, "the AIA will spend \$1.5 million a year for the next three years for a print advertisement campaign in consumer and business media developed by the Martin Agency, an ad firm whose clients have included Mercedes-Benz and Coke. The prospect of being packaged like a soft drink makes some architects and AIA staffers (*continued on page 12*)



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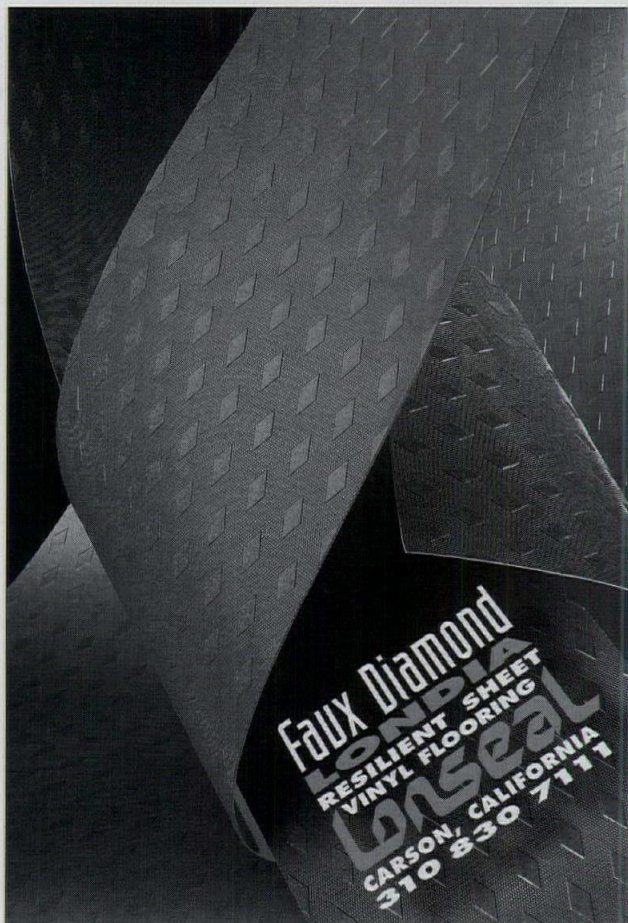


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(continued from page 10) squirm." As a Board member, I have been privy to a presentation by the Martin Agency's principals, have heard their philosophy which will be behind the campaign, and the strategy which they will use to convey a message of quality that architects bring to a project. Nowhere in the presentation was it ever conveyed, insinuated, or hinted at that architects would be packaged like a soft drink. I thought that reporters wrote articles based on fact and not bias but obviously Mr. Crosbie missed that day in school.

The Martin Agency, one of the top advertising agencies in the United States, was chosen by the Institute for their quality. The Institute also discussed the type of sophisticated campaign that was required by the Martin Agency to show architects in the most professional light possible. I have every confidence that this will be achieved and would like Mr. Crosbie to report on this again after the campaign is running for six months. An apology should be made by Mr. Crosbie for this remark, not only to the AIA membership at large, but to the Martin Agency as well.

A Continuing Board Boondoggle: It is interesting that Michael searched long and hard to dig up a Board member of ten years ago to quote on the compensation of spouses' travel. No one is more respectful of Laurie Maurer than I, but her quote in the article, which says "Much better use of time could be achieved if these were considered business meetings, not mini-vacations," ... "she recalls several board meetings when substantive business discussions had to be stopped because it was time to escort the spouses-in-waiting to a cocktail party." (sic)

That may have been true ten years ago, when Ms. Maurer was on the Board, but I can assure you that no Board meeting in the past year that I have sat in on has ever been cut short one minute to entertain or escort any spouses to any function. In fact, if anything, over the past year, the Board has continually worked over its scheduled time for the day. Doesn't Michael have a current list of Board members to call for accurate information? If not, I will be happy to send him a copy.

I also agree that the Board could probably be reduced and I am sure that this will be discussed in length in 1995. However, I do believe that if the Institute is to attract good qualified architects to serve on the Board, and to take approximately 20-25 days a year away from one's practice without compensation, spouse travel is important. It would be hard to attract good people if spouses were not allowed to come to at least two or three meetings a year. If anything, the article neglected to mention (not surprisingly) the fact that the spouses themselves form a cohesive bond in which the (continued on page 108)



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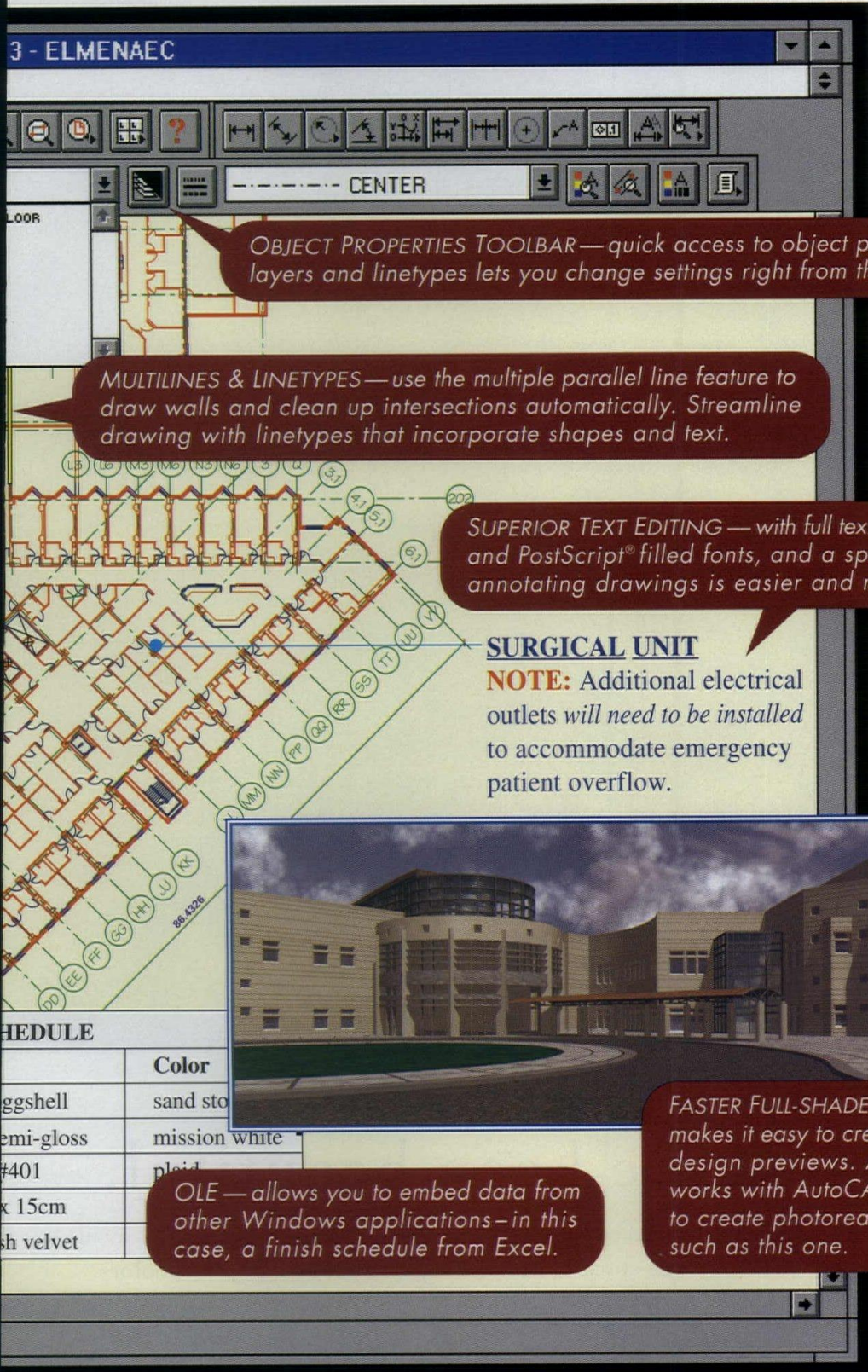
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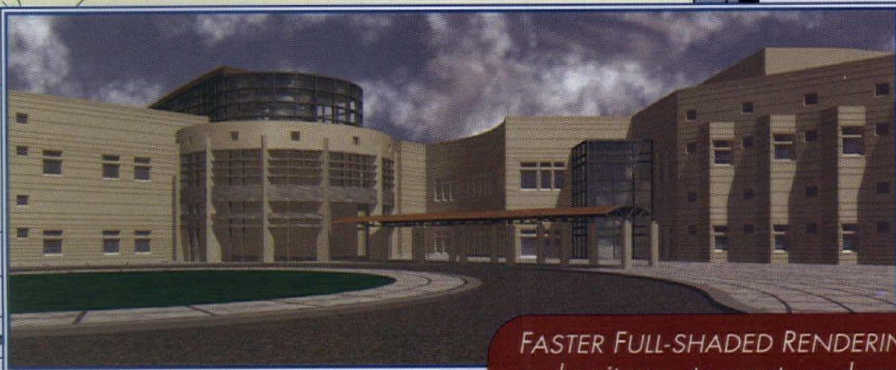
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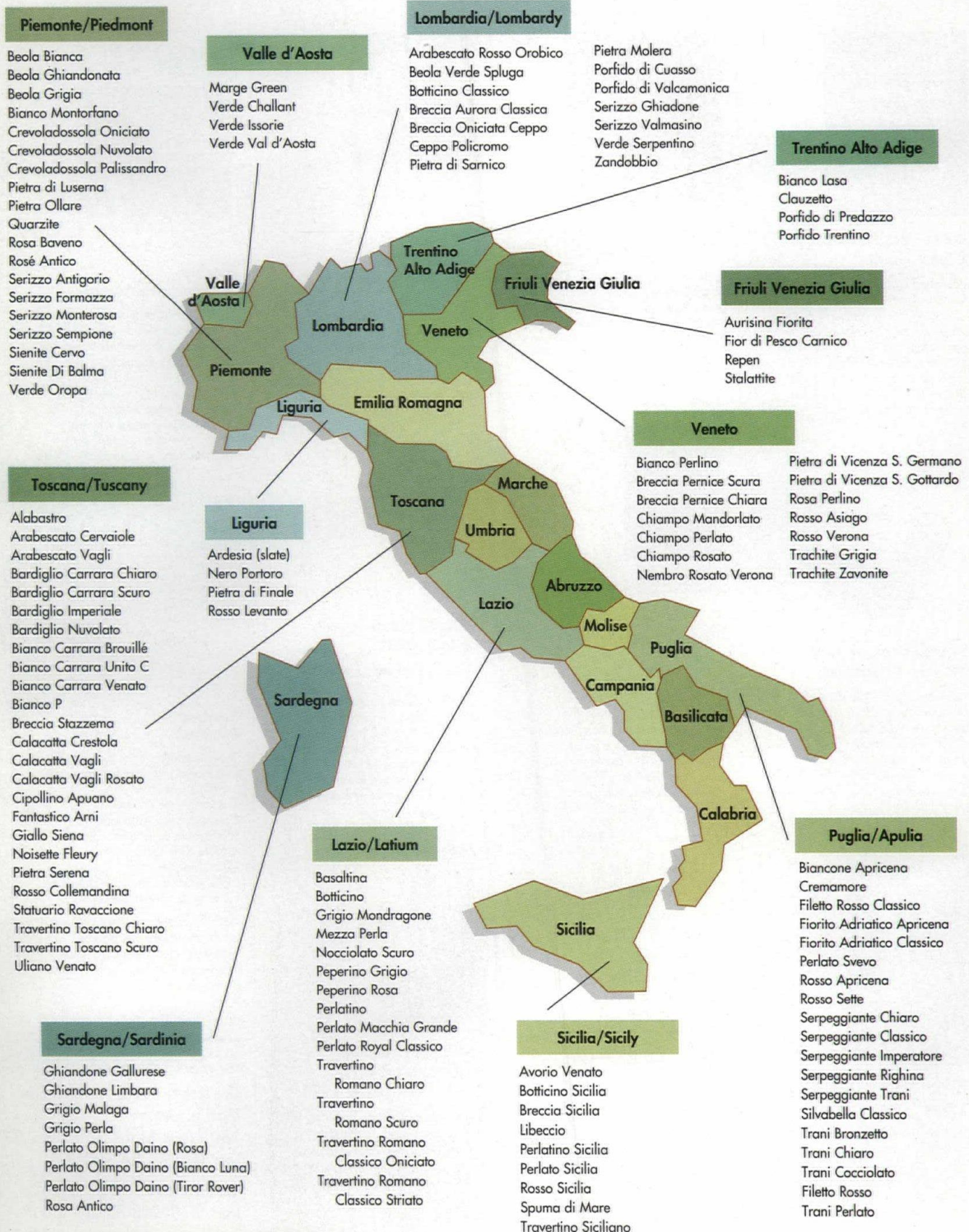




# MARBLE FROM ITALY

*The Natural Choice*

## A Map of the Major Stone Producing Regions in Italy





# PRODUCTS & LITERATURE

Complimentary copies of the following materials are currently available from the Marble Center - a division of the Italian Trade Commission in Los Angeles.

To order any of the listed items, please fill out the enclosed questionnaire and order form, fold it and return it by mail or fax it to the Italian Marble Center at: (310) 203-8335.

## Italian Marble Industry Buyers Guide

### Italian Marble Industry Buyers Guide

Published by the Italian Trade Commission - Los Angeles, and updated twice a year, this guide is a useful listing of over 500 Italian companies that supply marble & granite around the world. Each listing gives a complete address, and description of products and/or services. Spiral bound; format 8 1/2" x 5 1/2".



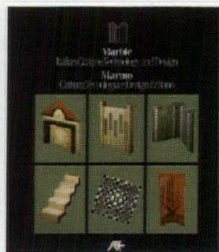
### Swatch Book of Italian Marbles & Granites

Produced by the Italian Trade Commission in 1993. The "swatch book" is a collection of 51 marble plates and 19 granite plates in four color with technical information provided about each stone. Plate Size: approx. 3" x 5" (limited supply available)

## Video Stone Technology & Italy

### Video: "Stone Technology & Italy"

Produced by the Tober Group & the Italian Trade Commission in 1991. The video features various elements on the natural stone industry in Italy. 22 minutes long; 1/2" VHS format.



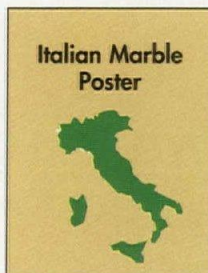
### Marble: Italian Culture, Technology & Design

Published by the Italian Trade Commission in 1987, this book features an overview of the stone industry in Italy from the rich tradition of stone processing to the use of marble in various architectural and design applications. 173 pages; four color photographs. (limited supply)



### The Intermarmomach Exposition in Verona

Promotional brochure on the annual international stone industry exposition held in Verona each year. This year's exposition will be held from October 6-9, 1995. The brochure features information about visiting and exhibiting at the show.



### Italian Marble Posters

Published by the Italian Trade Commission - Los Angeles, these posters feature marble samples from various regions in Italy. Each poster identifies a number of Italian natural stones and indicates the location of the quarrying sites in Italy. (The first poster of the series will be available in March)



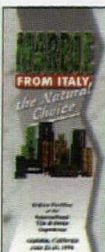
### The Internazionale Marmi e Macchine Exposition in Carrara

Promotional brochure on the annual international stone industry exposition held in Carrara each year. This year's exposition will be held from May 17-21, 1995. The brochure features information about visiting and exhibiting at the show.



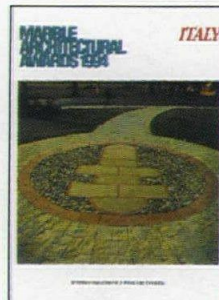
### Stone Materials in Curtain Walls

Article by Engineer Ennio Grassi, an international expert on cladding systems in stone; published by the Italian Trade Commission in London, 1993. The presentation provides a technical analysis of the design criteria, technical performance, and the use of stone in pre-fabricated systems. 34 pages long; four color photographs & charts.



### The Italian Pavilion at the International Tile & Stone Show 1994

Promotional brochure featuring 23 Italian companies, an English-Italian Glossary of Stone Industry terms and useful information on the natural stone industry in Italy. 20 pages; four color; Size: 8 1/2" x 4"



### Marble Architectural Awards

The marble architectural awards are organized each year by the Internazionale Marmi E Macchine stone industry promotions company in Carrara Italy. The awards are presented each year during the stone exposition in Carrara. The books feature award winning designs that are internationally renowned for photographs & designs.

The Language of Stone in Contemporary Architecture

Marble and Its Distinguishing Characteristics

The Reason Behind The Choice

Stone Applications in Architecture: Flooring and Interior Decoration.

### Seminar Abstracts

The following articles from a series of national technical seminars are currently available:  
The Language of Stone in Contemporary Architecture  
The Reason Behind The Choice  
Marble & Its Distinguishing Characteristics  
Stone Applications in Architecture: Flooring & Interior Decoration

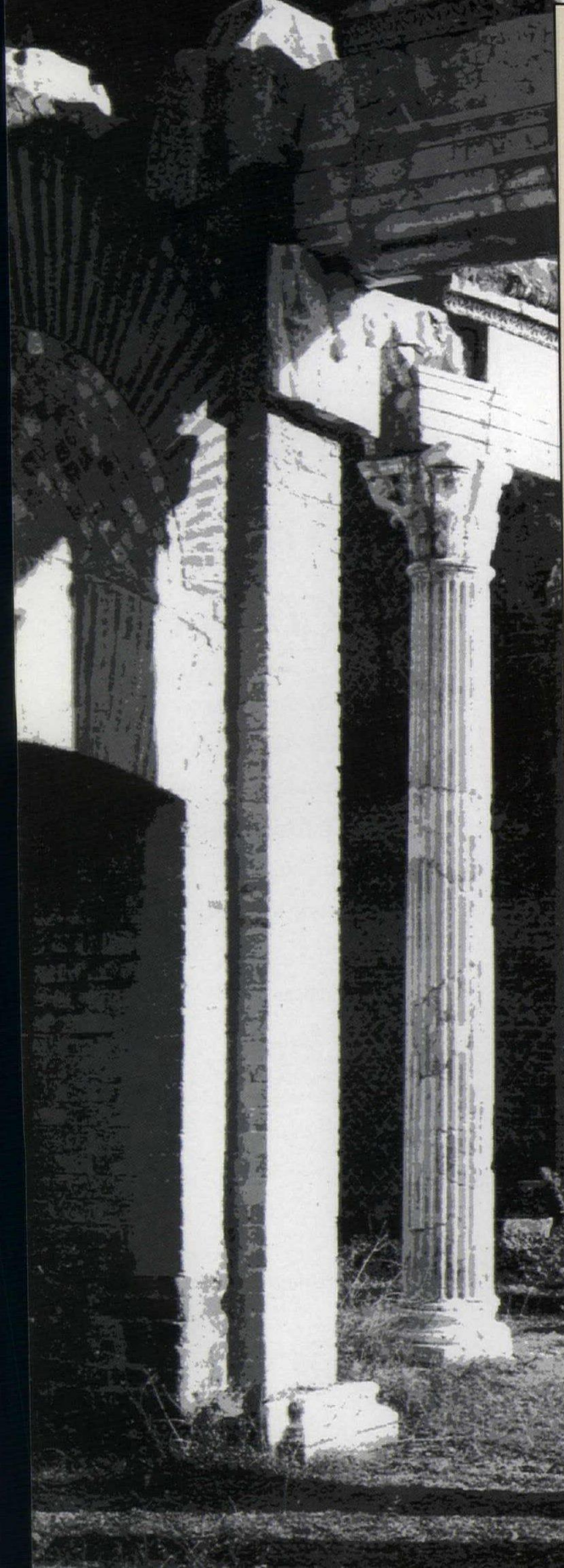
All of the speeches were presented by internationally recognized experts in their respective fields relating to the use of natural stone from Italy.

for more information:

The Italian Trade Commission - Marble Center  
1801 Ave. of the Stars, Ste. 700  
Los Angeles, CA 90067

tel: 213/879-0950  
fax: 310/203-8335





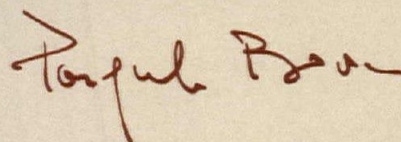
Dear Industry Associate

As part of a world-wide promotional campaign in favor of Italian dimensional stone, the Italian Trade Commission in Los Angeles is now the headquarters of the Italian Marble Center, an information and promotions service for architects, contractors, importers, distributors and other businesses involved in the natural Stone Industry in the U.S.A.

The 1995 promotional campaign will include:

- Italian pavilions at major international trade shows
- U.S. trade delegations to the shows in Carrara & Verona
- A data base with useful on-line information on natural stones from Italy
- An industry newsletter dedicated to the use of Italian stone
- A national advertising campaign announcing the resources of the center
- A national series of technical seminars on various applications of Italian stone products
- Publication of plate books with ASTM standards on over 100 different types of Italian stones imported to the U.S.

Please feel free to contact the Italian Marble Center for information on the use and sources of natural stone from Italy.



Pasquale Bova  
Trade Commissioner





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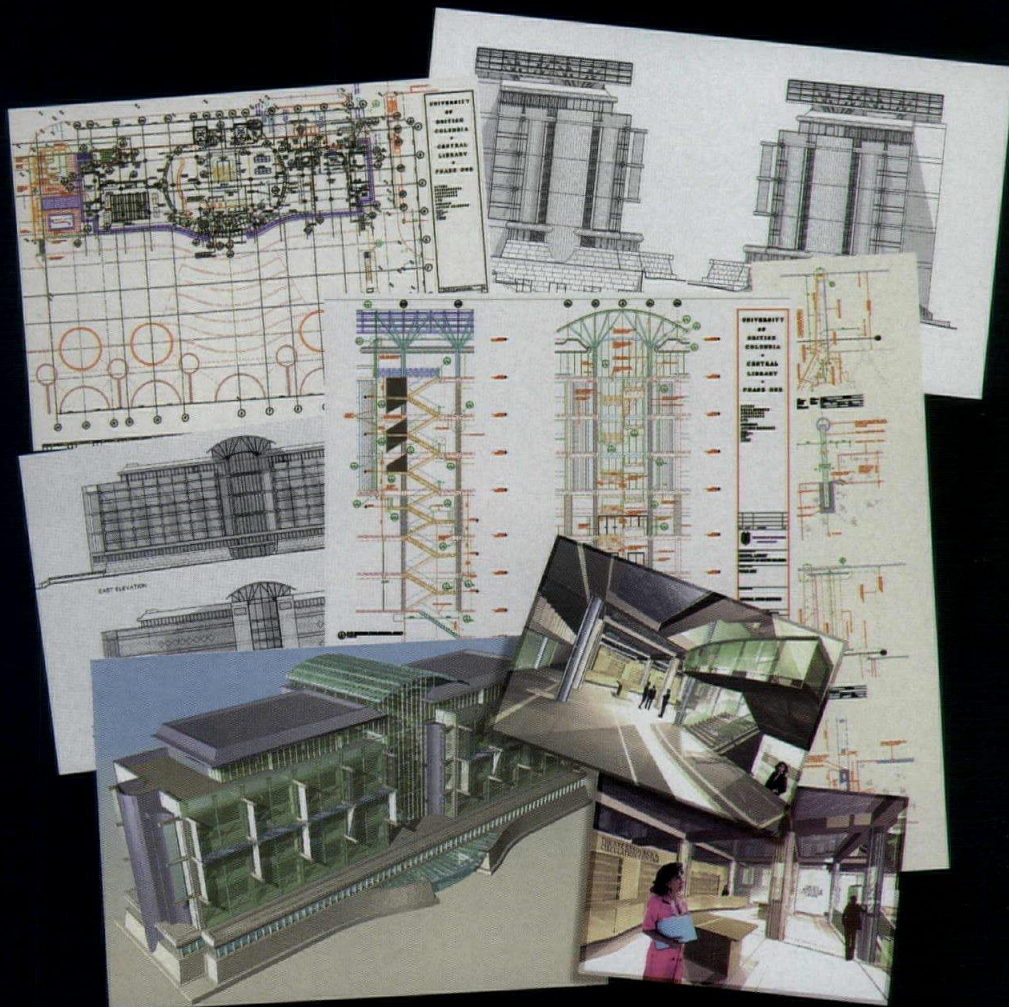
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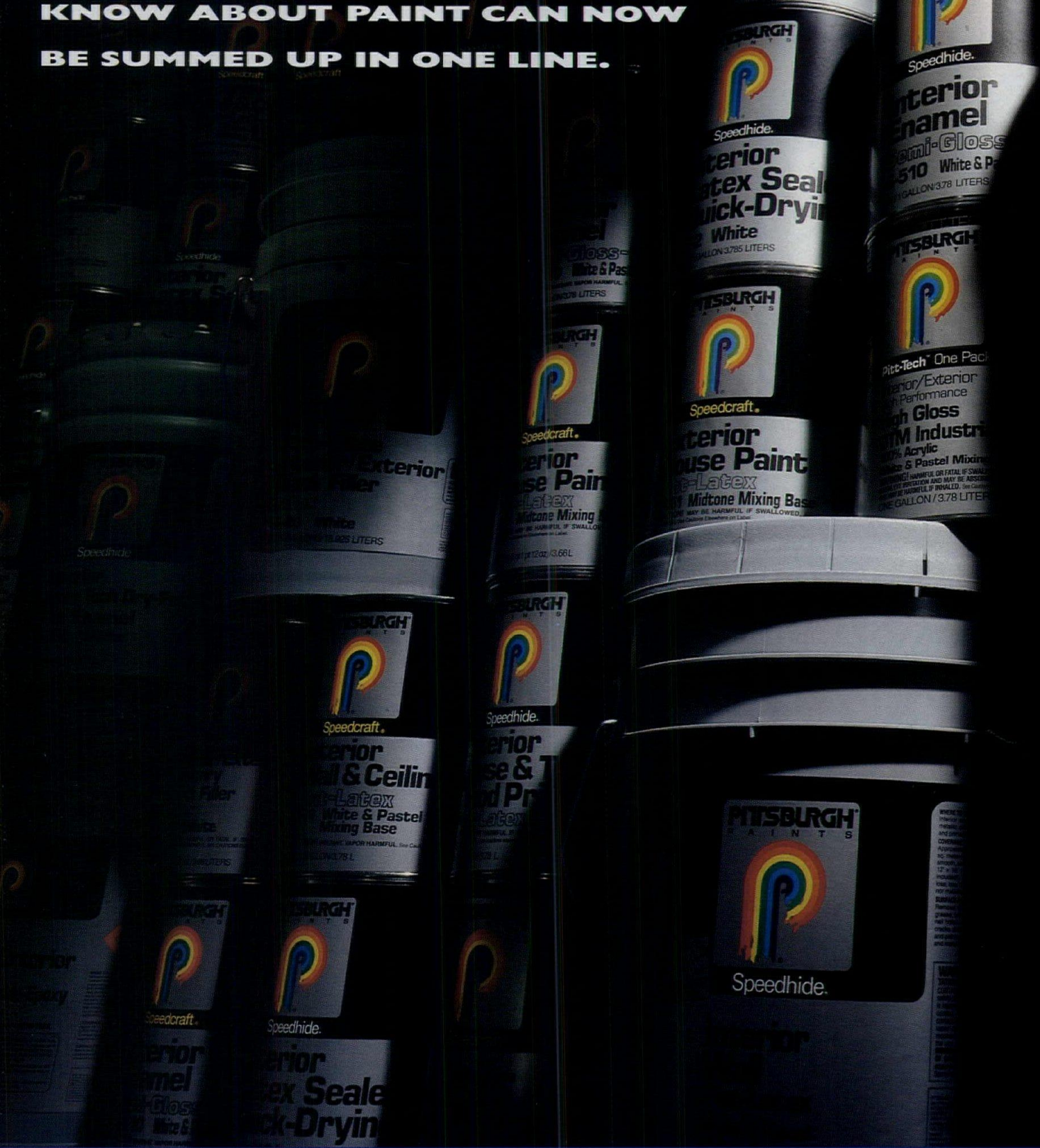
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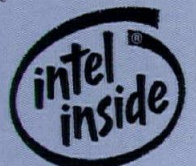
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DEADLINE FOR SUBMISSIONS: MARCH 3, 1995

# Second Annual P/A Awards for Architectural Research

**Progressive Architecture announces its second annual P/A Awards Program for Architectural Research, in collaboration with the AIA/ACSA Council on Architectural Research.** The Council is composed of a balance of practitioners and academics. It advocates and disseminates research that supports the design and construction of inspiring buildings and sustainable communities. The purpose of this awards competition is to recognize outstanding research in architecture and urban design, and to help disseminate it for use by the profession.

Awards and citations will be designated by a jury drawn from the Board of the Council on Architectural Research and leading researchers in the field, and will be ratified by the entire Council Board. Decisions will be made based on the overall excellence, innovation, and rigor of the study, as well as its usefulness to the practice of architecture and urban design. The jury will consider the degree to which the research addresses compelling social needs, extends traditional architectural expertise, demonstrates ways to integrate research and design, or utilizes multidisciplinary problem solving. Research methodology appropriate to the nature of the inquiry should be made explicit, as should the application or applicability of the research.

Entrants will be judged in one of three broad categories of research: **Energy and Sustainable Design, Behavioral and Social Science, or Technology and Materials.** Entrants are urged to interpret the call for outstanding research as broadly as possible to include the diverse subdisciplines of architects as well as diverse modes of inquiry. *See reverse for entry form and rules.*

Judging will take place in April 1995 and winners will be notified confidentially. Public announcement of the winners will be made in July 1995 and winning entries will be featured in the July issue of P/A. Clients and supporters of the research, as well as the researchers, will be recognized. P/A and the Council will distribute information on winning entries to national, local, and specialized media.

#### **Jury**

**Donald H. Lutes, FAIA** (Chair)  
Architect  
Springfield, Oregon

**Adèle Naudé Santos, AIA**  
Dean, School of Architecture  
University of California,  
San Diego  
Principal, Adèle Naudé Santos  
& Associates,  
San Diego and Philadelphia

**Ethel S. Goodstein**  
Associate Professor  
of Architecture  
University of Arkansas  
Fayetteville

**Thomas D. Pugh**  
Director, Institute of  
Building Sciences  
Associate Professor  
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Florida A&M University  
Tallahassee

**Frances Downing, Ph.D.**  
Associate Professor  
of Architecture  
Texas A&M University  
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## Entry Form: Second Annual P/A Awards for Architectural Research

Please fill out all parts and submit, intact, with each entry (see paragraph 9 of instructions). Copies of this form may be used.

Entrant:

Address: \_\_\_\_\_

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

Entrant phone number:

Project:

Client/Funding Agency:

Phone number:

Category:

Entrant:

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Project:

I certify that the submitted research was done by the parties credited and meets all Eligibility Requirements. I understand that any entry that fails to meet Submission Requirements may be disqualified. Signer must be authorized to represent those credited.

Signature

Name (typed or printed)

Fees: \$100 per entry

Research Awards Editor/Progressive Architecture

600 Summer Street, P.O. Box 1361, Stamford, CT 06904

Project:

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(Receipt)

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### Eligibility

**1 Who Can Enter:** Architects, environmental design professionals, and academics conducting research and working in the U.S., Mexico, or Canada may enter one or more submissions. Research may be focused on any location, but the study must have been directed and substantially executed in the U.S., Mexico, or Canada not more than five years ago.

**2 Substantive Projects:** Entries may include only funded research, reports accepted by clients for implementation, or studies undertaken by entrants who have marketed or applied their results. Basis of eligibility as well as the date of the study should be explained in the submission. P/A may contact any of the parties involved to verify eligibility.

### Publication Agreement

**3 Providing Additional Materials:** If the submission should win, the entrant agrees to make available further information and graphic material as needed by P/A.

**4 Publication:** P/A is granted the first opportunity among U.S. architecture magazines for first publication of the study. However, prior publication does not affect eligibility. The Council reserves the right to publish entries that are not premiated and published by P/A.

### Submission Requirements

**5 Project Facts Page:** To assure clear communication to the jury, each entry must contain a page that lists, in English, the research project facts under the following headings: Project Title; Research Category; Source of Funding; Total Budget; Start and Finish Date; Name and Location of Client; Research Setting; Form of Final Products; Basis of Eligibility; Bibliographic References. Ten copies of this page must be submitted.

**6 Narrative:** Entries must contain a three-to-five-page synopsis of the project that includes the following section headings: Purpose/Objectives of the Project; Research Design and Methods Used in Research; Data and Analysis Procedures; Major Findings and Results; Significance and Uses of Results. Ten copies of the Narrative must be submitted.

**7 Additional Materials:** One copy of supplementary graphic or written material may be submitted in 8 1/2" by 11" format, and all these materials must be firmly bound in binders. No slides, original drawings, video tapes, or unbound materials will be reviewed.

**8 Anonymity:** To maintain anonymity in judging, no names of entrants or collaborating parties may appear on any part of the submission, except on entry forms. Credits may be concealed by tape or any simple means.

**9 Entry Forms:** Each submission must be accompanied by a signed entry form, to be found on this page. Reproductions of the form are acceptable. Fill out the entry form and insert it, intact, into an unsealed envelope labeled "Entry Form" contained within the submission.

**10 Entry Fees:** Entry fees must accompany each submission. Fee is \$100. Make check or money order payable to Progressive Architecture. Canadian and Mexican entrants must send drafts in U.S. dollars. Fee must be inserted in unsealed envelope with entry form (see 9 above).

**11 Entry Receipts:** P/A will send a receipt by April 1, which will indicate an entry number to save for your reference.

**12 Return of Entries:** Entrants wishing return of submission materials should include a self-addressed, stamped envelope. Copies of Project Facts and Narrative may not be returned.

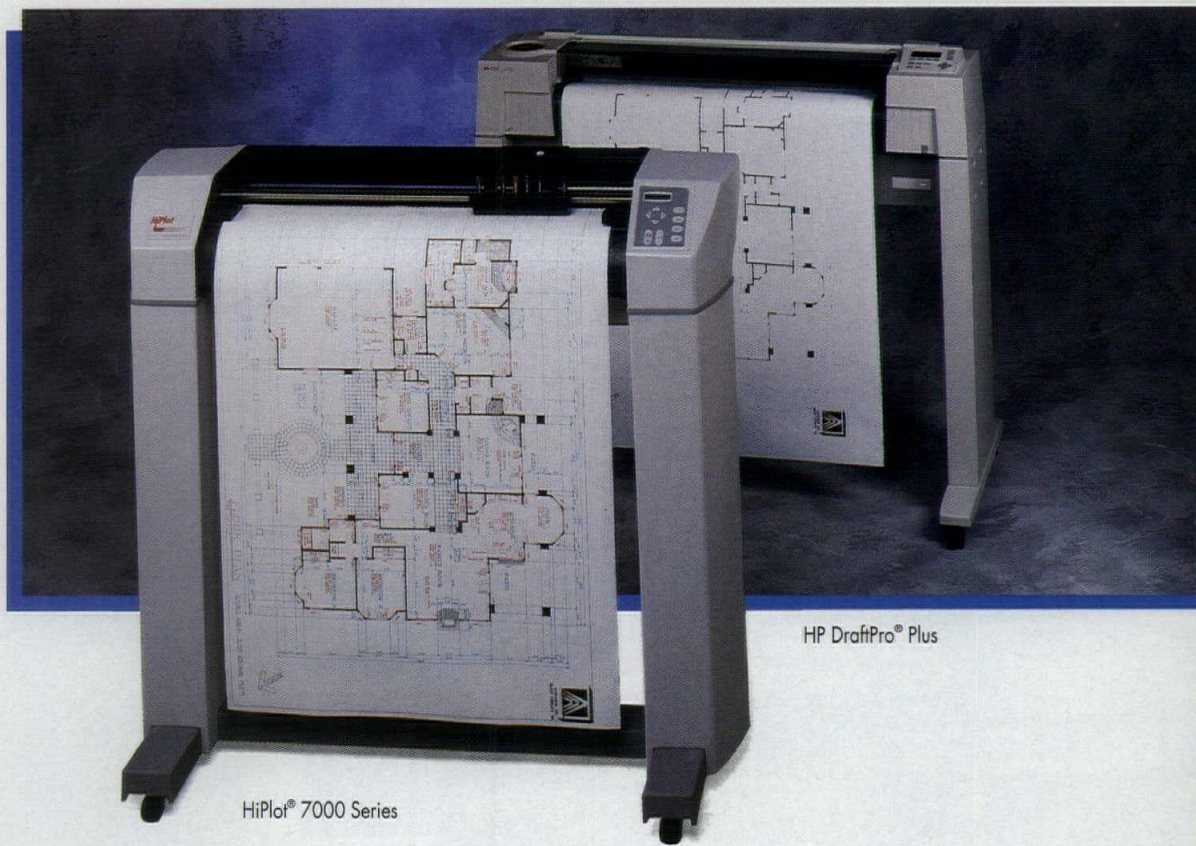
**13 Entry Deadline:** Deadline for sending entries is March 3, 1995. All entries must show some date marking as evidence of being in the carrier's hands by that date. Hand-delivered entries must arrive at P/A's offices (address below, 6th Floor reception desk) by 5 p.m., March 3. In order to assure arrival in time for the jury, P/A recommends using a carrier that guarantees delivery within a few days.

### Address Entries to:

P/A Awards Program  
for Architectural Research  
Progressive Architecture  
P.O. Box 1361  
600 Summer Street  
Stamford, CT 06904  
(For carriers other than mail,  
delete P.O. Box)

**Deadline: March 3 Strictly Enforced**





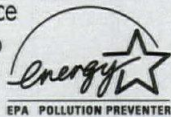
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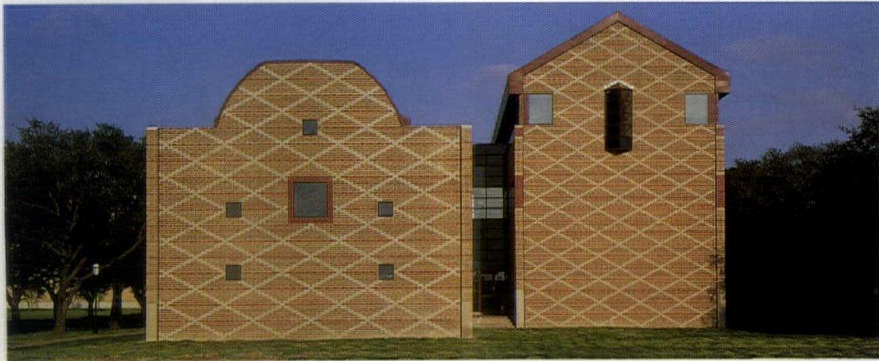
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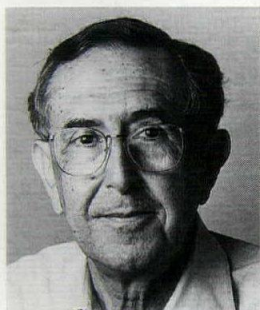
Paul Hester

## Cesar Pelli Wins AIA Gold Medal

Cesar Pelli received the AIA Gold Medal January 31 in Washington at the Accent on Architecture awards ceremony, where he was recognized for his "dedication to social concerns, to collaborations with artists, to teaching and writing, to clarity of design and construction, and to the public."

The 68-year-old Argentine-born architect graduated from the architecture program at the Universidad Nacional de Tucuman in his native country in 1949 and received a master's degree from the University of Illinois, Urbana-Champaign in 1954. Upon graduation he landed a job with Eero Saarinen & Associates, an experience he credits as one of the most important in his education as an architect. "At Saarinen's office we had an open design process," says Pelli, "and we also used models." The techniques of keeping the design open for the entire project team's collaboration and of studying solutions in model form are commonplace in Pelli's office today.

Pelli joined Daniel, Mann, Johnson & Mendenhall as design director in 1964 and then moved to Gruen Associates as design partner in 1968. When he was tapped to be dean of Yale's architecture school in 1977 (a

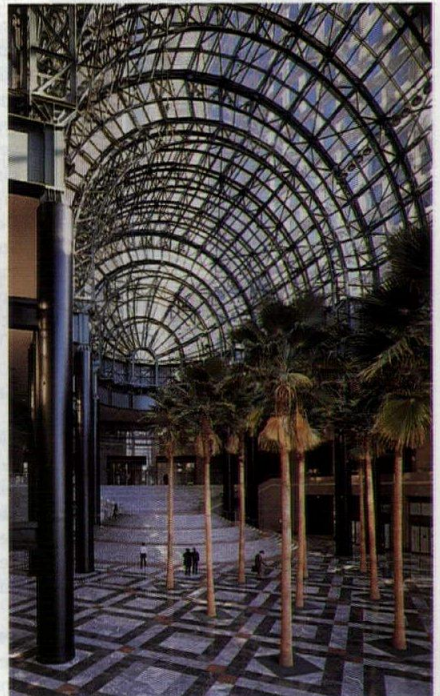


Marianne Bernstein

Pelli's Herring Hall (above) and World Financial Center Winter Garden (right)

post he held until 1984), Pelli set up his own firm in New Haven. Simultaneously he was commissioned to design the Museum of Modern Art's 384,000-square-foot gallery expansion and residential tower in New York. Without an established office or a large staff, Pelli thus developed another staple of his practice: collaboration with other architecture firms to manage the production of large projects. With this technique Pelli has completed projects all over the world, collaborating with some 70 firms.

Among Pelli's landmark buildings are several urban centers, such as the Commons in Columbus, Indiana, the Winter Garden at the World Financial Center in New York (top right), and the NationsBank Corporate Center in Charlotte, North Carolina. Pelli conceives these spaces as "public living rooms" for their cities, "centers of activity, focuses of urban life."



Tim Hursley

Another hallmark of Pelli's work is his exquisitely detailed building skins (in fact, *PELLI* in Italian means "skins") in a variety of materials. Examples of this are the glass skin of the Pacific Design Center in West Hollywood, California, the stone skin of the Crile Clinic in Cleveland, the metal skin of the Canary Wharf Tower in London, and the brick skin of Rice University's Herring Hall in Houston (top left) – widely different aesthetically, but all sharing Pelli's intention of "an appropriate expression of the nature of contemporary construction." Pelli observes, "The key to my being able to design responsive and responsible buildings while remaining faithful to our Modern condition is in the consistent relationship between the aesthetic system and the nature of the construction technology and systems with which we build." Two of Pelli's current projects, are shown on p. 36. □

## Competition Closed? Not for Jean Nouvel and France's Newest Stadium

Paris architect Jean Nouvel is fighting the decision by the French government to award the commission for the new stadium at St. Denis to his competitors, Macary-Zubléna and Costantini-Regembal (P/A, Dec. 1994, p. 15). Nouvel says that the jury chose the design he developed in concert with Emmanuel Cattani and the American firm HOK, but that Prime Minister Edouard Balladur overruled the jury and acted on his "personal tastes." The public

explanation was that Nouvel's scheme, which called for movable apparatus accommodating flexible configurations, cost too much and could not be completed in time for the World Cup soccer games in 1998. French architects are frustrated with the predilection of elected officials to override jury decisions on major public projects. Former President Valéry Giscard d'Estaing had done the same in choosing the Vienna architect Hans Hollein's design

for the European Volcanism Center (P/A, Dec. 1994, p. 11) in the Auvergne region, where Giscard is council president, rather than a design by Paris architect Jean-Michel Wilmotte, which the jury preferred. "Yes, juries are only advisory," said one architect quoted in a Paris newspaper, "but why bother having them at all if they're simply going to be ignored?" French ministries reportedly are now rewriting the public competition guidelines. □



**COMPETITIONS****Young Architects**

Deadline, submission: February 21, 1995  
 "Time" is the theme of this annual young architects competition. Entrants must be ten years or less out of architecture school. Contact Architectural League of New York, 457 Madison Ave., New York, NY 10022. Tel. (212) 753-1722.

**Architectural Photography Contest**

Deadline, submission: March 1  
 Registered architects may enter their own photos in this annual contest. Contact AIA St. Louis, 911 Washington, Ave., #225, St. Louis, MO 63101.

**Juried Young Architects Show**

Deadline, registration: March 1, entry: April 1.  
 Young architects nationwide may submit work for possible inclusion in "Save Yourself," a juried show to be held during the 1995 National AIA convention in Atlanta. Contact Rodney Dionisio, 1215 Hightower Trail, Bldg. B, Ste. 220, Atlanta, GA 30350. FAX (404) 998-3341.

**Lighting Design Awards**

Deadline, submission: March 1  
 Projects completed after June 1, 1992 may be entered in this awards program. Contact IALD, 18 E. 16th St., Ste. 208, New York, NY 10003-3193. Tel. (212) 206-1281, FAX (212) 206-1327.

**Research Fellowships**

Deadline, application: March 1  
 The 1995-96 Charles E. Peterson Research Fellowships and Summer Internships in early American architecture and building technology are now available. Contact Peterson Fellowship Committee, Athenaeum of Philadelphia, E. Washington Sq., Philadelphia, PA 19106-3794.

**P/A Research Awards**

Deadline, submission: March 3  
 The second annual P/A Awards for Architectural Research have been announced. See p. 27.

**Laminated Glass Awards**

Deadline, submission: April 4  
 The Benedictus Awards honor outstanding architectural projects that employ laminated glass. A separate student design competition is for a center for the study of world cultures and religions. Contact Benedictus Awards, c/o Jennifer Haskell, 400 N. Capitol St., NW, #550, Washington, DC 20001. Tel. (202) 393-5247.

**NIAE Student Competitions**

The National Institute for Architectural Education's annual student design competitions include Dinkeloo Bequests: American Academy in Rome (due Mar. 1); Lloyd Warren/Paris Prize (due May 12); and Universal Design Competition (due June 8). Contact NIAE, 30 W. 22nd St., New York, NY 10010. Tel. (212) 924-7000, FAX (212) 366-5836.

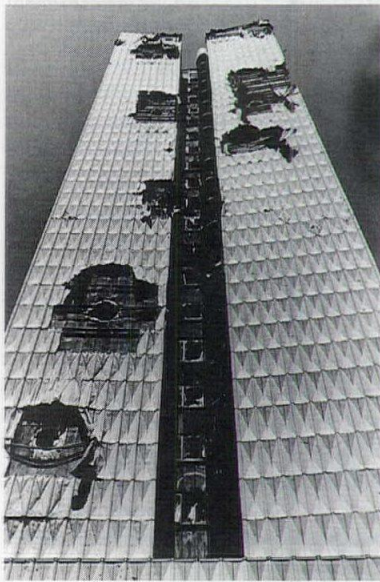
**EXHIBITIONS****Italian Renaissance Architecture**

Through April 16, 1995  
 National Gallery of Art, Washington, DC  
 This is a modified version of the landmark show held in Venice last summer.

**The Destruction of Sarajevo**

February 4-March 18  
 Storefront for Art and Architecture, New York.  
 "Warchitecture" chronicles the physical and psychological devastation of the city and its citizens.

(Shown below: Assembly and Government Building, Republic of Bosnia-Herzegovina.)

**CONFERENCES****The Politics of Place**

March 18  
 Cambridge, Massachusetts.  
 The relationship of political/social ideology to landscape history and architecture, and the landscapes of everyday life will be explored. Contact Harvard GSD, tel. (617) 495-2573.

**ACSA Annual Meeting**

March 18-21  
 Seattle.  
 Educators and practitioners will gather for the annual meeting of the Association of Collegiate Schools of Architecture. Contact ACSA, 1735 New York Ave., NW, Washington, DC 20006. Tel. (202) 785-2324, FAX (202) 628-0448.

**Working for the Feds**

March 22  
 FED CON is a national briefing on federal construction projects for architects, engineers, and other building professionals. Contact Layne Evans, National Institute of Building Sciences, 1201 L Street, NW, Ste. 400, Washington, DC 20005. FAX (202) 289-1092.

**Graphic Visualization**

March 24-26  
 Philadelphia.  
 This is an international symposium on graphic visualization in architecture and the design arts. Contact Marco Frascari or George Dodds, Dept. of Architecture, 207 Meyerson Hall, U. of Pennsylvania, Philadelphia, PA 19104-6311. FAX (215) 573-2192.

**Design-Build America**

March 30-31  
 Orlando, Florida.  
 This is an international conference and exhibition. Contact Design-Build America '95, 10 Midland Ave., Newton, MA 02158. Tel. (617) 965-0055, FAX (617) 965-5152.

**Practice Notes****Where the Jobs Are**

The Boston Society of Architects, which conducts an annual survey of the architectural job market nationwide, finds the news this year is better than last. "Booming" areas include Oklahoma, Arizona, and Mississippi, as well as Salt Lake City, Tampa, Las Vegas, and Fort Worth. "Down cycle" areas include Rhode Island, central California, and San Diego. For a copy of the survey, send your name and address plus \$6 for postage and handling to AIA Chapter Survey, BSA, 52 Broad Street, Boston, MA 02109.

**Design Management Newsletter**

Jim Cramer, former CEO of the AIA, is publishing *Design Intelligence*, a monthly newsletter and on-line database focusing on the management of design firms. It joins what seems an already crowded field, but if the new entry can actually get designers to pay attention to management issues, it will have accomplished something. The publication is available for a yearly subscription of \$120. Call 1-800-247-2160 for information.

**Technics Notes****Green Home Newsletter**

A new free publication, *Eco-Homes Today*, covers developments in environmentally conscious housing. The publication presents product reviews, sustainable building news, notices of conferences, and information resources. To receive a copy, contact The Archer Group, 1425 Victor-Holcomb Road, Victor, N.Y. 14564, phone 716-924-1823.

**ASHRAE Standard 90.1 Design Guide**

*The Thermal Mass Handbook, Concrete and Masonry Design Provisions Using ASHRAE/IES 90.1-1989* is now available from the National Codes and Standards Council of the National Concrete Masonry Association. The 110-page publication examines the energy performance of concrete and masonry walls and how to use thermal mass provisions of the ASHRAE standard to optimize energy efficiency. For order information, contact Maribeth Bradfield, NCMA, 2302 Horse Pen Road, Herndon, VA. 22070; phone 703-713-1900, fax 703-713-1910.

**Look at the Wheels On That One!**

The Los Angeles *Daily News* reports that the city's building department ordered a nightclub to tear down a stage built as a large shower stall in which nude dancers would frolic for club-goers. Officials determined the shower was not wheelchair-accessible for disabled dancers.



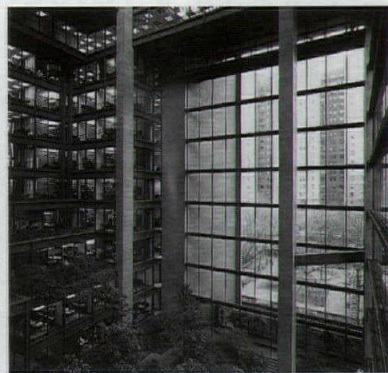


## Big War, Little Show

About half of "World War II and the American Dream: How Wartime Building Changed a Nation," at the National Building Museum in Washington, D.C., explores what was built or manufactured during that momentous war. As the exhibit text says, it took remarkable ingenuity and effort to put the Depression-plagued American economy on a successful, if not always efficient, wartime footing. Novel engineering feats were accomplished on industrial buildings, mainly to overcome materials shortages and unprecedented demand for volume. However, the sense one gets of most wartime production (conveyed here mainly through period photographs, since so little has survived) is of articles, buildings, and places made "quick and dirty," using unskilled labor and substitute materials, good enough for the duration of the job at hand and rarely for more than that. The exhibition moves onto shaky ground in seeming to suggest that World War II neatly blended into the 1950s vision of a peacetime "American dream." Efforts to convert Quonset huts into civilian housing obviously were doomed. Designers of other "instant houses" (including William Wurster and Richard Neutra) could hardly have expected that their dwellings, clad in materials such as exposed Homasote, would last; in fact, few of them endured. The "expandable trailer" designed in 1941 by William B. Stout, shown above, did not catch on. Even Lustron houses (P/A, Feb. 1994, p. 62), which are featured in one segment of the exhibit and have managed to survive, did not result directly from wartime technology. Rather, the company sought to disavow any connection to wartime "prefab" housing. Nonetheless, at least a few fruits of war-driven invention made their way firmly into the civilian consumer realm; among the most memorable were pastel-colored melamine dishware (touted in one ad as ideal for "Mr. Butterfingers 1954"), still found in cafeterias and in greasy spoons from here to eternity. Donald Albrecht was the curator of the show and editor of its catalog, to be published in March by MIT Press. Michael Sorkin designed the exhibits for the show which continues through Dec. 31. □

## Ford Foundation Headquarters Wins 25-Year Award

The Ford Foundation headquarters in New York (right), unaltered since its completion in 1967, has been recognized with the AIA's Twenty-Five-Year Award for design of enduring significance. Designed by Kevin Roche John Dinkeloo and Associates of Hamden, Connecticut, the 11-story building wraps around the west and north sides of its property, leaving the east and south sides relatively open and giving the philanthropic organization's interior offices a view across the East River. The 287,000-square-foot building also has an enclosed garden, open to the public, that has "withstood the test of time better than similar projects," said the Honor Awards for Architecture jury. "This project represents an outstanding collaboration of landscape and architecture," the jury said, noting that it provides "a



Kevin Roche John Dinkeloo and Associates

perfect, quiet environment in the middle of a bustling big city." The interior was conceived to help keep staff members aware of each other and to develop their sense of being a working family. The scale relates to varied surroundings. Kevin Roche, the firm's surviving partner, accepted the award January 31 during the AIA's fifth annual Accent on Architecture Awards ceremony in Washington. □

## Grimshaw's Station Wins Mies Prize

The Waterloo International Terminal, London's dazzling connection to the Channel tunnel railway, has won the Mies van der Rohe Pavilion Award for European Architecture. Curving like a gigantic caterpillar to fit its constricted city site, the terminal was designed by Nicholas Grimshaw & Partners, London, and was built to handle up to 15 million passengers a year. Its spectacular twisting, asymmetrical roof, consisting of ribbons of stainless steel and thousands of overlapping panes of glass, covers the full length of the 1,300-foot-long trains, sheltering all the travelers from England's weather. The Waterloo facility adjoins the old Windsor station from the 1920s and accommodates most of the services associated with an major airport, including immigration and customs control. The designers were



Jo Reed &amp; John Peck

Nicholas Grimshaw (a juror for this year's P/A Awards) and Neven Sidor. The European Commission, the European Parliament, and the Fundació Mies van der Rohe established the prize in 1987 to stimulate interest in contemporary architecture and its impact on the development of European cities. Norman Foster chaired the jury, which included Alvaro Siza, Fritz Neumeier, Henri E. Ciriani, Henning Larsen, Ignasi de Solà-Morales, Francis Strauven, and Elia Zenghelis. □

## PanAmerican Award for Mitchell/Giurgola

For the first time in two decades, the top prize in the PanAmerican Biennial of Architecture in Quito, Ecuador, has been awarded to a United States firm. Mitchell/Giurgola Architects of New York won the honor for its Air & Space Center in Hampton, Virginia, designed in association with Rancorn, Wildman, Krause, Brezinski. In giving the award, the jury cited the Air & Space Center's integration of aesthetics and technology. Sharing the first prize was

Venezuelan architect Jorge Rigamonti, honored for eco-tourism camp dwellings he designed in rural Venezuela. Honorable mentions were awarded to Hariri & Hariri, New York, for Gorman house, and Rene Davids and Christine Killory, San Diego, for their Daybreak Grove Homes (P/A, May 1994, p. 49). More than 180 invited entries from 15 countries in the Americas competed. The next biennial will be in November 1996. □

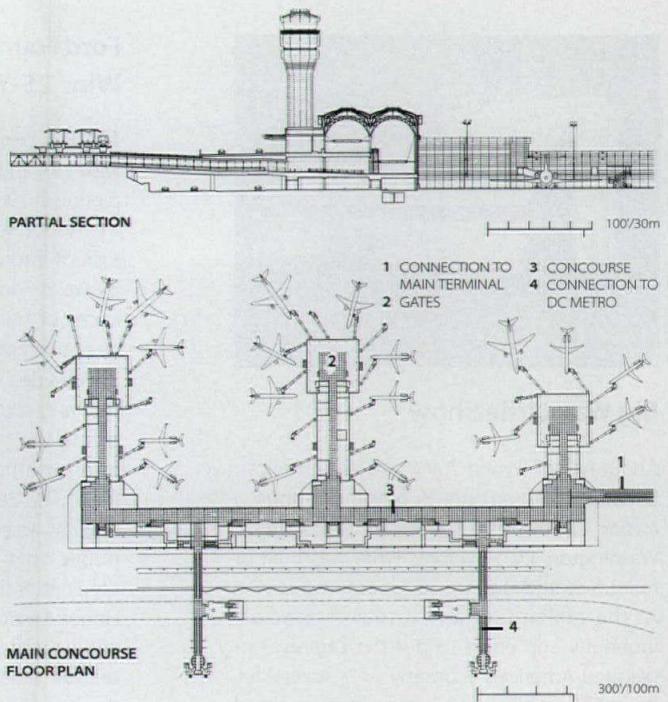




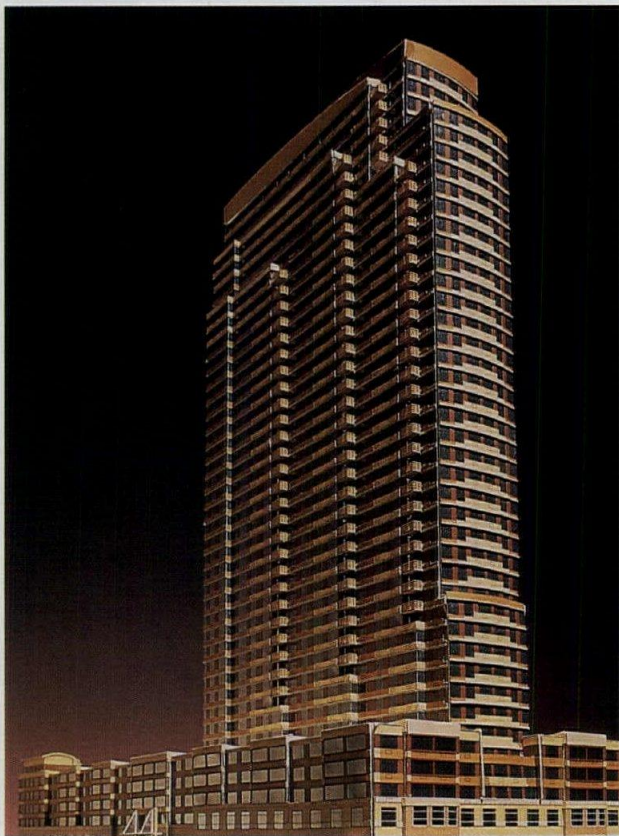
Kenneth Champain

### Pelli Adds to Washington's National Airport

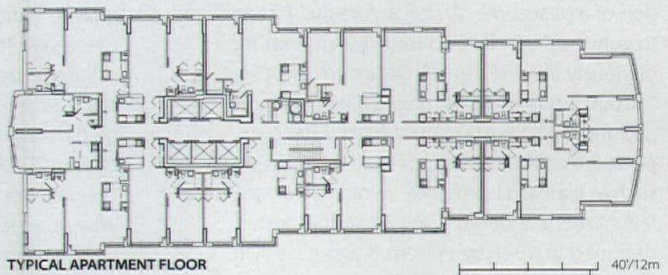
Although not known for designing airports, Cesar Pelli (see also p. 31) was involved in the design of one of the greatest early in his career — New York's TWA Terminal. He and his firm have designed, along with Leo A. Daly and Pierce Goodwin Alexander & Linville, a one-million-square-foot addition to Washington's National Airport that promises to be nearly as great. A series of 45-foot-square steel-framed domed roofs will define the main 1,200-foot-long terminal space, recalling an Islamic



bazaar or the vaults over the trains at New York's lost Penn Station. The terminal will have three levels, with direct access from the Metro station and a new parking garage, and 35 gates to accommodate 16 million passengers a year. Its exterior will be clad in clear, patterned, and spandrel glass set within a painted aluminum mullion system. Construction is under way, with completion expected in 1996.



E. Pelli/CP&A



### Financial Innovations in a Pelli Housing Project

Equally rare for Pelli's office is the design of affordable housing. And yet his firm, in association with Schuman Lichtenstein Claman Efron Architects, has designed what promises to be a landmark in this building type: a 522-unit, mixed-use, moderate-income housing project for Hunters Point in Queens, New York, across the East River from the United Nations. The project consists of a 37-story housing slab, clad in horizontal stripes of red, yellow, and orange brick, that stands atop a five-story base that contains retail space, a K-2 school, a 527-car garage, and additional housing. Although the slab's stepped side walls, corner balconies, and curved penthouse are unusual features in such housing, the real innovation in this project is financial. Instead of having to qualify individually for mortgages, residents collectively pay off the developer's financing, which greatly lowers the cost and qualification requirements for home ownership.





Richard Barnes

## Botta's New San Francisco MOMA Opens

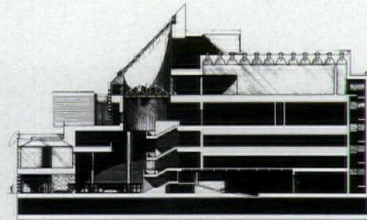
Mario Botta's first building in the United States is the new San Francisco Museum of Modern Art (P/A, Nov. 1990, p. 25) located on a downtown site adjacent to Yerba Buena Gardens. Designed in association with Hellmuth, Obata & Kassabaum, the brick building steps back from the street in a series of three tiers and encloses a skylighted atrium topped by a drum that is truncated on the diagonal as it rises above the roof. In the atrium is a four-story grand staircase that leads visitors to the museum's 50,000 square feet of gallery space, much of it naturally lighted. Finished in bands of black and white stone and topped with a radial pat-



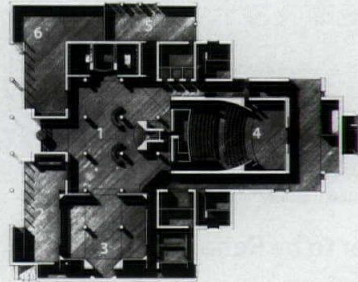
Heinrich Helfenstein

## Now Arriving in Lyon

As trade barriers fall in Europe, common market countries such as France are improving transportation services to boost commerce. This recently completed railway station in Lyon, a competition-winning design by Santiago Calatrava of Calatrava Valls, Paris, serves the Lyon airport and is another component of the country's high-speed rail network. The station's steel arched beams, spanning 100 meters, and its glass infill walls suggest the birdlike form of Eero Saarinen's TWA termi-



SECTION

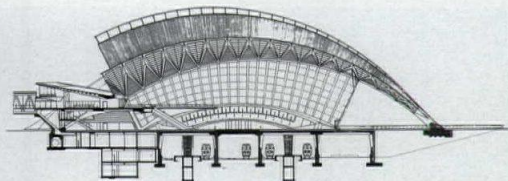


GROUND FLOOR PLAN

- 1 RECEPTION
- 2 CAFE
- 3 SPECIAL EVENTS
- 4 AUDITORIUM
- 5 CLASSROOM
- 6 BOOKSTORE

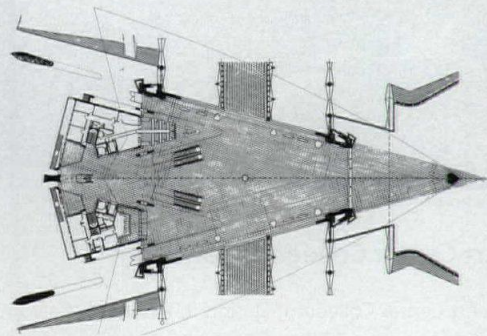
N ↗ 100/30m

tern in the same materials, the cylinder was to have a halo of ficus trees, but the idea was vetoed by the planning department of this windswept city. Local response to the museum has been mixed, although architecture writer Allan Temko in *San Francisco Focus* (January 1995) has called it "one of the best museum buildings of our time," arguing that its "fortresslike character" is mellowed by Botta's intricate brickwork. Against the more delicate scale and articulation of Maki's arts center and Polshek's theater across the street at Yerba Buena, Botta's hermetic design seems more a relic of 1980s elitism than a good neighbor.



SECTION

100/30m

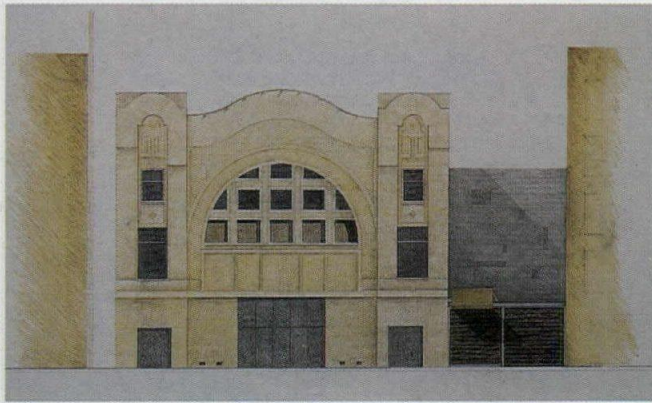


FLOOR PLAN

N ↓ 100/30m

nal in New York, built 33 years ago. This central element in Calatrava's station houses ticketing, offices, restrooms, a lobby, and escalators down to six tracks. Extending to the north and south from the station are 500-meter-long vaulted concrete canopies, which shelter the tracks. The apex of the 53-meter-wide vault is an open basket-weave of concrete webbing that admits natural light onto the platform. The webbing over passenger areas is glazed.



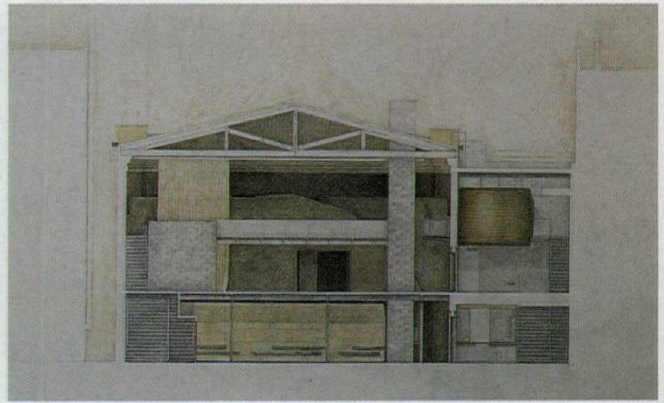


Renderings: Craig Rizzo

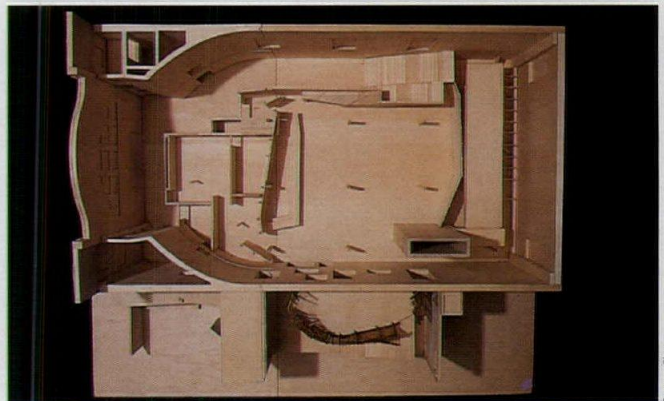
RENDERING OF PROPOSED REHABILITATION

### New York Theater to be Rehabbed

New York's Lower East Side has a rich, but decaying stock of early 20th-Century buildings. Few developers have been enticed to look beyond the area's reputation for crime and drugs to the vibrant arts community that thrives amid the mayhem. But one private corporation is going against the grain, commissioning architects Pleskow + Rael of Santa Monica, California, to rehabilitate and expand a turn-of-the-century vaudeville theater abandoned since 1949. Expected to open next fall, the new performance venue will feature alternative rock, jazz, world music, performance, and dance events. There will be bars and lounge areas. The original theater's brick bearing wall structure will be retained and an addition, on an abutting vacant lot, will have CMU bearing walls. The project will be built for \$142 per square foot.

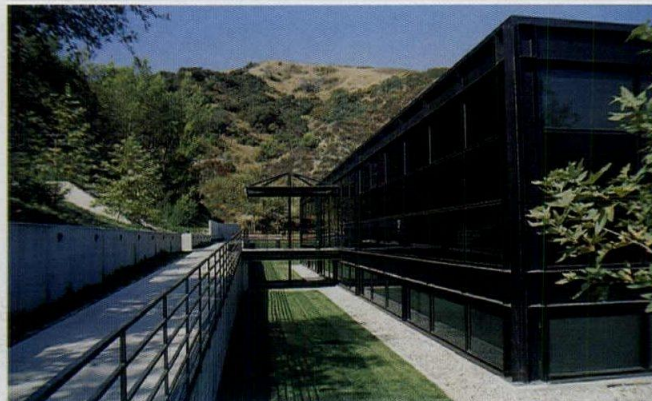


RENDERING OF CROSS SECTION



PLAN VIEW OF MODEL

Berry Chan

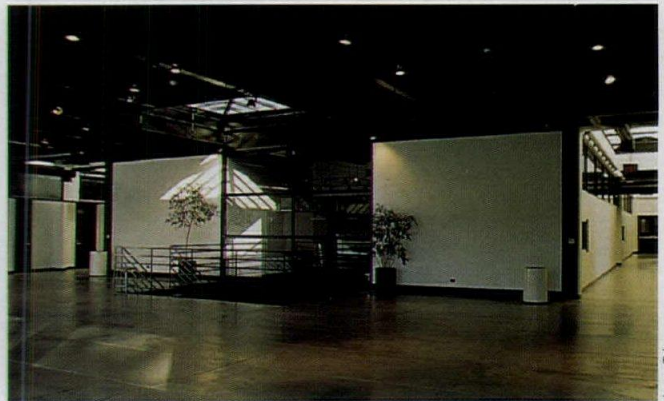


James Tyler

VIEW OF SOUTH ELEVATION

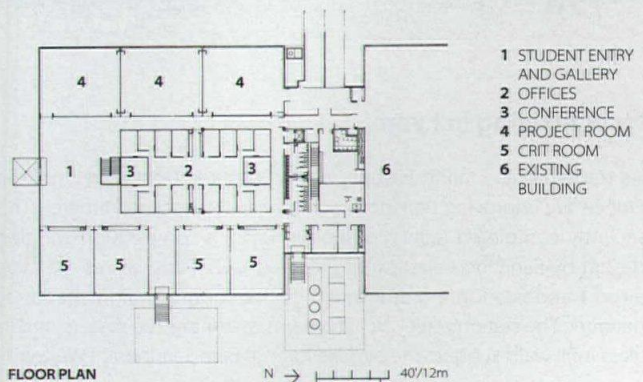
### Ellwood's Art Center College Expanded

Craig Ellwood's Art Center College of Design in Pasadena, California, (winner of a P/A citation, Jan. 1976, p. 71) has been expanded with a 50,000-square-foot addition that closely recalls the original Miesian steel-framed structure completed in 1977. Designed by James Tyler, Ellwood's design principal at the time the main building was executed, the new South Wing provides a neutral backdrop (concrete floors, gypsum board walls, and exposed ceiling systems) for student work. Formal synthesis was a priority, but the addition is not a miniature version of its 200,000-square-foot predecessor. The South Wing has more efficient glazing and a more economical HVAC system. Ellwood's building was retrofitted to reflect the efficiency of the new wing.



STUDENT ENTRY AND GALLERY

James Tyler

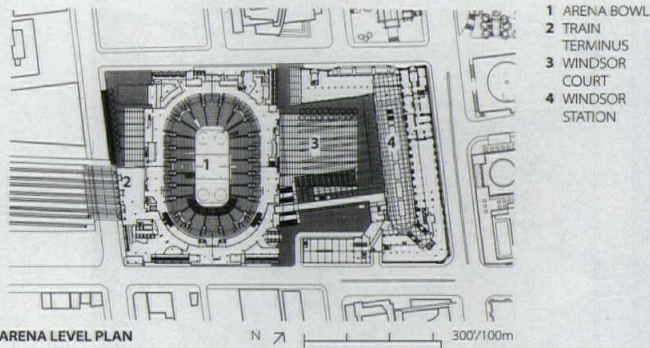


FLOOR PLAN

N → 40/12m

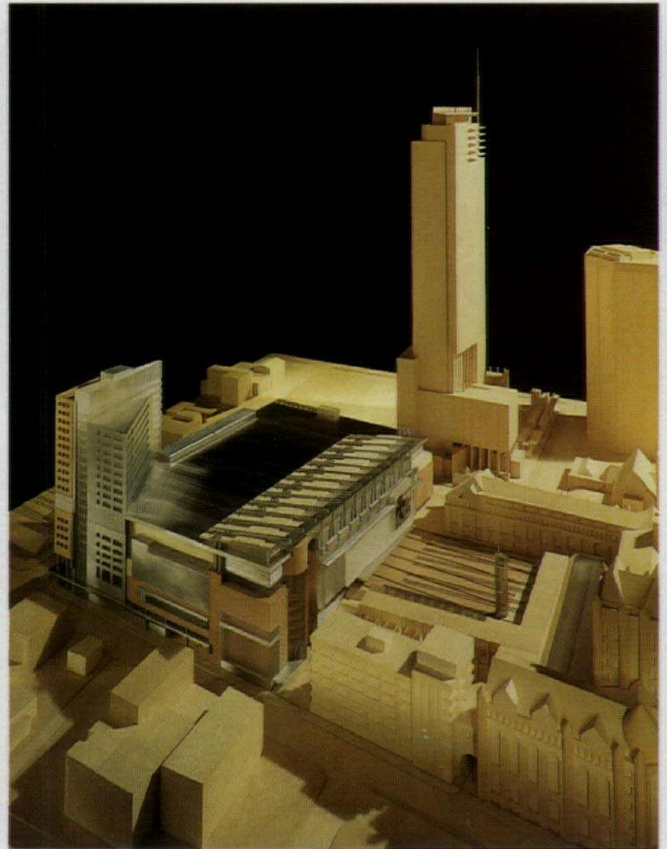
- 1 STUDENT ENTRY AND GALLERY
- 2 OFFICES
- 3 CONFERENCE
- 4 PROJECT ROOM
- 5 CRIT ROOM
- 6 EXISTING BUILDING





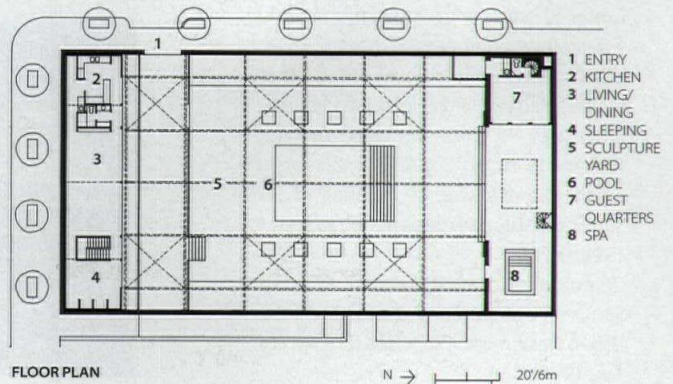
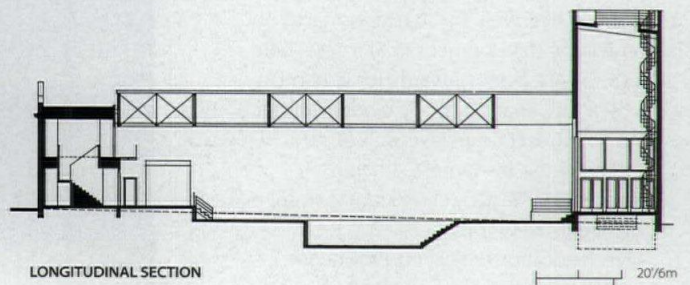
## Hockey Arena and Offices in Montreal

By 1996 the Montreal Canadiens hockey team will be playing in a new stadium, now being built in what has been a somewhat neglected part of downtown. The project, designed in a joint venture of Lemay & Associates and Lemoyne Lapointe Magne, Montreal, involves construction of a new station for commuter rail service, partly underneath the seating of the hockey arena and partly outside it, facing the old Windsor Station, which will be renovated for shops, offices, and other uses. Between the stadium and Windsor Station will be a pedestrian link and a courtyard-like public space with state-of-the-art lighting, sound, and projection capabilities for outdoor multimedia events. Because the development makes up a megablock as long as three conventional city blocks, efforts have been made to break the building into parts that will look less monolithic, most notably with an office tower of variegated appearance.



## A Theater Converted into a House and Studio

Architect Gary Glenn has converted a former theater in St. Louis into a residence and studio for the artist/designer Frank Schwaiger. Working together closely, architect and owner devised a scheme that recalls Mies's courtyard houses. The main house, with its glass northern wall and free-flowing space, occupies the former lobby area. Under the exposed steel trusses of what was once the roof of the auditorium are an in-ground pool and an open-air sculpture studio. The brick stage house, which is several stories high, shelters a small two-story guest house, a covered patio and spa, and a spiral stair that leads up to a rooftop terrace. The nearly blank perimeter walls of the original theater effectively hide the almost surreal sparseness of this courtyard house.





**Seven Projects Win  
AIA Honor Awards for Interiors**

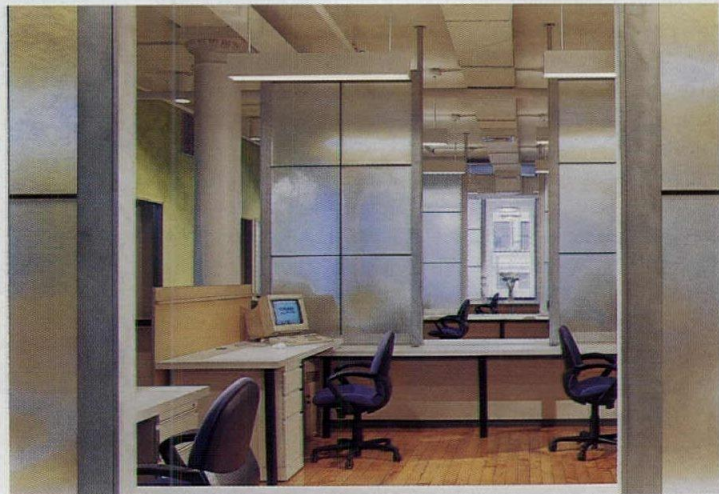
A jury headed by Tod Williams chose seven projects, ranging from public bathrooms in Boston to a video post-production studio in Los Angeles, for AIA Honor Awards.

- Limelight Production (1), Los Angeles, by Franklin D. Israel Design Associates, Beverly Hills.
- Graff Pay-Per-View (2), New York, by Kathryn McGraw Berry Architecture (Kathryn McGraw Berry with Bryce Sanders), New York.
- Private Residence with Office/Gallery for the LEF Foundation, St. Helena, California, by Kuth/Ranieri with Jim Jennings Arkitekture, San Francisco;
- Center for the Arts Theater at Yerba Buena Gardens, San Francisco, by Polshek and Partners with S. Leonard Auerbach & Associates, San Francisco (also winner of an Honor Award for architecture);
- Public Bathrooms, Boston Center for the Arts, by Kennedy & Violich Architecture, Boston, with Arrowstreet, Inc., associate architect;
- JPBT Headquarters, Miami, by Carlos Zapata Design Studio, Miami Beach;
- Carolines Comedy Night Club, New York, by Haigh Architects, Greenwich, Connecticut.



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Grant Muddford



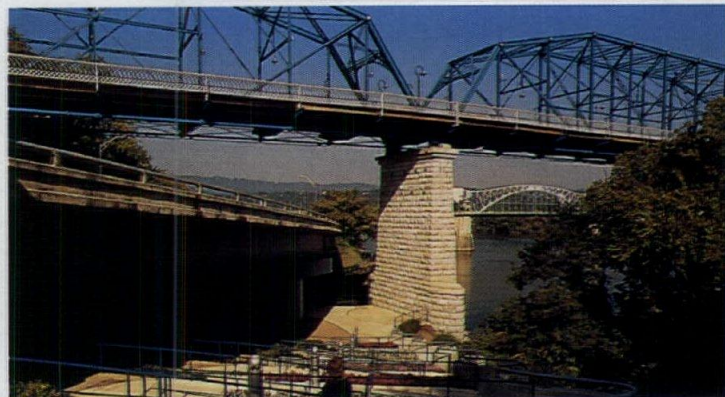
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Andrew Borshvint

**Five Win AIA Honor Awards  
for Urban Design**

Five projects ranging from a bridge restoration and a riverwalk in Chattanooga to an urban hillside development in San Jose were chosen for AIA Honor Awards for Urban Design by a jury chaired by Alexander Cooper.

- Walnut Street Bridge/Riverwalk (3), Chattanooga, by Garnet C. Chapin.
- Inner Harbor East, by Ehrenkrantz Eckstut Architects, New York;
- River Relocation Project (4), Providence, by William D. Warner, Architect & Planners, Exeter, Rhode Island, with Maguire Group, Providence, engineer.
- Los Angeles Public Library Central Library master plan by Hardy Holzman Pfeiffer Associates, New York, with KDG, Architecture and Planning, Los Angeles, associate architect, and Lawrence Halprin, San Francisco, park designer (P/A, Sept. 1994, p. 72);
- Communications Hill Specific Plan, San Jose, by Solomon Architecture and Urban Design, San Francisco (P/A Award, Jan. 1994, p. 36).



3



4



### 13 Win AIA Honor Awards

Frances Halsband, who chaired the jury for the 1995 AIA Honor Awards for architecture, said the jurors looked beyond the requisite of attractive design and placed a premium on other qualities as well: commitment to social progress, new technologies, environmentally sensitive design, conservation, preservation, and restoration.

- Teviot Springs Vineyard, Calistoga (5), California, by William Turnbull Associates, San Francisco.
- Center for the Arts Theater at Yerba Buena Gardens (6), San Francisco, by Polshek & Partners Architects, New York, with S. Leonard Auerbach & Associates, theater consultant, San Francisco.
- Arrow International corporate offices (7), Reading, Pennsylvania, by Kallmann McKinnell & Wood Architects, Boston.
- Hong Kong Stadium (8), seating 40,000, by HOK Sports Facilities Group, Kansas City, with HOK International, associate architect, Hong Kong.
- The Farm, energy-efficient housing for poor families after the 1989 Loma Prieta earthquake, Soquel, California, by Seidel/Holzman, San Francisco (P/A, May 1994, p. 36);
- Berth 30 Container Terminal, Port of Oakland, California, by Jordan Woodman Dobson, Oakland;
- Sunrise Place, energy-efficient affordable housing emphasizing Latino culture, Escondido, California, by Studio E Architects, San Diego;
- Hawaii's Plantation Village, relating immigrant groups' cultural heritage, Waipahu, Oahu, Hawaii, by Spencer Mason Architects, Honolulu;
- Seiji Ozawa Hall at Tanglewood, Lenox, Massachusetts, by William Rawn Associates, Boston (P/A, Sept. 1994, p. 24);
- Advertising Agency Project, warehouse conversion, New York, by V. Polsinelli Architects, New York;
- Jacobs Field, Cleveland, by HOK Sports Facilities Group, Kansas City (P/A, July 1994, p. 21);
- Cibolo Creek Ranch, resort involving restoration and traditional crafts, Shafter, Texas, by Ford, Powell & Carson, San Antonio;
- Westendstrasse 1, naturally lighted, energy-conscious office tower, Frankfurt Am Main, Germany, by Kohn Pedersen Fox Associates, New York.



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Mark Danley/Esto



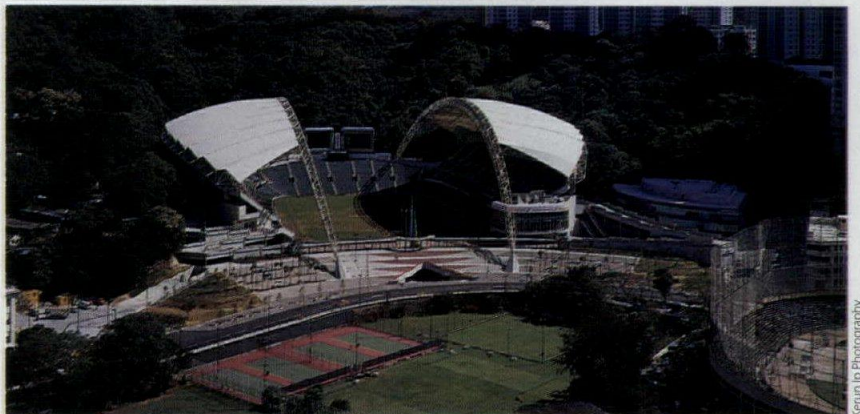
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Richard Baines/Esto



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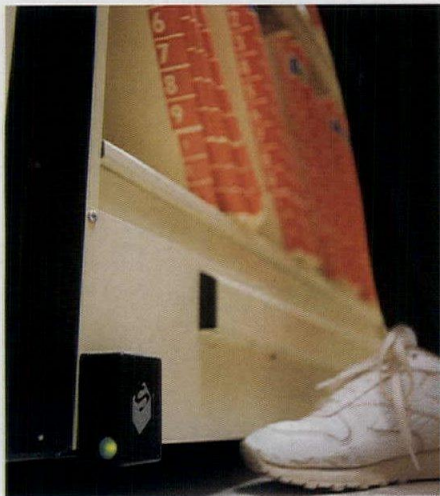
Steve Rosenthal



8

Keruti B Photography





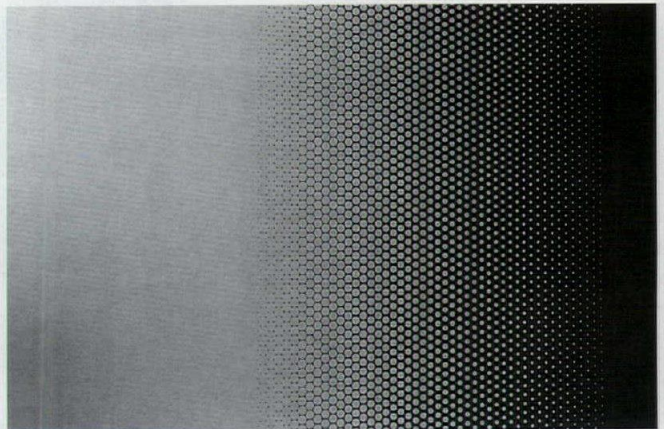
**Safety Sensor for High Density Mobile Storage**

Spacesaver has augmented its line of electric high-density mobile storage systems with the Zero Force Sensor™ safety system (ZFS). Also offered as a retrofit product for existing storage systems, ZFS is a patented micro-processor-controlled, infrared photoelectric system that detects and monitors the presence of people and objects in mobile storage aisles and prevents the aisles from closing. It is a passive, fail-safe system, requiring no physical contact for activation. Circle 100 on reader service card



**Incandescent Light Fixture**

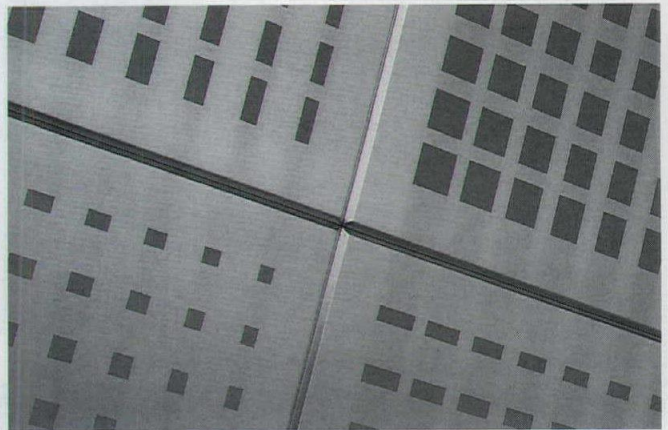
Part of a series that includes floor and wall- and ceiling-mounted versions, the Arpasia Table light fixture by Artemide provides incandescent diffused light. The diffuser is made of etched white blown glass, the base is natural anodized aluminum, and the stem is polished mahogany. The tabletop fixture is nine inches wide and 30 inches high. Circle 102 on reader service card



**Laminated Glass Product**

Gradation Dot is a new laminated glass product from Cesar Color. An addition to the ChromaFusion® Architectural Glass line, the new product allows for gradual, controlled transitions between sandblasted or metallic-colored glass and transparent glass areas. Produced in standard 12-, 24-, 36-, and 48-inch bands, the dot matrix

uniformly fades from translucent to transparent patterns. Specifiers can designate areas and degrees of privacy using windows, doors, and partitions. The ChromaFusion product line also includes 30 geometric and texture patterns, 20 metallic colors, 5 solids and blast densities, and custom designs. Circle 101 on reader service card

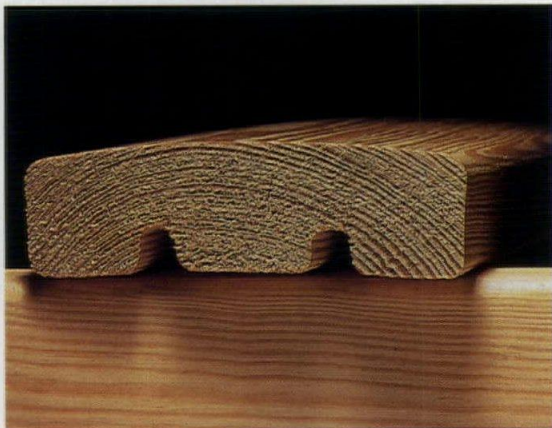


**Aluminum Ceiling Tiles**

Forms + Surfaces has introduced two new aluminum ceiling tile collections. The CS2000-CS4000 Series includes six standard embossed designs and six perforated designs with tegular edges for lay-in use in standard 15/16-inch T-bars. With six specular and frosted finishes available, the tiles can be combined in various

shapes and sizes. The CS5000 Series includes nine designs and two finishes, a specular/satin combination and a satin/satin combination. In addition to tegular edges, this series can also be specified with formed edges for snap-in mounting on concealed carriers (shown above). Circle 103 on reader service card





### Decking with Water-Drainage Design

Supreme Decking recently received patent approval for the water-draining design of its decking board. The company's manufacturing process involves the remilling of standard 2" x 6" boards with a subtle curved surface to drain water and to help minimize warping. The process trims away most of the splintered edges typically found on ordinary boards. The boards also have special relief cuts on the bottom, allowing the wood to adjust to humidity and extreme temperatures.

Circle 104 on reader service card



### Collection from Larsen

Grand Additions is the latest fabric collection from Jack Lenor Larsen. Designed by Lori Weitzner, the new collection includes 12 designs for residential and executive interiors. One of the

designs, Tracery, is a tapestry-like fabric inspired by filigree motifs. It is available in eight colorways and is 100 percent cotton.

Circle 105 on reader service card



### Seating by John Hutton

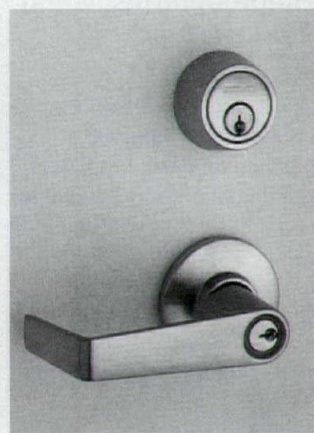
The Serpentine Collection of upholstered seating designed by John Hutton for Donghia includes a sofa (90" x 38 1/2" x 33"), a club sofa (64" x 38 1/2" x 33"), a club chair (32" x 38 1/2" x 33"), and an ottoman (24" x 24" x 14").

Circle 106 on reader service card

### Keyed Outside Lock/Deadbolt Lock

The Schlage Lock Company has enhanced the capabilities of its S-Series product line with the introduction of the S200 Interconnected Entrance Lock Series for light- and medium-use commercial applications and multifamily dwellings. The S200 reinforces the S-Series keyed lever with the extra security of a deadbolt lock and features "panic-proof exit," allowing simultaneous retraction of the latch bolt and deadbolt from the inside lever. Available in four styles, the product meets industry Grade 2 requirements and local life/safety and fire codes; it is also ADA-compliant.

Circle 107 on reader service card





**New Glass Fiber for Insulation**

Owens-Corning has announced the development of a new glass fiber for use in its insulation products. MIRAFLEX™ fibers are composed of two different forms of glass fused together in a single filament, and, unlike traditional fiber, are randomly twisted, soft, and "virtually itch-free." Initially developed for residential use, "PINKPLUS® insulation featuring MIRAFLEX® fiber" is the first product to incorporate the new material.

Circle 108 on reader service card

**Solar Control Film**

Solis™ Clear Heat Control for Windows has been introduced by Southwall Technologies. Applied to existing windows and glass doors, the spectrally selective film is said to transmit almost all of the sun's light and, at the same time, to reduce heat gain by more than 50 percent. The film is also treated with a scratch-resistant coating.

Circle 109 on reader service card

**Fireproofing Insulation Products Brochure**

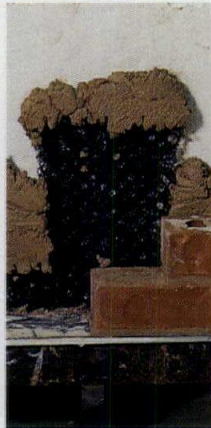
Available from Isolatak are CAFCO® sprayed fireproofing insulation and acoustical products for new construction and retrofit projects; they are also suitable for respray applications after asbestos abatement. The brochure includes specifications, code compliances, and performance ratings.

Circle 110 on reader service card

**Air Leakage Control Manual**

Iris Communications has published *Advanced Air Sealing*, the first application manual in its Energy Source Applications series. The manual includes techniques for air leakage control in residential buildings for sealing floor/ wall and floor/ceiling intersections.

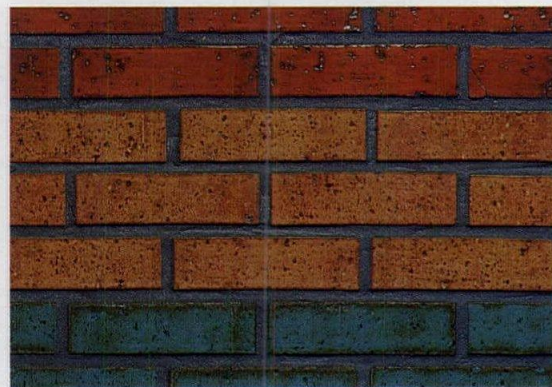
Circle 111 on reader service card



**A Net to Catch Mortar**

Specifically designed to work in conjunction with standard masonry cavity wall construction, the Mortar Net™ is made of rigid, high-strength, woven plastic mesh cut in a trapezoidal peak-and-valley shape. As wet mortar drops off the inside of the exterior wythe during construction, the net prevents it from clogging weep holes by catching and suspending it above the holes and flashing. The net's

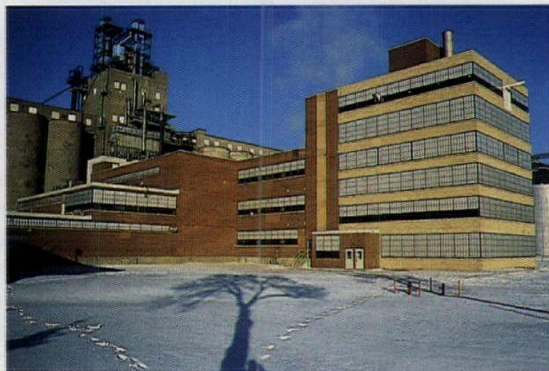
shape and 90 percent open-mesh configuration allows water to pass to the weep holes. With the reduction of water in the cavity, masonry walls are less likely to be damaged by freeze/thaw cycles; the potential for water damage on the building interior is also decreased. The net is available in four sizes and is effective in cavities up to 25 percent larger than its thickness. Circle 112 on reader service card



**Glazed Brick Veneer**

A new line of glazed solid clay brick veneer has been introduced by Castaic Brick. The 5/8" x 2 1/4" x 8 1/2" glazed brick is available in French Blue, British Green, Graham, Indian Brown, Arctic White, Black Diamond, Charcoal, Cappuccino, Burnt Orange, Cinnamon, and Turquoise. In addition, the company's thin veneer is offered with a clear glaze.

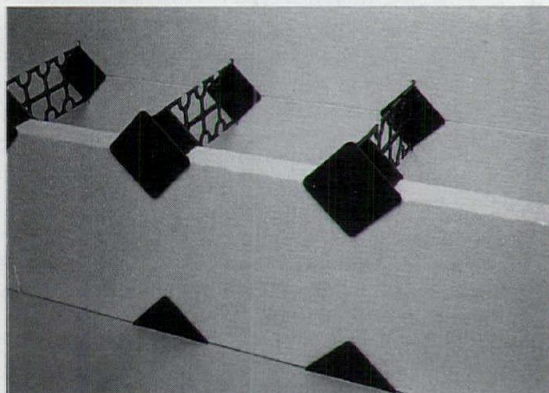
Circle 113 on reader service card



**Kalwall with a Thermal Break**

Kalwall's translucent sandwich building panels are now available with a thermal break. In the "standard 2 3/4" panel, "U" factor options range from .53 to .18; the new thermally broken panel can be as low as .10. The new structural composite panels are tested and computer modeled by NFRC-100 procedures.

Circle 114 on reader service card



**EPS Insulated Concrete Forming System**

The Diamond Snap-Form™ System is an EPS insulated concrete forming system from AFM. Incorporating the manufacturer's Diamond Snap-Tie™ and Perform Guard® Expanded Polystyrene insect-resistant insulation, the system is suitable for both above- and below-grade construction.

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# Computer Products

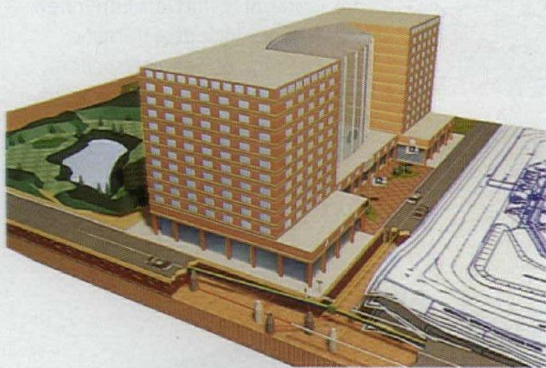


## New Personal Workstations

A new line of personal workstations, the Tri-CAD SMP Series, has been developed by TRI-STAR Computer. Based on a SYmmetric MultiProcessing (SMP) design, the new systems feature dual Pentium 90 processors that pro-

vide fast, realistic 3D graphics at a considerably lower cost than conventional workstations. The machines accommodate all DOS and Windows software.

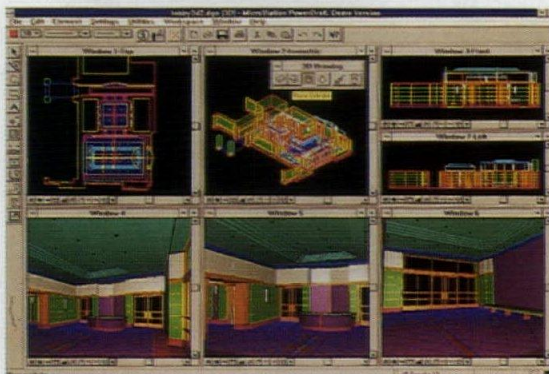
Circle 116 on Reader Service Card



## Integrated Software

Softdesk has announced the release of Softdesk 7 (S7), which allows the integration of the company's architectural and engineering software. S7's networking and translation capabilities enable architects and engineers to work on different aspects of a project simultaneously or to work in their native languages around the world.

Circle 117 on Reader Service Card



## High Productivity Drafting

Bentley Systems has just introduced PowerDraft™, new drafting software from the producers of Microstation™. The software contains intelligent drawing features and streamlined user interfaces, including customizable tool bars, a selector of predefined shapes, and a workspace for commonly used menus, tool boxes, and options. The result is a drafting package with considerable speed and ease-of-use at a reasonable price.

Circle 118 on Reader Service Card

## Project Management within AutoCAD

AutoPROJECT, developed by Research Engineers, integrates time, activity, resource, and cost information within an AutoCAD environment. The software provides enhanced levels of graphics, flexible report generation, and project scheduling, monitoring, and tracking capabilities.

Circle 119 on Reader Service Card

## Home Architect

Foresight Resources Corporation has released Planix Home Architect, a low-cost home-planning software and CD-ROM package. Containing 500 popular floor plans, the package allows home owners and their architects to review and edit plans that most suit their needs and site. The package is compatible with all popular CAD programs.

Circle 120 on Reader Service Card

## On-Line for Architects

Environmental Dynamics Design has just launched AECNET™, an on-line information and communications service for architects, engineers, and contractors that brings together information from building product manufacturers, trade associations, industry publications, code authorities, and software publishers. It has message centers, full E-mail capability, and easily searchable libraries.

Circle 121 on Reader Service Card

## Custom Texture Maps

Pixel Technology, a 3D computer rendering firm, has unveiled M<sup>2</sup>APAS, a national bulletin board service that allows architects and interior designers to "add into their computer renderings the texture maps of the materials they've selected for their design," according to President Jeff Tishman. Users can download a manufacturer's product line to their computer renderings, along with product specification and sizing information.

Circle 122 on Reader Service Card



### CAD Rating Guide

The fourth edition of *The CAD Rating Guide* has just been re-released by ZEM Press. The paper-bound book contains detailed descriptions and evaluations of 144 CAD systems. Other features of the book include a productivity checklist; listings of software according to price, platform, operating system, and market focus; data on each company; and vendor and user surveys. Circle 123 on Reader Service Card

### Estimating Software

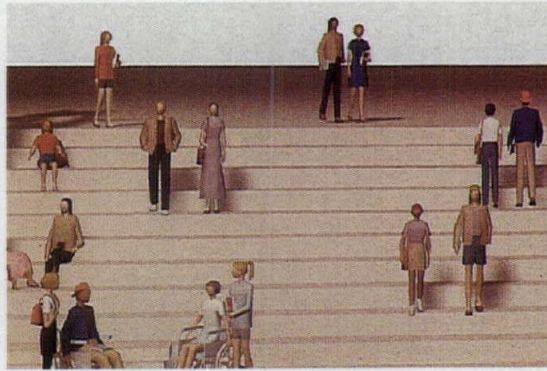
Tempest Company has developed Construction Reporting System (CRS) estimating software for architects, contractors, and owners. CRS provides for the entire spectrum of estimate types, from feasibility and budget estimates to detailed bids and change orders. Compatible with 386 or higher PCs, DOS 3.3, or Windows 3.1. Circle 124 on Reader Service Card

### Color Inkjet Printer

ENCAD has upgraded its line of wide-format color inkjet printers with the NOVAJET III. The new printer is more than twice as fast as its predecessor; is easier to use, with quick-action buttons, ink level alarms, and various user-selected functions; and is supported by a large number of software vendors. The printer comes in a 24-inch-wide and 36-inch-wide version. Circle 125 on Reader Service Card

### Acceleration Software

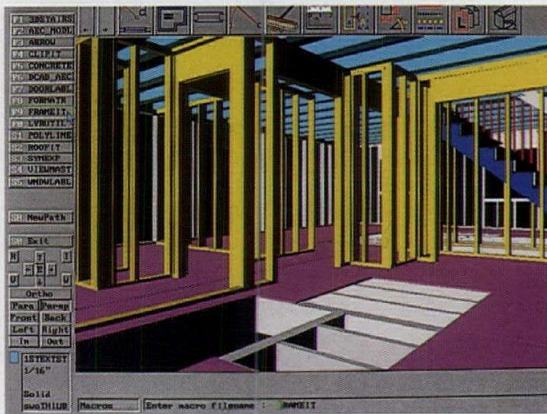
Vermont Microsystems is now shipping acceleration software that will dramatically speed up the graphics in Autodesk's Release 13. Called AutoMate/PRO for R13 Windows, the software increases the speed of pans and zooms, and redraws as much as ten times faster than standard Release 13 display list driver. It also improves erase and move times by at least 300%, according to the company. Circle 126 on Reader Service Card



### Rendered People

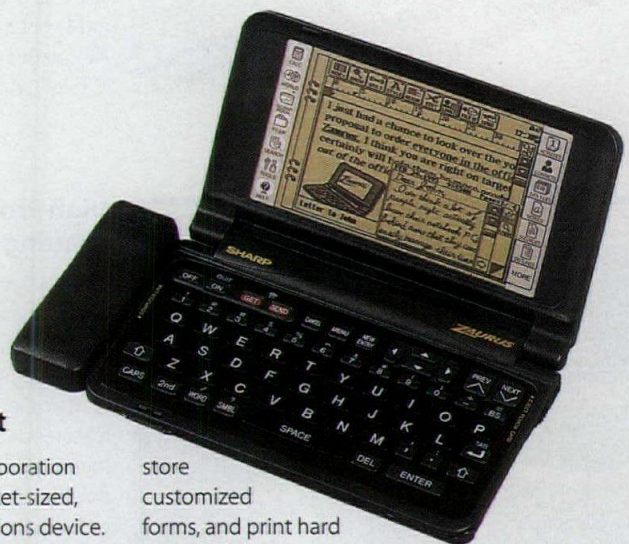
People for People™ offers a series of libraries that depict people in varied attire for insertion into renderings. Compatible with both 3D Studio and AccuRender, the libraries use meshes to pose the people and charts to select clothing styles and colors along with facial features and accessories.

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### Updated CAD Software

DataCAD™ 6, a new version of the low-cost 2- and 3-D CAD software by Cadkey, includes a customizable icon toolbar, automated 3D framing, color photorealistic rendering (using RenderStar 2™ from RenderStar Technology), and an optional cost-estimating module called DataCAD Estimator. Other new features include automatic clean-up of wall intersections, hidden-line removal, associative dimensioning and hatching, and background plotting. Circle 128 on Reader Service Card



### Personal Digital Assistant

Sharp Electronics Corporation has developed a pocket-sized, wireless communications device. Called "Zaurus," the device can fax or modem files, can send or receive E-mail, access on-line services, accept sketches on its electronic note pad, create maps and drawings, format and

store customized forms, and print hard copies of documents. It is ideal for architects who do a lot of traveling or who must have access to information on the job site. Circle 129 on Reader Service Card





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## Who Should Get That Coveted One Percent?

Artists are attacking an effort to spend "public art" money on architecture rather than on art works. The bigger issue is whether artists and architects can learn to work together again.

by Morris Newman

Is architecture at war with public art? One could get that impression from the furor surrounding a proposed city ordinance that would change the rules of a one-percent-for-public-art program in Culver City, California. The cause of the dispute, which has cast national attention on the uneasy relationship between architects and the artists who create works in or in front of their buildings, is an initiative by Frederick and Laurie Smith, who have been the leading patrons of Los Angeles avant-garde architect Eric Owen Moss (P/A, Jan. 1995, p. 104).

The Smiths, a local husband-and-wife development team, have asked Culver City, a small municipality on the southwest edge of Los Angeles, to exempt two of Moss's newest buildings from the city's one-percent-for-art requirement, on the grounds that the buildings themselves qualify as art. The buildings at issue, like much of Moss's work, are visually rich and uncompromisingly sculptural: one of them, known as "The Box," is a converted warehouse surmounted by a cubic volume intended to be a private dining room for a restaurant. The other, known as the IRS Building or 3520 Hayden, headquarters of IRS Records, is an irregularly shaped office building with a pyramidal skylight. A metal cutout of the record company's logo – a man with a hat and dark glasses – can be seen within the pyramid's glass enclosure. Both buildings recently received design awards from the Los Angeles AIA chapter. The Smiths touched off a national discussion about the importance of public art with their request for a building code change that would have released them from the public art requirement.

When word went out on the public-art grapevine that a developer and an architect were challenging mandatory public art, artists became alarmed at what seemed to them a frontal assault on a coveted source of major art commissions. (In most percent-for-art formu-



MOSS'S IRS BUILDING IN CULVER CITY: ALL THE ART THAT'S NEEDED?

las, the bill for the "public" art actually is footed by private developers.)

### Whose Careers Are More Fragile?

Moss and a group of public-art experts gathered December 7 in Culver City's now-notorious Box to sort out the architecture-as-art brouhaha. The architect took a lofty and calculatedly provocative approach to the subject, discussing the difficulty of differentiating architecture from art and suggesting that work such as his challenged such definitions, which change over time anyway. Perhaps predictably, the discussion failed to produce a clear-cut conclusion. But it did illuminate buried resentments and tensions between architects and artists. Architecture critic Joseph

Giovannini observed that many artists perceive architects as "being institutionally supported by the banking system, whereas the arts are very fragile." He made the point that many architects' careers are in fact as fragile, and as poorly funded, as those of artists.

Developer Frederick Smith portrayed himself as a champion of architecture who wanted to put extra money into building quality rather than siphon off part of the construction budget for art work. "The arts are deeply subsidized," he said. Business people, Smith argued, too often subsidize the arts by supporting museums and serving on their boards while neglecting opportunities to improve their companies' buildings, which can "enrich the city." Declared Smith: *(continued on the next page)*



## One Percent

(continued from previous page) "We decided we'd try to change that pattern."

Seattle arts administrator Barbara Goldstein rejected the idea that the one-percent-for-art program is an "artists' subsidy." The real intent of such ordinances, she said, is to provide "experiences of the arts" for city residents. She described as "extremely mean-spirited" the argument that architecture should qualify as art and deprive an artist of the one-percent allocation, "especially with the political climate that we're in right now, where we're threatened with the elimination of the National Endowment for the Arts as well as every other scrap of government support for anything that enlivens our lives."

### A Tax Break for Good Architecture

Giovannini, attempting to play the role of peacemaker, suggested that the issue did not involve an inherent conflict between architecture and art, but was essentially an administrative matter: "There is a question of how big the pie is and how it is to be divided," he said. Giovannini offered a compromise: keep one percent for art, and introduce a tax rebate for good architecture. He didn't say how deci-

sions would be made about what qualifies as good architecture.


Beyond the pertinent issue of providing money for public art, what is most interesting about the present controversy is the growing awareness that public art and architecture, which at one time were virtually the same thing, have come into conflict with each other. Figurative art, after all, was a key component of Western architecture until the advent of Modernism, whose chilly puritanism insisted on abstraction and the removal of any overt references to human and other natural forms. Architecture's abandonment of the other visual arts led, in part, to the current situation in which the making of public art and the making of buildings are separate processes. The selection of public art is made by a developer or, in the case of some public buildings, by a committee, often without consulting the architect. This is a recipe for disaster, as can be seen in the recent Los Angeles Central Library work by Hardy Holzman Pfeiffer (P/A, Sept. 1994, p. 72). There, a pair of giant chandeliers blocks much of the view of the library's atrium-like addition, obscuring the lines of perspective and confusing the sense of scale. The critical reception of the building was likely damaged by the mindless addition

of these mediocre objects, conceived without sympathy for the space they would fill. A committee of library officials, rather than the architect, chose the art after construction of the building was nearly finished.

### A Better Way of Working

Indeed, much public art in modern American cities has become known as "plop art": excrescences left on the sidewalk, indifferent or hostile not only to architecture but also to urban form and to the quality of public space the art is supposed to enhance. The most viable solution is to reinvigorate the tradition of architects and artists working together from the time a project is conceived until it is completed. In the Culver City discussion, artist Mark Allen Lere said the best public art projects usually begin as a collaboration between architect and artist. An example of this is the partnership between Frank Gehry and sculptor Claes Oldenburg on the giant binoculars that form of the centerpiece of the Chiat/Day building in Venice, California (P/A, March 1992, p. 66); in that project, the art is intrinsic to the building. Until such collaborations again become routine, public art and architecture are likely to continue seeming like motes in each other's eyes. □

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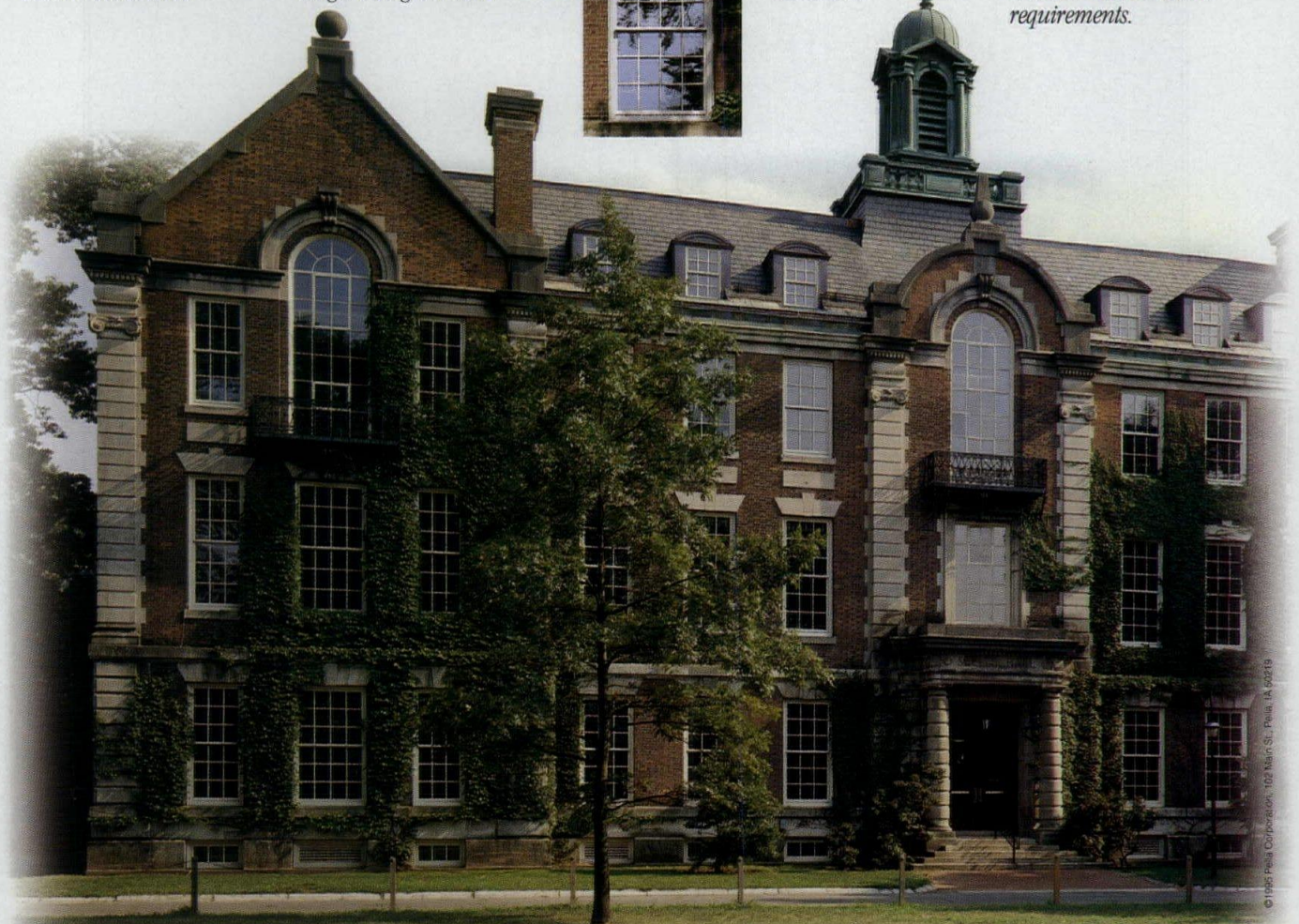
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## “The Group”: Designers Acting on Their Ideals

Inspired by the late Robert Marquis, Bay Area architects have launched a campaign to make affordable housing more abundant – and more welcome.

by Lynne Creighton

Just one year before his death last month, San Francisco architect Robert Marquis hosted a group of public officials, housing developers, sociologists, and fellow architects for a luncheon at Jack’s restaurant, the same downtown spot where three decades earlier Marquis and his coworkers had met with longshoremen to plan St. Francis Square, one of the highly influential housing developments of the 1960s. In the invitation, Marquis included an admonition from R. Buckminster Fuller: “We ought to be looking around saying ‘What is it that my experience teaches me that needs to be attended to, which if properly attended to could bring advantage to all humanity, and which if not attended to properly could find humanity at a great disadvantage?’”

It was a typical Marquis nudge to the conscience of his peers. The time had come, he felt, to reemphasize architecture’s social responsibilities. “I was concerned,” he said, “that we as architects weren’t effectively dealing with the issues of low-income housing and the homeless.” In Marquis’s view, the architecture profession has behaved in a largely reactive manner. Individual architects and design offices devise solutions to the specific problems that clients present to them, but seldom do they pursue opportunities to share their solutions with architects outside their offices; much less do they discuss them with academic thinkers and political decision makers. Marquis, in assembling a group of like-minded people from a variety of fields, intended to take a more ambitious and outgoing approach, focusing on affordable housing.

“The Group” – Marquis’s circle hasn’t coined a catchy title for itself – would be the vehicle to accomplish this. The informal organization attracted architects Robert Herman, FAIA; Ron Kappe; Donald MacDonald, FAIA; Willie Pettus; Fred Powell, Michael Pyatok; Joe Stein, FAIA;

Lynne Creighton, formerly an editor at Rizzoli in New York, is a writer and editor in San Francisco.



PAULA AVENUE HOUSING, SAN JOSE, BY MARQUIS ASSOCIATES



Robert Marquis, 1927–1995

I last got together with Robert Marquis over breakfast at the New York Yacht Club, an odd setting, perhaps, for an architect best known for affordable housing but one that in hindsight seems perfect. The swashbuckling Edwardian ornament, the club rooms once redolent of cigars, the generous proportions and idiosyncratic details of the ship-shaped dining room – all seemed to capture some of the essence of a man who, with zest and a certain sense of adventure, always went his own way. Born in Germany and educated at the University of Southern California, Bob Marquis established an office in San Francisco in 1953

and Marquis’s partner, Gita Dev, FAIA. Other participants have been architect and educator Sam Davis, community activist Tom Jones, architectural writer and critic Diana Ketcham, sociologist Clare Cooper Marcus, Barbara Smith of the San Francisco Housing Authority, and John Stewart, a developer and head of an affordable-housing management group. All have a history of distinguished, innovative work in housing. For the past year, The Group, no longer convening in the club-like atmosphere of Jack’s, has been brown-

and, with Claude Stoller, his partner until 1974, designed such landmark projects as St. Francis Square, a moderate-income housing co-op completed in 1963. In more recent years, his 12-person firm, Marquis & Associates, with offices in San Francisco and New York, designed a number of academic buildings and public libraries. Through the years, Marquis maintained his commitment to housing. He talked at great length during that breakfast in New York about his current effort to rehabilitate public housing and about the social activism of “The Group,” which he helped organize. His legacy will continue. Gita Dev, his partner along with Hal Brandes, says that before his death January 3 from complications after surgery for pancreatic cancer, “he was very interested in making sure the firm goes on.”

Thomas Fisher.

bagging it once a month at Marquis’s office on Vallejo Street.

### Overcoming Community Resistance

A major concern: the production rate of affordable housing in this country has fallen to about half of what it was a decade ago. “One of the biggest problems is that people don’t want this kind of housing in their neighborhood, or they don’t think it should be built at all,” says Willie Pettus, who frequently works with Pyatok. (continued on the next page)



## The Group

(continued from previous page) "Reasons for NIMBYism are all well known: 'it will devalue my property, increase noise, crime, and traffic, and it will be ugly as well.' And all these stereotypes are totally legitimate," Pettus adds, "given the past." But much has changed since the image of low-income housing was formed by massive projects like Pruitt-Igoe in St. Louis - dynamited more than 20 years ago. Since the retreat of the federal government from its prominent role in supplying housing for people with modest incomes, nonprofit developers have stepped in. Over the past decade, the nonprofits have created unprecedented opportunities for Bay Area architects to get involved in well-designed affordable housing.

To counter negative images of low-income housing still held by the public, The Group is acting as an outreach and educational enterprise. One of its goals is to collect outstanding examples of affordable housing from Bay Area architects. These studies, including text and illustrations, are to be gathered into a book showing the range and types of affordable housing - from shelters to SROs, from apartment complexes to single-family homes. The book, now being compiled, will be a tool for opening communication between architects

and key players in the financing, design, and approval process. It is intended to demonstrate that well-designed low-cost housing is not only possible but is actually good for communities.

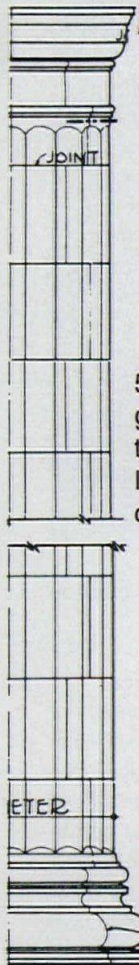
### Improving Housing Management

"One of the biggest problems in the history of public housing has been the lack of effective management, or in many cases any management at all," says Bob Herman, an architect whose firm has specialized in affordable housing for the past 20 years. "Management's philosophy was to leave well enough alone and they would manage themselves." The Group underlines the importance of a capable management team. John Stewart, a nonarchitect who calls himself the The Group's "reality check," says, "People need to be assured that low-cost housing can be effectively managed so that it won't end up abused and abandoned in the future."

A second activity undertaken by The Group is walking tours. Tours have been conducted in Oakland's and San Francisco's inner-city districts, aimed at showing residents and officials what good, affordable housing looks and feels like. A third activity is a sort of SWAT-team approach to providing information and education. The Group has resolved to have

teams ready at a moment's notice to conduct community workshops with housing organizations, city agencies, and elected officials, to explore current housing issues and ways of handling them. One of the examples The Group uses is Paula Avenue Housing, a 21-unit apartment complex on two-thirds of an acre, in San Jose California. Designed by Marquis Associates, the San Jose complex avoids elements associated with apartments, such as exposed stairs, exterior walkway-balconies, parking visible from the street, and big, boxy buildings. The Group cites Paula Avenue and other developments to argue that low-income housing can fit successfully into neighborhoods that might otherwise oppose it.

Architects alone will not solve the complex problems of low-income housing, just as design deficiencies alone did not cause the problems in the first place. But by vigorously advocating well-designed, effectively-managed affordable housing and focusing attention on successful examples, The Group is raising the odds that more such housing will be built in the future. That may, in the end, make The Group a worthy model for socially concerned architects in other regions - and a lasting testament to Robert Marquis's ideals. □



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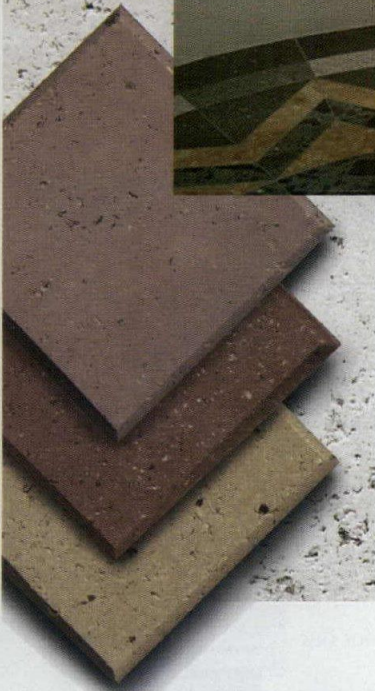
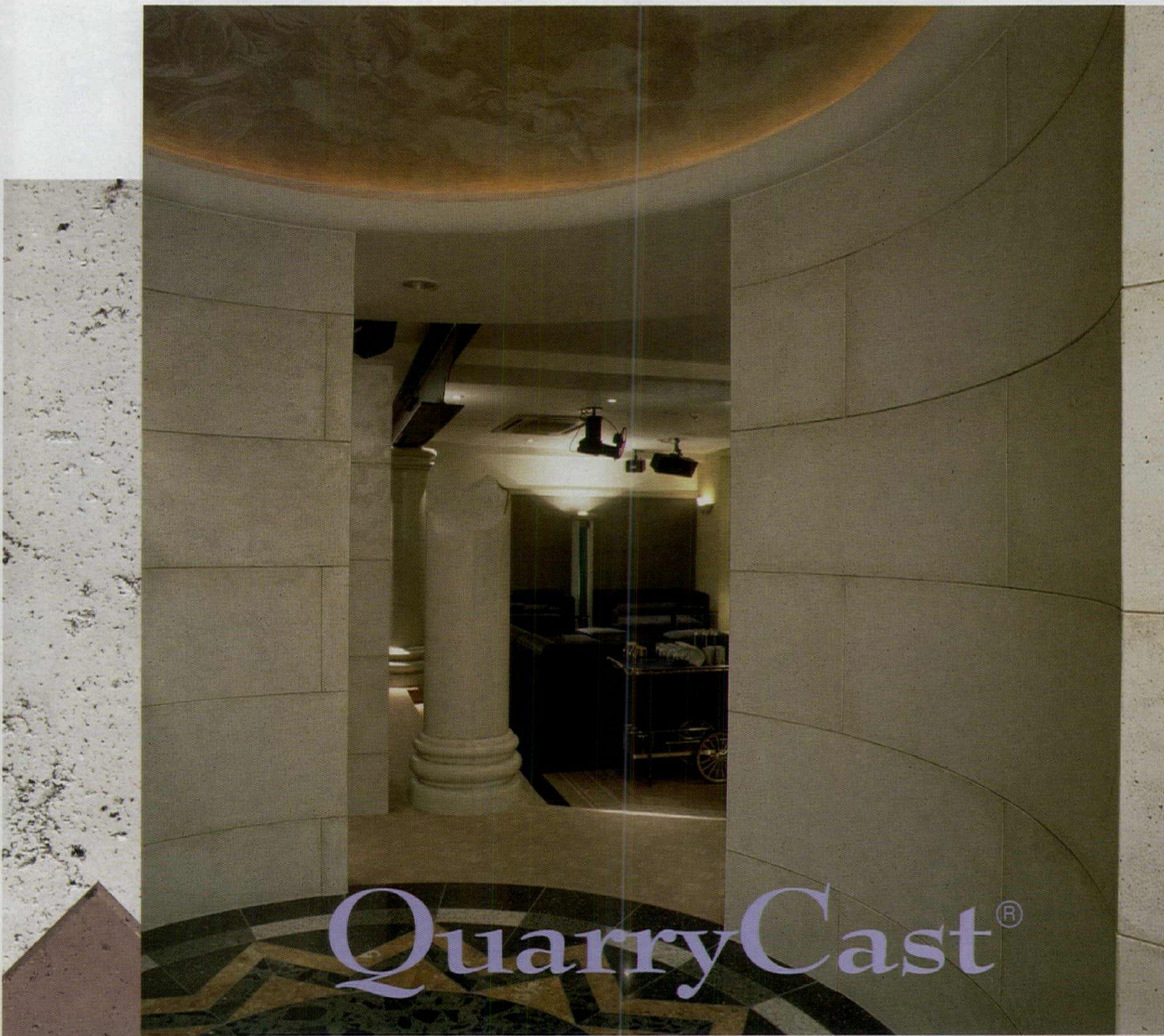
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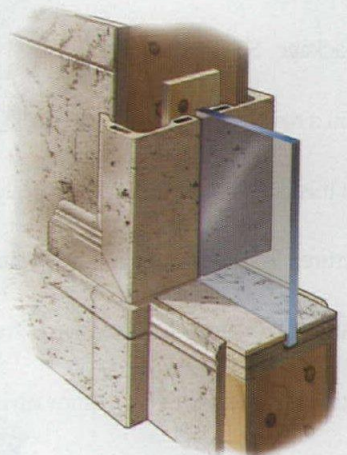
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# GOVERNMENT HOOPS

## The Trials of Pursuing Public Work

The daunting routines for getting public commissions are yielding to alternative procedures – some promising, some threatening – at various levels of government.

by John Morris Dixon

**J**ump, architect, jump! If you want a government commission, you have to perform for the bureaucrats. It has been a historical tradeoff: if we want our public bodies to select firms on the basis of qualifications, not connections, we just have to accept onerous paperwork and inscrutable bureaucracies. Now, as governments try alternative approaches to procuring design services, this numbing certainty is giving way to anxiety.

Qualification-based selection (QBS) has long been an article of faith among architects and engineers, but a difficult concept to explain to legislators. They and their constituents associate fairness in government procurement with competitive bidding, and it has taken constant lobbying at federal, state, and local levels to maintain QBS as official policy. To head off potential defections at the state and local levels, there is a program of “QBS facilitators” in some states, funded jointly by national and state AIA, along with comparable engineer and contractor organizations, which tries to reinforce commitment to QBS and keep the paperwork burden within bounds.

At the Federal level, it may be only symbolic that Representative Jack Brooks of Texas was defeated in November’s elec-



tions; he was the author of the 1972 Brooks Act, which required all federal architect selection to be qualification based – and set a standard for state and local governments. AIA's senior director of federal markets and regulations, Stuart Binstock, assures us that other long-term defenders of the Brooks Act remain in the Congress, but the iconoclastic mood of the present session should put professional organizations on their guard.

The most serious threat to QBS, the design-build alternative, has been around for decades, going through cycles of popularity at various levels. At the very least, design-build reduces the architecture firm's access to the client and its clout

### **In an atmosphere of cost cutting and outsourcing, lease-purchase could become a simple dollar transaction in which the builder chooses the architect.**

on the job site. If teams are selected on the basis of competing designs, the firm must make large upfront investments in a job it has only a chance of getting.

Public entities could entirely sidestep QBS laws through lease-purchase deals with developers, which are commonly used to circumvent capital appropriations. To date agencies entering into such arrangements usually retain control over architect selection, through QBS or design-build procedures. In an atmosphere of cost cutting and outsourcing, however, lease-purchase could become a simple dollar transaction in which the builder chooses the architect.

In some areas of government, meanwhile, there have been recent efforts to emphasize design quality. Realizing that selection based on reams of qualifications data too often produces drab buildings, some public servants are finding ways to cut through the paperwork and to give demonstrable design skills more stress in relation to management skills and experience with similar commissions. The General Services Agency (GSA) has recently initiated a "design excellence" program, which entails an unorthodox two-stage selection process (sidebar at right), and the Army and Air Force Exchange Service has altered its architecture selection criteria on recent projects to favor firms that can go beyond predictable solutions (sidebar, page 60).

#### **Slogging Through the 254/255 Forms**

While the Brooks Act has been the architect's friend and protector, the difficulty in getting jobs under its benevolent provisions is symbolized by the infamous Standard Forms 254 and 255. The 254 lays out the capabilities of the firm, must be filed at least once a year, and is a prerequisite for filing a 255, which explains the capabilities of a team, including consultants, to take on a specific commission the client agency has advertised in the Commerce Business Daily (CBD). States and municipalities may require these forms, or their own versions of them, and jobs with partial federal funding may require different forms to meet the requirements of two or three levels of government. *(continued on page 60)*

### **GSA's Design Excellence Program**

As the owner/manager of some 250 million square feet of federal buildings, the General Services Agency is the largest single government client and sets the pattern for other public owners. So it is significant for the profession that GSA has embarked on a "design excellence" program, with innovative selection procedures that break long-established patterns in federal architect selection, yet follow the provisions of the Brooks Act. GSA's deputy director for design and construction Edward Feiner (an architect and AIA member) has taken the lead in crafting this new program, because he wants "to raise the profile of public architecture," improving it not just in its surface aspects but "holistically," in terms of cost and performance.

The arena where GSA's new policy has been forged and most prominently applied is in the new federal courthouses being undertaken in virtually every corner of the nation. Many of the existing courthouses date from the 1930s or earlier, and the need for larger and updated facilities has become acute. These courthouses now constitute a substantial part of the roughly \$1 billion a year that GSA is spending on new construction.

This new selection process proceeds in two stages: the initial, open invitation requests far less information than the traditional Form 254 – just a "quarter-inch portfolio" stressing the design skills of the designated lead designer; no more than three projects can be illustrated, with information on how they met economic and functional, as well as aesthetic, goals. "We wanted to reduce the cost of competing," says Feiner, "thereby allowing more people into the arena – newer firms, smaller firms." For the projects administered this new way, 30 to 40 firms or teams have typically responded to this first-stage request.

A panel of agency architects reviews these first-stage submittals and decides on a short list of three to five contenders. The finalists are given 30 to 45 days to put together full teams, with all consultants, identify all key personnel, submit this information on the standard Form 255, and attend an interview. For projects above a \$25-million threshold, the same review panel is joined by an outside peer member, as well as a GSA staffer from a region other than





U.S. COURTHOUSE, OMAHA, CONCEPTUAL DESIGN, PEI COBB FREED & PARTNERS



FEDERAL BUILDING AND U.S. COURTHOUSE, SANTA ANA, CALIFORNIA, DESIGN DEVELOPMENT SCHEME, GRUEN ASSOCIATES/ZIMMER GUNSUL FRASCA PARTNERSHIP

one in which the job is located. While not allowed to vote, the outsiders participate fully in the discussion, which typically leads to consensus decision.

The great virtue of the new procedure, Feiner observes, is that quality of design is assured in the first stage; in the second stage reviewers can concentrate on the teams' management skills, staffing plans, track records, etc., knowing that they will not have to settle for lackluster design. During the process, only three to five teams have had to go through the arduous work of assembling a team and documenting its abilities on Form 254, and the agency has not had to try to evaluate dozens of detailed proposals.

The new process burst into the news with the selection of Pei Cobb Freed & Partners for the new Omaha courthouse on the basis of a second-stage design competition. All of the four shortlisted teams for this job included AIA Gold Medal or Pritzker Prize winners, thus suggesting an Olympian definition of "design excellence" and sending a shock wave through the large service firms accustomed to getting most GSA commissions. (Besides, Pei Cobb Freed already had the plum Boston courthouse commission, awarded when design was getting increased attention, but before the new procedure was adopted.)

Learning from Omaha, GSA has tried to include on all short lists a range of firms that Feiner calls "the stars, the planets, and the asteroids" – nationally prominent, locally prominent, and up-and-coming. They

have also made sure that the few instances when they include a design competition will not entail high team costs, as Omaha did, by strictly limiting finalists' presentations and offering a stipend to each. For the subsequent Scranton, Pennsylvania, courthouse, the two-stage qualification-based process (reported in P/A, December, 1994, p. 39) awarded the commission to Bohlin Cywinski Jackson, a "planet" firm in Feiner's universe. (Only after being shortlisted did they win AIA's 1994 Firm Award). For the Lafayette, Louisiana, courthouse, a joint venture of local firms ("asteroids") beat out three much more widely known firms.

The large firms that had gotten a dependable share of GSA work under the traditional 254/255 system have, of course, found the agency's new procedure disconcerting. Kevin McDonald, director for federal architecture in HNTB's Washington office, acknowledges that GSA's new procedures make things harder for firms with established reputations for project delivery. Many of the architects getting federal courthouse commissions – Meier, Pelli, Stern, and others – are new contenders in the federal arena. McDonald and others note that the slim first-stage portfolios are not necessarily easier to prepare than more voluminous documents, and you really have to assemble a full project team, even through that's not officially required. "Whenever you level the playing field," responds Feiner, "you're going to impact the people who had it all figured out." He points out that large management-oriented firms are making it to

some of the new short lists, if they can demonstrate design strengths, and some have won recent commissions.

GSA's new selection procedure is not limited to new construction, but is being applied in substantial renovation projects as well. Nor is it limited to the federal courthouses; it has been used, for instance, in the almost-\$1-billion Food and Drug Administration campus to be built in suburban Maryland (architects: Kling-Lindquist and RTKL). Feiner observes, however, that the courts, whose judges and facilities staff have been closely involved in the selection process, have been excellent clients – "who really want quality design." In the federal courts, says Feiner, "We are not building monuments, but they should be landmarks."

Is the new Congress a threat to GSA's construction projects, or to the agency's very existence? Even in the last Congress, there was great concern about projects that could be labeled "pork barrel," and this is bound to continue.

GSA, of course, is not the ultimate client for what it builds, but only the agency for construction and management. Feiner cites the professionalism of their procedures and their attention to costs as assuring the government good value for its outlays. As he also points out, those 250 million square feet of existing government building out there have to be managed and maintained, not to mention essential remodeling and construction projects. If GSA doesn't do it, somebody will have to be accountable. □



Obtaining commissions through this process has become notorious for the inordinate detail and the amount of paper required. It is not unusual for a firm or a team to submit cartons full of forms, minutely detailing the accomplishments of numerous professionals and identifying what tasks they are to perform years hence, at what cost. Except for the most complex projects, the standard forms can be answered succinctly, but the internal politics of contending teams and a fear of slipping up on even the most obscure points have increasingly bloated these submissions. The result has been a major waste of the professions' efforts, while basements are filled with data nobody has been able to analyze.

Expertise with 254 and 255 submissions has acquired its own appreciable price; firms hire marketing directors and

**It is not unusual for a firm or a team to submit cartons full of forms, minutely detailing the accomplishments of numerous professionals and identifying what tasks they are to perform years hence, at what cost.**

their staffs based in large part on experience with the forms. Professional marketing organizations and newsletters address the forms and their use. Several software programs for dealing with them are available.

Mark Zweig Associates' *Insider's Guide to SF254/255 Preparation* includes a section of "insiders' tips" from members of the federal agencies that build. Here one federal staffer reminds professionals submitting these forms that "we're in the same business you are, so describe your projects like you would describe them to one of your peers." Sensible advice, but another bureaucrat demands, "I want to know exactly who is going to work on my project and that they have done this work before" – articulating the old "if you haven't done it before you can't do it now" policy that has narrowed opportunity and kept federal work in a rut for decades.

**Closely Watching the Feds**

In an effort to get federal work, numerous large firms maintain offices in Washington mainly to keep in touch with agencies commissioning federal jobs. One consulting organization in Washington, Building Development Counsel, Inc., learns about federal jobs in detail before they are advertised in the CBD. The consultant firm, says its president, Mark Price, knows the agency staffers making the selection, their past decisions and their current concerns, and what they tend to respond to in a submission. The consultants then hand-pick a firm their research shows to be appropriate for the project, offer the firm an exclusive contract to advise them on the submission of forms, the interview, and the subsequent negotiation of the contract. Eighty percent of the time, say Price, these firms make the short list. His client firms, however, are paying a fee just to get a toehold in a system that should be accessible.

Price spells out some basics a firm should know when going after federal jobs: he notes that most agencies prefer a firm within 100 miles of the job site, *(continued on page 106)*

**Post Exchange Upgrade**

However the giant General Services Administration may dominate our view of federal construction, there are numerous other agencies forging their own approaches to quality building. One of these little-recognized federal entities, the Army and Air Force Exchange Service, actually does a lot of construction, \$183 million worth in 1994 alone, and it has an in-house staff of 85 professionals, including architects and engineers.

For a new round of post and base exchanges – "PXs" or "BXs" to their users – the service has been tapping firms of small to medium size with considerable reputations for design. Peter Forbes of Boston won the commission for an exchange at Ft. Bragg, North Carolina; Gunnar Birkerts Associates of Birmingham, Michigan, has designed an exchange for Mountain Home, Idaho; and Donald Singer of Ft. Lauderdale, Florida, has designed a base exchange for Edwards Air Force Base in California.

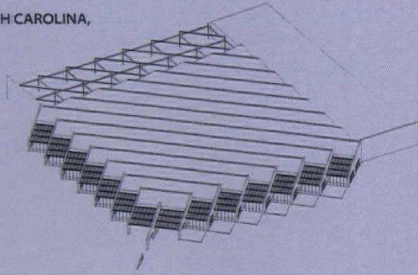
Large single-story retail structures, similar in program to discount superstores, PXs have to be economical to build and operate. The exchange service is run essentially like a business and does not depend on Congressional appropriations. And whereas PXs once appeared to be virtually the only shopping choice for military personnel, they must now compete with retailers such as Wal-Mart, located near many large installations, for mobile members of the volunteer armed forces and their families; at many bases, retired military settled nearby are also important customers. To maintain the loyalty of this customer base the exchanges must be comfortable and appealing, and they must also fit the architectural styles of the bases where they are built, many of which have detailed design guidelines for their buildings.

For the Fort Bragg exchange, Forbes has designed a naturally skylighted scheme, which will cut down on demand for artificial lighting, hence reduce air-conditioning demand, yielding substantial savings in operating costs while improving the appearance of the 130,000-square-foot interior. To meet design requirements of the military post, its public image will feature walls of "Fort Bragg brick" and sloping roofs. □





POST EXCHANGE, FORT BRAGG, NORTH CAROLINA,  
PETER FORBES & ASSOCIATES



STATE SUPERIOR COURT, MIDDLETOWN, CONNECTICUT; JETER COOK & JEPSON,  
ARCHITECTS OF RECORD; RICCI ASSOCIATES, ASSOCIATED ARCHITECT FOR  
JUDICIAL DESIGN

Robert Benson

## Connecticut Design-Build

While design-build is by no means unknown in federal work, it remains the exception. But in some states, sweeping efforts have been made to convert public work to a design-build procedure. In Connecticut, the state Public Works Department, comparable in its responsibilities to Washington's GSA, made design/build its dominant procedure about two years ago.

The first buildings commissioned this way are coming to completion, and the department is very pleased with the results. In the view of David McBride, an architect on the Public Works staff, the traditional system had become a tussle marked by disputes over omissions, change orders, etc., under which buildings were hardly ever completed on time and within budget. Now no contract is signed until everyone signs off on the design, the specs, and the cost. The user organizations are allowed no more changes of mind after the signing, and any cost discrepancies have to be covered by the builder/developer. Thorough review of drawings and specs, plus scrupulous monitoring at the building site, eliminate any temptation to cut corners.

The first project completed under this program, a courthouse in Middletown, went very smoothly, reports Michael Colarusso, its project manager at Jeter Cook & Jepson, Hartford. For that project, the choice of site was part of the team's proposal. Since site

research, securing options of the property, etc., put unusual demands on the developer involved, the state got only two proposals. The project was completed three months ahead of schedule and under budget.

Other architects in the state do not view the process in such a positive light. Their greatest concern is the enormous amount of upfront costs: in design-build selections to date, as many as 16 firms have invested \$40,000 or more each just to contend under brutal odds, and developers have made comparable investments. According to Judy Edwards, executive director of AIA Connecticut, the process is seriously weakening the viability of the state's architecture firms. A coalition of architects, engineers, and contractors is at work on a white paper that is likely to ask for a first-stage, qualification-based screening that would limit the field to a few teams actually submitting designs. The state licensing board is ruling on whether design-build procedures violate professional licensing laws, as they've been shown to do in other states.

Some architects claim that the selected team may be asked to essentially scrap its design, adopting elements of other contenders' schemes. In any case, it is said, more than \$50,000 worth of design adjustments and refinements may be required of the winning team as a condition for signing the contract. And without a contract, all this work would be wasted.

McBride at Public Works denies that

winning teams are asked to radically alter their designs. "We select the design we want to build," he says, and the user organization, which is involved from the outset, agrees. The team that presents the winning design is not necessarily the one with the lowest cost proposal. In the ensuing negotiation to meet cost objectives, design and spec revisions are virtually inevitable, and a contract cannot be signed until all these considerations have been resolved harmoniously. Despite complaints from architects and others involved, the department has seen no fall-off at all in the number or quality of teams contending for this work.

A lot of architects' discomfort with the new system, in McBride's opinion, has to do with a feeling they are placed in a subservient role to the developer. If more architects took the initiative to organize teams, they might regain a sense of their essential value to the project. After all, he observes, "A lot of traditional ways of doing business are not making it any more."

While the Public Works Department clearly thinks design-build is the way of the future, architects say firms are pursuing these jobs only because private sector work in Connecticut remains depressed. An architect selected for one of the department's projects observes that the design-build program so far has left "a lot of hurt bodies out there." He is convinced that the procedure will not work in the long run unless it is made "more humane." □

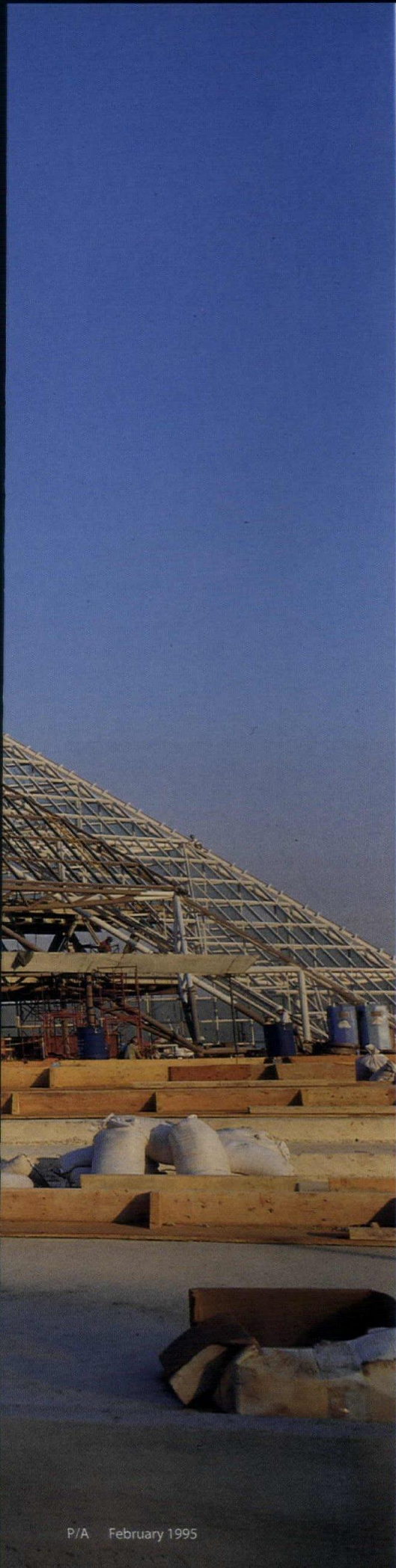


# Raising Rock's Reliquary



Facing the public plaza that serves as its forecourt (1) the Hall of Fame appears as a pyramid of steel, most of which will be clad in glass curtain wall and metal panels. On the lakeside (2), the building meets the water, which required construction of concrete caps poured over steel piles that go down to bedrock.





Photos these two pages: Hal Stata

2

## I.M. Pei's monument to Rock and Roll takes shape on the Cleveland skyline. *by Michael J. Crosbie*

### Editor's Note:

In this issue P/A debuts a new monthly feature, "Process." As the name implies, this forum will be an in-depth look at the life of a project, large or small, as it moves from initial design concept through schematics and design development, through working drawings, and into construction. "Process" will trace architectural ideas over time, documenting them in the architects' own words, with sketches, diagrams, working drawings, and construction photographs.

On the shores of Lake Erie, the Rock and Roll Hall of Fame and Museum nears completion. Cleveland's newest landmark is the work of I.M. Pei of Pei Cobb Freed & Partners, New York, who was commissioned in 1986 to design the 150,000-square-foot repository of Rock culture. The building deserves special attention to its design process, given the unlikely choice of one of architecture's elder statesmen to design a monument to youth culture, because it exhibits Pei's repute for refined detail, and for its on-again, off-again project history. After nearly a decade, the Rock and Roll Hall of Fame, which was designed originally for a site in the heart of Cleveland, is now generating a new cultural district on the city's lakefront. Dedication of the \$84-million project is scheduled for Labor Day of this year.

When he was approached by the Rock and Roll Hall of Fame Foundation to design Rock's equivalent to baseball's Cooperstown, Pei had his doubts. "I'd never taken to the music," the 78-year-old-architect confesses, "although my children did. I remember always asking them to turn it down." Members of the Foundation tutored their unhip designer, taking him on a tour of some of Rock's shrines, such as clubs in New Orleans, "where it all began," Pei observes, and Graceland. He also listened to a lot of music and read a good deal of Rock history.

Fresh from his crash course, Pei plunged into the project. The site he helped to select was at Tower City, a large business complex near Cleveland's Tower Terminal, overlooking the Cuyahoga River. Pei liked this site because of its central location. "It was the most accessible of all the sites that we looked at," says



Pei. "The railroad, subways, buses, hotels, and shopping are there. And it overlooks the famous bend in the river, with excellent views."

Pei developed a design for the steeply sloped site, with visitors entering at the building's mid-section, placed at Tower City's grade level. Some exhibit spaces were placed on the lower levels as the building cascaded downgrade. Marking the building on the skyline was a central tower, with the Hall of Fame at the top. Exhibit and performance spaces were found on intermediate levels under a triangular "tent" of glass.

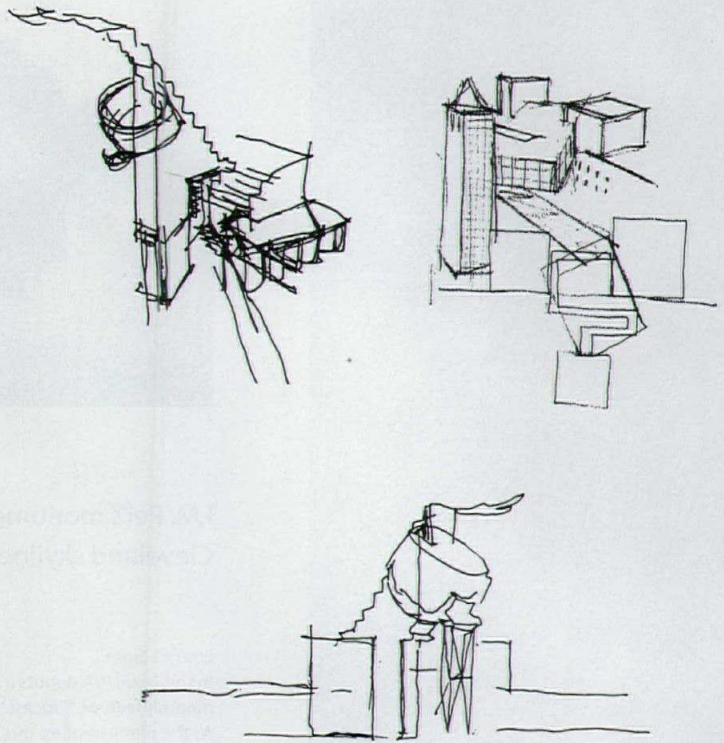
But local politics and fundraising troubles caused the Tower City site to be abandoned during schematics. The board finally chose the prominent lakefront site, although Pei still believes that Tower City was a better location. Rock and Roll is already attracting other development on the lakefront. The Great Lakes Museum a few hundred yards away is now under construction, and another museum is being considered for a site nearby.

Pei adapted the Tower City scheme, with its dramatic slope, to the flat lakefront site by collapsing several underground levels into one. The tower was also shortened by approximately 15 feet to conform to height restrictions. Apart from these changes, the building's organization and form remained virtually the same.

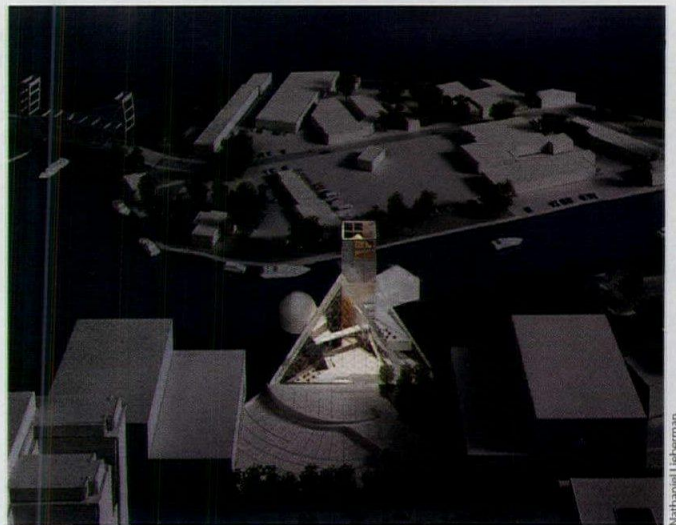
"The building had to express the music," Pei says. "What is this music? It has a sense of rebellion, of breaking away from tradition. It has a dimension of energy. The generation that made Rock music was much more transparent about their ideas than my generation. Everything is up front, whether you like it or not. And there is diversity of the art form," Pei notes, everything from Rhythm and Blues to Grunge.

In the building's architecture, these elements translate into a form that, for Pei, has "explosive energy, as if parts of the building were flying out in all directions." The 117-foot-high triangular glass wall gives the building the transparency that Pei wanted. This element also anchors the building in the architect's *oeuvre*. Pei began work on Rock and Roll when he was deep in the Louvre project, and the Hall of Fame's glass triangle appears to be a fragment of the Paris pyramid. The glass "tent" will be complemented with sheathing of white painted aluminum panels on the building's opaque surfaces.

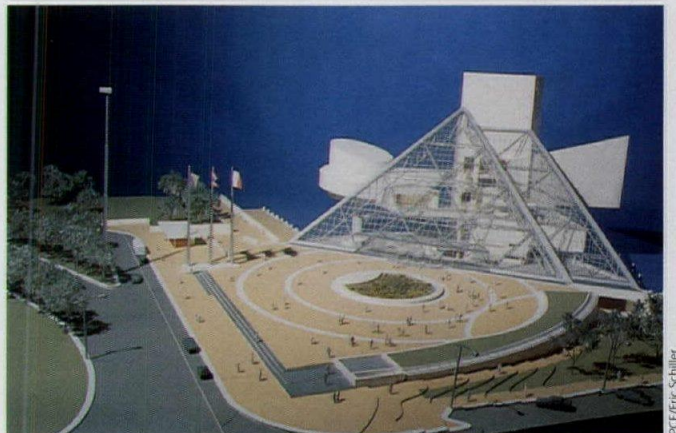
These pages document the evolution of the Hall of Fame, with emphasis on the glass curtain wall and its truss structure. After the base building's completion, scheduled for this month, exhibits designed by the Burdick Design Group of San Francisco will be installed for the September opening. □



3 INITIAL DESIGN TEAM SKETCHES

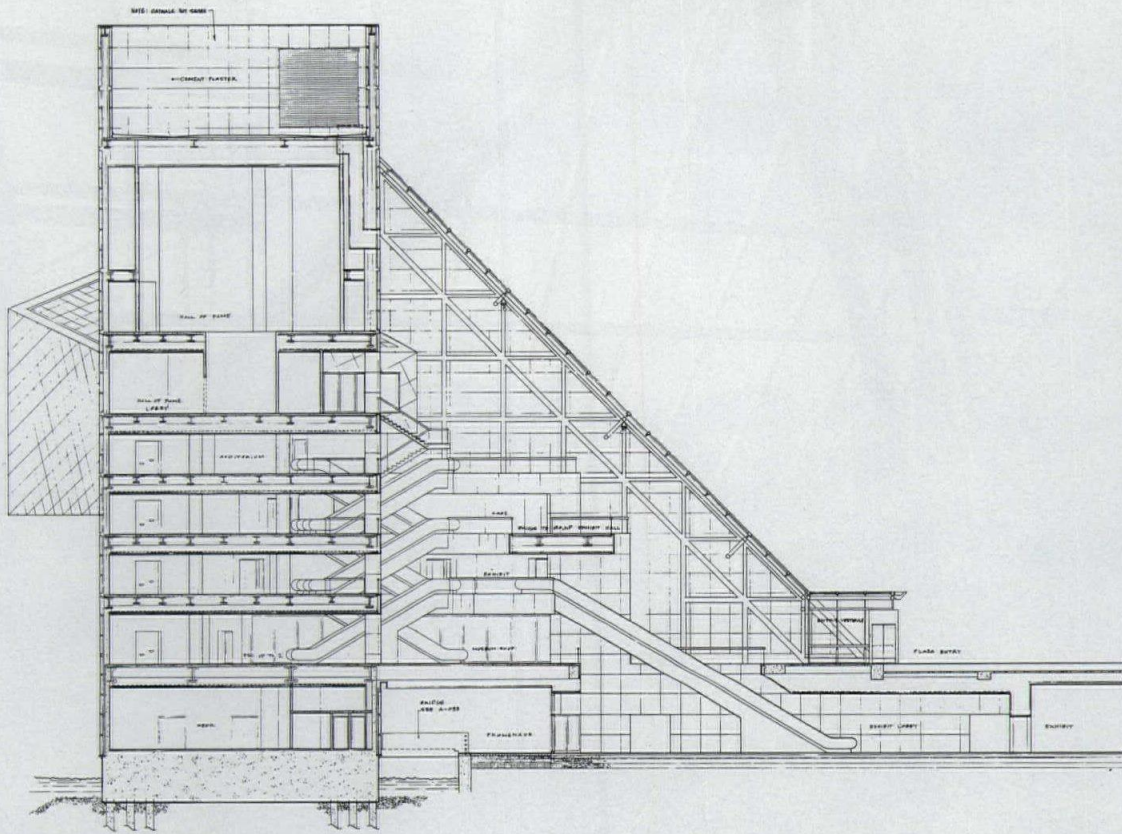


4 TOWER CITY SITE MODEL



5 LAKEFRONT SITE MODEL



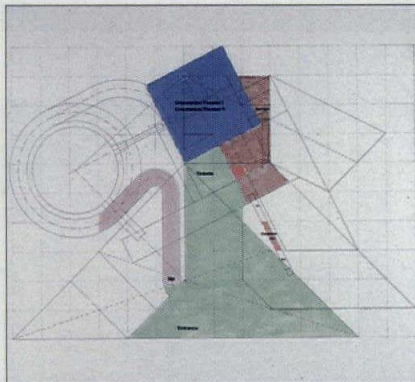


6 SECTION THROUGH TOWER AND LOBBY

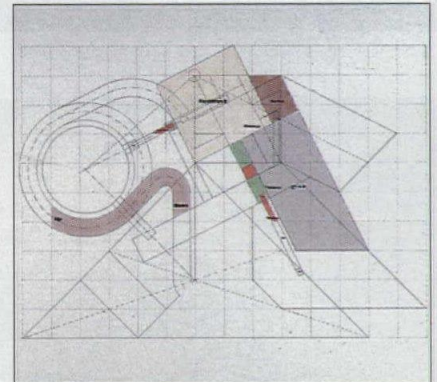
40/12m

Some of the design team's initial sketches (3) captured much of the sculptural, multilevel quality of the finished design. The earlier Tower City site (4) overlooked the Cuyahoga River from a precipice, and the building stepped down the site with some exhibition spaces cascading down the slope. Local politics caused the building to be relocated, after a delay during which the project was put on hold, to the relatively flat, lakefront (5) site, with its design virtually intact.

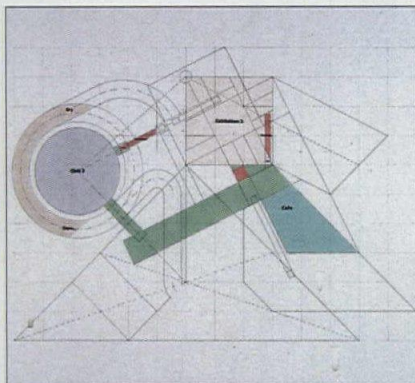
More than half of the building's 50,000 square feet of exhibit space will be below grade. Visitors circulate through the building's triangular lobby (6) to reach various levels (7-10). Primary circulation is via escalators and ramps, which allow access to the sculptural arrangement of exhibit spaces, cafés, performance spaces, and, at the top of the 142-foot tower, the Hall of Fame.



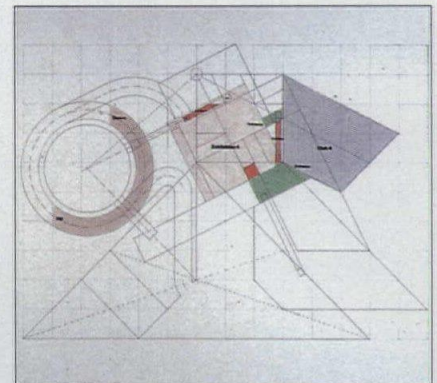
7 LEVEL 100 PLAN DIAGRAM



8 LEVEL 115 PLAN DIAGRAM



9 LEVEL 130 PLAN DIAGRAM



10 LEVEL 145 PLAN DIAGRAM





Photos: these two pages: Hal Stata

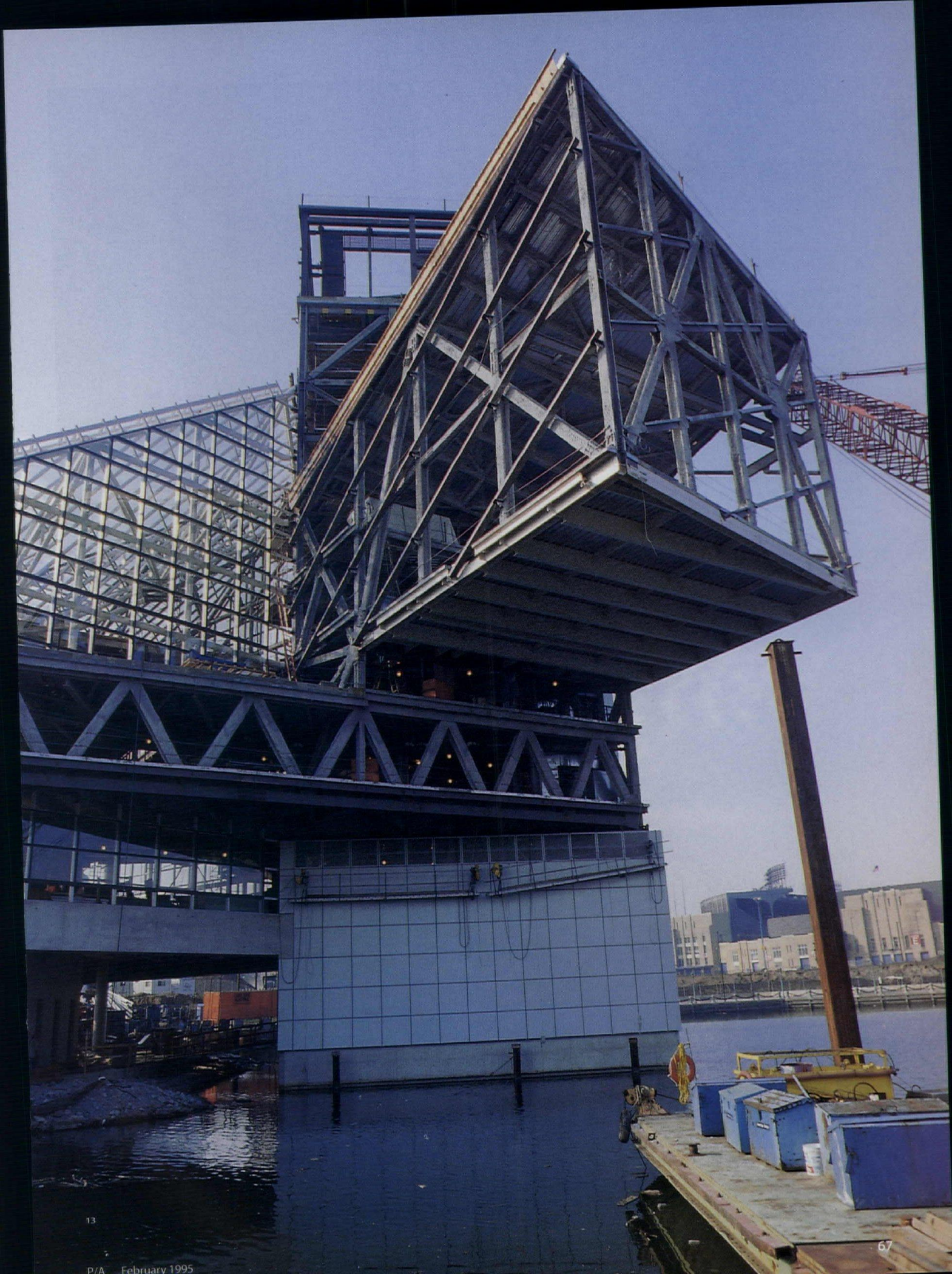
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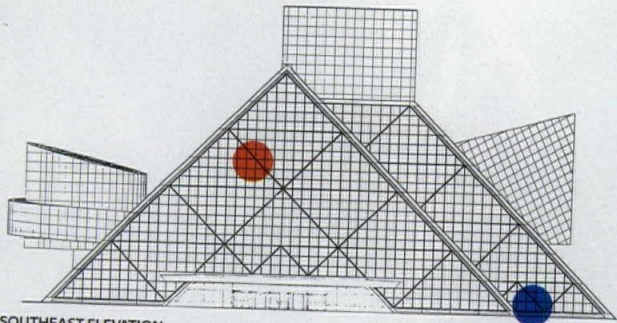
12

Steel-pipe trusses (11) make up the superstructure of the sloping glass curtain wall. The bowstring geometry was chosen for its superior strength. Earlier versions of the structure employed the use of space frames that ran horizontally. The exhibition space (12) found below the plaza is a concrete waffle-slab. The entire building uses nearly 17,000 cubic yards of the material. The two-story, 125-seat auditorium (13) cantilevers 65 feet off the tower's east side, 60 feet above the lake. This web of structural steel will be clad with painted aluminum panels. Approximately 1,900 tons of steel are used throughout the building.









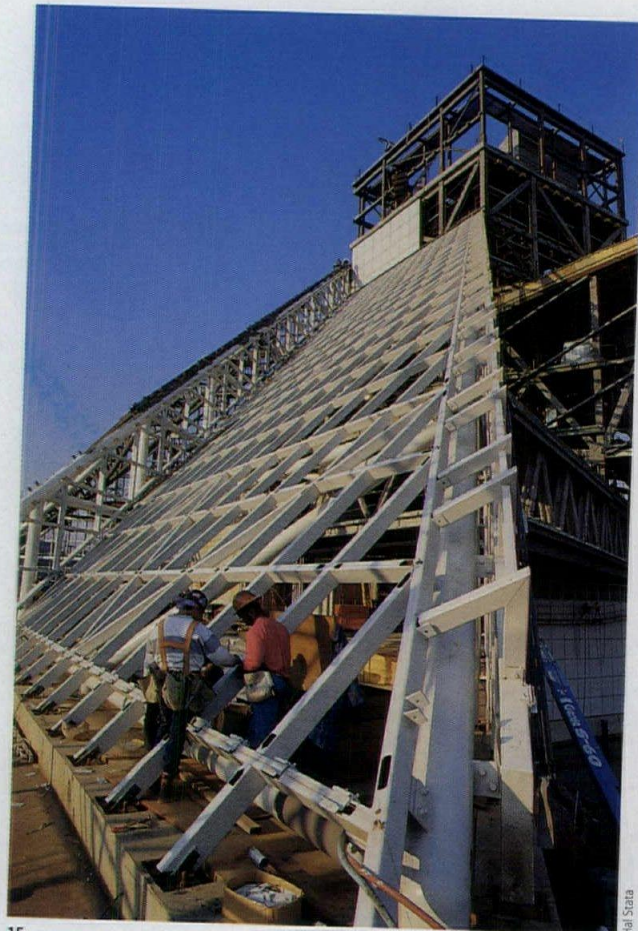
14 SOUTHEAST ELEVATION

The building's inclined curtain wall, known as the "tent," is a piggy-back system. The structural support is provided by 16 bowstring trusses, whose curved cords arch (as much as 6 1/2 feet) in the direction of the interior volume. Some of the bowstring trusses are expressed on the exterior (14) as the major diagonal elements on the façade. A prefabricated aluminum curtain wall system is laid over the bowstring structure and an aluminum channel system (11, 15), and will be glazed with low-e glass to mitigate heat-gain in the volume under the tent.

Details of the curtain wall system were developed at full scale, as are most details by Pei Cobb Freed. An initial sketch of a mullion detail (16) shows the curtain wall system with wide flanges that act

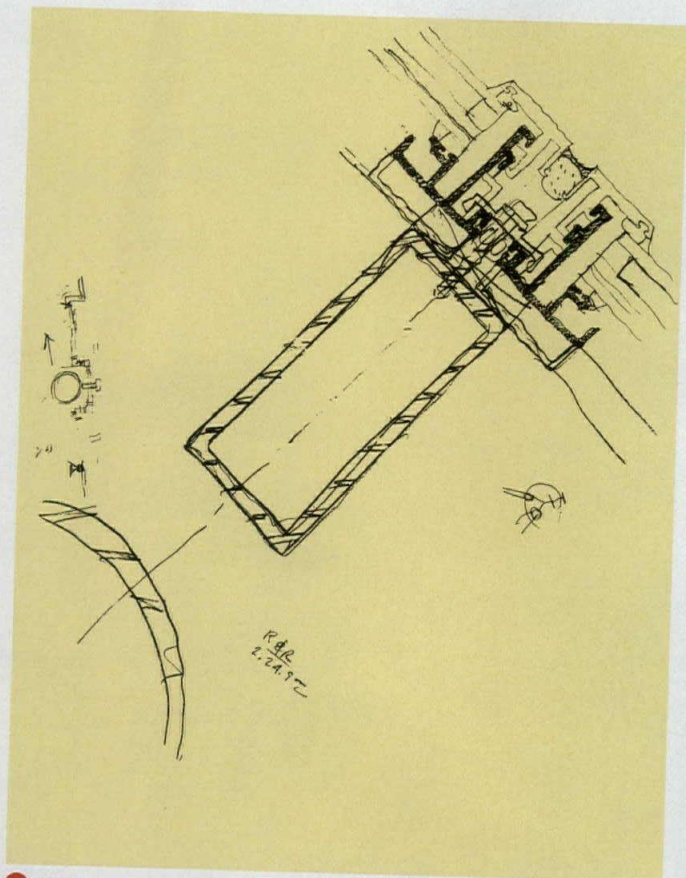
as gutters, and a profile on the exterior. Detail refinements, the inclusion of thermal breaks, and input from the curtain wall manufacturer are reflected in mullion details from the working drawings (17). Pei wanted to express on the exterior the location of the trusses with a deep joint, so a wide reveal and a T-shaped fin was designed to provide shadow lines. The gutter was also incorporated into the mullion and simple anchors were used.

Where the curtain wall meets grade, very little changed from the early sketch (18) to the working drawing (19). The stainless steel grating and insulation were changed from a 45-degree angle parallel to the curtain wall to a vertical condition in order to simplify construction and cut costs.

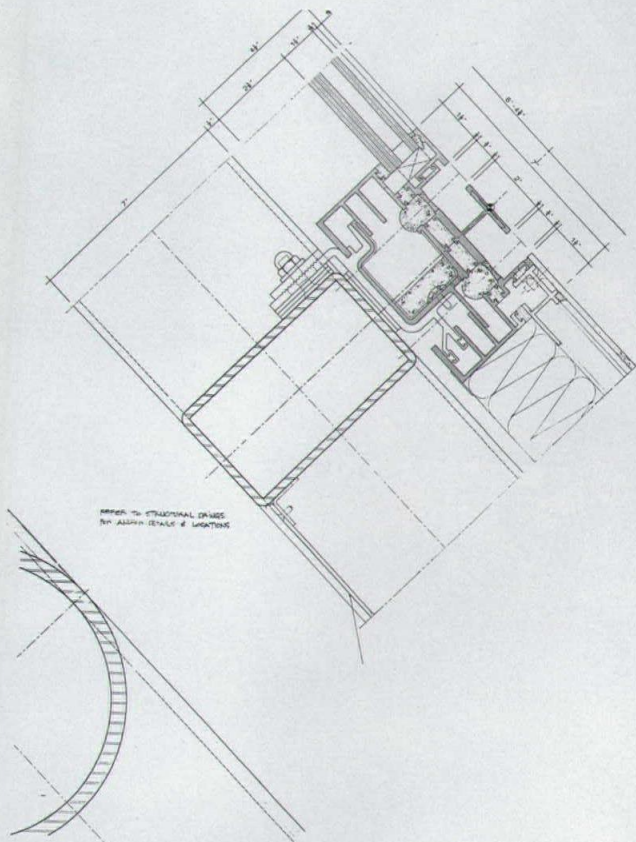


15

Hai Stata

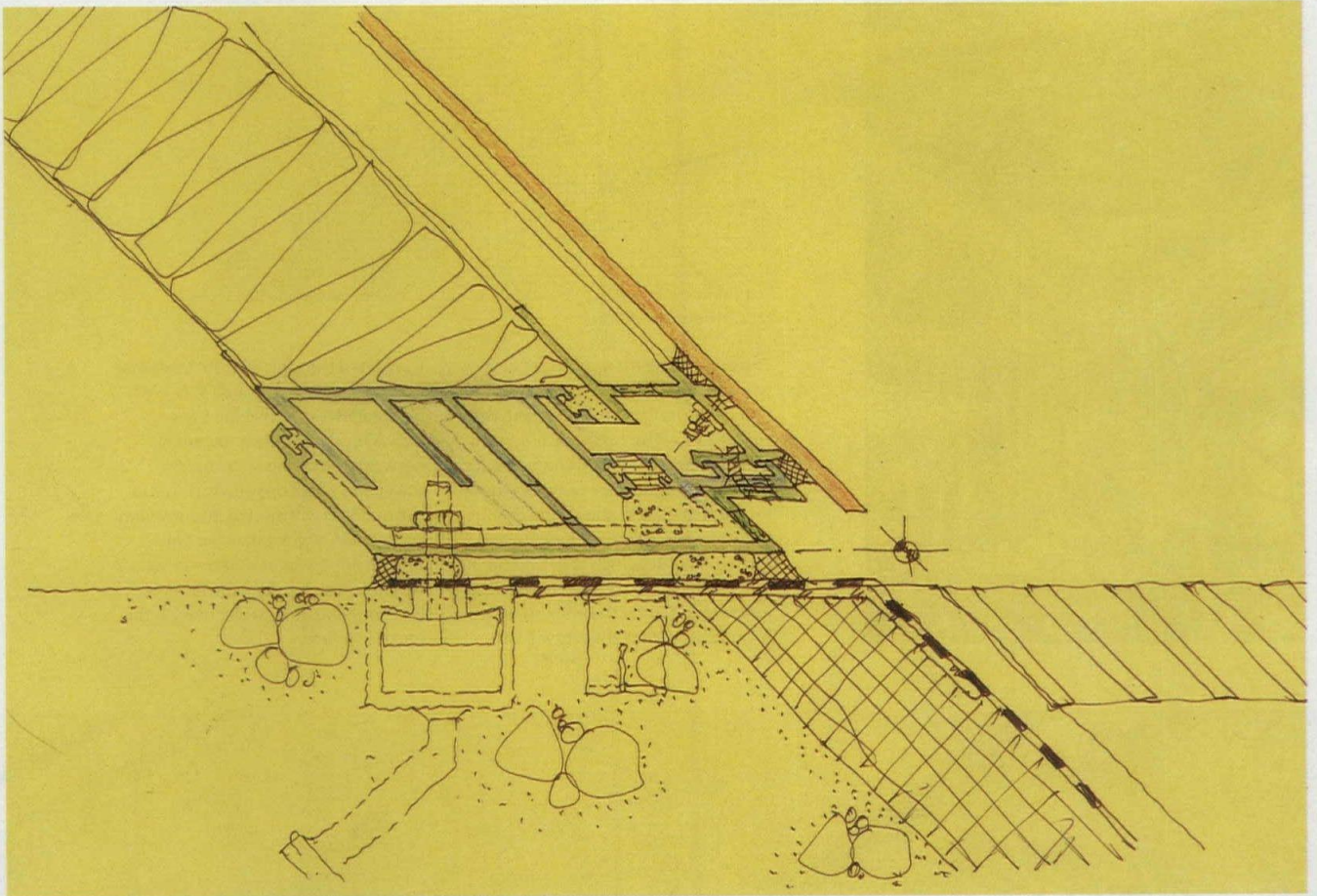


16 PRELIMINARY CURTAIN WALL MULLION DETAIL

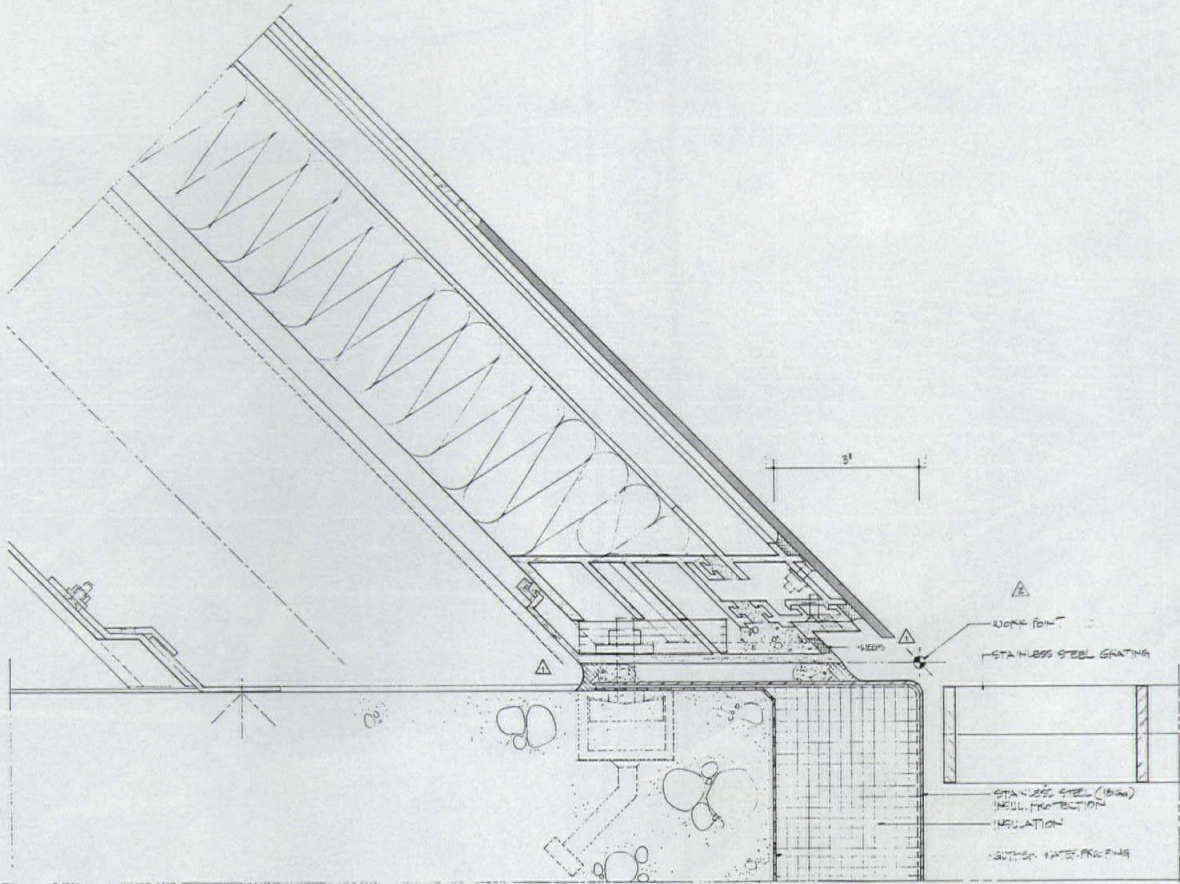


17 WORKING DRAWING CURTAIN WALL MULLION DETAIL



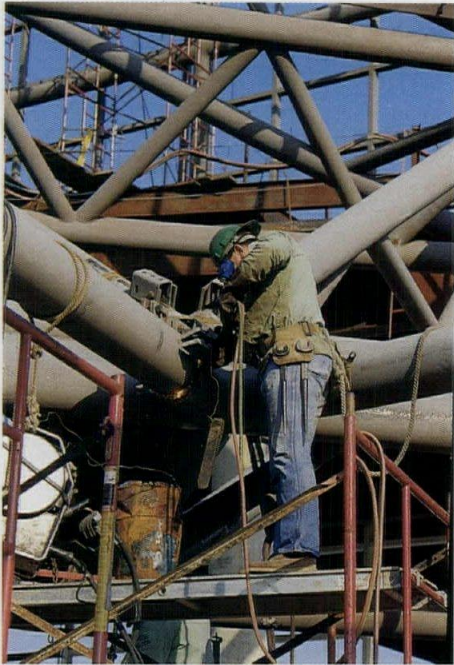


18 PRELIMINARY DETAIL OF SLOPED WALL AT GRADE



19 WORKING DRAWING DETAIL OF SLOPED WALL AT GRADE

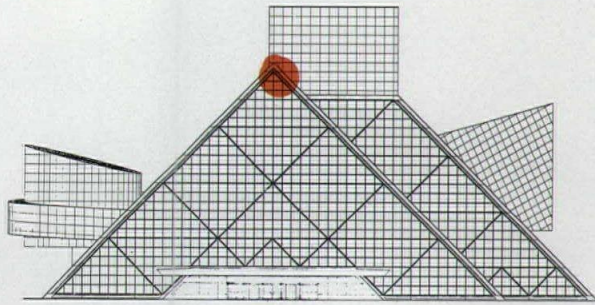




Photos these two pages: Hal Sota

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21



22 SOUTHEAST ELEVATION

The apex of the triangular tent (21) whose structure is of tubular steel (20) meets the vertical tower housing the Hall of Fame. The curtain wall system will be installed over this framework. Details of the juncture between the tent and the tower show little change between the early sketches (23) and the working drawings (24). Double seals with backer rods are used at the juncture to thwart the entry of water. Any moisture that collects will be

evacuated through the tent's internal gutter system. A one-inch soft joint between the tent and the tower allows for differential movement between these two systems. The tower and other opaque surfaces of the building will be clad in aluminum panels with a white painted finish. A paint finish was selected over an enamel finish because the latter is less forgiving of imperfections in the panel's surface.



70



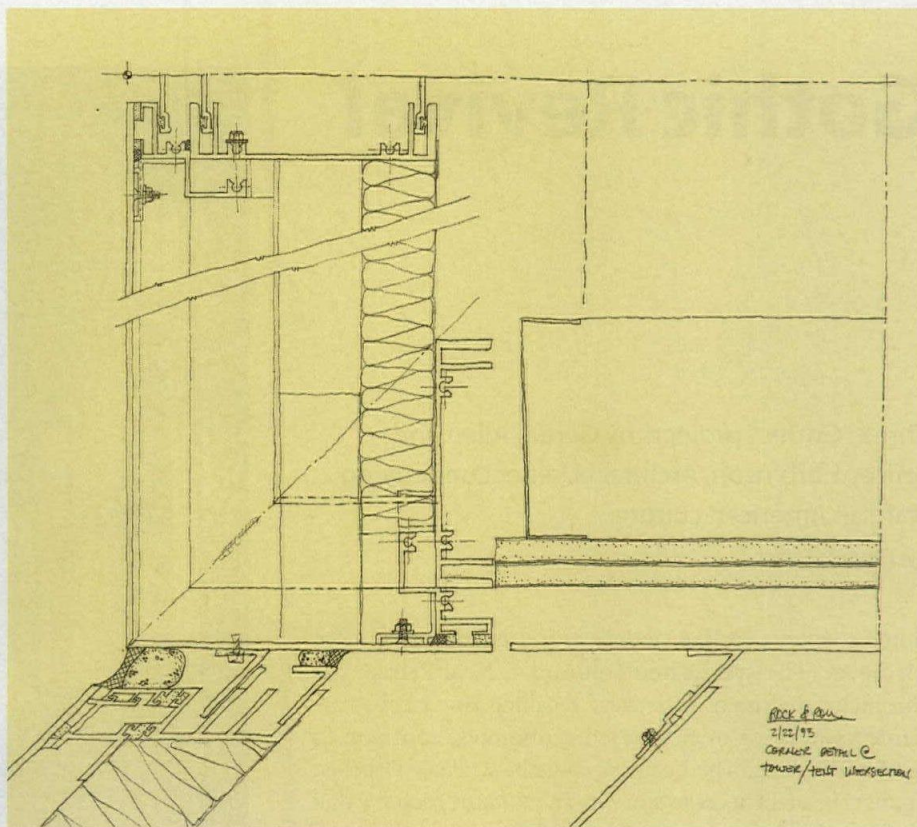
**Project:** Rock and Roll Hall of Fame and Museum, Cleveland.

**Client:** Rock and Roll Hall of Fame and Museum Foundation.

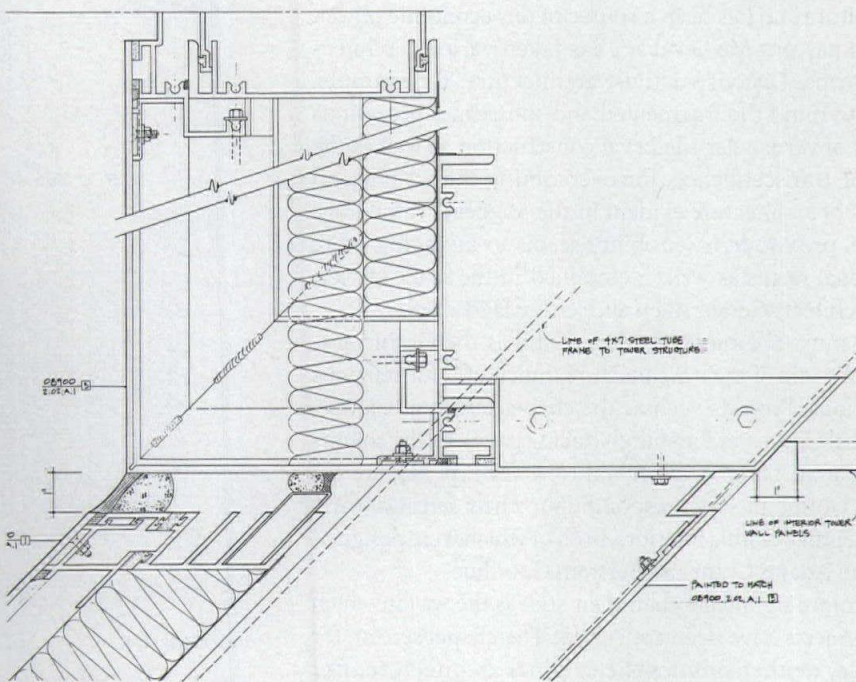
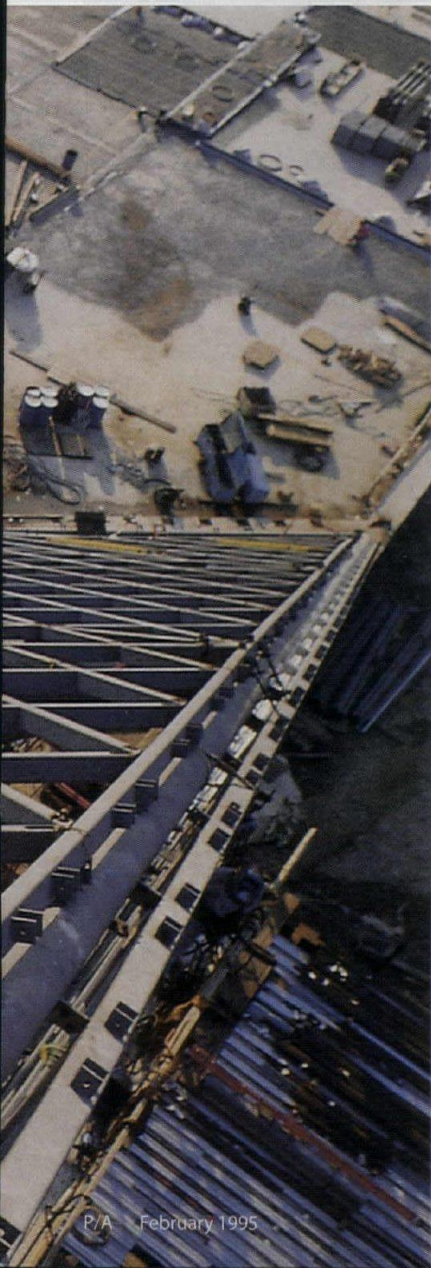
**Architect:** Pei Cobb Freed & Partners, New York (I.M. Pei, design principal; Leonard Jacobson, management; Michael Flynn, management and technology; Richard Diamond, management; Jennifer Sage, design; Winslow Kosior, curtain wall; Richard Gorman, specifications; Marianne Lau, Hope Dana, Steven Derasmo, David Dwight, Mahasti Fakourbayat, Kevin Johns, Sandra Lues, Christine Mahoney, Krista Williams, project team).

**Associate Architect:** Robert P. Madison International, Cleveland.

**Consultants:** Leslie E. Robertson Associates, structural; Altieri Sebor Wieber Consulting Engineers, mechanical/electrical/plumbing; Fisher Marantz Renfro Stone, lighting; Robert P. Madison International, site/civil; Shen Milsom & Wilke, acoustics; Knight & Stolar, landscape.



23 PRELIMINARY DETAIL OF TOWER/TENT INTERSECTION



24 WORKING DRAWING DETAIL OF TOWER/TENT INTERSECTION



# Gothic Revival

Three "Gothic" projects by Gerald Allen and Jeffrey Harbinson, Architects, reflect underlying shifts in American culture.

by Thomas Fisher

Some suggest that the Modern world is becoming more Medieval. The syndicated columnist, Neal Peirce, has chronicled the rise of "citistates," recalling Jane Jacobs's arguments in favor of city-based economies, common in the Middle Ages. The business consultant, Peter Drucker, predicts in a recent cover story in *The Atlantic Monthly* that religious institutions, as part of the "social sector," will "increasingly take care of the social challenges of a modern society." And the Latin-American critic, Claudio Veliz, demonstrates in his recent book, *The New World of the Gothic Fox*, that a "Gothic" outlook has deep roots in American culture and has been a source of our economic power.

This nascent Medievalism has taken various architectural forms. Deconstructivist architecture, for example, brings to mind the fragmented and sometimes precarious aspects of vernacular Medieval construction as well as the urge for transcendence, for overcoming the weight and opacity of architecture evident in the Medieval cathedrals. But this pre-Modern sensibility seems to be taking more traditional forms as well, exemplified in the work of New York architects Gerald Allen and Jeffrey Harbinson.

The most obvious reflection of this is the Gothic aesthetic of some of their architecture, much of it for religious institutions. Projects such as the chapel screen at Calvary Episcopal Church in Pittsburgh (facing page), or the columbarium at St. Thomas Church in New York (p. 74), are explicitly Gothic in style, responding to their settings: early 20th-Century Gothic interiors, both of which were designed by Ralph Adams Cram and Bertram Goodhue.

But more significant than their style is the way in which these projects have been conceived. The chapel screen, for example, neither mimics the original architecture, nor lampoons it in Post-Modern fashion. Instead, the screen, with its simple rail, tall torchères, and gilded flames is a free yet serious interpretation of the Gothic, suggesting as Gerald Allen puts it, "that this is not a dead tradition architecturally." Like the religious practices that go on in such churches, this tradition "can still evolve," he adds, "and can still mean something to us."

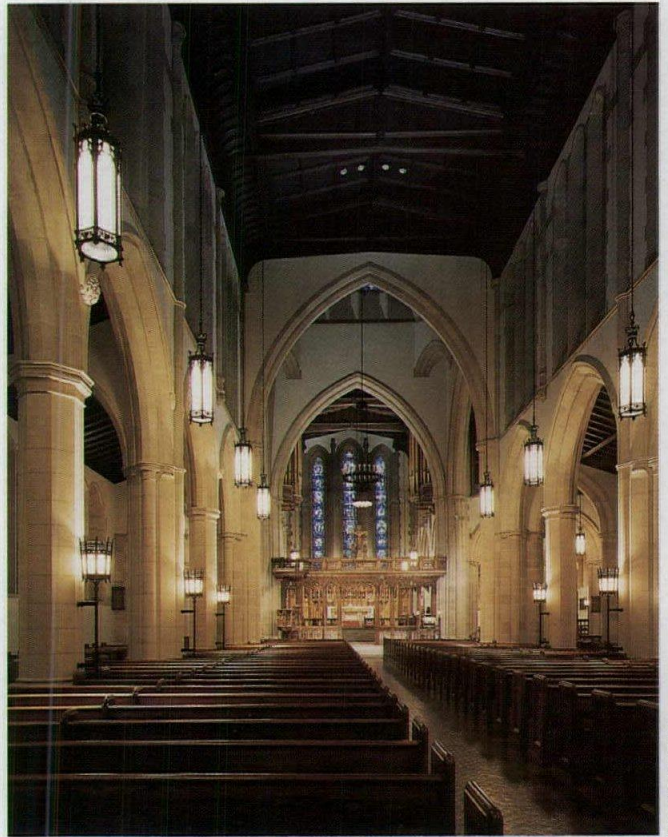
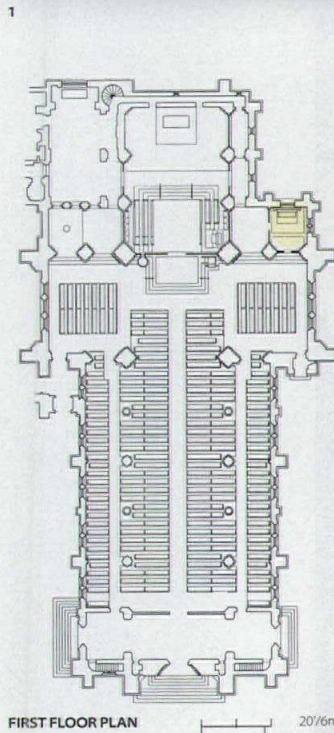


Photo: Tim Buchman



FIRST FLOOR PLAN 20'/6m

## Calvary Episcopal Church

Calvary Episcopal Church in Pittsburgh had a side chapel that provided little privacy for those who came there to pray (1), so the church commissioned Allen & Harbinson to design a privacy screen. Rather than replicate the adjacent Gothic screens, they designed a railing up to eye height so that people in the chapel would feel more private, and pairs of tall torchères topped with gilded frames to mark the entries to the chapel and to acknowledge the scale of the church (2). Other work at the church included designing a new podium for the altar, restoring the crossing chandelier and choir stalls, and cleaning the interior.

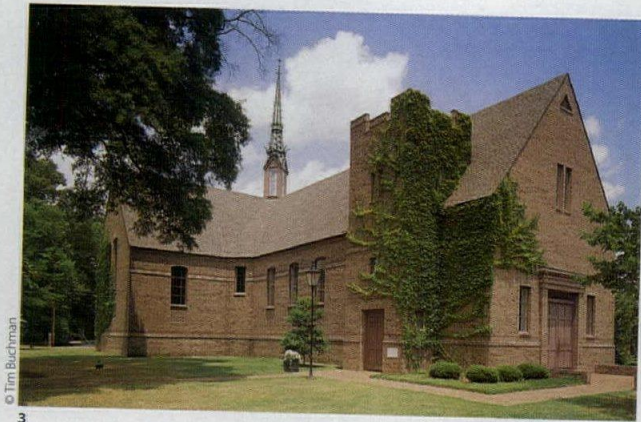
Client: The Rector, Wardens, and Vestry, Calvary Episcopal Church. Architects: Gerald Allen and Jeffrey Harbinson, Architects, New York. Consultants: Herbert Read, Ltd., new screen; Ron Probst, new ceramic tile; Wilson & McCracken, woodwork restoration; Michael's Lighting, fixture restoration; Casavant Frères Ltd., organ restoration; Klepper Marshall King Associates, acoustics; Jendico Construction Company, general contractor.





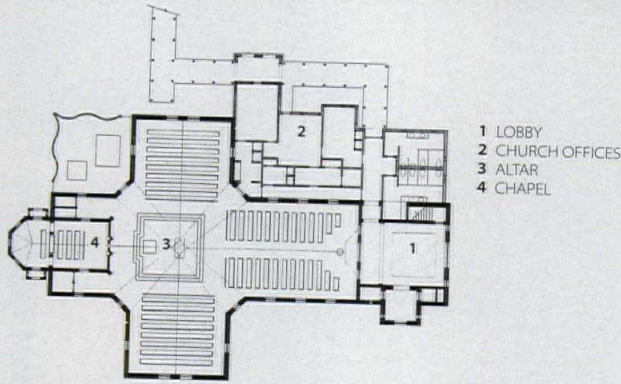
Gt. All Saints Chapel  
Screen  
Given in 1903  
In Honor of  
Gt. Parents  
By  
Jane Vaughan  
Edward W. Vaughan





© Tim Buchman

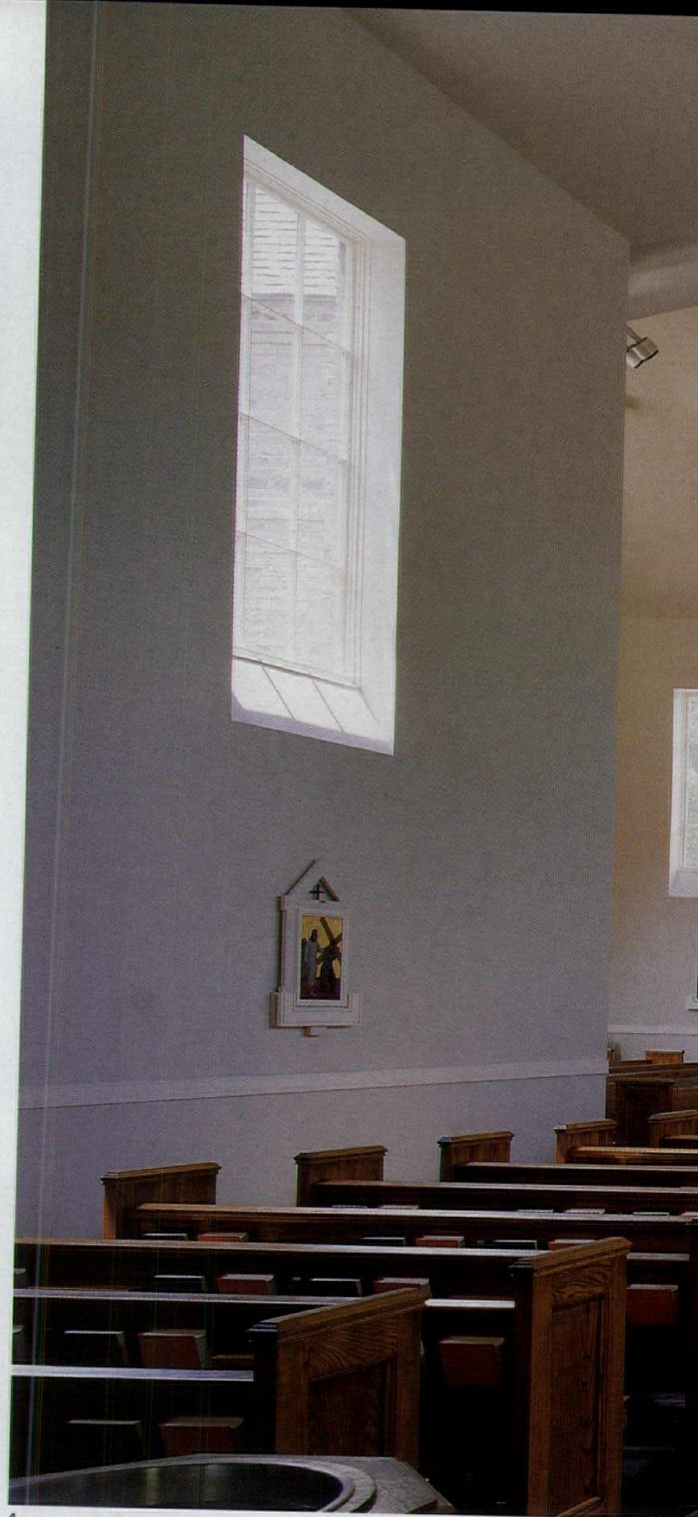
3



- 1 LOBBY
- 2 CHURCH OFFICES
- 3 ALTAR
- 4 CHAPEL

FIRST FLOOR PLAN

20'/6m



4

### The Church of Saint Therese

The Church of Saint Therese in Wilson, North Carolina, honors the parishioners' desire, say the architects, for a "church that looked like a church." The cruciform building (3) has a corner tower and an aluminum spire, designed in collaboration with and built by Kent Bloomer and Kimo Griggs. To add interest and scale to the exterior, the architects have made slight changes in the color and plane of the brick cladding. Inside, the spare white sanctuary is lit by clear glass

windows and a lantern over the altar, placed at the crossing to conform to current Catholic liturgy (4). In the traditional location of the altar is a small chapel, whose rear wall, ornamented with fleurs-de-lis (for the Virgin Mary) and roses (for Saint Therese), serves as a backdrop to the altar. The architects also designed some of the furniture and fittings, including the celebrants' chairs, altar, lectern, processional cross, stations of the cross, and baptismal font.

The screen also recalls the Gothic fondness for dematerialization, something that that tradition shares with 20th-Century Modern architecture. Rather than physically enclose the small worship space, the screen only suggests enclosure with a thick wood rail at the eye-height of those seated in the chapel, giving them a sense of privacy with the most minimal of means. Likewise, the Gothic and Modernist love of light and movement is recalled in the screen's gilded flames, which seem to sparkle and flash in the lamp-light, freezing the ephemera of fire.

Another Gothic quality of this work, evident in the columbarium at St. Thomas, is its reliance upon visual metaphor. Standing at the entrance to a chapel where the caskets are positioned before the funeral rite, this cabinet for 1,000 funeral urns is rich in symbolism, its series of doors within doors suggesting the mystery and unexpectedness of existence and its houselike fronts and treelike tracery symbolizing, says Allen, "the passage through life on the way to death."

Such visual metaphors, although still common in religious rituals, were also once common in architecture, especially in the Middle Ages, when public buildings served as narratives in wood and stone for a largely illiterate population. Books have long since taken over that role, allowing architecture to attend to more abstract matters, such as space, light, form. But for a population such as ours, which has grown accustomed through television to getting information aurally and spatially, architecture may once again have a narrative role, if not always in traditional garb such as this. And that, in turn, may require architects to

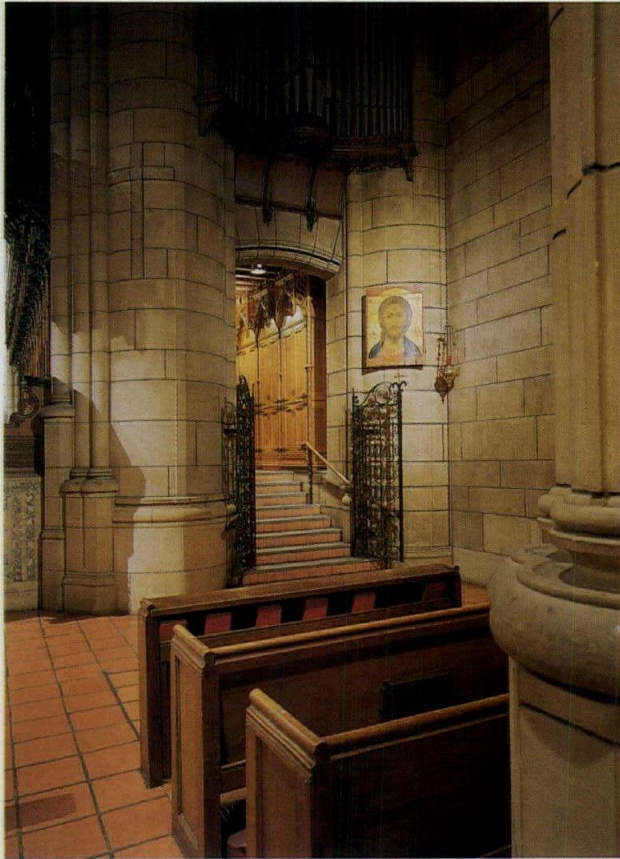




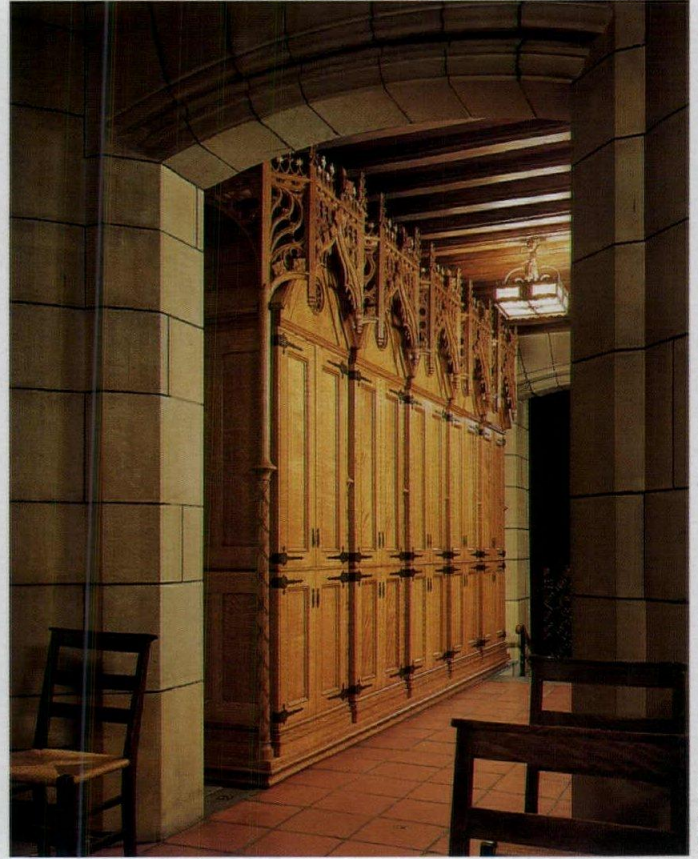
© Tim Buchman

**Client:** The Most Reverend F. Joseph Gossman, Bishop of the Roman Catholic Diocese of Raleigh.  
**Architects:** Gerald Allen and Jeffrey Harbinson, Architects, New York.  
**Consultants:** Kent Bloomer and Kimo Griggs, crossing spire; The Century Guild Ltd., altar, chair, ambo, and tabernacle; Marilee Keys & Bruce Linday, processional cross and torches, stations of the cross; Lysaght and Associates, engineers; Robert Williams and Company, general contractor.





5



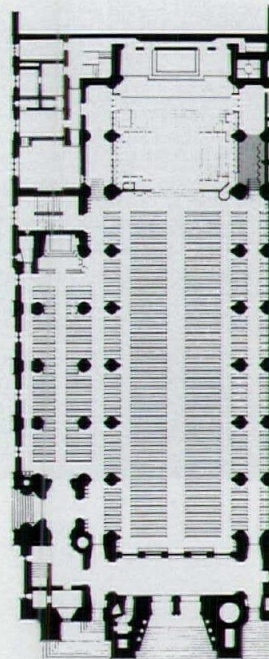
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© Tim Buchman

have a better grounding in the liberal arts than many do now. Gerald Allen, for example, nearly completed a Ph.D. in English at Yale before going to architecture school there, an education well suited to understanding the potential of metaphor in our medium.

Yet another characteristic that the Gothic shares with Modernism is an attachment to the vernacular, evident in Allen and Harbinson's Church of Saint Therese in Wilson, North Carolina (p. 72). Here is a simple, relatively inexpensive building (\$99 per square foot) that embraces the vernacular of the church – cross plan, symmetrical organization, gabled roof – while seeking to push it ahead in subtle ways. For example, current Catholic liturgy wants the altar closer to the parishioners. The architects have responded by moving the altar to the crossing and filling the choir space with a chapel, whose rear wall serves as the altar's reredos. At the same time, the interior of the church, with its unadorned white walls, brick floor, and clear-glass windows, evokes in a more Modern way the austere character of vernacular North Carolina churches from the 18th and early-19th Century.

If a Medieval mindset has begun to pervade our culture, that does not mean that our architecture will necessarily always look like that of the Middle Ages. But it may mean that we will think about architecture as something more craft-based, more symbolic, and more transcendent than we do now. The work of Gerald Allen and Jeffrey Harbinson indicates one of several directions such thinking might take us. □



FIRST FLOOR PLAN 20/6m

## St. Thomas Church

St. Thomas Church, one of the major Episcopal churches in New York, has undergone a \$2-million restoration and renovation. Allen and Harbinson have overseen the cleaning of the church's exterior masonry and bluestone sidewalks. They also have designed, in collaboration with cabinet makers and woodcarvers, this 1,000-urn columbarium. Adjacent to the church's choir and visible from the nave (5), the columbarium is designed in the Gothic style, although its details, such as the vinelike tracery and houselike cabinet fronts (6, 7), are Modern interpretations (see Selected Detail, p. 117). The architects also designed a new cabinet for the church's vesting room and had the building's exterior cleaned.

**Client:** The Rector, Wardens, and Vestry of St. Thomas Church.  
**Architects:** Gerald Allen and Jeffrey Harbinson, Architects, New York.  
**Consultants:** Herbert Read Ltd., The Century Guild Ltd., columbarium tracery and cabinets; Ball and Ball, columbarium hinges; Kent Bloomer, canopy over vesting room cabinet; Columbia University's Center of Preservation Technology, masonry cleaning, Nicholson & Galloway, general cleaning contractor.







# ARCHITECTURAL RESEARCH

A review of exemplary research into wayfinding cues, hybrid housing, and direct-supervision prisons.

In a continuing effort to demonstrate the value of rigorous research to the practice of architecture, the AIA/ACSA Research Council and P/A present three studies in environmental and behavioral research. Employing social science methods, this branch of research once had the reputation of being tangential to the architectural problem-solving process. As the field has matured over the past 35 years, studies have become more specifically tied to the design process. The investigations in this installment have direct applications to design.

Richard Wener's 20-year reiterative research/design process has resulted in more humane, safer prisons, while contributing to an understanding of the impact of design on behavior in a controlled setting. Sherry Ahrentzen's archival study of the spatial arrangement of home-based businesses informs the broader community of planners and designers as well as financial institutions about this new building type. Janet Carpman's two-week study employing video-taped simulations of a hospital parking entrance allowed her design partners to select the most appropriate of two alternative solutions during early schematics.

AIA/ACSA Research Council  
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San Luis Obispo, California



# Evaluating the Design of Direct-Supervision Jails

Richard Wener, Polytechnic University,  
Brooklyn, New York

Over the past 20 years a series of studies has documented and supported the success of direct-supervision correctional facilities. These studies have helped increase understanding of the way design affects staff and inmates, and they have been used in planning new facilities.

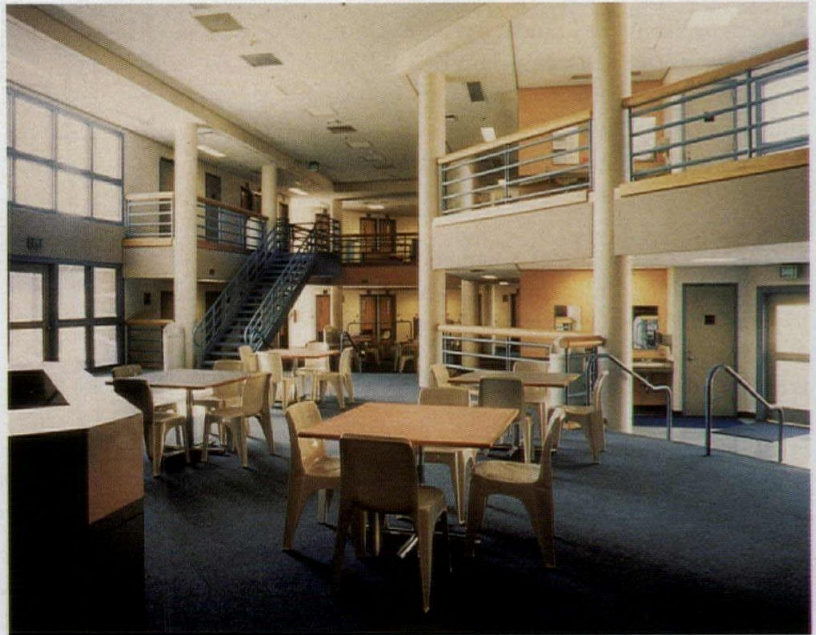
Post-occupancy evaluation (POE) research has supported innovation in new correctional facilities through three full cycles of "design-build-evaluate-improve design." The process started in the 1970s when the Federal Bureau of Prisons built several paradigm-breaking jails. In these direct-supervision facilities officers freely interacted with inmates in an open setting. Many typical institutional features, such as bars and fixed furniture, were eliminated in favor of more noninstitutional materials, furniture, and décor. The Bureau of Prisons hoped that contact between officers and inmates, supported by the positive expectations set by the design, would create a safer and more humane environment.

Our evaluations of these facilities, using questionnaires and interviews supplemented by structured behavioral observations, focused on the attitudes and behavior of line officers and inmates. Our research goals were to assess how successful these facilities were in meeting broad programmatic goals (safety, security, etc.) and to identify design strengths and weaknesses.

Direct-supervision jails have been quite successful. They provide a safer, less stressful work environment for staff. Serious assaults, rape, and vandalism are almost nonexistent. While a number of specific design strengths have been identified, such as privacy and multiple small groups areas, so have several problems, such as the lack of easy access to outdoors and recreation, and over-reliance on elevators. The findings have been used by the bureau in planning future jails.

These studies, and years of experience in dozens of direct-supervision jails, have led to a new generation of facilities now coming on-line. The safe and calm atmosphere of these jails encourages inmate rehabilitation programs; they move away from warehousing towards addressing root problems.

We recently evaluated two new prototype facilities: the Genesis Facility in Orange County, Florida, and the West County Detention Facility (WCDF) in Contra Costa



DAYROOM OF WEST COUNTY DETENTION FACILITY, DWORSKY/DESIGN PARTNERSHIP

Christopher Iron

County, California. The WCDF offers a number of innovative and successful design features aimed at reducing costs, such as "dry" cells without bathroom fixtures, and retractable doors between living units that allow for more flexible and efficient use of staff. It also uses an open campus plan and computers to reduce inmate dependence on staff.

Currently both the National Institute of Justice and the National Institute of Corrections are using the POEs described above as models for developing research instruments to evaluate a broad range of correctional settings. The findings from these studies also support the most recent revision of the physical plant standards in the *American Correctional Association Standards for Adult Correctional Institutions* (Third Edition).

Jail construction in America is a highly decentralized process, with thousands of local jurisdictions making largely independent design decisions. The jails we and others have studied have served as important models for the many jurisdictions that have adopted the direct-supervision system. The research has added to the knowledge base on the effect of design on behavior in these special settings.

For more information contact: Richard Wener, Polytechnic Institute, 6 Metrotech Center, Brooklyn, NY, 11201, 718-260-3585.

## Committee Comments

This study demonstrates the value of architectural research in multiple ways. A series of post-occupancy evaluations provided improvement of the design of specific projects, while yielding broad guidelines for correctional facilities and serving as a model for evaluating other buildings. At the same time, the evaluations added to the body of knowledge about the positive impact of design on human well-being.



## Hybrid Housing

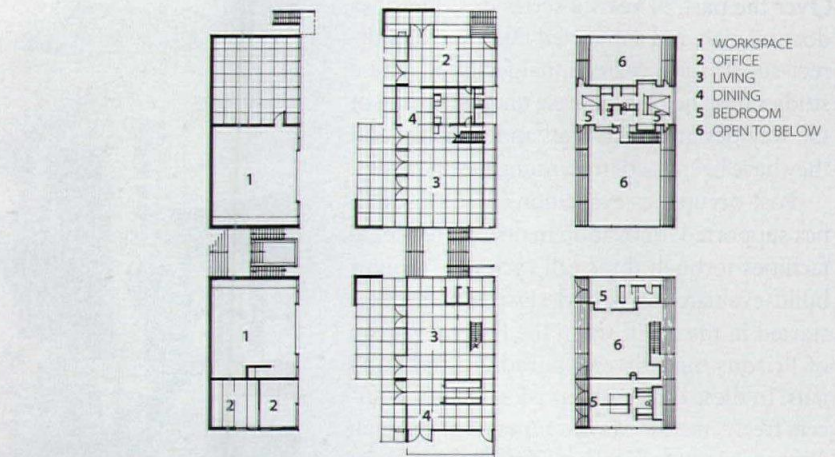
Sherry Ahrentzen, University of Wisconsin-Milwaukee

**M**ixed-use housing, house over the shop, live/work space, workshop homes – all are housing types in which occupants both live and work. Such “hybrid housing” contains both residential and business activities, with residents occupying and managing both types of space.

The blending of family, occupational, and leisure activities under one roof is appealing to more and more Americans. A recent estimate of the full-time, home-based work force is 6.7 million, out of a total 26.6 million doing some occupational work at home. Thirty-four percent of all small businesses are home-based. While many marketing surveys indicate a growing demand for residences that provide for occupational activities, most homes are not designed to accommodate these multiple and often conflicting activities. Understanding the various ways these households blend, braid, and segregate their living and working experiences under one roof can assist housing developers and architects to produce homes that accommodate these various demands.

This study, funded by the National Science Foundation, identifies major factors in the development and construction of hybrid housing, locates and describes examples of such housing, and classifies these houses by type. A major source of the design and planning recommendations was a previous empirical study (funded by the National Endowment for the Arts) in which I examined the socio-spatial patterns of households with home businesses. In that study I found that various spatial arrangements of the home either exacerbated, enhanced, or ameliorated conflict between domestic and work activities; health, safety, and labor regulations; feelings of vulnerability and safety while working in the home; social isolation and connection among work contacts as well as among friends and family; and different interpretations and expressions of what home meant to these households. Other design and construction issues considered were occupational requirements and safety, flexibility and adaptability, tax laws, zoning and land-use regulations, building codes, and labor laws.

From a sample of 100 projects I inventoried and illustrated the range of hybrid house



FIRST, SECOND, AND THIRD FLOOR OF HYBRID HOUSING DUPLEX DESIGNED BY PETER DE BRETTEVILLE

types, developing a typology of hybrid housing based on the relationship of various spatial design features, such as workspace location in the house and its orientation, visual exposure, and accessibility. Sixteen basic types evolved from the analysis of the 100 cases, allowing the housing designer to consider the best match between type/plan and the particular live/work circumstances being addressed.

The research led to a number of conclusions. Design options should provide for the diversity of households and occupational structures that exist. For example, an accountant may work different hours and use different spaces, furnishings, and equipment from those of a video producer, a journalist, a clothing designer, or a data-entry operator. Zoning officials and financial institutions should recognize hybrid housing as a viable residential form for millions of American households today and should amend land-use policies and lending practices accordingly. In addition, officials need to recognize hybrid housing as a strategy to enhance the living situations of low-income residents. Home-based businesses should be explored as a means of maximizing the income-generating potential of the home, without compromising health, safety, economic security, or a meaningful domestic and family life.

For more information contact: Sherry Ahrentzen, University of Wisconsin SARUP, 2131 E. Hartford Ave., Milwaukee, WI, 53211, 414-229-6976 (fax).

### Committee Comments

We see this as a groundbreaking study of an emerging building type that will generate other research, while providing baseline standards to improve what is happening ad hoc as more and more people set up home businesses. The study also contributes a new dimension to discussions of affordable housing, since it explores the design of homes that can also generate income.



# Comparing Architectural and Verbal Wayfinding Clues

Janet R. Carpman and Myron A. Grant, Carpman Grant Associates,  
Ann Arbor, Michigan

Early in the schematic design phase of the University of Michigan's Medical Center there was a difference of opinion among design consultants concerning the optimum relationship between the entrance to a new parking structure and the circular drive for dropping people off at the hospital's main entrance.

The circular drop-off drive and the parking structure were located immediately adjacent to each other, and the main road passed close by. Two alternatives were possible: a parking deck accessed directly from the circular drop-off entrance drive, or a parking deck accessible only from the main road.

This was a critical decision because it was estimated that several thousand cars per day would be involved, and there was only two weeks to make the decision in the fast-track construction process. Team members called their investigation "fast-track research."

While computer graphics and simulations offer "virtual" experiences of a building, the technology can be expensive, and such simulations are often time-consuming to construct. For our fast-track schedule, a video camera developed by Lester Fader of the University of Michigan College of Architecture was used to produce quickly video simulations of the two drop-off alternatives, using a model of the entrance drive to the new hospital. One hundred randomly sampled visitors were shown these simulations and asked where they would turn if they were coming alone to visit a patient and needed to park.

Several turn-off areas were located along the entrance drive before the parking deck turn-off. Each one had a sign directing drivers to continue straight ahead for parking, while listing destinations to the right, such as "Drop-Off" and "Main Entrance." Half the visitors saw a videotape in which there was an entrance to the deck from the drop-off circle and half saw a tape without the entrance. Each visitor saw two scenarios: the drop-off circle crowded with cars, and one uncrowded.

The study showed that the presence of the parking entrance near the drop-off circle made a significant difference in reported turning behavior. Being able to see the entrance to the parking deck adjacent to the drop-off circle lured a substantial percentage of drivers into the circle, creating potential traffic problems.

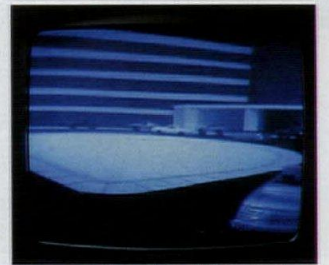


MEDICAL CENTER DROP-OFF, SANS GARAGE ENTRY

Participants ignored the signs directing them to the parking entrance, saying they would turn into the drive. However, if no parking entrance was visible from the drop-off circle they were more likely to follow directional signs, saying they would go straight to the parking structure entrance. The findings and our subsequent recommendation not to provide an entrance to the parking structure from the drop off circle directly influenced the final design decision.

Several lessons were learned in this study. Practitioners saw how research can shorten the design decision-making process and how information can be communicated with an inexpensive, simple, and highly imageable technique, one rarely used in environment-behavior research. The technique also showed designers and decision makers a moving, three-dimensional image of the drive to the new hospital – one they had not seen previously – and it demonstrated that signs alone are not sufficient to guide wayfinding behavior in large, complex environments like hospitals.

For more information contact: Carpman Grant Associates Wayfinding Consultants, 5584 Geddes Road, Ann Arbor, MI, 48105-9516, 313-482-7898 (phone and fax).

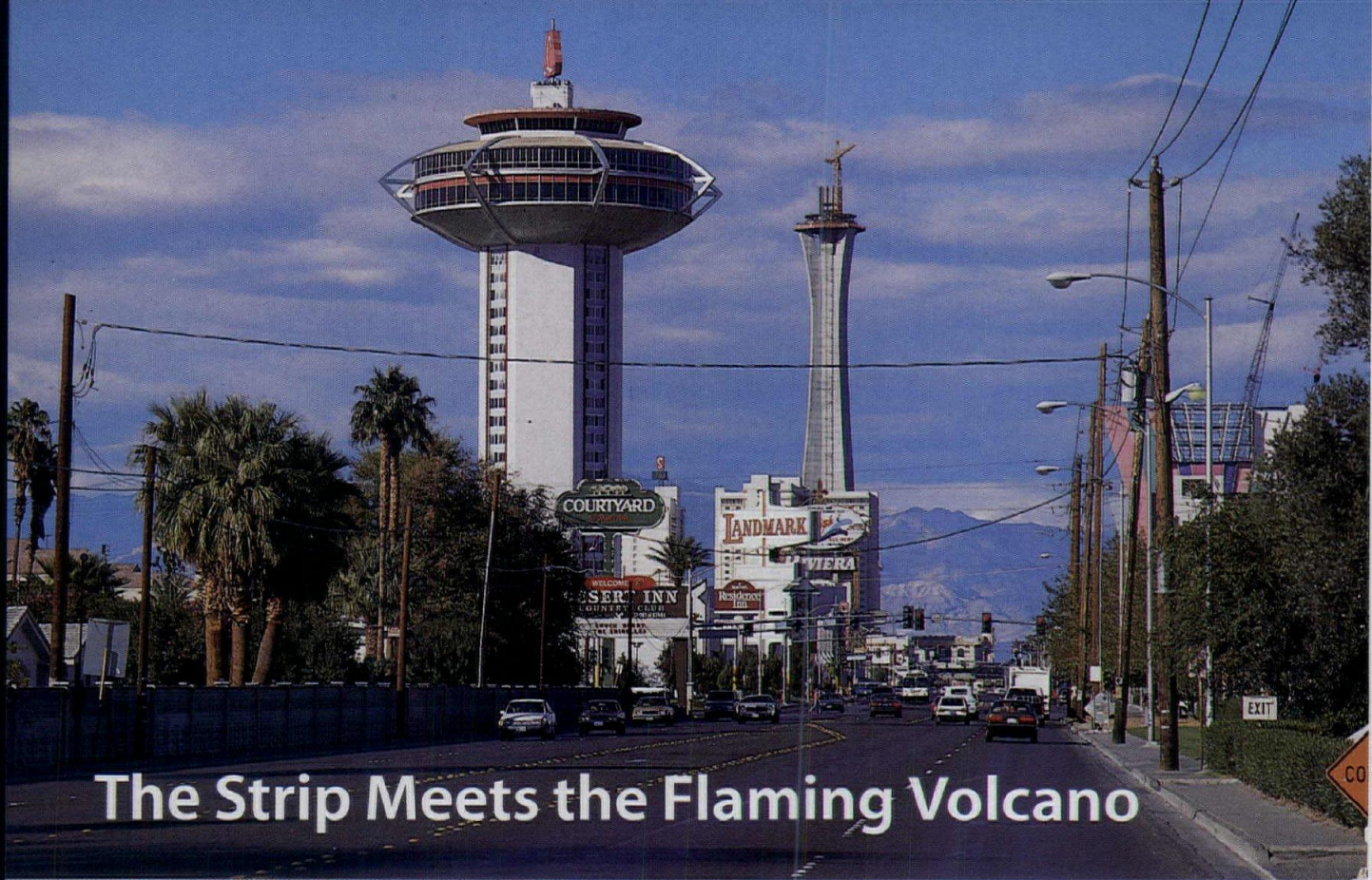


VIDEO SIMULATION OF DESIGN ALTERNATIVES

## Committee Comments

We chose this study because it describes a quick, low-cost method of pretesting design decisions. The imaging technique used has broad applicability. Not only can it improve the designer's ability to predict the success of a design, it can also assist a client to visualize a proposed scheme.





Photos: Fred Stocker (left), Las Vegas News Bureau (facing page)

## The Strip Meets the Flaming Volcano

The Las Vegas strip, long shaped by car culture, is now generating sidewalk extravaganzas aimed at a neglected desert species, the pedestrian.

by Morris Newman

Day and night, tourists crowd the sidewalks to stare at the Flaming Volcano, a kind of burning waterfall in front of the Mirage Hotel. A mile south, other tourists crane their necks to see cannons firing and sailors leaping overboard in a mock sea battle in front of the Treasure Island Hotel. At the Egyptian-themed Luxor casino, yet another herd of tourists snaps disposable cameras at ghostly holograms of Pharaohs and sphinxes projected on a shimmering mist, the images flickering and appearing almost to move.

The Las Vegas Strip, archetype of the auto-oriented street, is fast turning into a pedestrian promenade. Whether by design or improvisation, the promoters of America's best-known casino hotels have invented, or, more accurately, reinvented, an urbanism oriented around spectacle. In so doing, today's Las Vegas developers have rediscovered a number of devices from the Baroque, sometimes using them to powerful effect in ways that would never occur to the proponents of official or "tasteful" architecture.

Competition, rather than planning theory, is the engine driving the spectacle machine. Casino owners must compete for business both within the Strip and nationally, now that legalized gambling has become a widespread form of economic development. Because gambling alone will not necessarily bring the crowds to Vegas, the casinos feel compelled to

become more broadly appealing as tourist destinations. The new family-oriented repackaging of Las Vegas can be seen as part of the Theming of America, in which the city becomes yet another fantasy environment. Yet theming in Vegas has a flavor and an enormity all its own. Unlike the Mall of America in Bloomington, Minnesota, for example, (P/A, March 1994, pp. 70-73) the artificiality exhibited in Las Vegas does not seem intrusive. Las Vegas isn't phony anything; it has its own resounding, relentless identity. And Vegas is arguably the most interesting American city of the moment, the city most informed by the current state of American mass culture.

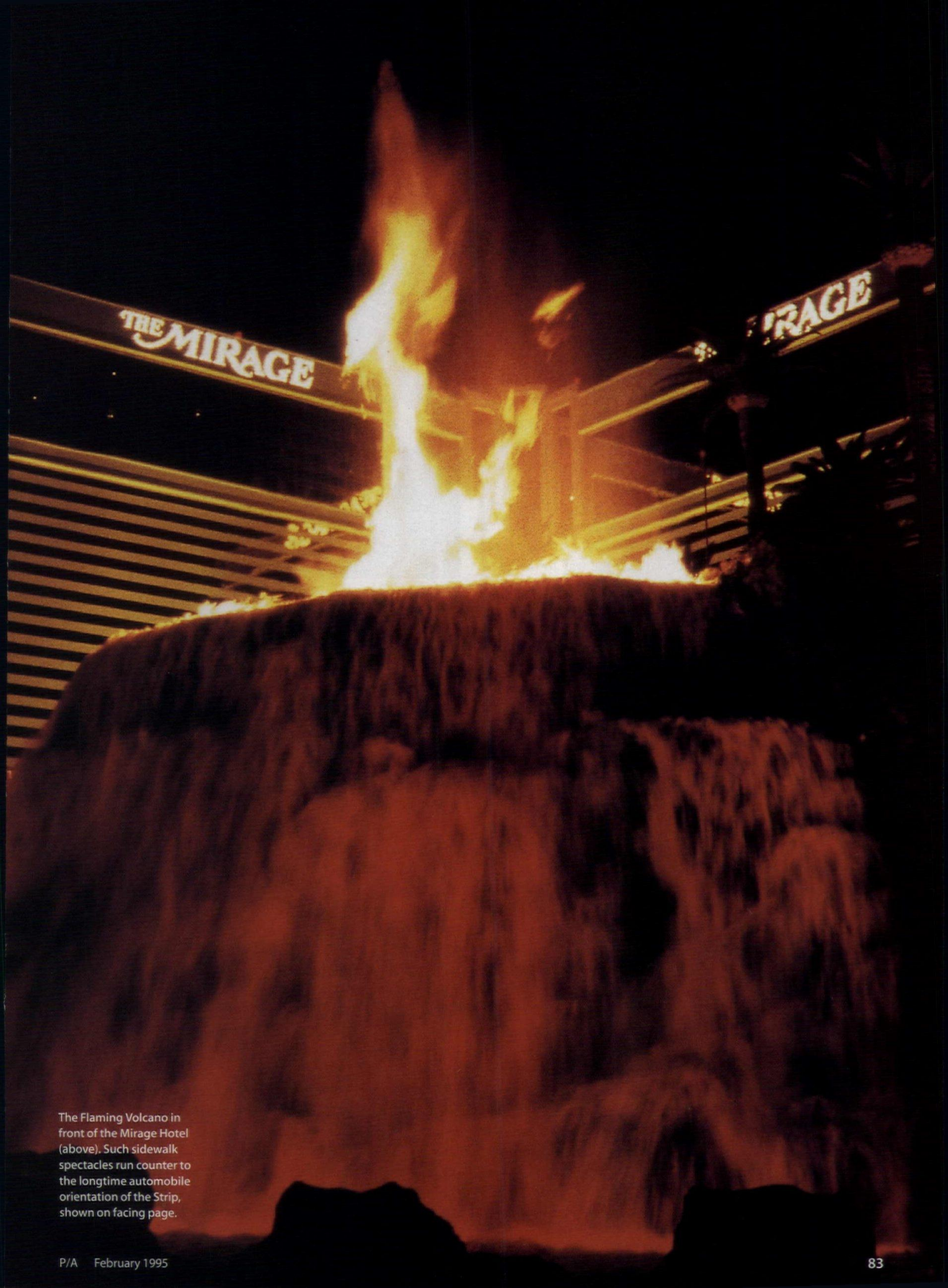
### Amplified Sidewalks

The attempt to make the Strip a continuous, mesmerizing wall of marketing has created, without benefit of planning, one of the most pedestrian-oriented urban scenes in the Western U.S. In the interval between the road and the gargantuan casinos, the sidewalk is filled with attractions such as the enormous sculpted heads of resident lion tamers Siegfried and Roy, which serve as backdrop for tourist snapshots. Objects of all sorts are pushed forward to the sidewalk. Las Vegas may be the only city where Coke machines are an integral part of the street furniture. Newspaper vending machines are ubiquitous, dispensing salacious newspapers that hawk "escort services" and chartered flights to parts of Nevada where prostitution is legal.

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Morris Newman is P/A's Los Angeles correspondent. He is also editor of LA Architect and senior editor of California Planning & Development Report.





The Flaming Volcano in front of the Mirage Hotel (above). Such sidewalk spectacles run counter to the longtime automobile orientation of the Strip, shown on facing page.



Exploring Las Vegas on foot, however, requires strong nerves and quick feet. The pedestrian attractions remain very much at odds with the Strip's historic character as a car corridor. The mammoth casinos, which on postcards appear huddled together, are actually hundreds of feet apart, with some of the intervening space taken up by vast parking structures and routine retailing. An intrepid architectural tourist who seeks to walk it discovers that the Strip is longer than one might imagine, stretching on for approximately five miles. The

**In Flaming Volcano urbanism, environmental graphics replace both sign and applied ornament. As a presence on the street, the building virtually dematerializes behind the spectacle.**

scale of the street grid must rank among the largest in any major American city. The enormous size of land holdings on the Strip has discouraged formation of side streets, which would have eased access to the corridor; the Strip is, in a sense, an isolated island in what has become one of the nation's fastest growing cities. Because the Strip was originally designed to function as essentially a driveway for casino parking lots, tourists find themselves dodging a constant stream of cars and taxis that cut across the sidewalk on the way to the gambling halls. (Indeed, the Strip has some of the busiest traffic and the most aggressive driving this side of Boston.) Add fatigue, searing heat in summer, and strong winds in winter, and disorientation soon sets in. Good public transportation provides some relief: city buses run until midnight, while a small army of taxis queues in front of casinos.

#### Ducks and Decorated Sheds, Move Over

In its current state, the Strip is far different from the place that Robert Venturi, Denise Scott Brown, and Steven Izenour described in 1972 in their influential *Learning from Las Vegas*. A crucial point in that study was the authors' distinction between the "decorated shed," which was a practical, workhorse building with applied ornament, and the "duck," a "special building that is the symbol" of its function.

Though many of today's buildings could be classified as ducks, neither that term nor decorated shed accurately captures the character of the new Vegas. The casino-as-street-spectacle deserves a new category – call it the "Flaming Volcano" in honor of the water feature at the Mirage. In Flaming Volcano urbanism, environmental graphics replace both sign and applied ornament. As a presence on the street, the building virtually dematerializes behind the spectacle. (Although signs have hardly been eliminated in the new Las Vegas, they are less prominent than they used to be, at least in instances when the buildings have Flaming-Volcano-style displays.)

In contrast to ducks and decorated sheds, the Flaming Volcano is roadside architecture intended to be viewed by pedestrians. Its function is to influence the behavior of crowds. People naturally congregate in front of carnival-like attractions such as the hourly thrashing and splashing of the sea battle. The show captures and focuses their attention, and



Photos: Fred Stocker (left and facing page, bottom); Las Vegas News Bureau (facing page, top)

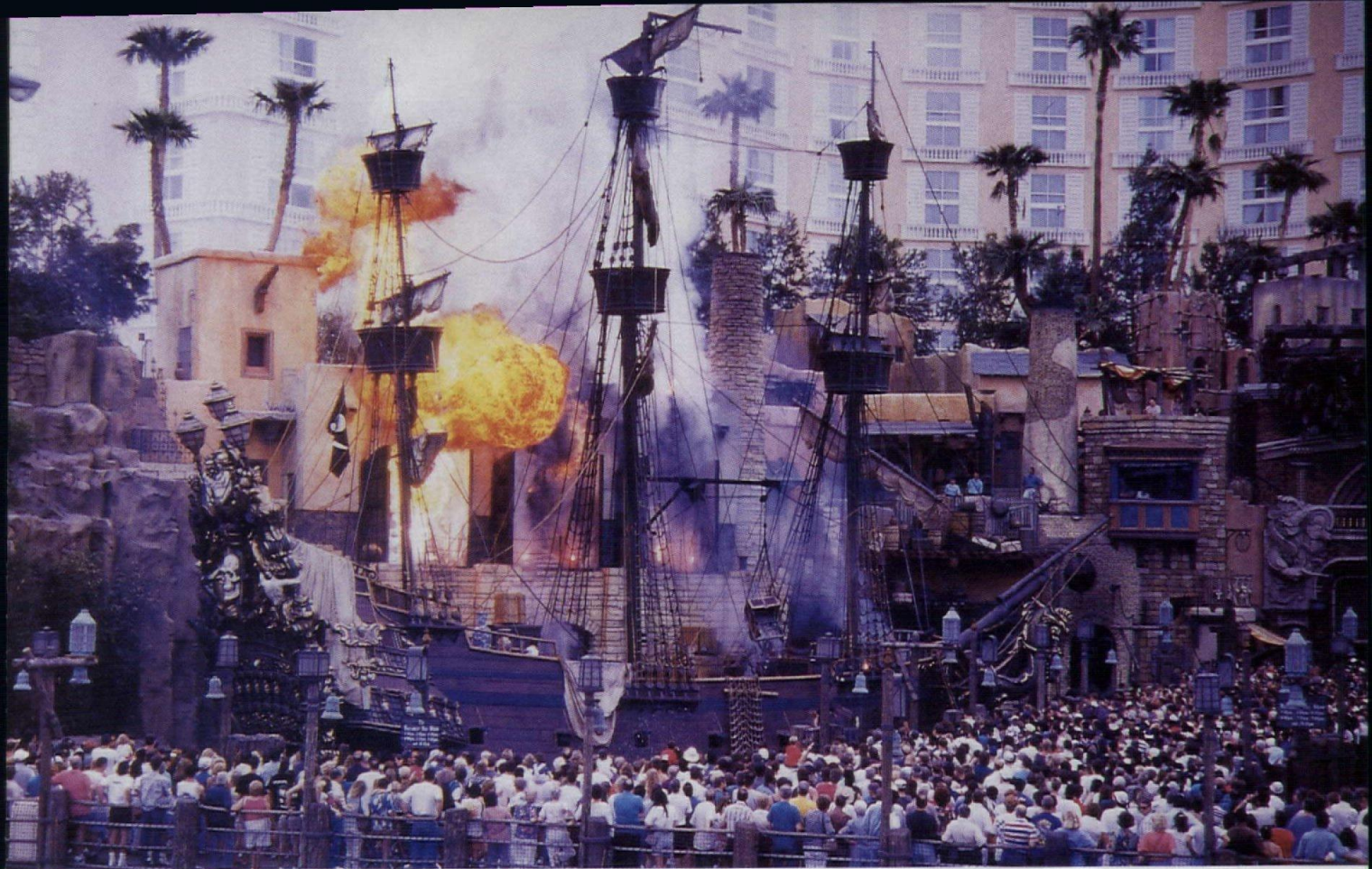
when the entertainment is over, many in the crowd drift into the adjacent casino.

#### A Modern City Learns from the Baroque

Like other postwar cities, Vegas has always understood itself to be a completely modern place, free from reliance on references to the past. Yet in fact the new generation of street-side attractions revives devices associated with the Baroque. The new public spectacles along the strip are, in their own way, reminiscent of Baroque public attractions like the Fontana di Trevi in Rome. The Roman fountain liberally employs water and figurative imagery to appeal to passersby. The sea battle at Treasure Island similarly deploys water and activity to please pedestrians. Where the Fontana di Trevi achieves an impression of movement through the writhing profiles of its statuary and through the visual distortions that come from looking through water sprayed in the air, the sea battle obtains much of its movement from the people presenting the show. From the standpoint of urbanism, the important difference between Rome and Las Vegas is that in Rome the fountains mark centers of public space, the piazzas, whereas in Las Vegas the fountains are events along the sidewalks, the great public space of that city.

The sea battle is the most remarkable of the sidewalk spectacles, partly because of its theatrical ambition: a carefully detailed replica of a British man-of-war advances on a pirate ship and sinks into mechanically agitated water every hour, only to emerge from the drink after showtime and slide back into starting position on an underwater track. What is equally notable is the way in which designers have integrated the sea





Crowds gather for the hourly sea battle at Treasure Island (top). The Roman streetscape at Caesars Forum features a changing sky (above). On facing page, Harrah's riverboat in the desert.



battle into the elevation of the Treasure Island casino, or, more precisely, replaced its elevation with a dioramalike shell of sea cliffs and false-front buildings. Artistically, the stage set is on par with Disney pastiche, but the designers have had the foresight to give the cliffs a lacy transparency, so diners inside the hotel can witness the sea battle through holes and caverns in the sea cliffs. It's a brilliant solution: the building is a spectacle for those in the street, while the street is a spectacle for casino patrons.

The most satisfying new spectacle is the interior of a shopping mall called Caesars Forum, a well-lighted place attached to the infernal darkness of the casino at Caesars Palace. Being indoors, the Forum is not a true sidewalk spectacle, yet it does

**The trend toward literalism represents the end of a design culture in Las Vegas, the design culture that relied on abstraction and the arabesque to achieve its atmosphere of fantasy.**

exude a streetlike atmosphere. Billed as a Roman streetscape, it twitches into life once an hour – a Bacchus-like computer-animated figure roaring about sensual pleasures, while a laser-light show zigzags above its head. The Forum's best feature is a hand-painted curved ceiling that represents sky, a Baroque device reminiscent of Palladio's Teatro Olimpico in Vicenza. Unlike Palladio's creation, in which the illusion of depth is achieved through the forced perspective of narrowing corridors, Caesars Forum suggests the spaciousness of curving streets whose end-points are out of view, a device more closely related to Hollywood set design. The soft, crepuscular light inside the Forum, modulated by a program that takes the illumination of the ceiling through a continuous cycle from bright to dark, makes an enchanting environment, one that generates pleasure through artifice.

**Where Imagination Fails**

Other elements on the Strip fall short on enchantment. The problem is not a lack of money but a failure of imagination. The lion at the MGM Grand, with its painted metallic highlights, is a big bust; an object on this scale must be magnificently detailed to be compelling, and the MGM lion is no more than papier-maché on a heroic scale. The glass pyramid of the Luxor looks impressive to motorists on the desert, but its 10-story sphinx is a saggy prop possessing none of the terrifying mystery of the original. The entrance to the motor court, beneath the sphinx, is nothing more than a slot cut into the belly of the beast, which consequently looks like a cabinet with the bottom drawer removed.

Whatever inconsistencies in quality mar the newest additions to the Strip, the animation of street life attributable to spectacles rooted in the Baroque does succeed in making Las Vegas the destination its promoters intended. If the taste level of these streetside extravaganzas is often low, the spectacles nonetheless manage to animate public spaces, generate a sense of vitality, and engage pedestrians more readily than the lifeless "public art" that litters many major cities.



Photos: Fred Stoeber

The most nagging problem of the new sidewalk spectacles and "billboard buildings" is their reliance on special effects and their concomitant literalism. Perhaps the merchandisers of the New Las Vegas believe people want spectacles resembling cinematic special effects: noisy, garish, violent. The situation becomes still more unfortunate when one realizes that the trend toward literalism represents the end of a design culture in Las Vegas, the design culture that relied on abstraction and the arabesque to achieve its atmosphere of fantasy. A glance at Alan Hess's excellent new book, *Viva Las Vegas: After-Hours Architecture*, with its comprehensive survey of construction in Las Vegas from the 1940s onward, reminds readers of the link between the Googie coffee shops of the 1950s and the early casinos of the same era. Yet nearly all the early casinos have been demolished in favor of giganticized buildings that disdain fantasy-as-abstraction and prefer their fantasy in the form of oversized, ponderously literal objects. Much of the new imagery is banal, stemming from an ever-increasing corporate presence.

The irony is that Las Vegas's new creation of a pedestrian promenade is an outgrowth of the same trend toward corporate giantism and promotion that has deprived the city of unique buildings and a great part of its colorful past. To some of us, the loss is significant. But, it must be admitted, something unique has taken the place of the remarkable buildings that formerly lined the Strip. Throughout its changes, Las Vegas has retained its role in the American imagination as the City of the Id. The pleasure principle continues its reign in the desert, ushering in an urbanism that, for good or ill, sets a new paradigm for fantasy made concrete. □





The MGM Grand's Lion (above), a giant-size disappointment. On facing page, the Sphinx as sidewalk attraction for the Luxor's glass pyramid.



# EISENMAN (AND COMPANY)

***In the discourse and practice of architecture, can the formal ever be defined politically?***

***Have previous definitions of the formal become problematic in today's historical condition?***

**Rosalind Krauss** There are two ways, I would say, to reply to hostility against one in print. The first is to brush it off like some kind of annoying fly that has landed on one's shoulder. The second is, as it were, to drop a huge elephant pat on it and smother it to death. Reading Derrida's *Limited Inc.*, his reply to John Searle's attack on "Signature, Event, Context," I was struck by what can be the brilliance of this latter strategy, as the incredible length of Derrida's response allowed him to embed in it citations of Searle's copyrighted text, thereby quoting that text almost in its entirety and in so doing, violating the copyright of "Searle's seal." Since the attack had itself perversely borrowed Derrida's own arguments to use against him, this imitation, or doubling of his opponent's behavior had its own logic. In that sense its move was formal, though in its possible juridical consequences, "political" as well.

In securing four pages of *Progressive Architecture* for a reply to "Eisenman's Bogus..." Peter Eisenman is also engaging in the second strategy. And, given the philistine silliness of the article that has triggered this response, one could say it is over-reaction, or over-kill. One might also say that by summoning a panel of artists and intellectuals to his cause, he is conforming to the article's picture of himself as cultural impresario. The "cause" here is not himself, however, but that of debate on a level worthy of the name: a discussion of the issues raised by the term "formalism" (as though one could demonize this term forever, as though formalization were not inherent to any reflection at all). In the repetition of the article's original length, made possible by insisting upon his right of reply, Eisenman is thus holding a mirror up to P/A, one in which will be reflected the kind of reasoned debate P/A itself had tried to foreclose. This is a formal move, one that shows that return, even if return of the same, always slips from the control of the original. In that latter cause it produces the politics of discourse.

**K. Michael Hays** The presumption that a concern for form entails a lack of concern with social issues is worse than conceptual error. It is a pernicious reaffirmation of the classical bourgeois incapacity to think in other than the most compartmentalized and undialectical categories (such as form or content, fact or value, real or conceptual). It is one more trotting out of the hackneyed and tedious opposition between theory and practice that intellectuals and architects should be spending their time trying to dissolve. It is one of the weakest, though still the most frequent of criticisms that we have come to expect from the liberal humanist camp.

For what is "society" if not a set of means for knowing, belonging, and practicing, all fixed ideologically through different sorts of form, architecture being historically among the principal ones? There is no automatic virtue in the renunciation of form, any more than there is in the taking up of it. Our theoretical-practical task will have to be more precise: any theory of architecture and politics will have to show how social ideologies are not mere surrounds, but immanent in the very fabric of the architectural conception.

If architectural formalism is understood not as the make-believe proposal of significantly different spaces against all practical economic and social obstacles, but rather as the actual production of the concept of such spaces – the production of new ways of thinking about our society and how architecture structures it – then it becomes plausible to propose that work on form – formalism – be grasped as a properly political anticipation of new social relations, against and beyond the limits of our present ways of life. Then we will not have to ask whether form can ever be defined politically. Rather we will have to do the more difficult work of showing how architecture helps construct the very possibility of thinking the social relations that it then claims to represent.

**Jeff Kipnis** There are many crucial issues – financial, social, economic, and political, etc. – that bear on a building in its relationship to a context, but I believe only three are pertinent to a building's architectural design: what does it look like, what does it mean, and what does it do. Insofar as judgment is imbedded in these questions – e.g., what does it look like also asks what should it look like – they are already in part political.

In recent years each of these ancient questions, asked in ever more sophisticated terms, has vied for the right to unilaterally organize the discourse of architectural design, defining, respectively, building as art, building as text, or building as apparatus. Of necessity, each has laid claim in competing terms to the problem of architectural form. Though these three questions overlap and intermingle, at once supporting and confounding one another, they cannot simply be subsumed into one another nor ranked in order of importance, despite a fascinating history of efforts to the contrary.

As any architect knows, however, they cannot each be equally addressed in the design of a given project. The architect who desires to contribute to the discourse of design must falsely emphasize one of these in coordination with the others, and is therefore always vulnerable to a charge of error by omission. And if we perpetually obligate every design to every issue that a building engages, even those beyond the three questions of design, then charges will replace theory and criticism and drive the discourse of design into extinction. Some may think this desirable for architecture. I do not.

Such charges, even if well-intended and mounted in the most politically correct rhetoric, are, in the end, intellectually inept. They neither engage a project in its own terms nor formulate a substantive debate on the relative merits of the design position taken by a project. Therefore, whatever their journalistic force, they make no real contribution to the discourse of architectural design. They merely attack the architect for making a necessary and inevitable choice of emphasis and then insult others who have found that choice interesting and have developed work from it. Nothing could be more political in the crassest sense of the term, nor more tedious.

Anyway, to the questions. Can the formal ever be defined politically? It seems to me that this question stems in part from a questionable philosophical tradition that separates form from content, but primarily from a history of efforts in architecture to catalogue the universe of formal types. Such a catalogue would in principle stand aside from any particular doctrine and yet enable the architect to engage evolving political and social issues, much as one language enables divergent ideologists to engage and debate one another. If one believes in the possibility of a reliable catalogue of architectural formal types, then one must believe that, however politically these may be deployed, they cannot, *a priori*, be defined politically.

While I am not so naïve as to believe that any particular architectural form belongs simply to any particular political doctrine, neither do I believe in the possibility of a reliable catalogue of apolitical formal types. In fact, I feel that the positing of such a catalogue is nothing other than a covert form of conservatism. Thus, I find both the philosophical and the architectural histories of form mentioned above to be deeply problematic, in answer to your second question.

To me, one of the most urgent responsibilities of both architecture and politics is to search for the New. In architecture's direct relationship to politics this will mean participating in the positing of new forms of institutions and social, legal, and disciplinary arrangements. But equally, it means a search for new forms of buildings as art, new forms of buildings as texts, and new forms of buildings as apparatus. In short, it means design.

**Jennifer Bloomer** I am, perhaps, old-fashioned in my belief that almost every human act has political dimensions. And so, for me, the question that has been raised is puzzling. How, I wonder, can architectural formalism, even and especially the avowed apolitical, not be political?

The critics of formalism complain about self-indulgence and the absence of a pragmatic dimension. One individual has called it architectural onanism. The accusatory, and sometimes even malicious, stances that characterize contemporary architectural fashion resemble uncannily those of contemporary political fashion. There cannot be this approach and that approach; there must be a right way and, consequently, wrong ways. It is sad when those who work under the worthy banner of love of fellow humans rail so viciously against individuals who engage in relatively benign activities of which they disapprove. At the risk of sounding like the erstwhile Surgeon General, what is the point of attempting to suppress a common human practice? Neither decrying it nor ignoring it will make it disappear.

Architectural, and political, turf is alluvial and transitory. So, let us care for each other as best we can as we flow along, and not worry about whose bit of muck is more fertile. Let those who sustain pleasure by making transitory buildings of dung painted with colorful, sometimes self-expressive symbols, as the women in



# RESPOND:

West Africa do, and those whose architectural faith embraces what we call the pragmatic, look with care and see how the similarities of our acts are as meaningful as the differences.

**Alan Balfour** The 20th Century began with the belief that the imagination of an *avant garde* would shape the new society. Yet even during times of the most progressive change the transformation of architectural form was left to the imaginations of a few; the essential nature of architecture remained conservative. The end of the 20th Century sees the declining influence of an intellectual elite, and no clear guidance for the behavior of an *avant garde* when it becomes the plaything of fashion.

The need still exists for experimental practice, though it will always be a high risk game, and nothing can predict the match between the desires of the culture and the imagination of individuals, no matter how prescient. In the end, the productive in the culture buy what they want from what has always been an over-supply of willing imagination. It all comes down to whose fantasies are most appealing.

A paradox of these times, the conflict between a rising conservatism in the uses of the formal in architecture, and an insatiable desire for the new in many other aspects of created reality, has two obvious explanations: economic – architecture is too expensive to experiment with – and experiential – there are so many other mediations of reality available to toy with that gratify faster. A third explanation is that formative cultures no longer look to architecture to change the future, but to contain it.

**Bernard Tschumi** Much architectural discourse today seems to reduce itself to two irreconcilable attitudes. One claims that "reality" is the measure of all things – including architectural relevance. The other claims that architectural thought can be marginal to the real and that this appeal to "reality" is a call for conformity.

One locates architectural reality at the center and excludes consideration of the margins. The other wants to explore the margins and bring them towards the center. One proclaims itself critical; the other proclaims itself radical. One often implies that if architects have built little they cannot be "real." The other sometimes proposes that "it is because I do not build that I am an architect." One says all theory must proceed from and be anchored in reality. The other aims at devising forms and hypothesizes to capture this reality. One speaks about moral values and about knowing when to resist reality, while the other seeks to go faster than reality.

Somewhere in the process, both speak about form. For one, architectural form should be original, ideal, or contextual, but, above all, intelligible. The other suggests that form is endlessly malleable, transformable, and even enigmatic. (A few even say that form does not matter.) Surprisingly, both attitudes claim that their forms are political. Yet rarely do either critical or radical views touch on the specifics of their engagement, except in the widest generalities.

Which is better? A critical stance filled with oversimplifications and platitudes, or the radical attitude that seeks to extend the fertile confusions of reality? I suggest that the issue is neither reality nor form per se. Form is always and only political in relations to its use, namely in its ability to question, rearrange, or confront (social) programs, so as to displace the stale habits of reality.

**Sarah Whiting and Ron Witte** We were struck by the suggestion that we may need to "redefine the formal." The polarized nature of recent debate suggests that this term's definition is clear enough to have catalyzed two camps: those who continue to pursue the formal, and those who regard the formal as minor or even irrelevant. And yet, the definition of the formal remains elusive. It is not a clear, fixed term, but rather a proliferate one which, when examined, cascades outward, multiplying rather than polarizing. Furthermore, formalism's potential lies in the dependency of these multiple meanings upon one another. Like the five points of a starfish, formalisms can be severed from their figured whole, only to become entire in themselves. These formalisms include, among others, the structural, historical, philosophical, linguistic, material, economic, aesthetic, geometric, and political. To invoke one of those formalisms is to invoke the others: within each one are present all of the others.

The formalism of material, for example, includes forms which are concrete, brick, plastic, wood, steel, and glass. These material forms are necessarily deployed through a form of process: raising, pouring, molding, piling, and hanging. The combination of the material and the process results in the forming of space, a formalism of action, program, and inhabitation. The intrinsic relations among these formalisms make it impossible for one of them to exclude the rest. The political is embedded within the geometric and vice versa. For example, the choice of a pitched roof evokes a complex interplay of historical, linguistic, structural, and geometric formalisms which would

In the spirit of debate, Peter Eisenman asked for equal space to respond to Diane Ghirardo's critique of him and his work in the November 1994 issue (pp. 70–73), and we have accommodated his request. Instead of writing a rebuttal himself, he posed two questions about formalism to twenty architects and critics, and he, along with seventeen others, wrote the following responses, reduced in type size to fit the same four pages. We'd like to hear your thoughts on these subjects. Editors

differ were the roof to be flat.

Invoking formalism necessarily includes formalisms: the starfish always grows back multiple points.

**R.E. Somol** In discussions of the relationship between the "formal" and political or social aspects of architecture, debate has invariably focused on a definition of the boundaries of architecture, its interior and exterior limits. What is surprising in today's situation, however, is a curious alliance between the would-be politically radical (from the "outside") and the architecturally conservative (from the "inside"), the first who attack certain recent theoretical and material practices for not going far enough and the latter who dismiss it for wandering too far afield. In this way, a common scapegoat has been identified by social critics and market-driven practitioners alike, which has tended to collapse the more typical dialectical cycles of reform and development. What underlies these processes of development promoted as social reform is a united reference to a new reality principle, the by now well rehearsed call by professional organizations, magazines, and educational institutions to return to "the real," to tradition, to order.

If one of the effects of a politics is the construction and maintenance of boundaries, then the "formal," no less than the "real," will always in part be a political definition. Reciprocally, attempts to extend, attenuate, or transgress the boundaries of a discipline will have implications for political-form. [This is not, of course, to suggest a one-to-one correspondence of form to political ideology. In fact, the degree to which any cultural form can be exhausted by a particular instrumentality (i.e., participates in a non-problematic communication or representation) may question its status as a viable or critical cultural form at all. In other words, perhaps a building is architecture only to the extent that it escapes or exceeds capture by a single (economic, social, technical, intellectual) institutional discourse.]

In any case, the politics of architecture necessarily implies community and institution building in several senses, and it is difficult to understand the moral celebration of design charrettes or advocacy planning on the one hand, while simply dismissing the development and support of other communities and networks as forms of "self-promotion." It would be no less accurate – and no more productive – to characterize the former practice as demagoguery and the latter as philanthropy. The political discrimination of "relevance" (or whatever other value one chooses to employ) resides in the combined formal, social, and technical effects of particular architectural and urban propositions. Within the architectural politics of the last thirty years one can broadly detect two poetic-politics: an architectural discourse of the *déjà-vu* (where the new is domesticated and draped in an aura of the familiar) and one of the uncanny (where the familiar is solicited to reveal the unfamiliar or to produce new effects). More precisely, contemporary architectural politics display alternative modes of repetition. The first – which both social critics and developers have come to embrace – returns the discipline to proper and static models of the same, to self-evident definitions of needs and techniques, to the realization of the possible. The other – currently under suspicion for its experiments in material-form and idea-text – conceives repetition as the setting in motion of divergent series from which it wagers on the emergence of difference and the actualization of the impossible. The continued pursuit of the latter as a positive and projective program may yet demonstrate that to act "responsibly" in formal-political terms will require that which dominant professional and critical practice can only now define as the incorrect.

**Peter Eisenman** That the terms *formal* and *formalism* produce as much anxiety and hostility among architects and critics as they do is reason alone to investigate the phenomenon of the formal. But this alone would not reveal the unique status of the formal in architecture as different from the other arts. While the formal in all of the arts distinguishes the aesthetic and the purely visual from the nonvisual or conceptual, it has another aspect in architecture that makes it a more problematic concern. This is the condition of the formal that allows it to separate itself from the social. For example, one could take the form of an African village and transpose it for reasons other than its inherent structural value to an American suburb without doing anything for the village from which it was taken and without its form having any social or political relevance in its new context. This is traditionally cited as a formalism, because it has been understood from the time of the Vitruvian dictum of commodity, firmness, and delight, that there is an irrevocable link between form and content. This joining of architecture's iconicity with its instrumentality has, after two thousand years of practice, come to be seen as natural. In turn, architecture has used this form/content connection as a moral justification for its form making, so much so that



this argument has become immanent to its discourse. Wary of the possible accusations of formalism as a form of amorality, most formal arguments, from Rudolf Wittkower to Colin Rowe, have also taken on the moral coloring of immanence by deploying a similar argument. For example, Rowe often justifies a form by referring to architectural or typological precedence. Even in our own practice we have attempted to justify the form of a Bio-centrum by using the forms of a DNA notation, or that of a Tokyo office building by using the seismic structures lying conceptually in the site. While these were formal analogies used as justification, they depended on the immanence of the formal material to the proposed building for their argument. This is what can be called the trap of immanence, of using a moral argument even in a formal context, to justify the making of form.

To pursue a formal argument today, one must escape this trap of immanence. It would require neither an immanence that is posed in moral terms between time or historical precedence nor an immanence of traditional essences and appearances. Rather, such an immanence would have to suggest a formal concerned with the random, with chance; of a formal that does not respond to its own former conditions. That is, it would have to utilize precisely its capacity to de-contextualize itself. For quite rightly it can be thought that such a concept of the formal would have no immanent or originary relationship to its content, and it is the absence of these relationships that would become its only immanence. This immanence is the formal's potential critical, and therefore political, content; it is this which has the capacity to undermine the tradition of architecture. This is well understood by the critics of its practice.

**Silvia Kolbowski** Distinctions should be made between "the formal" and formalism, and between the status of "the formal" in architecture and in art. In art practices, formalism has occupied the position of an (overt or naturalized) *asocial* visual language. A concern with the social and discursive aspects of form (the formal) is a very different matter. There have been historical moments when a particular form or material or manner of execution was read as the politics of an art work. Such readings are dependent on a broad contemporaneous context – for example, the relationships between 1960s minimalist sculpture and industrial, as opposed to craft, techniques, between Constructivist uses of abstract form and revolutionary redefinitions of spectatorship, and among Constructivist craft forms and the historically specific resonances of collective production and mass audience. In later, less socially rooted, readings this type of work is often perceived from a purely formalist standpoint, and the politics of its forms recede from view.

Precisely because form is never without political/historical dimensions, it is read differently through two practices – art and architecture – which have developed across varying social and institutional terrains. What might be expected of art today – in terms of a critical practice, in terms of the politics of form – may have little to do with what can be expected of architecture. And vice versa. An articulation of forms that can be understood as socially critical in architecture, forms that disrupt norms of occupation, circulation, or vision, can be read as socially quiescent in a contemporary art context that has a more than half-century history of direct engagement with language. This does not mean that architecture is a less political practice, or that its formal articulations should be reduced to an *architecture parlante* in order for it to assume a critical status. It only means that definitions of the political are not universal or timeless.

**John Rajchman** "Formalism" has become a term of abuse. But there is no great architect of whom it cannot be said that he dealt with the question of "form." No doubt the question is raised in different ways in architecture than in painting or writing or film, at different times, by different architects. Yet there is a sense in which what is called "art" is intrinsically "formal" or "abstract" and has been so since its inception, as Leroi Gourhan remarks in his analysis of the forms and spaces of the distributions of bison on prehistoric cave walls. Today the question is raised anew by the impact and potential of software imaging: can one depart from the categories of "simulation" and "virtuality," and use this technology to realize "forms" of other kinds and functions?

"Formalism" (and complaints about "formalism") usually attach to "Modernism," and it is hard to imagine that the architecture (or painting, writing, dance, etc.) of the last century and a half could be intelligently talked about without talking about "forms." Its own practitioners worked with them, associating them with many theories and practices. Through their experimentations, ideas of form entered many different conceptual fields, linked to different hopes and projects, going off at once in different directions, some stopped by external politics, others by an inability to keep going, leaving a complex fabric of creations and questions for others to take up anew and attack from other angles. The stark contrast some have urged between form and history is too gross to capture this complexity or tap its potential; it has led to views that are not just formally obtuse but also quite unhistorical. Indeed the self-confident appeal to History has been pushed into a comical reversal, for a "formalism" has been reintroduced in historicist disguise – the guise of "postmodern" or "appropriationist" styles and, more recently, "other-culturalist" ones. The supposition that context (or "cultural context"), is something which, in contrast to form, we know, control, represent, and reproduce has led to a kitsch irrealisation of our past (and that of "others"), forming an obstacle to "really" seeing or conceiving what is happening to us (and our relations with one another).

More promising than eliminating talk of form is thus making new distinctions, drawing up new lineages, looking for new concepts. For example, in the last century we find a large division in conceptions of politics as well as of arts between "organic" and "mechanistic" forms, or holism and atomism; but today we can also discriminate

the start of notions closer to our own models of chaotic or complex forms, which, neither organic nor atomistic, permit "vital" uncontrollable bifurcations and singularities. At that time, we also find beginnings of the cluster of features usually collected by "formalism" – self-reference, purity, internal autonomy of works, and so on. To arrive at this view, one begins with a classical division of "form" from matter, content, literalness, figure, story, etc., and then pictures abstraction as an internalizing purification of form from such things, a kind of "reductivism"; in this way one discovers a lineage of form connected to a search for purity or "spirituality," often associated with geometric figure and transparency. Of course, we know today that abstraction does not take this path alone; there exist other lineages that attach it, for example, to whole realms of "the formless." But this classical "self-referential" kind of formalism often still predominates, its reductivism suggesting that all "formal" possibilities have been exhausted, inducing one to declare "formalism" itself to be a thing of the past, followed by something nonformal in the "advance" of styles. But there exist many other lineages and possibilities, and the question of form may become unsettled, untimely, again.

In architecture a promising line concerns the question of the city and what it looks like. It would seem that the "fabric" of our cities (and "conurbations") is now such that it no longer makes sense to talk in "perspectival" terms of surface/depth, near/far, inside/outside, figure/ground relations. One must thus alter the "formal" character of design, finding other views of depth, composition, and movement. For example, one can envisage an architecture of paths and movements, at once internal and external, concerned with the way the city "moves" in architecture, and architecture in the city. Along these lines one might then recast the questions of the relation of "forms" to "programs" and "contexts." One would then surely confront "politics." But could one also begin to rethink the whole concept of the "polis" (the city) in "the political?"

It is striking that the questions of form that "Modernism" raised arose at a time when the nature of "the political" became a question and the object of movement, with horrific, brutal outcomes we know today. The most general conclusion one may draw is perhaps that the manner in which the formal and the political are connected is not direct or univocal. Even forms that are highly politicized, functionally or symbolically, discover uses that deviate from their purposes; while plans and policies discover "spatial realizations" that open them to "unintended consequences." It doesn't follow, however, that there is no connection between them. In the 1930s, "ideologies" (progressive as well as reactionary) were supposed to identify the two: art as the Form of politics and vice versa. After the Fascists were defeated and the hopes of Modernism lost, it seemed enough to give up being "ideological." But this abnegation hardly constitutes a way of dealing with politics (or form). Rather we need to rethink the "political" itself, without the supposition that the "polis" either symbolically embodies a Form or functionally realizes a plan or program, and so permit movement in its concept; today such rethinking has been urged through theories of "radical democracy." A promising direction for architectural thought may then lie in the intersections between a new abstraction or formal experimentation (partially computer-assisted), a new way of thinking about cities (beyond grid and collage, planning and renewal), and a radical-democratic conception of the political (which no master-Form can ever embody or control).

**Mark Wigley** There is no formalism without a certain politics. Those who announce their detachment from the political inevitably reconnect themselves to it. The very announcement is political. Its rhetoric of innocent form is the agent of numerous crimes. Likewise, there is no politics without a certain formalism. Those who so smugly insist on their commitment to the political over the formal inevitably depend on tacit readings of form.

Both rhetorical positions are unacceptable today. The maintenance of a clear-cut and symmetrical opposition between the formal and the political has itself had an insidious political role. In recent decades, architectural discourse has worked especially hard to sustain it. Influential "formalists" have long been paired off with "political" adversaries and these not so odd couples have continued to fight with each other in the same old terms that were monumentalized in the seventies. The fact that the sound of their domestic sparring gets fainter and fainter as they ride into the sunset of their choice is compensated by their increasing access to, if not editorial control over, different branches of the architectural press. A recording of the discourse today ends up sounding remarkably like any recording made over the last quarter of a century. Neither "side" examines its own politics. Symptomatically, both share a pathological intolerance of the specific analyses of race, gender, and sexual orientation (to name but the most obvious battlefields) that are starting to be carried out by designers and writers today – without neglecting form. Private discomfort is poorly disguised behind public declarations that contemporary work is incomprehensible. Still, the "unreadable" texts are being read. The tide has turned.

I would not join a call to redefine the formal as such. If anything, it is the old sense of the political that needs redefinition. Indeed, it has already been redefined and the anxiety that this has produced is quite palpable.

**Rem Koolhaas** Even more problematic than the definition of the formal today is the definition of the political. Bush? Ballardur? Berlusconi? The political is now everywhere and nowhere. The diffusion of the political has undermined the possibility of both an opposition or a complicity between the formal and the political. Paradoxically therefore the most inept formalisms that least intend it – the glut of sub-post-modernity – may be the most political, the most strident formalisms – in the absence



of any counterpart – the least – the emblems of name architects.  
No, these are shifts beyond our control.

**Sanford Kwinter** No principal marks Hebraic civilization more deeply than the interdiction against graven idols. The Jewish god Yahweh, himself faceless, chaotic and mercurial, formed the world out of, and appeared to his subjects only through, language (this to the profound anxiety and perplexity of Moses and Abraham). The Elohist god eventually replaced the idolatry of static figures (the recidivism of Aaron) with the fluidity, the *performativity*, and the infinitely flexible rigor of a textual practice (Tablets, Torah and Commentaries). The historical Exodus of Jews from Egypt was itself an act of multiple decomposition – the release of free vectors onto a Steppe (only forty years in the Sinai could permit the formation of an entirely new human “type”) – and the severing of relations from a despotic State formation (subjection to Pharaonic sovereignty and its tectonic world of closed monumental forms). Judaic space – to extend the hypothesis of Bruno Zevi – can be understood only through its nature in the *episodic* and therefore the plastic, and this in radical opposition to the solid forms of imperial power (the pyramids). Though the birth of the Hebraic tradition constituted a breach of total historical novelty, it is no secret that it was the Egyptian, not the Hebraic, ideal that was later re-embodied in what came to be known as classicism.

The regimes of later Greece and Rome, and their subsequent – utterly corrupted and fetishized – reception from the Renaissance to the present, provided the framework for a blind cult of order (understood in the most impoverished and oppressive sense) based on bureaucratic values of symmetry and proportion. Classicism is the formalism of empire, the sleazy-grandiloquent expression of a hidden will to purity, an *idolatrous* bulwark against the genuine forces of historical process: the mobile, the unrooted, the destabilizing, the new. To be sure, other formalisms exist, *informal* ones for example, though these are typically said to come from an outside (of course, only despotic formalisms create the illusion of serene, static, ahistorical insideness).

In our own century these forces of innovation have intensified (modernization) even if they have maintained a millennial mythical characterization: adventitious Hebraism. The anticlassical formalisms of Einstein (the mollusk of space-time) and of Schönberg (dodecapronic and timbre-composition) revolutionized the absolutist “orders” of Newton and Bach (on rigorous mathematical grounds!), yet these were duly abhorred and denounced as “Jewish science” and “cultural Bolshevism.” Perhaps because Hebraism belongs to the openness of *diaspora* to free action, and to actualization through performance in an essentially *interpretive* landscape, it has often been assailed by the fascist-classicizing mind as the result primarily of pernicious “influence,” rather than “work.” The fear of fluency, and the inability to tap the transformative power of the turbulence that issues from it, are the sinews on which classicism is built. All Hebraism enfolds within it the volatile powers of the informal formalism of manifold time. One need only recall Bergson’s *élan vital* and Proust’s anti-novel of spontaneous *Remembrance*. And who today can seriously doubt that Heidegger’s disfiguring concept of *Dasein* is anything more than a fearful classicization of Being in a spatial *there*, that is, in a rootedness-in-place (*Blut und Boden?*) from which the wandering (“cosmopolitan”) Jew is not only excluded by nature, but is also made to represent the diametrical opposite: the very embodiment of the rootless, disruptive forces of change: technology (money and ideas) and modernization. Yes, in the West, the genius of transformation, innovation, and revolution is by no means always Jewish, but it is *always Hebraic*. For what else is Western history if not the continuous, varied unfolding of the archetypal strife between the biblical brothers Moses and Aaron (as Schönberg, prophet of anti-classicizing dissonance, subtly showed), between the Hebraic god of *events* and the Egypto-Hellenistic one of idols, orders, and repressive forms.

What a strange question, “Can form be defined politically?” When has it not been?

**Elizabeth Diller** Architecture is reluctant to admit that space is already constructed before it gets there – encoded socially, legally, and politically. This reluctance is license for architectural practice to either claim a false autonomy or to disclaim its position in “contractual” space, slipping into a regulatory role, complicitous with the systems that employ it.

“Resistance,” normally understood to be in direct debate with institutional programs, often results in prescriptive assertions as dogmatic as those they are meant to replace. But a politically motivated architecture need not have policies as its target. The “political” is, at best, a negotiable term in a discipline driven and regulated by economic forces. The difficulty of undermining the very structures that provide a forum for an argument to be staged is a paradox particular to architecture. This paradox has forced critical practices to assume a variety of covers. Seemingly acritical, self-referential strategies, which avert explicit stances, may, in fact, be engaging institutional critiques on broader grounds. Particular formalisms (the category cannot be thought of as monolithic) stake out extrarepresentational arguments – ones lodged principally through the production of spaces that engender ideological special effects: instability, anxiety, doubt.

Yet, a resistant architecture need not rely on the erasure of familiarity. Rather, it could engage accepted representational norms to earn its welcome into the status quo and then turn insidious. This “architecture of entrapment,” characterized by stealth, would opt for descriptive strategies over prescriptive ones. It would look closely at spatial conventions that are typically obscured by their familiarity – conventions within structures of power, gender, class – to identify contestable assumptions, take them apart, and in exposing their constructs, weaken their authority.

**Daniel Libeskind** Is the formal political? Certainly. Here is the proof: A single line taken far enough becomes political. This much is a lacuna \_\_\_\_\_. This much of it is (unconscious) blankness \_\_\_\_\_. This much is still (just) indifference \_\_\_\_\_. But try this much! \_\_\_\_\_

\_\_\_\_\_ Wasting precious means of communication signifies that the formless has given way to the apolitical by an appeal to form. Now there are no more lines left. Nor more lines to fill up. No left lines.

On the other hand try to draw a conclusive line that is not political, the right one \_\_\_\_\_. Looks just like any other line, pure form, blank followed in blankness by blanks. But this drawing *Mmmmm* seems politically motivated by another (image of form) – this time one in which the indefinite oscillation renders itself as obsolete as a parable. Let’s try again, *zzzzzzzz* more definitely, less technically. Political? It’s only a signature, a seal or some idiotic private scrawl defacing the page of an otherwise completely apolitical publication. Try again: *zzzzzzzz*. Now it’s a matter of disgrace, proving decisively that architecture should, must, has, and always will be \_\_\_\_\_ and not *zzzzzzzz*. From here on it’s easy to have apolitical form, for example:



How nice to be free at last! No more politics in architecture, just poetry, geometry, and the eternal return ..... yes eternal ..... same ..... same ..... What did you say? They are only politicians, but disguised by \_\_\_\_\_. Because “\_\_\_\_\_ : *zzzzzzzz*, \_\_\_\_\_ politically quite \_\_\_\_\_!”

*zzzzzzzz*  
(Daniel Libeskind)

P.S. It has always been known that architecture had to be opened in order to be violated. If one questions its closure, it is clear that it has already lost it, therefore one still holds onto it – otherwise there would be no question of the ~~form~~ or the ~~form~~.

**Mark C. Taylor** Form – especially good form – is never superficial; nor is it ever profound. Form is nothing more and nothing less than a convention which, while never providing a secure foundation, creates the space within which social relations can emerge and develop. In the absence of good form, civility disappears and social relations deteriorate.

Poor form is the lack of decorum. In certain circumstances, this lack can become excessive. The excessive lack of decorum destroys the forum within which civilized dialogue and debate can transpire. This lack is hardly inconsequential; indeed, the lack of decorum threatens the very “foundation” of the institutions without which societies cannot prosper.

Architecture ought not to be preoccupied with fabricating form, but with creating *good form*. The spaces that must be constructed for individuals and groups to thrive take many forms, all of which ought to be as good as possible. No architecture can be regarded as responsible if it is not committed to creating and sustaining *good form*. The destruction of decorum is a crime, a crime against humanity – the common humanity, which it is our ethical obligation to realize. To take this obligation seriously is to struggle against every form of poor form, which some people and institutions promote in the name of progressive architecture.

**Kurt W. Forster** “Formalism” constituted the catchall charge brought against artists during the Moscow trials in the mid-1930s. In essence, the charge amounted to an indictment of art itself, for, beyond ideological ornament, it could no longer have any purpose in a state that declared itself the answer to all problems. If Russia’s greatest artists (and others having sought temporary refuge in the Soviet Union) could be charged with the crime of producing art that exceeded its political requirements, then the indictment, perversely and unwittingly, amounted to an affirmation of art itself. This was, to be sure, of no help or solace to the artists, nor did it afford any protection to their works, but it did make clear that art remained a thorn in the side of a totalitarian body decreeing “realism” the only style it would tolerate.

Diane Ghirardo’s polemical broadside takes Eisenman to task for his entire work in architecture. Her muddled reasoning turns him into somebody who ought not to exist in order for things to be right, and yet, since he very much does exist, makes him the very cause of things being wrong. Just what would be better in architecture without him, she does not say, while taking her own sweet time to accuse him of being himself. Helpless to be other, as she claims, and yet helping nobody the way he is, he must, after all, be somebody to deserve so much blame: Blame for being the sorcerer’s apprentice (that fellow who cannot stop the bucket of architecture from overflowing), the flawed mastermind of American architecture who consorts with the likes (so unlike anybody else) of Libeskind, and for twisting the minds of our young, pulling the wool over our eyes, and getting us hooked on a substance we call, for lack of a better word, architecture. In the end, one will wonder whether so much evil can be all bad. If architecture is in such dire straits because of him, how much worse off could it be without an occasional lesson of PE? □



# Made in Switzerland

Formal concerns take a back seat to experiential qualities in the work of four Swiss firms. *by Kevin Alter*

A review of recent buildings in the German-speaking regions of Switzerland reveals a remarkable body of spatially dynamic, construction-driven work by two generations of architects. Although it would be incorrect to categorize these architects as belonging to a particular school of thought, they do share a mutual regard for simplicity, mechanical pragmatics, and meticulous craftsmanship. Formal innovation and complexity are secondary concerns.

While a number of firms are producing significant projects, the work of Burkhalter & Sumi, Gigon & Guyer, Herzog & de Meuron, and Atelier Peter Zumthor is the most accomplished. Despite significant differences among these firms, they have much in common. In virtually all of their projects one finds straightforward configurations of primarily orthogonal geometries in both plan and section, with a minimal articulation of surface and detail. In terms of form, it's not flashy stuff. But formal modesty should not be confused with muteness. Their buildings speak powerfully and in a provocative manner, and in consequence represent a significant contribution to contemporary architecture.

## Intrinsically Architectural Concerns

In assessing the significance of this work, it is important to begin with the understanding that architecture cannot be separated from its material reality. In *Architectonic Space*, Dutch monk and architecture writer Dom H. Van der Laan conceives of architecture as fundamentally bound to concerns of materiality and use. He writes:

*For the foot the surface of the sandal represents a little piece of soft ground, whereas the underside acts as a toughened foot in relation to the ground. In the same way the inside of the house is for man a piece of habitable environment, while on the outside, where it confronts nature, it stands for a fortified human existence.*

Buildings in the German-speaking regions of Switzerland arise from a cultural and historical context that accords well with this conception. The profession has maintained a dialogue with the traditions of the master-builder, and, as a consequence, what has emerged are buildings derived from an investigation of the components of the architectural artifact (materials, construction, architectonic elements, and site).

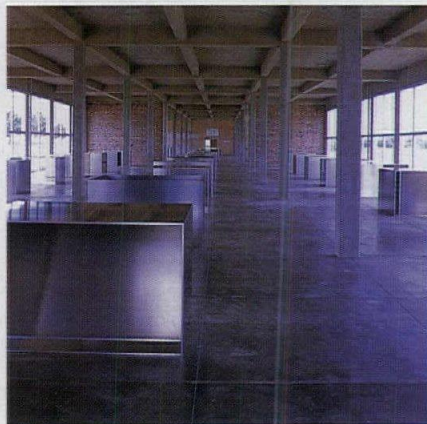
A focus on material concerns is evident in the cladding of the Kirchner Museum in Davos, Switzerland, for example, by Annette Gigon and Mike Guyer, based in Zurich and the youngest architects in this collection. The museum's façades, composed almost entirely of glass, suggest the possibility of seeing in. This possibility is immediately denied, however, because the glass is translucent and insulation is placed directly behind the panes. The glass reveals nothing but itself. This paradoxical presence of glass provokes immediate speculation and curiosity when one encounters the building.<sup>1</sup>

An emphasis on architectonic elements is found in the Forest Works Depot in Turbenthal designed by Marianne Burkhalter and Christian Sumi, who also practice in Zurich. The building is composed of parts that are independently coherent. As in the Kirchner Museum, the composition of independent elements does not converge on a single meaning. Its columns, roughly milled tree trunks propped up off the ground and held away from the ceiling, appear to be isolated. The unusual thinness of the roof, made possible by the use of prefabricated wooden box-beams and a specially designed truss (only the bottom chord is exposed below the ceiling), makes it appear as a surreal red plane hovering above the columns. The difference and the connection between the depot's two enclosed volumes are expressed in their sheathing: horizontal or vertical wood boards, set wide apart, and either left natural or painted red.

## An Architecture to be Experienced

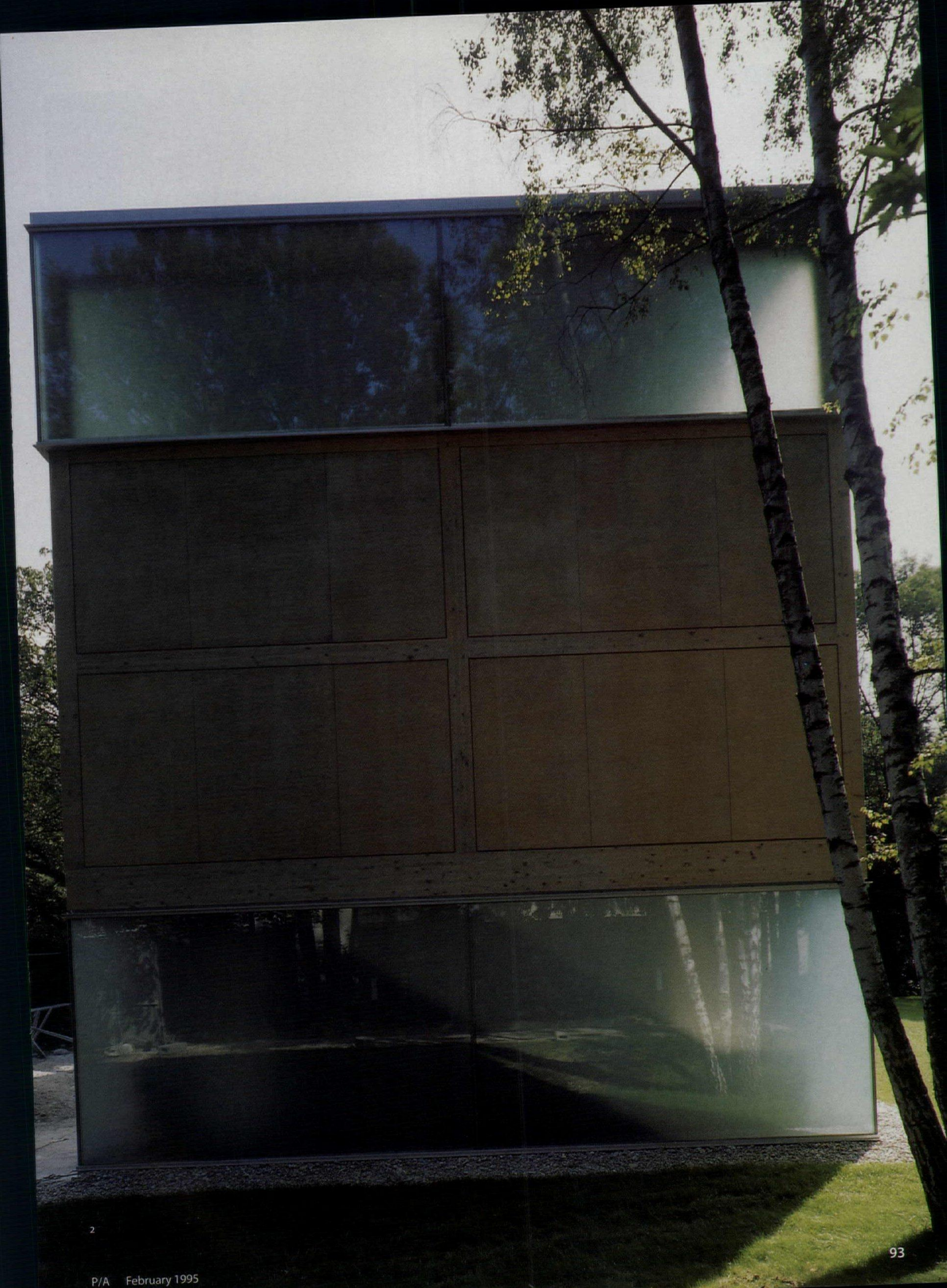
Contemporary Swiss architecture has a distinguished history. The work of architects like Mario Botta, Aurelio Galfetti, or Livio Vacchini, located mostly in the Italian-speaking Ticino region, is commonly considered significant because of its iconography. Meaning is typically attributed to Botta's buildings, for example, because they contain formal elements that refer to an established system of value: geometrical forms and proportions, it is thought, possess merit simply because the shapes themselves have meaning. By this criterion, a *(continued on page 96)*

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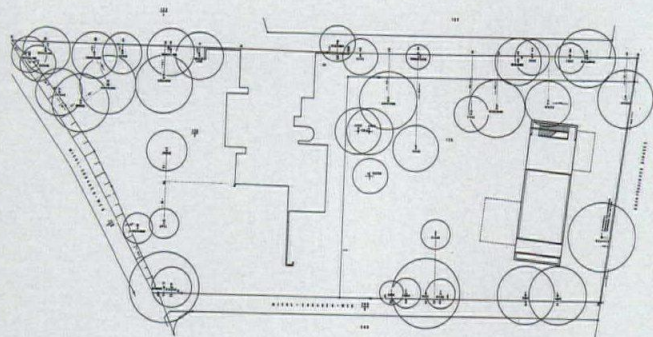
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*Untitled (1)*, a 1984 installation by the late Donald Judd at the Chinati Foundation in Marfa, Texas, includes 100 aluminum boxes set in three rows. The work of architects practicing in German-speaking regions of Switzerland, such as the Goetz Collection (2) by Herzog & de Meuron, has been compared to that of architecturally driven artists like Judd and Richard Serra.



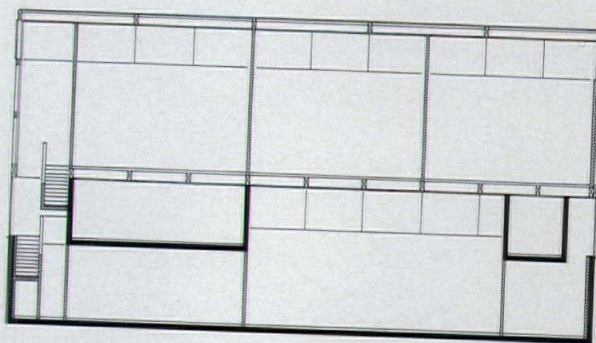




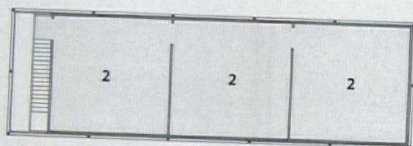
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3



SITE PLAN



LONGITUDINAL SECTION



UPPER EXHIBITION FLOOR



GARDEN LEVEL PLAN

1 ENTRANCE "TUBES"  
2 GALLERY

### HERZOG & de MEURON

The Goetz Collection (3), a private contemporary art gallery in Munich, Germany, designed by Herzog & de Meuron with Mario Meier, stands in a garden of birch trees and conifers between the owner's house and the street; the siting took into consideration the possibility of opening the gallery to the public. The gallery's reinforced-concrete base is half-buried so that only its upper glazed perimeter is visible. A wooden box of the same dimension

appears to hover above the base; above the box rises a matte glass clerestory that admits diffuse daylight into the exhibition spaces (4). Two reinforced concrete tubes are set laterally between the lower and upper galleries, supporting the wooden box. Above the box, columns appear as shadows behind the glazing. The architects' use of materials is clearly articulated in the stair to the upper gallery (5).





4

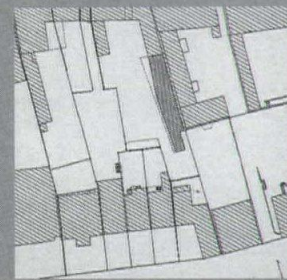


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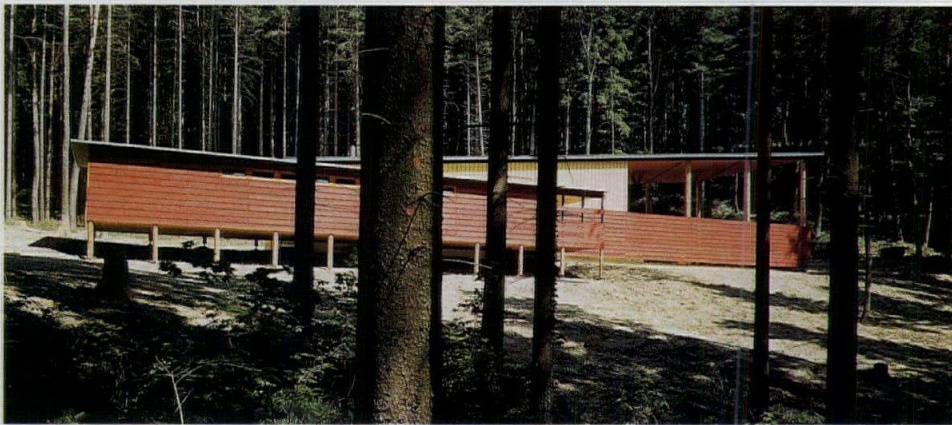
SITE PLAN N 100/30m

A competition-winning design, Herzog & de Meuron's three-story apartment building at 11 Hebelstrasse (6) in Basel, Switzerland, is set within a 13th-Century residential courtyard. Designed in collaboration with Mario Meier and completed in 1988, its footprint, floor plans, and materials were all driven by site conditions. Although this building has a basement, it appears to rest on concrete grade beams. Structurally, the grade beams do little more than support the balcony, yet they make the whole edifice look almost as if it had been formed at some other location, and dragged like a sled to the courtyard. The apartments are oriented to the courtyard, a result of the linear organization of the building along an existing party wall to the east. To ensure privacy, the first and the second floors are clad with narrow oak panels; equally narrow glass doors are the only glazing. In contrast, the third floor, which rises above the precinct of the courtyard, is rendered in steel and glass. Turned oak columns support the west-facing porches on the first two floors, mediating between the public space of the courtyard and the private space of the wood-clad apartments. On the third floor, a deck is added to the south end, again taking advantage of its perch above the confines of the courtyard.





7



8

Photos: these two pages: Heinrich Hellenstein

**BURKHALTER & SUMI**

The Forest Works Depot (7, 8) in Turbenthal, a region outside of Zurich, is the first built version of a prototype administration and field service structure developed by Burkhalter & Sumi in 1991. The prototype is essentially a kit of building elements – an administration block, an enclosed garage, and an open shed (10) – that can be assembled according to specific site conditions and programmatic requirements. In Turbenthal, the elements are arranged in two abutting blocks laid parallel to the face of the forest slope. One block is built of concrete, one is wood; both are clad with wood sheathing. The blocks (9) are differentiated through their color (one is left natural, the other painted red) and through the alignment of the wood boards (one horizontal, the other vertical). The sheathing changes as it wraps around the building, successively reinforcing or undermining the identity of the individual elements.

building is evaluated independently of how, and even whether, it is used, and therefore independently of what it feels like to occupy the structure. In contrast, the work shown here is grounded not in representational or referential attributes but in the experience of those using it.

This architectural approach is perhaps best understood by comparing it to the work of architecturally driven artists like Richard Serra. His sculpture is typically created on a large scale, and is consistently austere in design, resulting in a sometimes overpowering presence. Serra's controversial *Tilted Arc* (installed 1981, removed 1989) manifested this kind of puissant simplicity: it was a Corten steel plane 120-feet long in the shape of a simple arc. The uniform, uninterrupted surface of the piece shifted the viewer's attention away from small, localized details (which are virtually nonexistent). Consequently, the sculpture's material presence was overwhelming.

The work of the Swiss architects affects its inhabitants in many of the same ways that Serra's art affects those who experience it. Consider, for example, the Goetz Gallery, a private gallery housing contemporary art in Munich, Germany, by Jacques Herzog and Pierre de Meuron (based in Basel and the most widely acclaimed of the group). Situated in a garden of birch trees, it is a simple rectangular solid, consisting of a wooden box banded above and below by matte glazing. The box comprises a framework of posts and beams that continues unvaryingly around the building, infilled with birch plywood panels set in the same plane with the grid. The glass is butt-glazed, and the roof and joints between the glass and box are barely vis-

ible. Depending on the time of day, the weather conditions, and the perspective of the visitor, the gallery's character changes dramatically. Like a Serra sculpture, the Goetz Gallery stands alone, and presents itself as an autonomous, unitary object.

**Contextual and Programmatic Concerns**

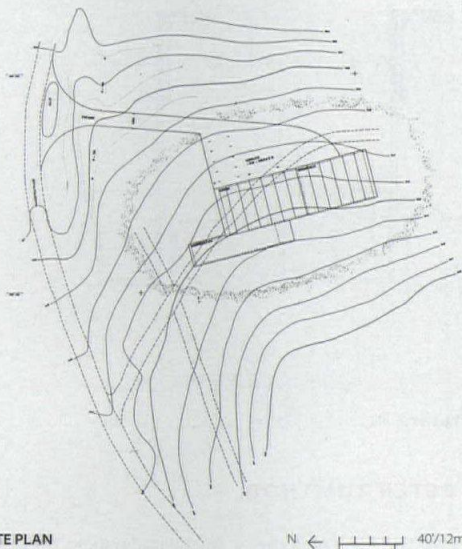
Considerations of site and program play important roles in the architects' work, but are reflected in the material, as opposed to the formal, aspects of the projects. An interesting example, also by Herzog & de Meuron, is the apartment building at 11 Hebelstrasse in Basel, located within a 13th-Century residential courtyard. In the Hebelstrasse building essentially the same form and floor plan persist throughout, but while the bottom two floors are configured in bearing walls, oak siding, and shutters, the top floor is rendered in glass and steel. This variation is deliberate: the first two floors rest squarely within the precinct of the courtyard, where privacy is paramount; the third floor rises above the perimeter wall, and the glass provides the occupants with a comparatively expansive view.

Programmatic considerations are also reflected in the treatment of material and in construction techniques. The tiny Sogn Benedetg chapel in Sumvitg by Peter Zumthor, at 51 the elder statesman of the group, is teardrop-shaped in plan with a fairly straightforward massing and section. As a consequence of its innovative construction, however, the chapel is a peculiar and extraordinary place. A custom-designed, inconspicuous sheer bolt allows the structural skeleton of the building to be pulled in from the silver-painted ply- (continued on page 100)





9

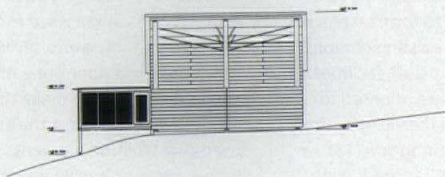


SITE PLAN

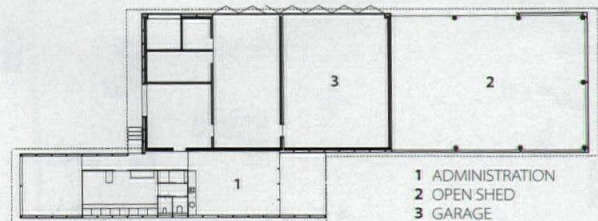
N ← 40/12m



10



SOUTH ELEVATION

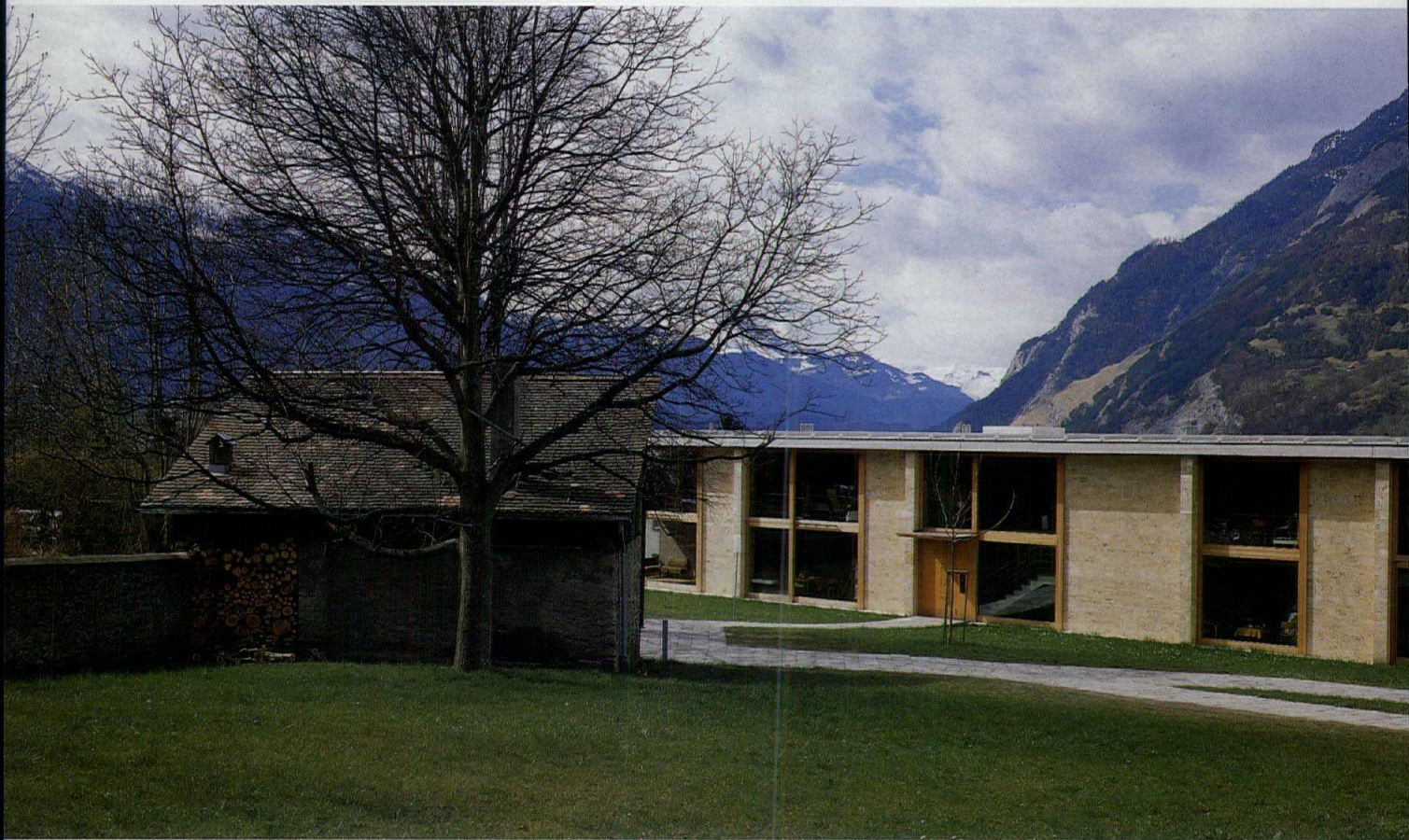


FLOOR PLAN

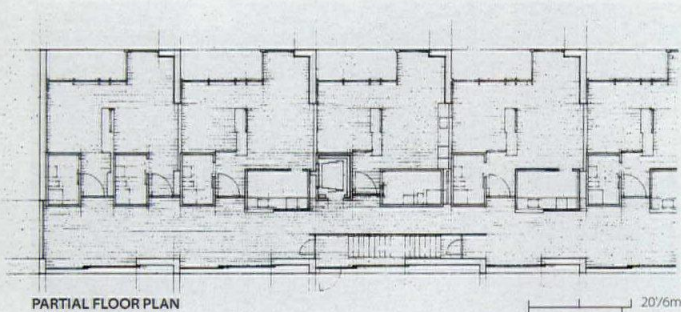
- 1 ADMINISTRATION
- 2 OPEN SHED
- 3 GARAGE

N ← 20/6m

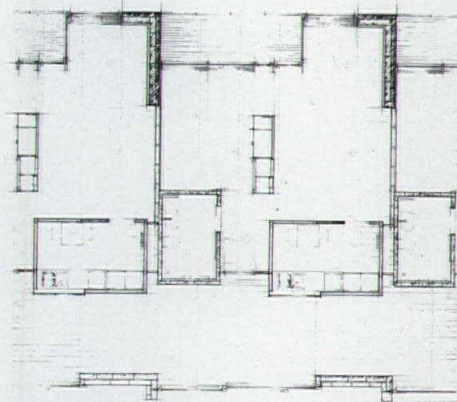




11

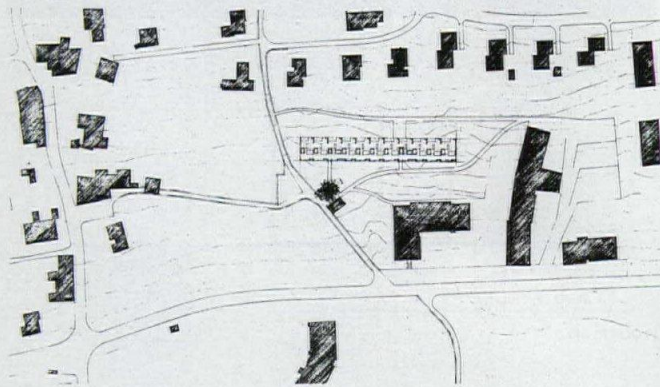


PARTIAL FLOOR PLAN



TYPICAL APARTMENT PLAN

Heinrich Hellenstein



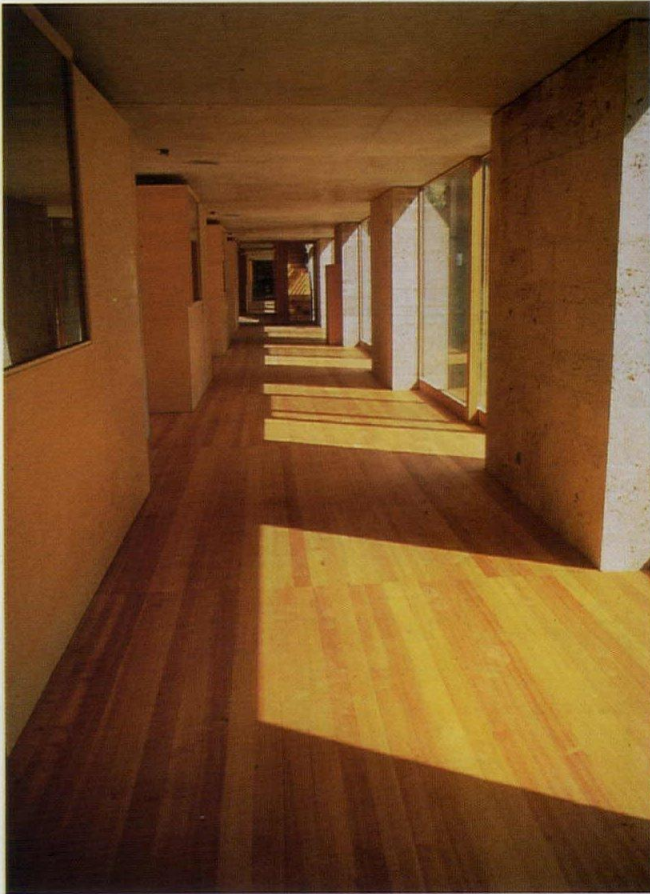
SITE PLAN

**ATELIER PETER ZUMTHOR**

At the foot of the Engadine Alps, the Elderly Housing building (11) in suburban Chur, Switzerland, by Peter Zumthor is sited to form an entry courtyard for an existing complex of housing and nursing facilities. The apartments are oriented to provide views up the valley to the west, and the evening sun (13). An existing stone wall, a shed, and a lime tree, were incorporated into the new courtyard to evoke an informal rural environment. Zumthor's palette of materials included exposed concrete, tufa stone, and

larchwood panels. The building has 21 apartments for elderly people who are able to live independently, a guest room, and a ward room on two levels. Storage and services are housed in a floor beneath the residential levels. To make the residents feel at home, the architect used construction elements found in the surrounding villages: timber flooring that sounds hollow when walked on; private verandas; and kitchen windows that look onto the glazed main corridor (12).





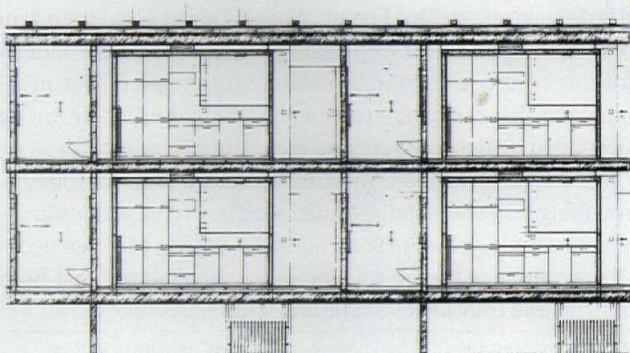
Kevin Alter

12



Heinrich Helfenstein

13

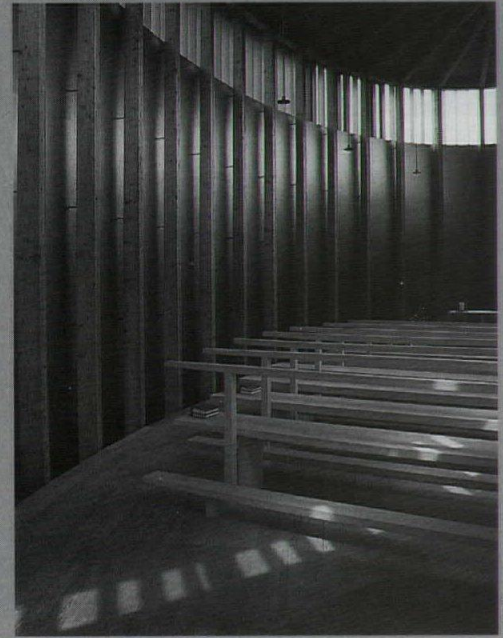


CROSS SECTION



Heinrich Helfenstein

14



Hans Danuser

15

Winner of a competition held to replace a chapel swept away in an avalanche, Peter Zumthor's Chapel of Sogn Benedetg (14), in a small village high in the Alps, was constructed by its 20-person congregation with the help of local craftsmen. On a site chosen by the architect, the tiny one-room chapel appears towerlike from below. A slatted door with a handmade lock and door handle gives way to a teardrop-shaped, clerestory-lighted room (15), where every detail is meticulously crafted. Inside, the building's exposed skeleton is held away from the silver-painted plywood walls by a custom-designed sheer bolt. Light from the clerestory illuminates the perimeter of the room from behind the many columns. Set within the inner edge of the columns and leaving a gap between it and the walls, the floor appears to hover in space.





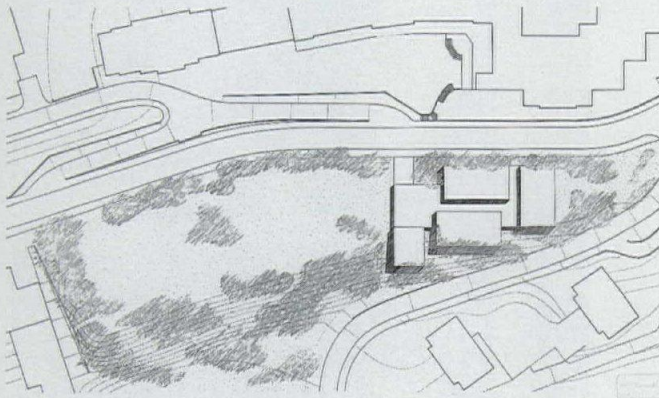
Photos these two pages: Heinrich Helfferstein

16

## GIGON &amp; GUYER

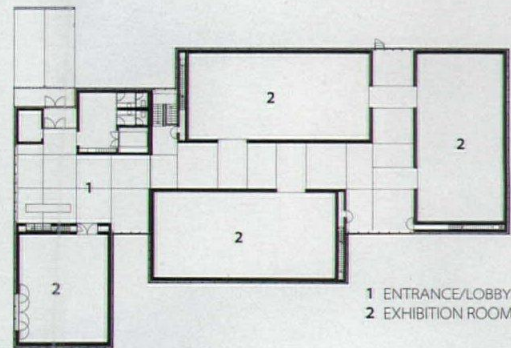
Clad in glass, the Kirchner Museum (16, 17), a competition-winning design by Gigon & Guyer on a prominent site in Davos, Switzerland, does not adhere to popular notions of building in the mountains and, as a result, caused a public uproar on its completion in 1992. From a distance, it looks like a solid crystal shining in the alpine light (even the roofs glitter, as they are covered with glass fragments). The glass cladding is mostly translucent with

rigid insulation directly behind it, denying the possibility of seeing inside. The volumes of the four galleries define a concourse and circulation space, where the walls, floors, and ceiling are exposed concrete. Glazing between the volumes is transparent, offering views of the landscape. The galleries (18) have oiled oak parquet floors, white walls, and luminous glass ceilings evenly lighted by a continuous clerestory.



SITE PLAN

N 100/30m



FLOOR PLAN

1 ENTRANCE/LOBBY  
2 EXHIBITION ROOM

40/12m

wood walls. Light from the clerestory illuminates the perimeter of the room from behind its many columns. Consequently, the building's structure is seen in silhouette, making it seem almost intangible and giving the room a transcendental feeling.

## Less is More

The architects' self-imposed restraint in formal manipulation and the rigor with which they pursue each building's development result in an experiential dynamism. Zumthor's Elderly Housing in Chur, though seemingly ordinary, is in reality spatially dynamic. The building has three clearly articulated elements: supporting masonry piers; solid masonry blocks housing the bathrooms; and nonsupporting, birch-clad wooden boxes containing the kitchen and storage. Only the main elements are seen in the framework of the building; they appear unadulterated because the services of the building are hidden in the interstices. What is extraordinary about the apartments, however, is the tremendous shift in perception of the interior space, depending on the position of the interior doors. One of these functions both as a bedroom and a closet door. When the door is shut on the bedroom, the feeling is that of a collection of distinct, internalized rooms laid out next to each other – like a room in a 19th-Century building. But when the door is shut flush into the cupboard, the rooms appear continuous with each other, fitting into a 20th-Century conception of continuous and overlapping space.

To appreciate fully the significance of these buildings, another comparison to sculpture is helpful. There is an obvious

formal resemblance between Donald Judd's well-known boxes and some of the buildings discussed here – the Goetz Gallery, for example. But there is a deeper parallel. Judd's sculptures have the effect of shifting the viewer's attention to the surrounding landscape; at his installations at the Chinati Foundation in Marfa, Texas, one is left pondering the enormity of the sky, the horizon, the sun, and the ground. The experiences produced by some of these buildings are similar. They often frame the landscape in a new light.

## Beguiling Objects

In all of this work the abstract, pure forms required much ingenuity and rigor in construction. Although hidden, the apparatus used to support *Tilted Arc*, for example, came as the result of no mean feat of engineering. The Kirchner Museum's paradoxical glass, the Forest Works Depot's independent parts, the Goetz Gallery's puzzling presence, and the Elderly Housing's oddly alternating spatial conditions all reflect an architecture that remains intentionally unresolved, its meaning interpreted by the occupant and the visitor.

The buildings by these Swiss architects are beguiling objects, provoking reflection and speculation. They represent a significant part of the stream of contemporary architecture that needs to be experienced to be understood – architecture that both confirms and transforms its cultural and social context. □

<sup>1</sup> Cf. Martin Steinman, "The Presence of Things" in *Construction Intention Detail*, ed. Kevin Alter and Mark Gilbert (Artemis, 1994), pp.11–12.





17



18



# The Architect as FM Contractor

Corporate America's outsourcing of facilities management functions is creating an enormous opportunity for architects to offer clients a host of computer-based FM services.

by Eric Teicholz

## Abstract

Companies contracting out for facilities management services represent a new market for expanded architectural services. This article discusses the relative costs of different facilities-management activities, use of computers for space management, and how to sell these services to a client.

One of the results of the recent recession for corporate America has been the loss of millions of white-collar jobs. Organizations today are reducing the number of full-time staff – no matter what the cost, the loss of employee expertise, or the increased management load. The primary targets of cutbacks are overhead staff – particularly facility management departments (facility operations typically account for 8 to 12 percent of corporate budgets) and corporate technology groups (accounting for another 2 to 4 percent of budgets).

Organizations usually want to “outsource” the entire facility management function, or “outtask” specific FM services such as maintenance/operations, space planning, security, and cleaning. Corporate management is turning to technology to replace the knowledge base that is lost when employees are let go.

Companies interested in computer-aided facility management (CAFM) demand that it handle corporate “charge backs.” Management wants to know what assets are consumed by the various business units of the company in order to charge back these assets (such as rent, utility costs, furniture, and equipment) to the groups that consume them. In large organizations, with hundreds of cost centers, only computer technology can handle tracking and charge-back functions.

Corporations, for better or for worse, will continue to outsource FM tasks in the foreseeable future, and here is a new business opportunity for architects. CAFM is a sophisticated and complex function and FM departments in general do not have the expertise or time to create the required databases (up to 70 percent of the life cycle costs of CAFM) and the ongoing management required for effective CAFM implementation and churn (space turnover). It has been estimated that at least 50 percent of the integrated CAFM systems now sold end up as “shelfware” – software not used at all or dramatically under-utilized in

terms of its potential. Architects who develop the expertise to offer CAFM services can establish and maintain an ongoing business relationship with corporate clients.

## Current Use of Technology

I was recently involved in conducting a CAFM survey that indicated, among other things, the tasks performed by FM staff and how they were using technology. The graph on page 101 ranks, in terms of importance, the various tasks performed. At one extreme, various maintenance and operations functions (such as maintenance, facility accounting, construction project management) were considered most important. This is not surprising since these functions usually account for more than 50 percent of the life-cycle costs of a building (initial design and construction accounting for only 25 percent). At the other extreme, fixed asset management (building acquisition and disposal) is often not even performed by the FM staff but by the corporate real estate arm of the organization.

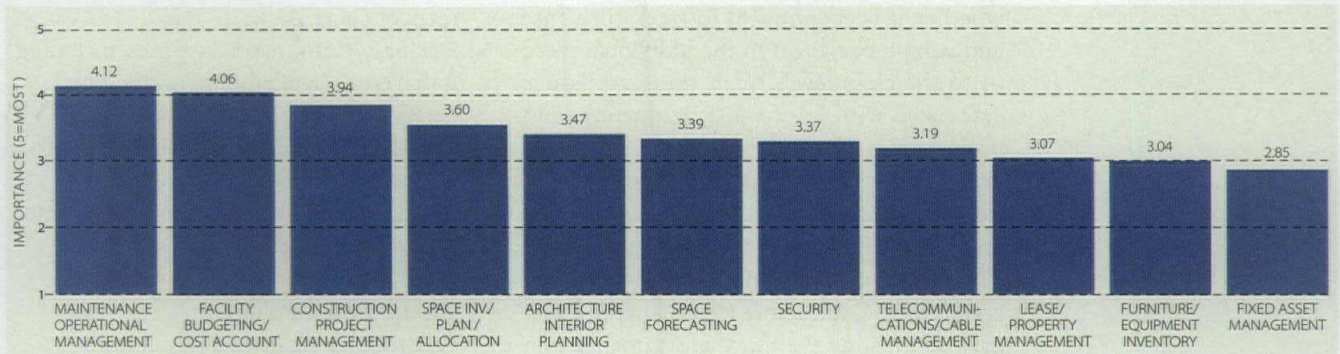
Interestingly, when we examined the use of technology by these organizations, we found that most CAFM is used for functions associated with the middle of the bar chart, for applications associated with space inventory, planning, architectural and interior planning, and space forecasting. This is because of the widespread use of CAD by close to 70 percent of the organizations polled in the survey.

Most organizations are technically literate enough to make use of CAD and database technology. But with dwindling FM staffs, the need is growing for companies to employ computers not so much for maintenance of as-built drawings, but to create and maintain

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*Eric Teicholz is president of Graphic Systems, Inc., a technology consulting company specializing in CAD and CAFM technology and management, based in Cambridge, Massachusetts.*





RANKING OF FACILITIES MANAGEMENT TASKS

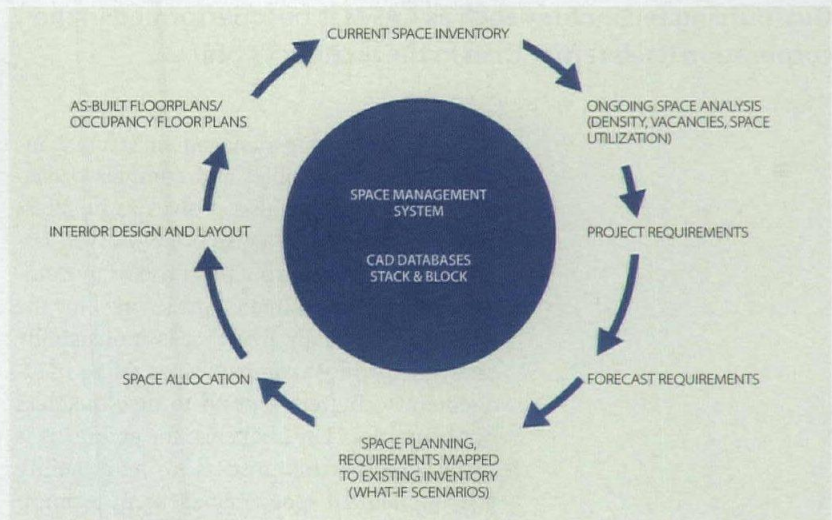
graphic and nongraphic databases to track assets and personnel for charge-back purposes. The challenge for the architect is to understand this process, marry the technology and database needs of the client with those of the design consulting firm, and to make a solid financial case for the client to outsource to the architect various space management tasks.

### Space Management

The largest cost savings with CAFM automation are in space management, the software for which can also be used for asset tracking and space and asset charge back.

There are many functions the architect can perform relative to this process. The process itself can be schematically illustrated by the diagram on this page. The client starts with an electronic database of floor plans along with occupant and organizational information located in an associated database. From this, density and vacancy analyses and space utilization drawings can be developed. In some cases, moves can be forecast and scheduled, but in general little notice is given to the facility staff about when moves and associated space churn must occur. As a result, the space and assets required for a move must be compared to the existing space inventory (which in turn must be kept current and accurate) and project requirements mapped to available space (generating schematic stacking and block plans). Based on this available space or space made available by reshuffling staff (which can be expensive if new furniture or construction is required), new floor plans are generated and appropriate databases updated.

Consulting architects must make many decisions related to the space management process. For example, they must first decide what information should be tracked by the system and at what scale (e.g., by room or by organizational unit). Does the client need to track furniture, equipment, personnel, orga-



AUTOMATION/SPACE MANAGEMENT PROCESS DIAGRAM

nizational structure, adjacency information, occupancy information, space standards associated with staff levels, or all of the above? Each piece of data tracked must be linked in the database to the graphic record, which in turn has a significant effect on the cost of creating and maintaining the relevant databases.

The consulting architect must also set up procedures for maintaining the graphic and nongraphic databases so that information is at all times current and accurate. This can become logistically complex if the client has more than one building and if other staff are involved in updating drawings and nongraphic databases to represent as-is occupancy conditions.

Procedures must be established for generating requirements associated with space, adjacencies, furniture, and equipment. Space standards must be created and updated to represent desired working procedures. If furniture is tracked, there is the possibility of linking the graphic and nongraphic data to third-party databases that provide a wealth of electronic information on various furniture manufacturers. It must be determined



whether it is economical to track furniture and equipment down to the individual piece or to the class level. Next, there are issues associated with forecasting, budgeting, and project management. Business units of the organization must be polled to determine future plans and their space implications. Costs associated with construction and moves must be tied to capital budgets and to charge-back accounting. Contractors (internal and external) performing the move and construction must be managed.

### **Outsourcing technology such as CAFM is best performed in the corporation itself rather than in the architect's office.**

In general, space management is a task involving many variables and complex procedures. The process also evolves as business procedures and strategies do. However, automating and managing this process by computer results in dramatic cost savings for the organization in an area that is increasingly strategic for most companies, enabling management to better respond to new business opportunities. The challenge for architects is to understand this process, to help facility staff implement space management technology, and to provide professional design services to ensure the best possible use of space.

#### **Selling these Services to Your Client**

The marketing of such services to your client involves not only professional design skills, but an understanding of your client's space-management needs and of how technology will affect their "bottom line." Understanding the process, the data requirements, the required technology, and the appropriate standards is usually more difficult than justifying the cost of the technology.

The cost benefits model for CAFM services usually shows a return on investment in one to three years, depending on the amount of data being tracked. Cost categories include:

- Acquisition (capital-related), including hardware and maintenance (usually a large PC such a Pentium or a workstation will be required for medium and large facilities);
- Acquisition (noncapital-related), including CAFM and space-management software (an integrated CAFM system with space management modules costs about \$10,000, including CAD);
- Recurring Expenses, including continuing and new training, ongoing space manage-

ment or churn costs;

- Database/Conversion Expenses, including initial creation of graphic/nongraphic databases and linking of data to CAD;
- One-Time Expenses, which are any start-up and nonrecurring expenses such as initial training, customization, set-up, etc.

The benefits include:

- Direct Savings, such as internal labor affected by technology;
- Contract Savings, which result from decreased use of outside contractors (drafting, cleaning, asset management, design, purchasing consultants, etc.);
- Indirect Savings through better use of space, reduction of space turnover, less construction, better scheduling of personnel, and cost reduction of moves.

#### **The Bottom Line**

Outsourcing technology such as CAFM is best performed in the corporation itself rather than in the architect's office. Thus designers must be prepared to provide staff to work at the client's facility. To successfully provide outsourcing services, the consultant architect must understand the business, organizational, and technology needs of that organization and be prepared to make a business argument for outsourcing a particular task. When it comes to a task such as space management (which typically accounts for 5 percent of a company's operating budget) the procedures and issues are complex, but the financial benefits to the client (and, subsequently, to the architect) can be enormous.

#### **Further Information**

Sample dedicated CAFM software vendors:

- Archibus, Inc., producer of Archibus/FM, 177 Milk Street, Boston, MA 02109.
- CADworks, Inc., producer of Drawbase, 222 Third Street, Cambridge, MA.
- FM:Systems, producer of FM:Space-Management, 5922 Six Forks Road, Suite B, Raleigh, NC 27609.
- ITS, producer of Span, 1250 Easton Road, Suite 250, Horsham, PA 19044.
- Softdesk, producer of AutoFM, 7 Liberty Hill Road, Henniker, NH 03242.

Sample automatic stacking and blocking space management vendors:

- CAP/Sweet's Electronic Publishing, producer of SpaceTek, 99 Monroe Ave., Suite 400, Grand Rapids, MI 49503.
- CAFM Works, Inc., producer of Stack & Block, 1815 Massachusetts Ave., Cambridge, MA 02140. □



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## Government Hoops *(continued from page 60)*

whether or not the CBD notice stipulates that; he urges attention to whether the funding is secure or the site has been acquired (NIMBY struggles over sites substantially delay some projects); he points out that the agency is likely to have records of past performance by prospective engineers and consultants, which can be checked to ensure they won't be counted as liabilities. In the negotiation phase, it is crucial to know which specifics the agency representative is free to negotiate.

One of the non-negotiable provisions of contracts under the Brooks Act is that fees cannot exceed 6 percent (including

### **GSA has been cited as a target for elimination by those who want to reduce the federal bureaucracy; it would be difficult, however, to replace their expertise in maintaining buildings and administering projects.**

fees passed on to consultants) for any job. But aspects of the job that involve exceptional design or consultant effort can generate additional fees, as can routine aspects, such as interior design, that go beyond basic building design services. There has been some organized objection to the 6 percent fee limit; even the Association of General Contractors (AGC) recently argued that the fee cap can undermine the quality of federal projects.

For the 22 years the Brooks Act has been law, however, AIA has concentrated on defending it *in toto*, to reduce the threat of fee-based procurement of services. Occasional agitation in Congress to mandate design competitions for certain work, as some foreign governments do, has been opposed by AIA. Requiring competitions is probably a bad idea for this country, but AIA's zeal in defending Brooks has affected its openness to design competitions generally; in recent decades, the Institute has supported only the most modest efforts to inform members or prospective sponsors about how competitions can be run fairly. Binstock reports that the Federal Construction Council, which includes representatives from AIA and other industry groups, is studying ways to streamline 254/255 procedures while maintaining the integrity of the Brooks Act. In his opinion, "QBS is alive and well." There may be threats to Brooks in the incoming Congress, he admits, but architects, engineers, and supporters on Capitol hill will in all likelihood defeat them.

There is the possibility, of course, that the new Congress will bring about a sharp reduction in federal building. GSA has been cited as a target for elimination by those who want to reduce the federal bureaucracy; it would be difficult to replace their expertise in maintaining buildings and administering projects, however. Design-be-damned lease-purchase might become the norm.

#### **Design-Build**

According to Stuart Binstock, AIA acknowledges that design-build may be an appropriate alternative delivery system

for some buildings, but there need to be guidelines on when and how to apply it. It is used occasionally at the federal level, and rarely at the local level, but several states, he observes, have been adopting design-build "without doing their homework," with the result that design-build competitors have been spending up to \$250,000 per team for jobs they fail to land.

Seeking to improve design-build procedures, rather than just fight them, AIA is now collaborating with the Associated General Contractors of America (AGC) on design-build guidelines for the whole "public sector." It recommends that such procedures be used only when funding and site selection are fully assured. It also urges a two-phased process that pre-qualifies a limited number of teams before design begins. The relative importance of price and other considerations should be made clear, ultimate users should take part in the process, including outside experts is urged, and there should be a "fair stipend" for participating teams. Finally, there should be candid feedback to all contenders about their proposals. Public sector acceptance of even half the guidelines would constitute a great improvement over the typically exploitative design-build processes now used by some agencies.

#### **Future Hoops**

Notwithstanding current proposals to shrink government and switch to "privatization," the amount of construction by governments at federal, state, and local levels is bound to remain huge. And it will remain imperative that selection of design professionals be fair and above-board. Just as we are going through a period of doubt about most of our public institutions, we are passing through a period of frustration with established Brooks Act selection procedures. Practicing architects as a group are distrustful of a system that entails unjustified paperwork and favors firms adept at filing it; and even though they support Brooks procedures in principle, architects don't want to appear obstructive in relation to alternative selection procedures. Hence AIA's imminent copublication of guidelines for design-build programs.

On the other side of the table are the numerous government architects who take part in architect selection on behalf of their agencies. They are now under great pressure to streamline their offices and to deliver maximum value for the taxpayers' money. Little wonder that some of them are enthusiastic about design-build, with its promise of predictable design and cost, despite costs and risks it imposes on architects and engineers going after this work.

The good news is that some agency staffers are seeing design quality as the best value for the taxpayers' dollar. Architects who get jobs under their more enlightened procedures need to put their hearts into serving the public that is going to pay the bill. After so many decades when too few public buildings stood for quality and pride, the architects doing these buildings must consider their responsibilities as sacred; professional organizations and the professional press must hold them to a high standard and celebrate their successes. It would be possible, after all, for quality in public buildings to become the rule rather than the exception. □





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(continued from page 12) Board derives a symbiosis which is invaluable in helping the Board members work closely.

Since I presently don't have a spouse, there is no hidden agenda for me to state this to you other than true, unbiased relating of facts, something that Michael Crosbie should learn how to do.

I am sure that you may receive many of these letters, but I would appreciate your consideration in putting some of these facts into one of your next issues. Although the Institute has come a long way over the past year, it still has a long way to go. I don't believe there has ever been a Board more organized, sensitive, and more willing and ready to make all the changes required to achieve a successful and cohesive "One AIA." I think 1994 is a good example of conscious Board dedication to good membership representation.

I have no problem in Michael Crosbie writing articles and shaking up National when it needs to be shaken, but I do have a great problem with the biased opinions and use of ancient information not current to the 1995 AIA.

Lastly, when I read 99 percent of the articles in P/A, I have no cause but to think the information is true since I have no firsthand knowledge of many articles. However, since having firsthand knowledge of this article, I can only assume the rest of the articles are written in the same light, and P/A has just lost a lot of credibility in my mind. Maybe P/A needs to do the same introspection as it is requiring AIA National to do.

*John R. Sorrenti, AIA  
The American Institute of Architects*

Michael J. Crosbie responds: I find Mr. Sorrenti's picture of the AIA staff as one big happy family inaccurate, in light of my conversations with staff members, and his caricature of them as "children" condescending. I interviewed no former AIA employees for this article. I have no bias against advertising, but it is important to report the fact that some AIA staff and members are skeptical about an advertising campaign, and that there are other ways to raise public awareness of the profession. A difference of opinion is not a factual error. I did not "search long and hard" to find a board member critical of compensated spouse travel. Laurie Maurer had offered these observations to me unsolicited, and for the December article I called to verify her position. As a former board member, she has no special interest in protecting a perk for herself or her peers. The AIA should certainly not have to depend on the spouse travel perk to attract board members.

## AIA Continued

There are two things I am passionate about. One is the advertising business, which I've served for 30 years as a copywriter, creative director, and, most recently, chairman of one of this country's leading ad agencies. The other is the American Institute of Architects, where I serve on the board as a public director. The misstatements in your December article, "AIA Revisited," aroused both those passions.

1. I have talked with hundreds of AIA members and CACE staff over the past year, and know that architects have been asking for an advertising campaign. I don't think that we will package architects like a soft drink as the writer suggests. We aim to raise awareness of the unique and important contributions an architect brings to any project, large or small.

2. The writer mentions that the advertising agency did some "research." Putting quotation marks a round a word is an old trick meant to cast doubt. It's like: I saw you last night going into that bar with your "wife." The Martin Agency, through an independent consultant, did indeed conduct focus groups that gave us many helpful insights. In addition, in 1993 the highly regarded Roper research company conducted, for the AIA, a quantitative study of how clients and potential clients view architects.

3. The article states that the new ads will use "fuzzy, feel-good chatter about 'design excellence'" (uh-oh, here come those quotation marks again!). I don't know how the writer felt he could describe the copy approach, since he could not have seen it. I did not read final copy for the first ad until December 30, the same day your December issue reached my desk. In any event, that comment demeans The Martin Agency, known for its crisp and persuasive prose.

The AIA and its board welcome candid, helpful criticism. In the future perhaps your publication will be able to give us just that.

*Jane Maas  
Chairman Emeritus, Earle Palmer Brown  
New York*

Michael J. Crosbie responds: I never said that the ads will use "fuzzy, feel-good chatter," but that ads employing this kind of verbiage won't be successful. From what I have learned about the ad mock-ups, they're not impressive, but that's another article....

## ... or Equal

My apologies for not commending you on your earlier exposé of the AIA hierarchy, but you really struck a chord with me on your December 1994 editorial concerning the "or equal" clause. I couldn't agree more! (You are a great catalyst for thought and can really stir it up.)

For years, as a practicing architect and roofing consultant, I have been dumbfounded by the fact that architects are hired for their advice and professionalism, yet they lie down when some slick-talking representative of either a materials manufacturer or a roof-contracting company brainwashes them into believing that something other than what is specified is equal. And these are just the architects who are aware of an attempted change prior to bid time. Why they even consider an alternative system after the bid is in is unbelievable! It usually means two things. One is that they did not properly specify that any and all alternate systems shall have to have written approval (by the architect) before the bid date. And, second, that they don't have the chutzpa to stand up for the owner's concerns.

Unfortunately, there are a few architects who really do not know how to evaluate one product with another. Unless the systems under scrutiny are made in the same plant by the same people using the same raw materials and manufacturing specifications, how can they be "equals"? If an owner must have an equal clause, the specifier should simply specify the one system that he or she has done research on and get a letter of release from the owner if another "equal" system is used. A client hires me for my advice. They do not have to take it, but they do have to pay me for it!


Architects need to develop a relationship with a product line or system by getting to know more than the latest rep who shows up at the office offering a free lunch. There are too many side-effects to be had from taking out one part of an integral system such as a building envelope and going with an untested part. Manufacturers will, as you say, continue to distance themselves from talking to the specifying community if laziness and ignorance are being inserted to save time and money. That is most likely the result of an architect's not selling the owner on quality in the first place and, consequently, not asking for adequate compensation. If that is the case, the architect is losing money from the start and is constantly playing catch-up. It will never work!

*Harrison McCampbell, Architect  
McCampbell & Associates  
Roofing and Waterproofing Consultants  
Knoxville, Tennessee*

## LIRR Entrance Pavilion CORRECTION

The credits for the new Entrance Pavilion for the Long Island Railroad at Pennsylvania Station (P/A, December 1994, p. 17) should have read as follows: R.M. Kliment & Frances Halsband Architects, Design Architect for Entrance Pavilion, in association with TAMS Consultants, Inc., Architects and Engineers for LIRR Penn Station Improvement Project.





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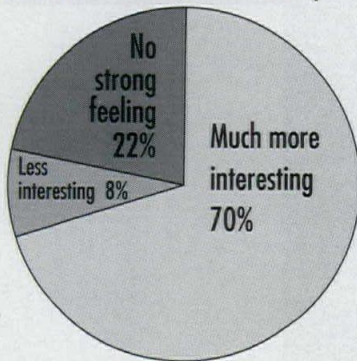


# WHAT AIA MEMBERS THINK OF P/A

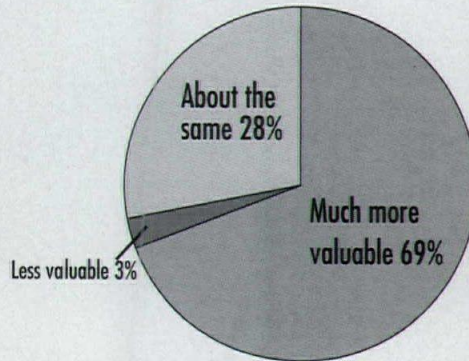
During the AIA Show held in Los Angeles last year, Progressive Architecture conducted a survey asking for attendees' opinions of the architectural publications.

Here are the results of that survey:

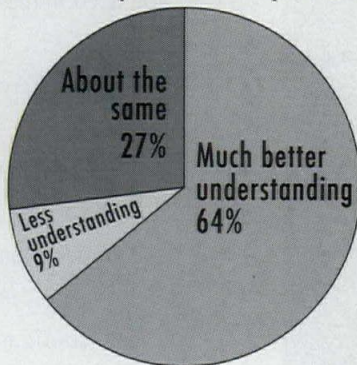
How much does P/A's new editorial direction interest you?



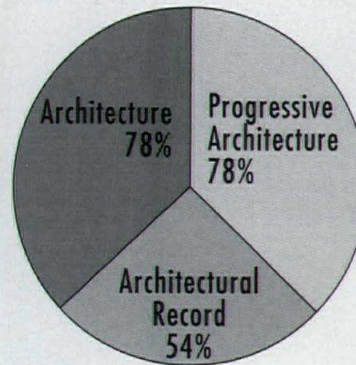
How valuable is P/A in your professional work?



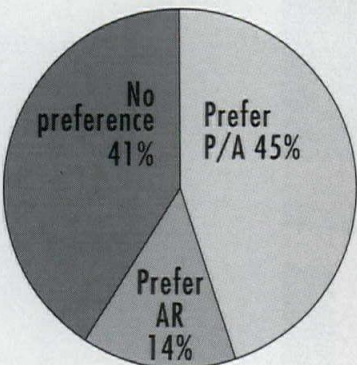
To what extent does P/A help you understand the profession's major concerns?



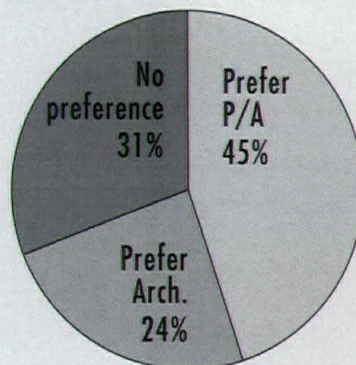
Which publications do you read regularly?



Do you prefer the new editorial direction of P/A to the other magazines in the field?



ARCHITECTURAL RECORD



ARCHITECTURE

Additional surveys and focus groups are being conducted to assure continuing assessment of readers' needs and acceptance. P/A's editorial staff welcomes your comments and suggestions

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# Computers & Related Products Literature Digest



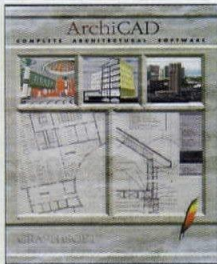
Integrated Architectural Cadd software for architects, interior designers, urban planners, and builders, Architrion II provides an advanced true-3D modeling and design environment, a complete set of architectural drafting tools, an on-line quantifier, and a photorealistic rendering module. It enables you to explore, visualize, document, and quantify your designs simply and efficiently. **BAGH Technologies/Architrion II. Circle No. 363**



Visions by Midmark, the Smart Healthcare Software, makes it easy to use Concepts by Midmark Interactive systems casework selection, planning, and medical or hospital facility design. The Visions design package is the only software that can cut drawing time by 50 percent. You will see your designs in realistic 3D images. **Concepts by Midmark. Circle No. 364**



The GTXRasterCAD® Series is an intelligent and cost-effective paper-to-CAD solution for AutoCAD users. Scanned drawings can be loaded, restored, modified, and plotted with ease. Only GTX provides CAD-like functionality through Intelligent Object Picking and raster object snapping. The GTXRasterCAD® Series even lets you convert to vector (.DWG) all within AutoCAD®! **GTX Corp. Circle No. 365**



The ArchiCAD is an award-winning and complete software solution for all phases of architectural and building design work. It stores all of the building information – model, drawings, and bill of materials – together as a "Living Document" of your project. Every change involving one aspect (deleting a window for example) is reflected in material take-offs, floor plans, dimensions, and all other views. **Graphisoft® U.S., Inc. Circle No. 366**



The Marvin Design System (MDS) is a comprehensive software package that helps to streamline the CAD design/specification process for architects and designers. MDS works with Windows and AutoCAD, allowing both small and large firms to take advantage of several unique and time-saving on-line features not available with any other design software. **Marvin Windows & Doors. Circle No. 367**



Pella Designer™ Software is compatible with both MS-DOS for AutoCAD Release 12 and AutoCAD Release 12 for Windows™. It puts the Pella product catalog at your fingertips. This easy-to-use program generates plan views, 2D and 3D elevations, cross-sections, and window and door schedules. (Ad code #A277Z5LD.) **Pella Windows & Doors. Circle No. 368**



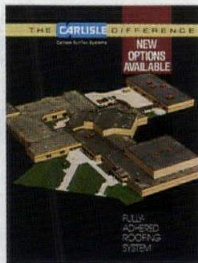
Summagraphics has established an international leadership position as a manufacturer of peripheral products used in computer graphics and computer-aided design. The SummaSketch®, SummaSketch FX®, and the new Microgrid® Ultra tablet provide a full range of digitizing tablets. SummaJet 2 Series of inkjet plotters is the latest innovative product developed by Summagraphics. **Summagraphics®. Circle No. 369**



The United States Gypsum Company's USG ACTION CD-ROM software system allows architects to quickly locate and review detailed data and specification information on all USG building products and construction systems. It also enables them to electronically transfer product specifications, descriptive copy, code and performance test results, and CADD drawings directly into architectural plans and specification sheets. **United States Gypsum Co. Circle No. 370**



# General Products & Literature Digest



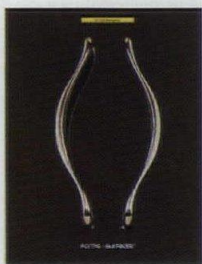
Carlisle SynTec Systems' Design "A Fully Adhered Roofing System" features a lightweight, yet durable EPDM membrane that specifiers prefer for difficult roofing challenges including irregularly shaped buildings and steep slopes. Their black Sure-Seal® and white-on-black Brite-Ply™ products are available as a .060-inch-thick nonreinforced membranes or a .045-inch-thick polyester-reinforced membrane.

**Carlisle SynTec Systems. Circle No. 349**



QuarryCast® by Formglas is a lightweight molded stone manufactured with glass fiber-reinforced, inorganic materials. Easy to install, the QuarryCast® wall system includes 5/16-inch veneer panels, outside corners, baseboards, cornices, and door frames

**Formglas Interiors, Inc. Circle No. 350**



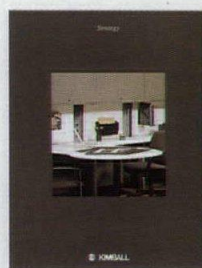
The DP7500 series is a collection of beautifully handcrafted doorpulls that offers a fresh approach to architectural hardware. Fluid lines and graceful curves reward the hand with a comfortable grip. Sophisticated fabrication techniques and meticulous detailing result in a seamless finish. The profiles that make up this series are cast of solid bronze or stainless steel and are available with polished or satin finishes.

**Forms + Surfaces. Circle No. 351**



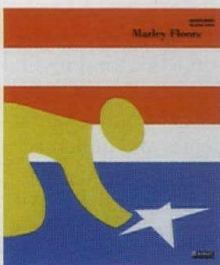
The promotional brochure from the International Tile & Stone Show 1994 features 23 Italian companies, an English-Italian glossary of stone industry terms, and useful information on the natural stone industry in Italy. Also available is the "Italian Marble Industry Buyers Guide" listing more than 500 Italian companies that supply marble and granite around the world.

**Italian Trade Commission - Marble Center. Circle No. 352**



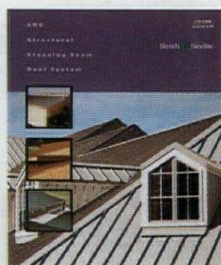
Strategy is a freestanding modular desk system that addresses team-oriented functions and today's changing office environments. Strategy is economical, dividing space effectively without the added cost of panels. With 36- and 48-inch widths, the base module of Strategy becomes the building block for adding overhead storage and vertical files for privacy as user needs change.

**Kimball Office Furniture Co. Circle No. 353**



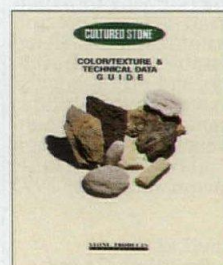
Resilient sheet and tile from Marley Floors combine durability for demanding commercial applications and imaginative, coordinated colors and designs. Self-coving, heat-weldable, watertight, hygienic, and stain-resistant, the products are ideal for hospitals, food service, and retail uses.

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**Stone Products Corp. Circle No. 356**



# P/A Classified

## SITUATIONS OPEN

### Associate Dean for Research/Creative Activity-Director, Herberger Center for Design Excellence College of Architecture and Environmental Design Arizona State University

Arizona State University invites nominations and applications for the position of Associate Dean for Research/Creative Activity at the rank of associate or full professor with tenure. The appointment will be a twelve month fiscal year academic appointment in the Schools of Architecture and Planning and Landscape Architecture (75% college administration, 25% instruction.)

The faculty of the college seeks an individual with experience in teaching, research/creative activity and academic/research administration in association with the environmental design professions, including personnel and budget management.

The person appointed will also hold the position of Director of the Herberger Center for Design Excellence, participate in a significant way in the team that administers the College and assist the Dean and academic directors in the administration of the College's graduate programs.

Candidates for the position must have a Doctorate in Planning, Architecture or closely related discipline, and experience in teaching and research/creative activity, and academic/research administration in association with the environmental design profession including personnel and budget management. Desire several years of responsibility coordinating educational, research/creative activity, and service programs in a significant urban context and entrepreneurial record in generating public and private funding support.

Applications or nominations must be addressed to:

Chair, Associate Dean Search Committee  
College of Architecture and Environmental Design  
Arizona State University  
Tempe, Arizona 85287-1905

Applications must include a letter of interest, a resume, and the names, addresses and telephone numbers of five references. Applications will be reviewed beginning April 3, 1995, and every two weeks thereafter until the position is filled. AA/EOE

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## UNIVERSITY OF TENNESSEE: Assistant or Associate Professor Two Tenure-Track Design Faculty Positions

The University of Tennessee, Knoxville - The School of Architecture seeks candidates for two anticipated full-time tenure track positions in architectural design, at either the Assistant or Associate Professor rank, commencing Fall 1995. Candidates should be qualified to teach architectural design at all levels in both the undergraduate and graduate programs, as well as a second elective course in an area of related specialization, such as structures, technology, computer aided design, drawing, or theory. Applicants should possess a professional degree in architecture, including a graduate degree in either architecture or another related field (i.e. urban design, planning, landscape architecture, art, etc.). Experience in teaching is valued. Practice leading to professional registration is desirable. All candidates must have the interest and potential to pursue self-defined intellectual objectives through research, scholarship, creative work, and/or practice.

Candidates should submit a letter of interest and objectives, a curriculum vitae, photocopied select examples of design work (non-returnable), and the names of three references by March 15, 1995 to:

Thomas K. Davis, Chair, Design Faculty Search Committee; University of Tennessee, School of Architecture, 1715 Volunteer Boulevard, Knoxville, TN 37996-2400. The School of Architecture seeks diversity and encourages women and members of minority groups to apply.

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## ARCHITECTURE Ball State University Muncie, IN

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*Ball State University is an Equal Opportunity,  
Affirmative Action Employer and is strongly and  
actively committed to diversity within its  
community.*

## RICE UNIVERSITY

seeks applications for a tenure track appointment to join the School of Architecture faculty in the Fall 1995. The candidate should be able to teach design studios, have expertise in one or several of the following fields: theory, history, and urbanism, and be able to supervise graduate students on a doctoral level. Candidates should hold a doctoral degree. Prior teaching experience and a record of both academic and design accomplishment are desirable. Applications will be considered until 1 April 1995. Letters of interest and curriculum vitae should be forwarded to Lars Lerup, Dean, School of Architecture, Rice University, 6100 Main Street, Houston, Texas 77005-1892.

Rice University is an equal opportunity/affirmative action employer and encourages applications from female and minority candidates. Rice does not discriminate on the basis of race, color, religion, sex, sexual orientation, national or ethnic origin, age, disability or veteran status.

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# P/A Classified

## SITUATIONS OPEN

### California State Polytechnic University, Pomona DEAN OF THE COLLEGE OF ENVIRONMENTAL DESIGN

Applications and nominations for the position of Dean of the College of Environmental Design are invited. **Duties and Responsibilities:** highly responsive to student and faculty academic needs; able to communicate the strengths and accomplishments of the College to external forums; responsible for fiscal and personnel mgmt, strategic planning, development, and excellence in teaching, research, and equity efforts. **Req-qualifications:** earned doctorate or terminal master's degree; a record of teaching, research, and scholarship to support a sr. faculty appt; three or more yrs of successful admin experience requiring academic leadership and stewardship. **Date of Appt:** 7/1/95. Willing to negotiate an earlier or later date. **Salary:** Commensurate with qualifications and experience; attractive benefits package. Committee consideration of completed applications will begin on February 1, 1995.

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P E N T O N

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Send away for 1994  
Architectural Research

## Keep up

## on the

This publication contains the synopses of the 67 research submissions to the 1st Annual Awards for Architectural Research, co-sponsored by the AIA/ACSA Council on Architectural Research. Each synopsis discusses the importance of the research, describes the methods used, summarizes the key findings of the work. The name, address, and phone number of the principal researcher is also included for further information.

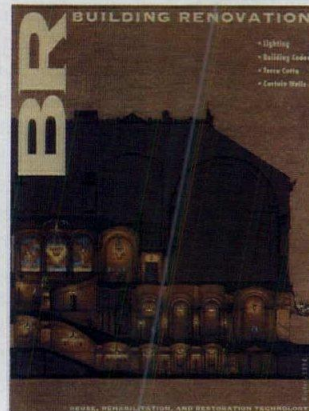
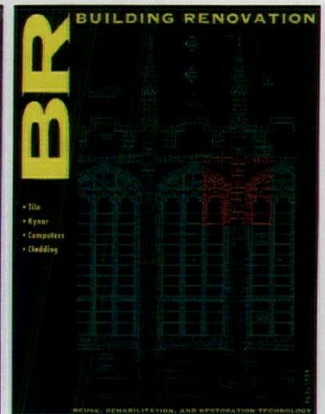
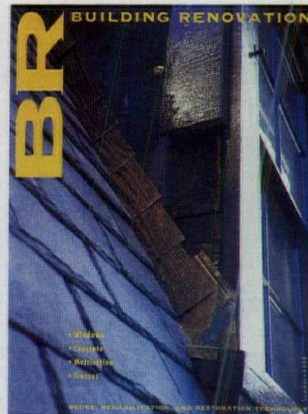
## latest

The bound volume, over 100 pages long, is available from P/A for \$50.00 plus shipping and handling. Call Michael Walters at (203) 348-7531 or fax him at (203) 348-4023 to purchase a copy. Checks, money orders, or credit card (Visa, Master Card, American Express) accepted. Make checks out to P/A Research.

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# Creating Gothic Tracery

CSI SECTION 06400

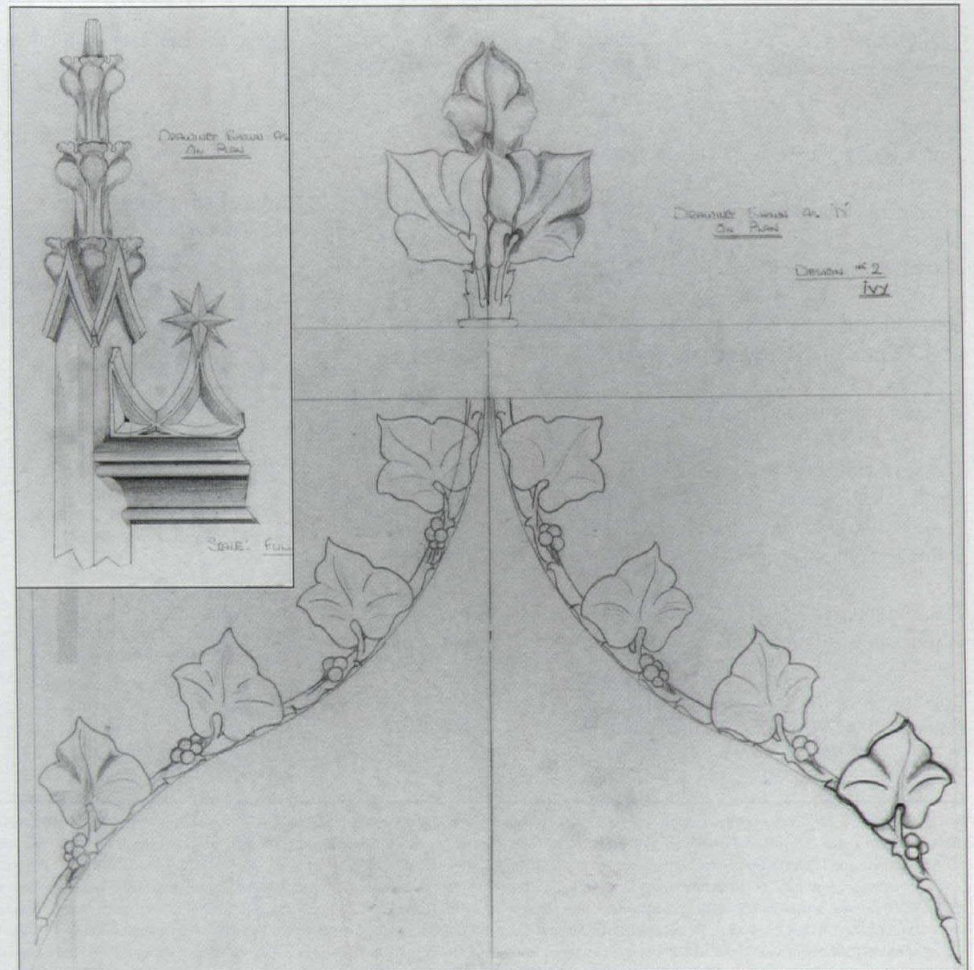
The carving of Gothic tracery, such as that on the columbarium at St. Thomas Church by Gerald Allen and Jeffrey Harbinson, Architects (p. 70), is a craft still practiced by Herbert Read, Ltd. in Devon, England. In working with the architects on the project, says Hugh Harrison of Herbert Read, "we went through several alternatives, coming up with something not too dissimilar to what Gerald had initially proposed." The tracery's Rose of York, adds Harrison, "represents New York, its oak leaves express age and tradition, its vine symbolizes wine and the blood of Christ, and its ivy and hawthorne leaves, with their flat and serrated edges, are traditional foliage from 11th- and 12th-Century English cathedrals." Harrison and Allen also worked together on the shape of the tracery. "We pushed the neck of the ogee arch," says Harrison, "up through the cornice, as in the choir screens at Exeter Cathedral."

Once the design was set, Herbert Read's carvers developed full-size drawings (right). "We then cut the drawings out," says Harrison, "pasted them onto the wood, cut the profiles, and started carving." Harrison dismisses Gothic out of catalogs; "it ruins everything," he says. "It's important that we keep these carving skills alive," he adds. "The greatest thing about the St. Thomas job was that not one person working on it here was over the age of 28." **Thomas Fisher** □



Tim Buchman

DETAIL OF CARVED OAK TRACERY



FULL-SIZE PENCIL DRAWINGS OF ORNAMENT USED AS BASIS FOR CARVINGS



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