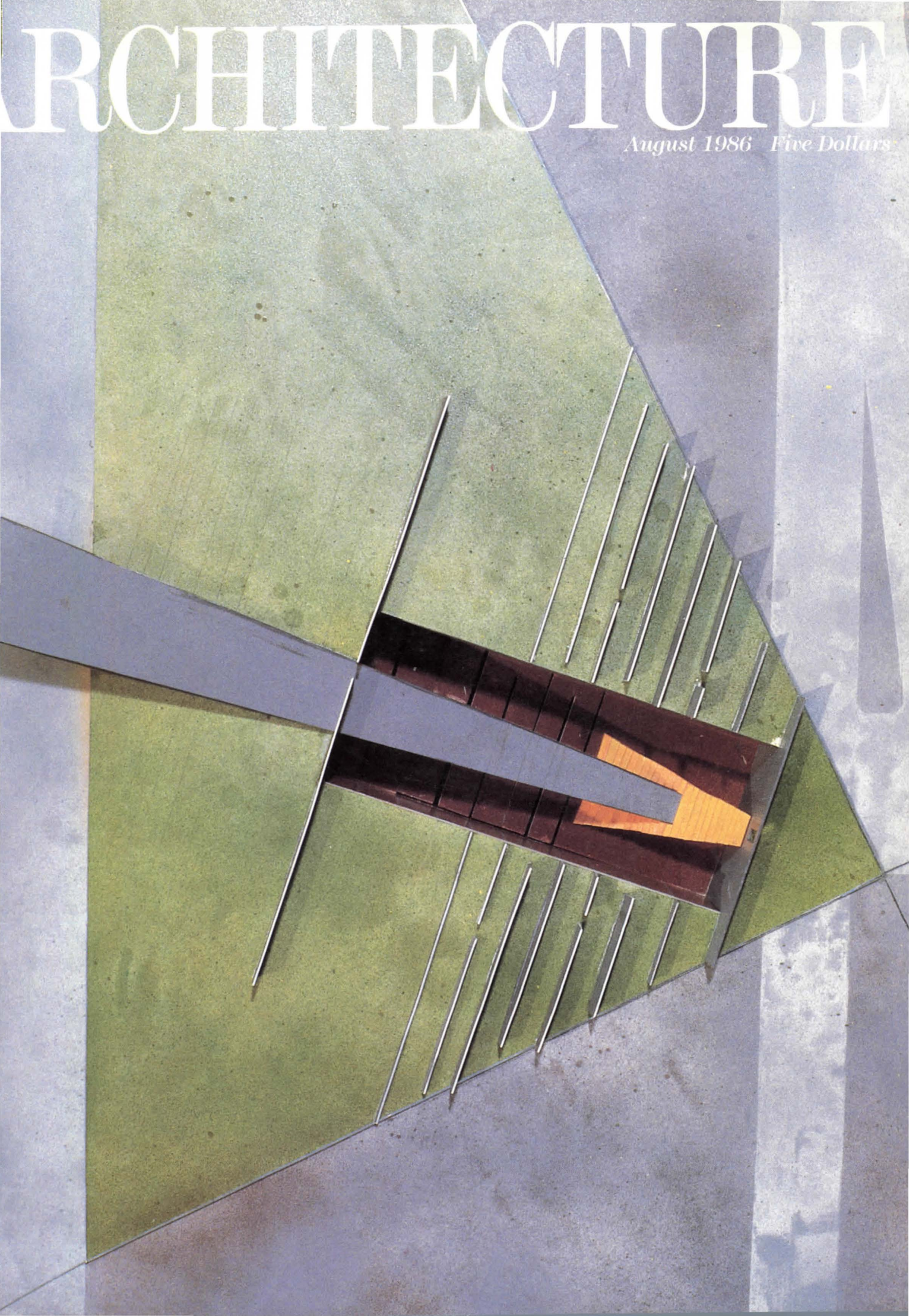


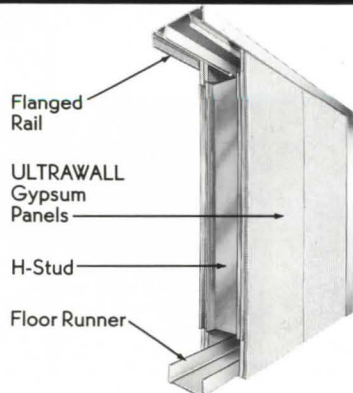
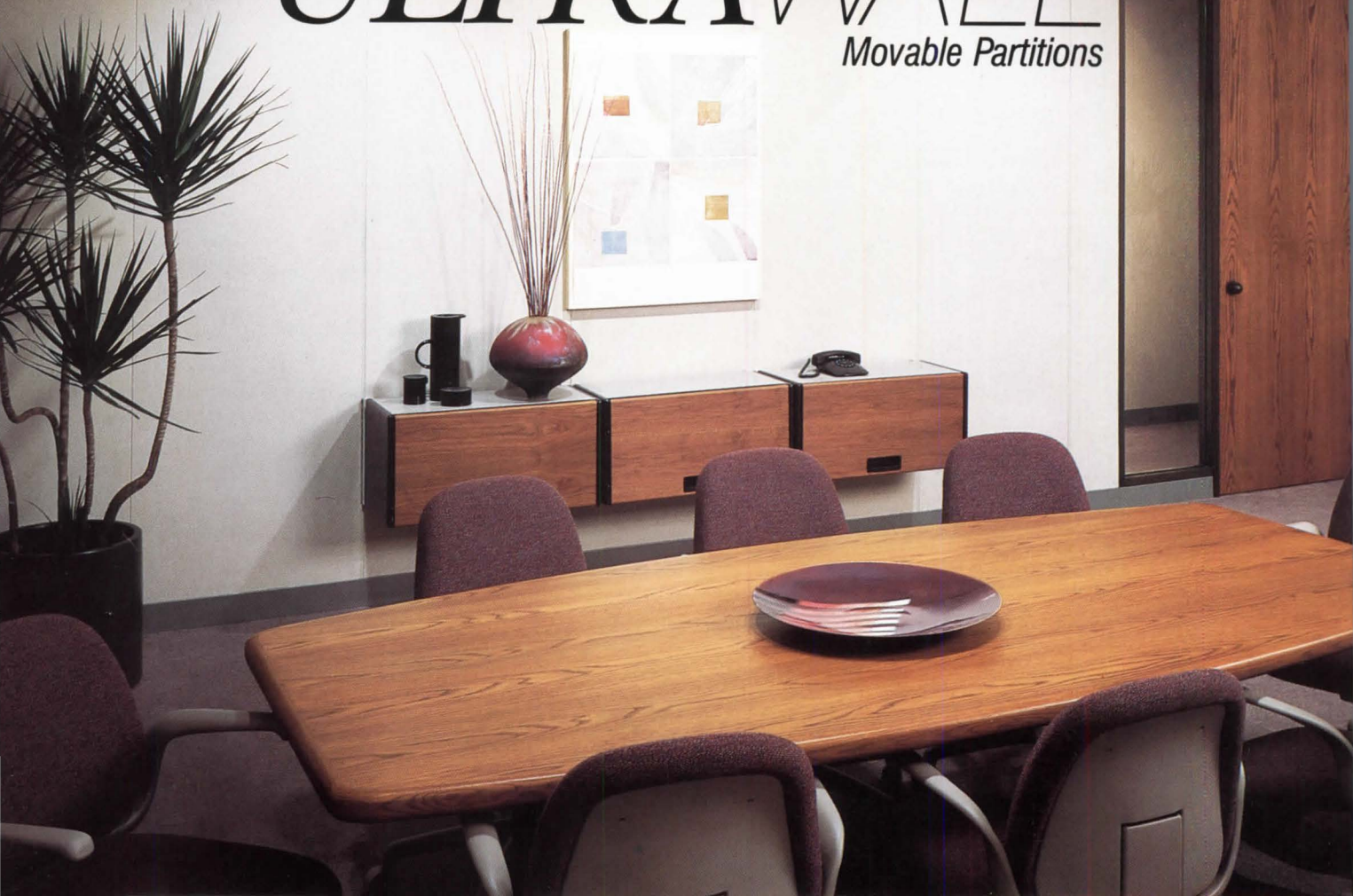
# ARCHITECTURE

August 1986 Five Dollars



# ULTRAWALL<sup>®</sup>

Movable Partitions



## Fast track to interior elegance!

ULTRAWALL<sup>®</sup> Movable Partitions put that solid prestige look and feel into walls that move. Quickly. Easily. Economically. Just four basic parts make these superior partition systems simple to dismantle and reassemble. Yet, the hefty  $\frac{3}{4}$ " gypsum panels add all the sound control and fire protection of a permanent wall.

Distinctive finishes and compatibility with other interior systems make ULTRAWALL partitions the key component in designing relocatable interiors for today's highly integrated needs. In fact, new Systems/ULTRAWALL hardware accepts most wall supported furniture. Removable panels provide more than ample wall cavities for communications cable. And sizeable tax advantages make it the smart choice to separate space. Get specifics.

Call our representative. Or write to us at 101 S. Wacker Dr., Chicago, IL 60606-4385, Dept. A886

**UNITED STATES GYPSUM COMPANY**  
BUILDING AMERICA

© 1986, United States Gypsum Co.

Circle 1 on information card

# TEXTONE<sup>®</sup>

vinyl-  
faced  
gypsum  
panels



Superior  
interiors...  
*yours to create with our  
practical magic colors  
and textures.*

TEXTONE<sup>®</sup> panels offer unique creative options. Refined low profile patterns. Stylish rough textile looks. Realistic suede, cork and wood effects. All high fashion wall appeal in tough, heavy-duty vinyl. And all backed with SHEETROCK<sup>®</sup> Brand Gypsum Panels—the original fire-resistant gypsum walls for solid life safety protection. Check into the many advantages of TEXTONE vinyl-faced gypsum panels. None of the expense and general messiness of field-applied wall coverings. No costly scheduling delays. Expedites early occupancy. No major decorating concerns. In fact, savings start with delivery to the job site.

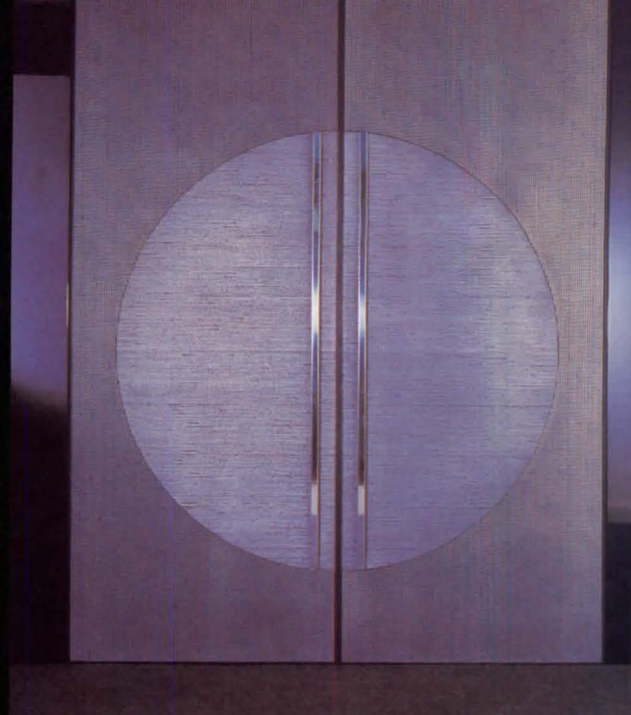
■ Call our representative. See Sweet's General Building File, Sec. 9.12. Or write to us for our NEW COLOR COORDINATOR at 101 S. Wacker Dr., Chicago, IL 60606-4385, Dept.

**UNITED STATES GYPSUM COMPANY**  
BUILDING AMERICA

© 1986, U.S. Gypsum Co.

Circle 23 on information card

## New Bonded Bronze Designs



Since its introduction 17 years ago, Bonded Bronze has become a standard for excellence in contemporary surfacing materials. . . elegant, durable and ageless. Now 16 handsome new designs and textures extend the range, bringing the quality you expect from Forms + Surfaces to your walls, doors and other architectural surfaces. Available in a variety of forms for rapid and economical installation, including preformed curves and corners, and castings with Class 1 fire rating.



**Forms + Surfaces**  
Metal Surfaces Division  
Box 5215 Santa Barbara, CA 93150 (805) 969-7721



# CONTENTS

## American Institute of Architects

**Officers**  
 John A. Busby Jr., FAIA, *President*  
 Gerald J. Hackl, FAIA, *First Vice President*  
 Notley Alford, FAIA, *Vice President*  
 Benjamin E. Brewer Jr., FAIA, *Vice President*  
 David E. Lawson, FAIA, *Vice President*  
 Philip W. Dinsmore, AIA, *Secretary*  
 Gregory C. Hallenbeck, FAIA, *Treasurer*  
 Luis L. Marines, *Executive Vice President*

**Directors** (Year indicates expiration of term)  
 Gerald P. Lyman, AIA ('87), *California*  
 Al R. Neel, FAIA ('86), *California*  
 Robert A. Odermatt, FAIA ('86), *California*  
 Gregory Jacobs, FAIA, ('88), *California*  
 Gregory S. Palermo, AIA ('88), *Central States*  
 Kennard Bussard, AIA ('87), *Central States*  
 Lawrence J. Leis, AIA ('88), *East Central States*  
 Mark T. Jaroszewicz, FAIA ('88), *Florida/Caribbean*  
 Glenn Allen Buff, FAIA ('87), *Florida/Caribbean*  
 William W. Herrin, AIA ('86), *Gulf States*  
 Norman Koonce, AIA ('87), *Gulf States*  
 Graham Bradley, FAIA ('87), *Illinois*  
 Gordon J. Durkee, FAIA ('86), *Michigan*  
 Gordon Bridges, AIA ('86), *Middle Atlantic*  
 Robert Calhoun Smith, FAIA ('87), *Middle Atlantic*  
 James Lawler, AIA ('88), *New England*  
 W. Terry Rankine, FAIA ('86), *New England*  
 Kenneth D. Wheeler, FAIA ('86), *New Jersey*  
 Gordon M. Laping, AIA ('87), *New York*  
 Laurie Maurer, FAIA ('88), *New York*  
 Thomas Van Housen, AIA ('88), *North Central*  
 Raymond Crowder Jr., AIA ('86), *Northwest*  
 Christopher J. Smith, AIA ('87), *Northwest*  
 Gerald S. Hammond, AIA ('88), *Ohio*  
 Alexander Damianos, FAIA ('87), *Pennsylvania*  
 Charles Lee Thomas, AIA ('88), *South Atlantic*  
 Raymond F. Stainback, FAIA ('86), *South Atlantic*  
 Charles D. Tittle, FAIA ('88), *Texas*  
 Joseph E. Hawes Jr., FAIA ('87), *Texas*  
 John McCree, AIA ('86), *Texas*  
 David A. Daileda, AIA ('87), *Western Mountain*  
 Gregory Franta, AIA ('88), *Western Mountain*  
 Robert Norberg, *ex officio, President AIAS*  
 Robert L. Davis, *ex officio, Chairman, CACE*

## Headquarters

**The American Institute of Architects**  
 Luis L. Marines, *Executive Vice President*  
 Charles A. Scheeler, FAIA, *Group Executive, Liaison, Special Program, Assistant Treasurer*  
 Charles Vincent Siena, *General Counsel, Group Executive, Government Affairs*  
 David R. DeLuca, *Chief Financial Officer, Group Executive, Financial Management*  
 William Allen Hecht, *Membership Services*  
 Francis X. Brown, Hon. AIA, *Conventions*  
 Stephanie Byrnes, *Information Center*  
 Charles E. Ellison, AIA, *Education Services*  
 Charles R. Franklin, AIA, *Professional Services*  
 Timothy Hargrove, *Controller*  
 Michael T. Knapp, *Communications*  
 John E. Lynn, *Government Affairs*

## A Service Corporation

Charles P. Cramer, *President/Chief Executive Officer*  
 Steven A. Etkin, *Corporate Vice President*  
 Gordon H. Schruben, FAIA, *Real Estate, Institute Resources*  
 William Allen Hecht, *Assistant Secretary*  
 David R. DeLuca, *Assistant Treasurer*  
 Deborah A. Diffendal, *Management Information*  
 Judy G. Dresser, *Human Resources*  
 David S. Godfrey, *Magazine Group*  
 Gerald J. Panciera, Hon. AIA, *Controllor*  
 William D. Hooper, AIA, *Professional Systems*  
 Gordon L. Parenteau, *Marketing, AIA Press*  
 Michael B. Rouda, *Architectural Technology*  
 Michael J. Cohan, *Purchasing, Institute Resources*

## A Foundation

Luis L. Marines, *Acting President*  
 Gordon J. Alt, *Vice President*

**Academy Above Well-Known Waters** 26  
 Cornell University's department of architecture.  
 By John Pastier

**Theory In-House, Practice in Offices** 34  
 University of Cincinnati's department of architecture.  
 By Michael J. Crosbie

**Where Students Actually Build** 42  
 University of North Carolina at Charlotte's college of architecture. By Marguerite N. Villecco

**'A Nice School in a Nice City' Faces Change** 48  
 Tulane University's school of architecture. By David Dillon

**A Rich Mixture of People and Offerings** 54  
 Massachusetts Institute of Technology's department of architecture. By M.J.C.

## Kaleidoscope

Justice Center. Architect: W.C. Muchow & Partners. 62  
 By Andrea Oppenheimer Dean  
 Fire Station. Architect: Zervas Group Architects. 66  
 By John Galloway  
 Visitors Center. Architect: Bull Volkmann Stockwell. 68  
 By M.J.C.

Events & Letters	6	Interiors	80
News	10	Products	86
Books	74	Advertisers	92

Cover: Design for a Gallery for Organic Art by Drew Burgess, an architecture student at University of Cincinnati (see page 34), with Philip Parker as critic.

**Donald Canty, Hon. AIA**, Editor in Chief; **Carole J. Palmer**, Executive Art Director; **Andrea Oppenheimer Dean**, Executive Editor; **Allen Freeman**, Managing Editor; **Nora Richter Greer** and **Michael J. Crosbie**, Senior Editors; **Mary E. Osman, Hon. AIA**, Senior Editor, Books; **Lynn Nesmith**, Associate Editor; **Kathleen Vetter**, Design Assistant; **Karen Collins**, Editorial Assistant; **Robert Campbell**, **David Dillon**, **Carleton Knight III**, **Robert A. Ivy Jr., AIA**, **John Pastier**, and **Marguerite Villecco**, Contributing Editors.

**Robert G. Kliesch**, Publisher; **Christi L. Wilkins**, Assistant to the Publisher; **David S. Godfrey**, General Manager; **Jesse Sims**, Production and Business Manager.

**James P. Cramer**, Magazine Group Publisher.

ARCHITECTURE, publication number ISSN0746-0554, official magazine of The American Institute of Architects, is published monthly by the AIA Service Corporation at 1735 New York Ave. N.W., Washington, D.C. 20006. **Individual subscriptions:** U.S. and its possessions: \$30 for one year, \$48 for two years, \$65 for three years. Canada: \$36 for one year, \$56 for two years, \$75 for three years. Foreign: \$54 for one year, \$96 for two years, \$138 for three years. Single copies, \$5 each (except for May and September issues, which are \$10). Publisher reserves the right to refuse unqualified subscriptions. For subscriptions: write circulation department, ARCHITECTURE, 1735 New York Ave. N.W., Washington, D.C. 20006; allow eight weeks. Quotations on reprints of articles available. Microfilm copies available from University Microfilm, 300 N. Zeeb Road, Ann Arbor, Mich. 48106. Referenced in The Architectural Index, Architectural Periodicals Index, Art Index, Avery Index to Architectural Periodicals. Second class postage paid at Washington, D.C., and additional mailing offices. © 1986 by The American Institute of Architects. Opinions expressed by the editors and contributors are not necessarily those of AIA, vol. 75, no. 8.



# Specify Manville.

You won't have to burn the midnight oil making roofing systems decisions.

Manville supplies all three major roofing systems: built-up, modified bitumen and single-ply.

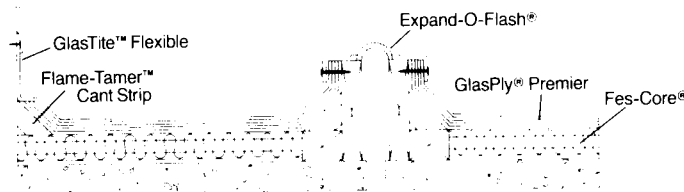
That's why Manville can eliminate a lot of after-hours work for you in the selection, design and specifications stage of your project. Manville can offer you impartial, objective recommendations resulting in the best possible roof for your building design. And this means you'll receive Manville quality in every component in the roofing system, from the deck up. Including insulation, fasteners, accessories, and, of course, the membrane itself.

More than that, you can receive design and specification assistance from the industry's largest, most knowledgeable staff of full-time roofing specialists. Experienced district engineers work with you on your project from start to finish, including inspections and on-site problem solving.

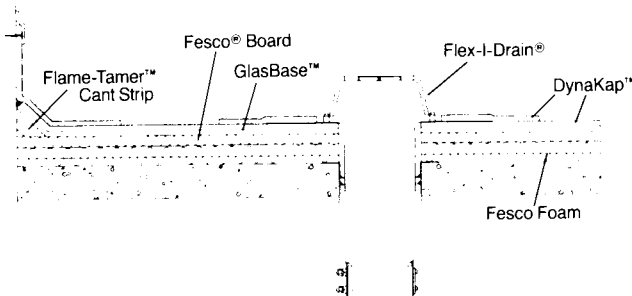
Manville gives you true single-source supply and backs it with single-source responsibility for the performance of the roofing system. Manville's unique guaranteed guarantee offers the roofing industry's broadest coverage.

Specify Manville and you'll save yourself a lot of time-consuming decision making. A helpful Manville roofing specialist is as close as your phone. Just call (303) 978-4900. For report, telex 454404 JOHNMANVL DVR.

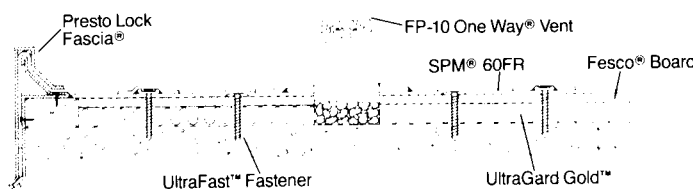
## BUILT-UP ROOFING SYSTEM



## MODIFIED BITUMEN ROOFING SYSTEM



## SINGLE PLY ROOFING SYSTEM



21,000 people with one goal:  
To be your best supplier.

# Manville

Circle 3 on information card

## EVENTS

**Sept. 1-5:** International Conference on Passive and Low Energy Architecture, Pecs, Hungary. Contact: PLEA '86 Mecsek-tourist, Pecs, PF: 129, H-7601, Hungary.

**Sept. 3-5:** Society for Marketing Professional Services Annual Convention, San Francisco. Contact: SMPS, 801 North Fairfax Street, Suite 215, Alexandria, Va. 22314.

**Sept. 3-16:** Chinese Architecture, Urbanism and the Arts Programs, Tianjin, China. Contact: Diedre Mercer, Dept. of Continuing Education, Georgia Institute of Technology, Atlanta, Ga. 30332-0385.

**Sept. 4-6:** The National Trust for Historic Preservation's "Main Street" National Town Meeting, Winston-Salem, N.C. Contact: Vicki Onderdonk, NTHP, 1785 Massachusetts Ave. N.W., Washington, D.C. 20036.

**Sept. 5-7:** Training Course for Testing, Adjusting, and Balancing Supervisors, St. Louis. Contact: Skippi Carl, National Environmental Balancing Bureau, 8224 Old Courthouse Road, Vienna, Va. 22180.

**Sept. 8-12:** Course in the Application of Infra-Red Scanners to Detect Energy Losses and Roof Moisture, Burlington, Vt. Contact: Paul Glover, The Infraspection Institute, Juniper Ridge, Box 2643, Shelburne, Vt. 05482.

**Sept. 10:** Course on Energy Efficient Construction Techniques, Lakeland, Fla. Contact: Ken Sheinkopf, Florida Solar Energy Center, 300 State Road, 401, Cape Canaveral, Fla. 32920.

**Sept. 11-14:** Inter-American Forum for Architecture: Housing and the City, New Orleans. Contact: New Orleans Chapter/AIA, 330 Exchange Alley, New Orleans, La. 70130.

**Sept. 14-17:** Conference on "The Engineered Environment," Dublin, Ireland. Contact: Sheila Weidman, American Society of Heating, Refrigerating, and Airconditioning Engineers, 1791 Tullie Circle N.E., Atlanta, Ga. 30329.

**Sept. 14-18:** Eleventh Annual Design Management Conference, Martha's Vineyard, Mass. Contact: Earl Powell, Design Management Institute, 621 Huntington Ave., Boston, Mass. 02115.

**Sept. 18-19:** Contract and Residential Exposition and Design Conference, Minneapolis. Contact: International Market Square, 275 Market St., Minneapolis, Minn. 55405.

**Sept. 19-20:** AIA Architecture for Education Conference, Chicago. Contact: Charlotte Yowell at Institute headquarters, (202) 626-7410.

**Sept. 20:** Seminar on Architecture for the Performing Arts, Spring Green, Wis. Contact: Richard Carney, Frank Lloyd Wright Memorial Foundation, Taliesin, Spring Green, Wis. 53588.

**Sept. 21-26:** Tenth Triennial Congress of the International Council of Building Research. Contact: Noel J. Raufaste, Director CIB. 86, Center for Building

Technology, National Bureau of Standards, Gaithersburg, Md. 20890.

**Sept. 22-24:** "Statue of Liberty—Today for Tomorrow" Conference, New York City. Contact: Dale Miller, National Association of Corrosion Engineers, P.O. Box 218340, Houston, Tex. 77218.

**Sept. 22-24:** International Conference on Engineering Management, Crystal City, Va. Contact: E. Ross Curtis, STS Consultants, Ltd., 2929-C Eskridge Rd., Fairfax, Va. 22031.

**Sept. 22-24:** Course on Quality Engineering by Design—The Taguchi Approach, Chicago. Contact: Susan Chan, ASME Professional Development Dept., 345 East 47th St., New York, N.Y. 10017.

**Sept. 23-27:** AIA Architecture for Justice Conference on Mixed-Use Correctional Facilities, Philadelphia. Contact: Mike Cohn at Institute headquarters, (202) 626-7366.

**Sept. 25-27:** Fourth National Urban Waterfront Conference, Washington, D.C. Contact: The Waterfront Center, 1536 44th St. N.W., Washington, D.C. 20007.

**Sept. 28-30:** Door and Hardware Institute's Show and Convention, Chicago. Contact: Connie Cantin, 7711 Old Springhouse Road, McLean, Va. 22102.

## LETTERS

**'Pride of Place':** Needless to say, I anticipated Andrea Oppenheimer Dean's assessment of "Pride of Place" with some trepidation [June News, page 10]. But I shouldn't have—as it turns out and as I should have known it would turn out. Her assessment was balanced, fair, and frank. I am delighted that so many of my important and busy colleagues took the time to offer *their* personal views.

Robert A.M. Stern, FAIA  
New York City

**'Bully' to 'Rams':** To put it in a nutshell, there probably are only three persons in the architect/historian category who could have carried off an eight-hour "personal view" of architecture on PBS television. Ranked in seniority, those persons would be: Philip Johnson, FAIA, Vincent Scully Jr., Hon. AIA, and Robert A. M. Stern, FAIA.

Bob Stern took on the job. The television viewer got Bob's opinion, his mentors' views, and the views of numerous others selected by him. Perhaps "Pride of Place" was a missed opportunity, maybe even a brilliant failure, but Stern put out the time, energy, and effort to do it. In my opinion, none of his critics or detractors could have sustained such an effort, and to them I would offer a quote from that proud President, Teddy Roosevelt:

"It's not the critic who counts. It's not the man who points out where the grown man stumbles, or how the doer of deeds could have done them better. The credit belongs to the man who actually is in the arena, who strives violently, who errs and

comes up short again and again, who knows the great enthusiasms, the great devotions, and spends himself in a worthy cause, who if he wins knows the triumph high achievement, but who if he fails, fails while daring greatly, so his place will never be with those cold and timid souls who know neither victory nor defeat."

Enough silliness. If nothing else, Stern's efforts ought to provoke all of us to reconsider what to keep and what to discard of our broad and diverse architectural tradition.

On to "America by Design" and Spiro Kostof!

Jeremy Scott Wood, AIA  
Weston, Ma

**Misplacements:** Personal interpretation aside, some errors surfaced in PBS's "Pride of Place" regarding the identification of certain important buildings. During the segment "Proud Towers," old film footage of the rising American International Building (formerly 60 Wall Tower) was placed smack in the middle of the story of the Empire State Building, its history and esthetics. One was undoubtedly led to believe this was the steel skeleton of the Empire State Building.

In the accompanying coffee table edition of *Pride of Place* errors also reared up. On page 291 the caption of an adjacent photo of lower Manhattan mislabeled the 40 Wall Street Building as the Gothic-inspired Woolworth Building. Better luck next time!

Joseph J. Korom Jr., AIA  
University of Wisconsin-Milwaukee

**In Defense of Leonardo:** Percival Goodman seems very determined to not fall in with most people who marvel at the foresight and assume DaVinci a genius [see May Books, page 262]. In fact, his article ignores certain basic points. Naturally DaVinci's sketches of gears, pinions, and the like seem clumsy, especially if compared, say, to a modern wristwatch. Also, how many architect's concept sketches and graphic notes are not fuzzy?

It is a pity that visions from a man living nearly 500 years ago must be denigrated by modern hindsight.

Michael Eli  
Schenectady, N. Y.

**Correction:** The Planetree project's interior designer was misidentified in the April issue (see page 69). The correct spelling is Victoria Fay.

**Amplification:** For the Bradford Exchange by Weese Hickey Weese shown in our April issue, page 62, the tensile structure were designed by Todd Dalland, AIA, of FTL Associates; the gardens were designed by Chris Kusske, ASLA, of Kolko witz, Kuzske & Grove; the lighting was designed by Peter Barna, IDSA, of Light & Space; and the major portion of the architectural administration was performed by Janet Shure, then in-house architect for the Bradford Exchange Corporation. The client was Rod McArthur.



"The history of architecture is  
the history of the struggle for light..."

*Le Corbusier*



# Lighting the way to tomorrow.

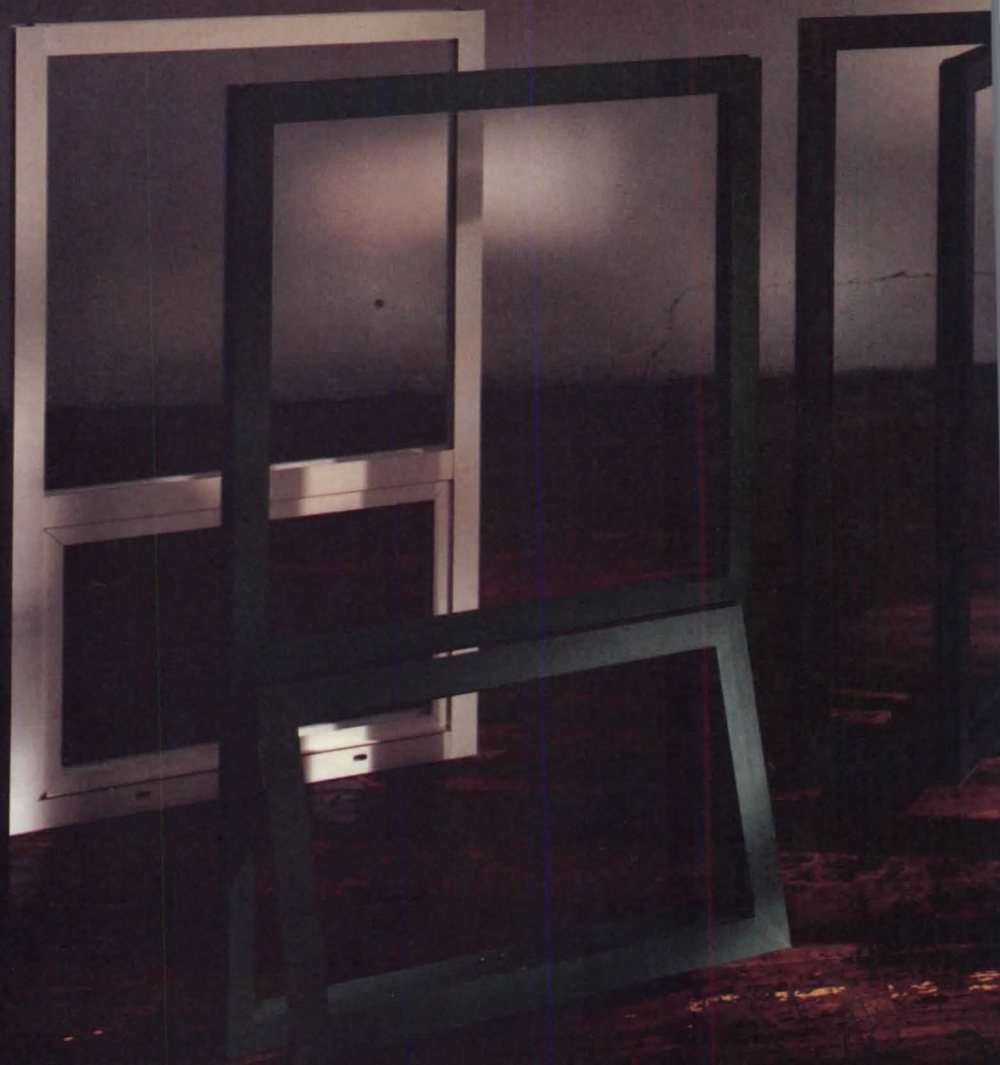
Today, windows are a bigger part of architectural design than ever before. That's because design is a bigger part of windows.

Kawneer's window line includes both Thermal and Non-Thermal models. Vertically and horizontally pivoted. Inswinging and outswinging casements. Projected, hinged, fixed and high performance windows. Kawneer has them all. To open design opportunities. To open minds.

And Kawneer windows are not only constructed to meet AAMA performance standards but standards much higher. Our own.

Kawneer windows. They let you look at your design in a whole different light.

 **Kawneer**  
*The Designer's Element*





*For full technical description, tracing details and specifications,  
contact your Kawneer representative or write to: Kawneer Company, Inc.,  
Department C, Technology Park-Atlanta, 555 Guthridge Court, Norcross, GA 30092.*

*Circle 4 on information card*

## Design

# Proposed Guggenheim Addition Debated at Municipal Hearing

A standing-room-only crowd of architects, attorneys, museum officials, architectural historians, preservationists, and residents of Manhattan's upper east side gathered in late June at a day-long hearing before the New York City board of standards and appeals to determine the fate of a proposed addition by Gwathmey Siegel & Associates to Frank Lloyd Wright's Solomon R. Guggenheim Museum (see Dec. '85, page 11). The audience appeared equally divided between supporters of the museum's plan to expand and opponents who believe the addition would overshadow Wright's only building in New York City.

Gwathmey Siegel's proposed addition would be built directly east of the original, 1959 museum, incorporating and rising seven stories above a small, four-story annex designed by Taliesin West and completed in 1968. The \$9 million expansion scheme would consist of a service core building approximately 150 feet high that would serve as a backdrop for a rectangular, cantilevered box clad in gray-green porcelain enamel panels that would project as far forward as the center of the large Wright rotunda.

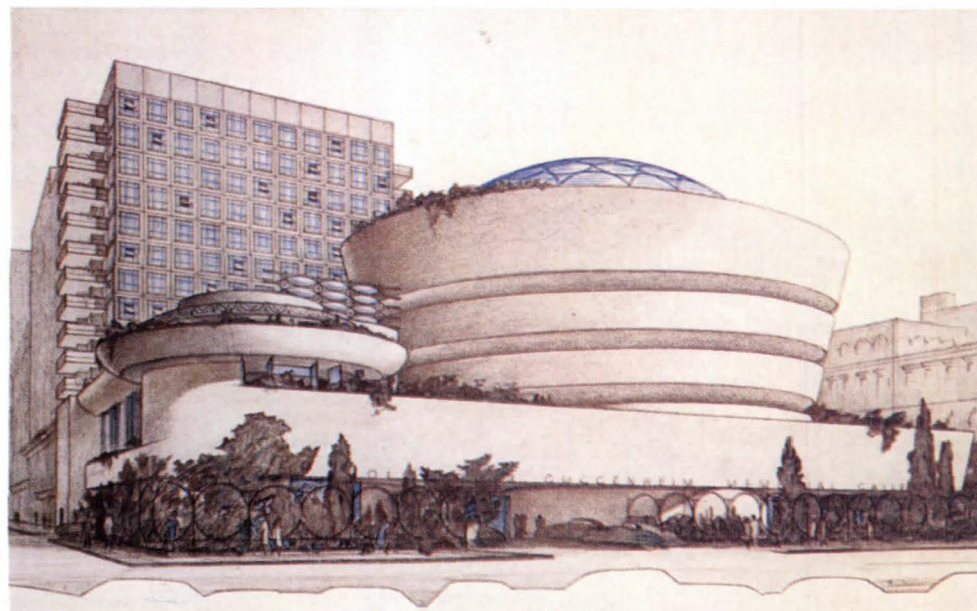
The ground floor of the proposed addition would house an enlarged bookstore and service functions. Additional exhibition space for the permanent collection would be located on second through sixth floors with a connection between the addition and the original museum on the fifth

and sixth floors. The five floors of the cantilevered box would contain art conservation space, storage, and offices.

The board of standards and appeals is the governing body with the authority to grant the necessary zoning variances and a special permit for the museum's building program. The board is also charged with ruling on an environmental impact statement issued jointly by the city's departments of environmental protection and city planning that stated, "The proposed project may significantly impair the character or quality of an important architectural resource." The expansion scheme was not required to go through the rigorous review process of the New York Landmarks Preservation Commission because the Wright building is not an official landmark—New York City law requires any individual building to be at least 30 years old—and its site on Fifth Avenue at 89th Street is not within the boundaries of any of the city's historic districts.

Thomas M. Messer, director of the Guggenheim, was the first to testify in support of the proposed expansion, calling for the "opening up our great collection." The museum contends that the primary purpose of this addition is to double the permanent collection exhibition space, while secondary considerations would be an enlarged bookstore, archives,

*Wright's unexecuted design for a studio building east of the museum.*



the library, art storage and conservation and improved office space. According to Messer, the museum has enough space to exhibit only 3 percent or 150 works from its permanent collection that number approximately 5,000 works of art.

Although Messer stated that the museum has been fortunate to be the custodian of the "great Frank Lloyd Wright spiral," the newly designed plan "rationalizes and improves the administrative area" and would "free from storage the permanent collection of works of art that are too good and important and central to be kept there."

Asking the audience to recall Wright's body of work and using numerous projections, including two elaborate models and colorful drawings of his scheme, photographs of the Wright building at various stages after completion, Wright drawings published in a 1952 article in *Architectural Forum*, and formal geometrical analyses for the addition, Charles Gwathmey, FAIA, presented a detailed rationale for the basis of his design. Gwathmey said his proposal is in reference to Wright and his work and is both "comprehensive" and "respectful." After outlining the program and the dimensions, square footage, and functions of the addition, Gwathmey concluded by saying that his proposal would "reinforce the Wright building in the context of space" and establish a larger site for the museum as a whole.

After the museum's formal presentation, supporters of the Guggenheim's expansion scheme were invited to testify, although a three-minute limit per person was set and enforced with a loud alarm clock.

Philippe de Montebello, director of the Metropolitan Museum of Art, compared a proposal by opponents of the addition that would move administrative functions off-site to constructing a "zoo and putting zookeepers and doctors and others in a building miles away." Robert Buck, director of the Brooklyn Museum concurred, adding that all the functions of a museum must be under one roof and that the Wright building "is not a frozen jewel box."

Next to speak in favor of the Gwathmey Siegel proposal were a number of prominent architects. John Hejduk, FAIA, dean of Cooper Union's school of architecture, said that architecture is the art of approximation and "great architecture is able to adjust." He also talked about the "biological needs" of the Wright structure and the "soft wonderful dialogue" of the Gwathmey addition.

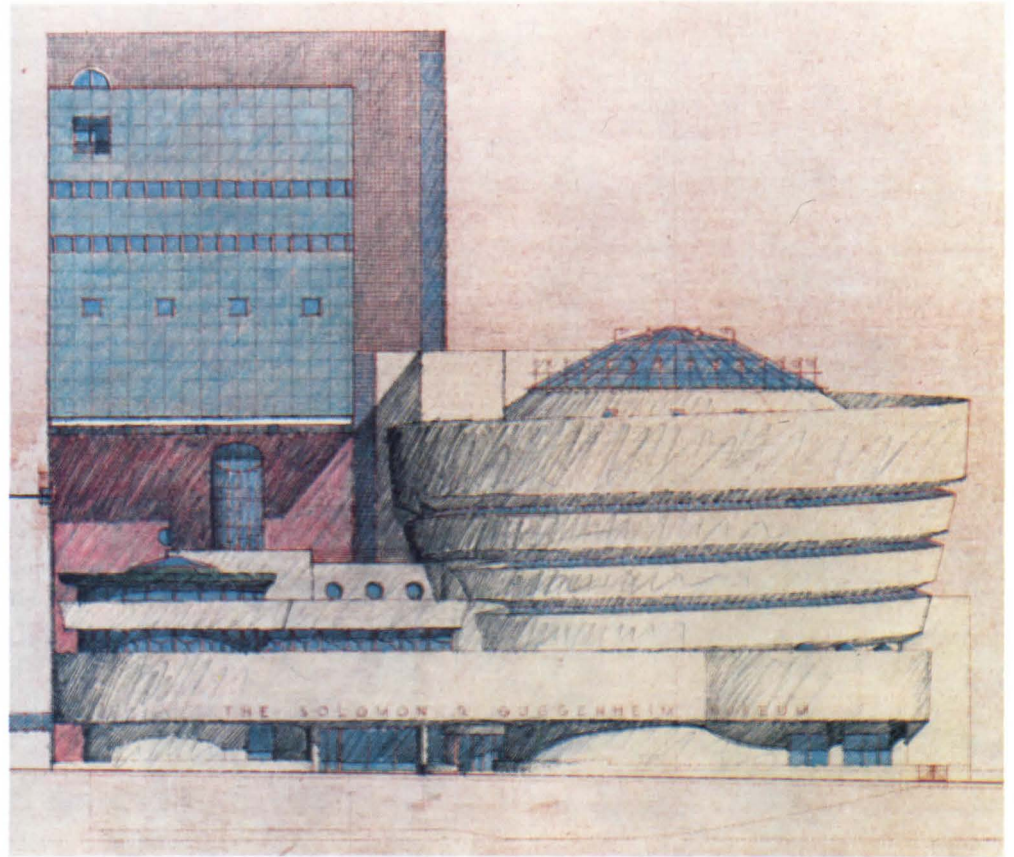
Peter Eisenman, FAIA, maintained that Wright would have supported the addition. Also testifying in support of the plan was James Marston Fitch, Hon. AIA, director of historic preservation for Beyer Blinder

Architects. Fitch said that the enheim has "always been hemmed a backdrop of highrise buildings" he "outwardly spiraling form of it's great atrium" has always been in on with its neighbors.

The issue that was constantly debated throughout the day was Wright's unexecuted design for a 15-story artist studio/office space next to the museum. Supporters of the addition said that Wright had intended for such a backdrop to his museum, while opponents argued that the tower did not appear in the early working drawings. An attorney representing the museum, Samuel H. Lindenfeld, read a 1953 letter from Wright that said of the studio building "there is no reason why we can not go ahead with the feature of the project." Opponents denied this claim, stating it was never Wright's intention to locate the studio building on the site of the Gwathmey Siegel proposal and that the Wright tower to be located on a site east of the museum where the apartment building 400th Street now stands, a piece of property once owned by the museum.

Leading the fight to stop the construction of the addition is a group called Guggenheim Neighbors, who have retained Robert Davis of the New York law firm of Kass & Case. In his testimony, Davis discussed many of the issues addressed in the environmental impact statement and urged the museum to consider solutions he said would not detract from the Wright building. He also suggested the possibility of underground space or renting space in nearby buildings.

As part of the group's presentation, Michael Kwartler, AIA, said that the addition is not a backdrop but a "generic solution to a landlocked site" and added that "not a logical conclusion to Wright's design." Architectural historian Andrew Kuttart said, "What we see today is what Wright intended."



*Gwathmey Siegel's Fifth Avenue elevation.*

In a passionate plea to preserve the architectural integrity of the Wright building, William Wesley Peters, an apprentice to Wright and now chairman of the Frank Lloyd Wright Foundation, said the proposal is "the architectural equivalent of replacing the last movement of Beethoven's Fifth Symphony with steel guitar and washboard country rock." He railed at the director's plan to "raise a gaudy tombstone over the museum" that will "flatly negate the transitional quality of Wright's great work." Peters concluded that no argument for additional space can rationalize the destruction of the "greatest masterpiece of the Guggenheim collection."

Edgar Kaufmann, jr., whose father commissioned Wright to design Fallingwater, likened the proposed addition to a sharp elbow in his face on the subway in rush hour. Edgar Tafel, FAIA, another Wright apprentice and author of numerous books on Wright, said that it is a sorrowful moment when Wright apprentices have to come before the board and plead to save the city's only Wright building.

A prepared statement by Romaldo Giurgola, FAIA, read before the board called the proposal an "unnecessary competitor." Giurgola wrote that a geometric plane of the height and bulk of the proposed addition would dominate the entire silhouette "no matter what color or texture the tiles are, and not

matter what fenestration is used." He also stated that "New York City would suffer an irreplaceable loss of cultural value if its government should allow the city to be so callously disfigured."

A number of prominent architectural critics also expressed concern over the proposed scheme. Michael Sorkin of the *Village Voice* stated that a culture is judged by its sacred objects and urged the board "to repudiate the idea of altering this holy building." He posed a question to the board, "If the Guggenheim isn't a landmark, what is?" Statements by writers Ada Louis Huxtable, Hon. AIA, and Suzanne Stephens in opposition to the proposal were also read.

Neighborhood groups who spoke against the museum's expansion plan included Friends of the Upper East Side Historic Districts, Carnegie Hill Neighbors, the Municipal Art Society, the New York Landmarks Conservancy, and Civitas. In addition, prepared statements opposing the proposal were submitted from people ranging from Woody Allen, to Alistair Cooke, to a U.S. congressman from Wisconsin.

Before the hearing was adjourned, Sylvia Deutsch, chair of the board of standards and appeals, posed a number of questions to the attorneys representing both the museum and the opposition group and requested that written responses be submitted to the board before a second hearing scheduled for the middle of August, when a final decision is expected

*continued on page 12*

## NEWS CONTENTS

Design	
Guggenheim addition debated	above
Open design conference	12
<b>Institute</b>	
Competitions for young students	14
Architects donate time to help rebuild	16
Philadelphia's waterfront development	18
<b>Arts</b>	
Art objects by architects	21

*Unless otherwise indicated, the news is reported and written by Allen Freeman, Lynn Nesmith, Michael J. Crosbie, and Lynn Nesmith.*

## Design from page 11

to be reached. Deutsch questioned the feasibility of an underground addition and requested background material to substantiate the museum's projected cost of \$500 per square foot for an underground expansion scheme.

In a question directed at Gwathmey, Deutsch said, "I don't want to sound like a heathen, but did you consider reducing the depth of the cantilever?"

She also asked the museum's director to clarify whether the building was originally intended to house permanent or temporary exhibitions and reminded the museum that 22 years ago there was a similar request for permission to build an addition that resulted in the four-story Taliesin annex. How long will it be before the directors return to seek more space, she asked.—LYNN NESMITH

## Trends in British Architecture Explored at Aspen Conference

The 36th annual Aspen Design Conference in June addressed the theme "Insight and Outlook: Views of British Design." Every afternoon it threatened to rain, but that only made the atmosphere seem more British and made even greener the unreal Happy Valley of sandals and Mercedes that is Aspen. Between slimming hikes and gourmet dinners, the conference attendees gathered in the conference's tents and glades to hear a long series of shamelessly articulate Britishers talk about design in film, fashion, graphics, packaging, industry, and architecture. Among the architectural speakers were James Stirling, Hon. FAIA, Norman Foster, Hon. FAIA, Sir Hugh Casson, Hon. FAIA, Piers Gough, Reyner Banham, and Patrick Nuttgens.

Almost at once, a gulf appeared between two groups who seemed to be entirely at cross purposes with each other. One side thought of British design as characteristically pragmatic and traditional, the other as essentially lunatic and ephemeral.

Representing the first (and older) group was Nuttgens, historian and director of Leeds Polytechnic, who gave the keynote talk. Nuttgens approvingly quoted Capability Brown, the 18th century garden architect, who said that in design there should be "no disgusting display of art." He also quoted Frank Pick, creator of the London Underground graphics, who said design should be "modest and not too grandiose in scale, not too logical in form; a reasonable compromise between beauty and utility, neither overstressing beauty until it degenerates into ornament, nor overstressing utility until it becomes bare and hard."

Added Nuttgens: "The characteristically British approach to design is not that of the wayward genius or the isolated fantasist. The English are an empirical race, working from precedent to precedent

*continued on page 14*



**Moore Since 1949:** A retrospective exhibit of the work of Charles Moore, FAIA, covering his career from 1949 to the present will open at the Williams College Museum of Art in Williamstown, Mass., in October and continue through mid-December. The exhibit will cover 65 projects and buildings, rendered in more than 200 drawings, and a dozen models.

Moore completed approximately 50 ink and watercolor renderings (such as the one above) especially for the exhibit, some taller than the architect himself. The breadth of the drawings will include everything from sketches on cocktail napkins (how many architectural inspirations have been lost for lack of a cocktail napkin?) to finished working drawings. A few projects, such as the Beverly Hills Civic Center and Sea Ranch, will be documented from the germination of the idea to the final design, drawing by drawing.

The exhibit will be divided into four categories of Moore's invention. All eight houses he designed for himself are grouped under "Houses for the Architect." Public housing and private houses are included in "Houses at the Center of the World." "Frivolous and Serious Play" includes outdoor public projects; and the last category, "Fitting," contains projects that are faithful to their contexts, the history of an area, a special place or group of people.

The exhibit likely will look at home at the Williams College Museum of Art, which recently reopened after completion of renovations and additions designed by Moore and Robert Harper, AIA, of Centerbrook Architects. From Williams the exhibit will travel to Moore's Hood Museum at Dartmouth College (see *Journal* page 32), the Farisch Gallery at Rice University, and the German Architecture Museum in Frankfurt.

The sudden impact of a whisper. Delicate texture on a hint of color. Whisper Patterns. For those who don't understand the meaning of compromise.

It's no wonder people pay more attention to a whisper. American-Standard's Whisper Patterns™ Zigzag on Shell (shown), Heather with waves, and pinstripes on Sterling Silver.

Exclusively on the Ellisse™ Suite. And coordinated tiles from American Olean. For our luxury products brochures, write to American-Standard, Department PBD, P.O. Box 2003, New Brunswick, NJ 08903. To see Whisper Patterns, visit our Showplaces: Chicago (111 Crossroads of Commerce, Suite 100, Rolling Meadows); Dallas (12344 Inwood Rd.); Los Angeles (116 N. Robertson Blvd.); New York (40 W. 40th St.); Pittsburgh (100 Ross St.). Or call 1-800-821-7700 (ext. 4023) for your local showroom. © 1986 American Standard Inc.



**AMERICAN  
STANDARD**  
Pure luxury

**Design** from page 12

rather than from general theories; the English suspicion of abstraction finds the idea of 'creativity' as elusive and intangible as the idea of 'originality,' which may merely hide the fact that no one has been so stupid as to do it before." He picked as the best design of the century the London Underground map of 1931, calling it "the product of a thoroughly practical exercise of imaginative common sense."

Sir Hugh Casson, architect and until recently president of the Royal Academy, agreed with almost everything Nuttgens said, pointing out that to the British, "Art is a hobby fit only for what Henry James used to call unreliable people like foreigners and women." He said that "the Englishness of the English is that in times of crisis, they turn for help not to reason but to memory," and added: "To the British, design is a social activity, about solving people's problems" and is characterized by "common sense, discipline, and intellectual torpor."

Contradicting virtually everything in these remarks was a particularly brilliant and amusing talk by Peter York, author and "style editor" of the magazine *Harpers and Queen*. He derided the notion that the British are any good at designing "things" and laid claim instead to world leadership in what he called "anti-design" or "software" that is the invention and export of life style and popular culture. "We don't make the video recorder, we make what goes on the tape," he said. "Our principal export specialties are punk and pageant, the future and the past." The past, he said, is "queen and country,

the romance of a WASP-y style based on the British 18th century," including such displays as the recent "Treasure Houses of Britain" show at the National Gallery ("doesn't it make you want to throw up?") and such exports as whisky, tweeds, tea, jam, Burberrys, and Laura Ashley.

"The English past sells," York said. "We're world leaders in the royalty market. And now we're increasing our royal dominance with exciting new models, tooling up for the '80s with Princess Diana, who is made for television."

Next to royal pageantry, York said, the software the world most wants from Britain is "juvenile delinquent rock stars—the future, but not the designer future of world's fair skylons." Punk style, new wave, new romantics are all "video style," he said, calling video record promotions "an original British art form that wraps up music, clothes, film, graphics, and set design" and is "postmodernism come to life, all about dressing up and making up and calling on the past and the future." Both punk and pageant, he said, involve conscious designers at every level, but in both cases the designers must conceal their presence so the public can believe that "the 18th century house just grew" or the video was "pure, spontaneous effusion."

Needless to say, the clash of punk with pragmatism was never resolved. Among other highlights of the week was a brilliant film festival that ranged from Hitchcock to "My Beautiful Laundrette," a talk by artist David Hockney on photographic space, and a talk by film producer David Puttnam on the moral obligations of film makers.—ROBERT CAMPBELL

## The Institute

# Competitions for Young Students Spark Interest in Architecture

Last spring in Oklahoma City 3,000 sixth-graders, with the aid of their teachers and area architects and architecture students, designed learning stations in space—73 fantastic spaceship environments for work and play. The task for 86 sixth-, seventh-, and eighth-graders in Des Moines was a lunar restaurant. In Atascadero, Calif., 32 fifth-graders designed new habitats for animals at the city zoo.

While such built environment education projects are not new for grades kindergarten through 12, they are increasing in popularity across the nation. As one educator put it: "Architecture is the hot item now."

The mushrooming of these programs in large part parallels an increased awareness of the built environment by both teachers and parents. "I think that all this began with the bicentennial and the inter-

est in the built heritage and preservation," says Ginny Graves, AIA's central states region environmental education coordinator.

Graves and the 19 other environmental education regional coordinators are the facilitators of AIA's efforts to encourage schools to include such education in the K-12 curriculum. As a guidebook, AIA published in 1981 *The Sourcebook: Learning by Design*, a resource detailing exemplary environmental education programs, describing commercially available publications and teachers' aids, and listing people and organizations involved in environmental education. (Ironically, this publication has recently gone out of print, at a time when demand is on the rise.

However, Alan Sandler, Director of AIA's environmental education program, will continue to track the architects in schools programs; for more information, he can

be reached at Institute headquarters, [202] 626-7572.)

The recent decrease in many states education budgets, as well as a declining National Endowment for the Arts grant for both arts and architecture education have caused teachers and school administrators to look elsewhere for unique educational programs.

"I think one of the reasons that learning about design came along when it did," says Sandler, "was because it was about the same period that the National Endowment for the Arts, which had been the primary agency for architects in schools was moving away from direct involvement to let the states and the localities do what they wanted. This left a vacuum and we stepped into it without trying to replicate NEA's programs."

As a result, "the number of programs our components are doing has increased significantly in the last five years," Sandler says. And other organizations are getting involved: For the first time, the annual conference of the National Trust for Historic Preservation (to be held Oct. 15-16 in Kansas City) will include seminars on built environmental education for grades K-12.

The learning station in space program in Oklahoma City was modeled after one developed by AIA and tested by 200 to 300 students in District of Columbia schools in 1983. In Oklahoma City, the program entered the classroom via the Chamber of Commerce's adopt-a-school program. In all, it was a tremendous and expensive—roughly half a million dollar effort, involving 93 teachers, 93 architects, and 93 architecture students from the University of Oklahoma and Oklahoma State University over five months. Every classroom was required to design one learning station.

The jury of scientists, architects, teachers, and journalists presented four awards with the entire top-winning classroom receiving a one-day trip to Johnson Space Center in Houston. (The winners will be part of the exhibit "Ideas Above Earth: Space Architecture," through Aug. 17 at the Octagon, AIA headquarters, Washington, D.C.)

Afterward, 60 percent of the teachers said they would participate in such a program again. Eighty-five percent of the architects responded positively, as did 90 percent of the students. But as Marian Floyd, the Oklahoma Chapter/AIA's executive director, says, "If we can change the life of one child, then the whole thing is worth it."

What seems to catch the imagination of the teachers is the interdisciplinary nature of architecture education. "What we point out is that it's economics, it's politics, it's geography, it's reading, and it's writing and math," Graves says. "The teachers can stick it into that teachable moment every day all day long, and you

*continued on page*



# Employee's moonlighting can result in lawsuit.

An employee who moonlights may be exposing you to a professional liability suit. In one suit brought by the client of a moonlighting employee, a large judgment went against the firm because its involvement with the project was unclear.

A moonlighting employee rarely has sufficient coverage or personal assets to cover a claim. Consequently, if a claim is made, the plaintiff may name the firm in the suit. The likelihood that the firm will be named increases if it has provided any support to the employee.

While an employer may not want to prohibit moonlighting, it should have written personnel policies that will discourage plaintiffs from in-

cluding the firm in a suit. Such policies should prohibit the performance of outside work on company time or property. In addition, the use of all company equipment, including the telephone and the copier, should not be allowed. Moonlighting employees should also inform their outside clients that the firm has no connection with the project.

CNA Insurance and Victor O. Schinnerer & Company, Inc., share information like this to help you avoid similar losses. It's part of our loss control program which has grown out of 30 years of experience.

Contact Schinnerer. And share the experience.

Victor O.  
**Schinnerer**  
& Company, Inc.

Underwriting Manager  
5028 Wisconsin Avenue, NW  
Washington, DC 20016 (202) 885-9500  
Coverage for this program is provided by  
Continental Casualty Company, one of the CNA Insurance Companies.

**CNA**

For All the Commitments You Make®

**The Institute** from page 14

don't have to wait for a specific hour."

The Iowa Chapter's lunar restaurant project was a day-long activity involving 86 students and 20 architects. Of that effort William Anderson, AIA, says it "taught the students a little about architecture and a lot about the process of solving an architectural problem. It allowed full freedom of expression and encouraged imaginative thinking. It dealt with the varied elements of form and function. And it was just plain fun, a beautiful example of how successful interaction between the professional and the educational community can be."

California's built environment education program encouraged teachers to develop a design problem geared toward a particular locale and the skills of a specific classroom. Besides the Atascadero zoo project, two sixth-grade classes in Baywood Park developed a plan and partial model of their community 10 years in the future. Fifth-graders in Shell Beach designed a model multi-purpose facility for their community.

Most built environment educators feel both the one-shot approach and the curriculum-directed programs are valuable. Teachers' involvement is viewed as all important. As Sandler says, "The key is for the teacher to be interested and carry the ball. Architects can serve as the igniter, but education happens every day in that classroom with the teacher and kids."

"If you give the teacher good enough information," Graves says, "they will take that information and make it right for the kids at their level."

The architect's role, says Sandler, is to "work with the teacher in sort of an architect/client relationship in reverse where the teacher is the director/manager and the architect has the message to deliver. They work hand-in-hand, but the teacher is the primary leader in the project."

In the end, though, it is the children who are the biggest beneficiaries of this built environment education. What was made clear in the programs mentioned here was an increase in self-esteem and a new sense of cooperation. Many of the children who never participated in class or who were labeled slow learners became classroom leaders, and children who didn't excel in book work were often achievers.

Ultimately, built environment education is to be most influential in the long run. As Kathy Atkinson of the California Chapter/AIA explains: "Our members for a long time felt the need for future citizens to understand the built environment, about what will affect the quality of lives in urban areas. With the limited resources that we have and the growing populations, we just can't be wasteful about space. . . . We need to get future decision makers informed." Graves concurs: "Environmental decisions are being made by lots of people who have not had architectural

training and most of whom have not even had art. They may not have had any exposure to land use or people needs, or any of those things. And we are saying, 'Let's give this kind of information to the developer, to the banker, to the lawyer, to the average citizen that sits on the city planning commission.' The benefit in the long run is that we will have an improved built environment. . . . And the time is so ripe."

—NORA RICHTER GREER

## Architects Donate Time to Help Rebuild Flood-Damaged Cities

Floods in rural and ski-country West Virginia last November killed more than 50 people and ravaged several towns, sweeping buildings and cars downstream and washing out roads. Damage was so severe that cleanup was still underway in some areas as spring turned to summer; bodies occasionally were being found in piles of debris.

Three days after the flood crested, Governor Arch Moore Jr. asked the West Virginia Society of Architects/AIA to assist in planning the rebuilding of seven of the largest towns along the Greenbrier and Potomac rivers. No state money was available at the time and a perceived need for haste precluded employment of a national AIA-sponsored R/UDAT. All preliminary planning and design work would have to be volunteered.

Francis Guffey, AIA, president of the state society of architects, estimates that since the flood architects, landscape architects, and contractors have donated well over 2,000 hours. "A number of the volunteers are single practitioners," he says. "We tried to limit their pro bono work to weekends, but it had to be just whenever they could get to the communities in-

*Damage along the main street of Petersburg, W.Va., just after flood waters receded.*



involved. It has taken a lot out of their practices."

Governor Moore has praised the work. At a press conference, he said, "These West Virginia architects have done an absolutely outstanding job of volunteer attempting in every way they possibly could to share their professionalism and their talent. . . . Their efforts have been of the highest caliber."

Guffey, who coordinated the work, participated in one of the mini-R/UDATs assigned an architect as captain for each of the seven towns. These seven teamed with a landscape architect, a contractor and "as many others as possible," Guffey says.

"We knew we couldn't spend a lot of time on the scene," he continues, "so we obtained the services of architectural technology students from Fairmont State College and Bluefield State College, who worked over Christmas vacation in bad weather to photograph the damage. All that they did was excellent."

After the photographic documentation—a series of 2x3-inch streetscape photos backed by 8x10s showing greater detail and dissemination of damage assessment forms to property owners, each team spent at least two days in its assigned town, meeting with community leaders to further assess needs. Two of the towns, Albright and Rowlesburg, require planning more than revitalization because their downtowns were literally swept away. Marlinton and Moorefield, many turn-of-the-century buildings are intact (although their character is obscured by "modernization"), so the approach is more one of revitalization. Petersburg and Alderson require a combination of planning and renovation. Parsons was part of the original study. However, prior to the architects' involvement, city fathers had applied for a federal urban design action grant, which subsequently was not approved. Guffey

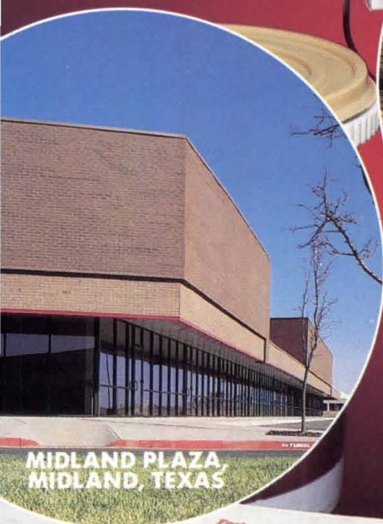
*continued on page*

# U.S. BRICK SYSTEMS

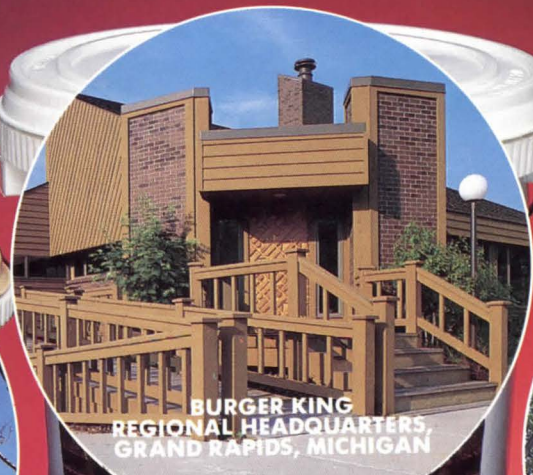
## Insulated 1/2-inch Panelized Kiln-Fired Clay Brick

Maintenance free exterior  
 Aesthetic and easy installation  
 Durable and fire-resistant

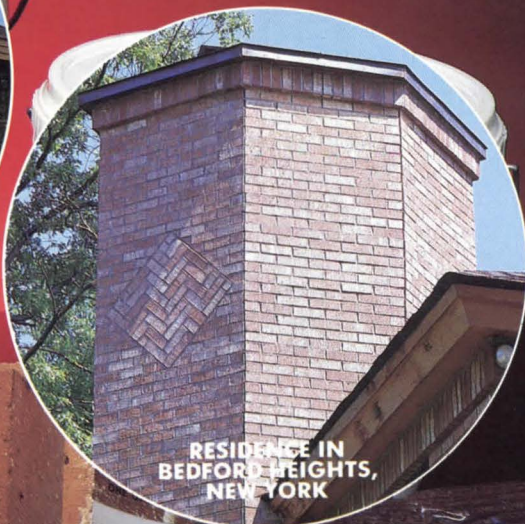
Enhances property values  
 Versatile product and systems  
 Higher insulating "R" factors



MIDLAND PLAZA,  
 MIDLAND, TEXAS



BURGER KING  
 REGIONAL HEADQUARTERS,  
 GRAND RAPIDS, MICHIGAN

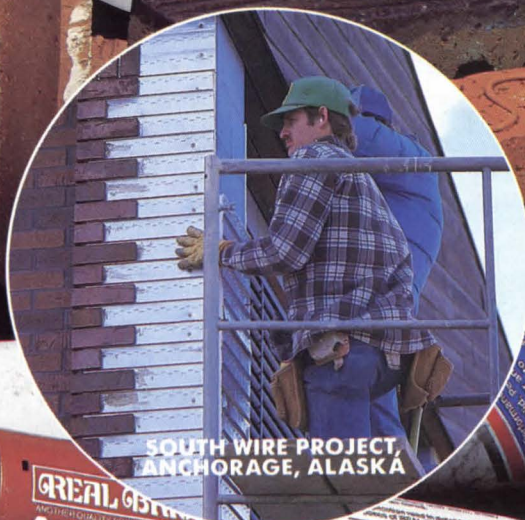


RESIDENCE IN  
 BEDFORD HEIGHTS,  
 NEW YORK



Antique Red

- (1) Trowel Mortar
- (2) Apply Brick
- (3) Trowel



SOUTH WIRE PROJECT,  
 ANCHORAGE, ALASKA



Brick  
 Group  
 Brick, Inc.  
 National  
 (pany),  
 est  
 of half-  
 fired clay  
 use in  
 ns as  
 there are  
 to be  
 ated.

Brick, Inc., Real Brick Products Group,  
 Main St., Owosso, MI 48867  
 Information about U.S. Brick Systems call toll-free at  
 1-800-744-7440. In Michigan call 517-723-8380.

The revolution has begun...

**The Institute** from page 16 believes Parsons will undergo downtown revitalization and some overall planning geared to attracting tourists during ski season.

For each town, teams prepared renderings and/or plans showing what can be done, along with narratives that go into the towns' histories, damage caused by the flood, recommendations for the future, and cost estimates.

Meanwhile, in June, Governor Moore announced that the state would provide

about \$4.5 million to rebuild the seven towns' commercial centers and distributed half of that amount to the communities. At that time, Moore said he didn't want residents to consider the plans his recommendations. Rather, he said, he wanted to share ideas of professionals from which they could choose.

Guffey says the teams are now working with the state and communities to modify the plans. "It is a continuing effort," he says. "The volunteer work has not stopped."

## Cities

# Development Finally Underway Along Philadelphia's Waterfront

When it was proposed more than 20 years ago as part of the Bacon plan, Philadelphia's Penn's Landing project was one of the first proposals by an American city to reclaim its waterfront for public use. Now, after many false starts, there is activity, not just on the 37-acre landfill that makes up Penn's Landing proper but all along a two-mile stretch of waterfront.

This is happening even though the problem of access, which has been perceived as the chief obstacle to development, has not yet been fully solved. The riverfront is cut off from the lively nearby Society Hill, Old City, and Queen Village neighborhoods by Interstate 95, and there is no direct access from the expressway itself. The successful opposition of the nearby neighborhoods to expressway ramps was at least the excuse used by previous developers to abandon their plans.

But now, a 15-acre marina/trade center is nearing completion, an apartment project within an abandoned pier is renting, several other residential and hotel projects are moving ahead, and development appears likely at Penn's Landing itself. There is even the promise of activity on the east bank of the Delaware River, in Camden, N.J., where Campbell Soup Co. plans to build a new world headquarters in conjunction with an aquarium planned by the State of New Jersey.

At its beginning, Penn's Landing was conceived as a self-contained megastruc-

ture. It was called "a city within a city," but it was in fact an island on the river—a four-block-long parking structure with towers sprouting from the top. Now it is viewed both as a focus for development activity and, most of all, as an entertaining place for both tourists and local residents.

This redefinition stems in large part from the success stories of such other waterfront developments as Baltimore's Inner Harbor. But it also reflects a way in which Penn's Landing has already succeeded. Since 1975, it has been used primarily as a public park, a place for performances and fireworks displays, boat shows, or just gazing at the water. The high density of the private development once seen for the site would no longer be politically acceptable. Moreover, nearby private development of a scale not conceived in the original plans helps justify the costs of public improvements to the site and allows Penn's Landing itself to be less dense.

The symbol of this changed perception is the 3.5-acre Great Plaza, which opened in May. This rather baroque space—the whole thing is conceived as a grand staircase that connects the ground level of the city to that of the river's edge—is a fragment of an earlier master plan by Cope Linder Associates. That plan was intended to be visionary, a sugges-

tion of what might be possible prepared after the city government rejected a developer's proposal that had been accepted by a previous administration. The decision was made to go ahead with the Great Plaza, even though the rest of the plan was unlikely to be carried out, in order to ensure that a major public space would be at the heart of any new development there. At the moment, it is a space floating in space, a dramatic and eccentric thing that will pose a real challenge to those who follow.

Rouse & Associates, the same local developer whose downtown Liberty Place development will shatter Philadelphia's informal height limit, has been given the right to develop the first phase of Penn's Landing, a festival marketplace and a 250,000-square-foot office building, with options to eventually develop the entire site with apartments, hotels, and more office buildings. Evans Development Co. of Baltimore is codeveloper of the first phase, and Cambridge Seven, Wallace Roberts & Todd, and Rector & Olsen are the architects. No designs have been released, and Rouse representatives say that they are still looking for a feature that will set Penn's Landing apart from other waterfront developments. They have had talks with several local cultural institutions, as well as with the Disney organizations and film makers George Lucas and Steven Spielberg.

One indication that the right to develop Penn's Landing is now considered very valuable came in June when Leland Bell, the city councilman for the district that includes the site, was arrested. The FBI charged that he attempted, along with his chief aide and a person alleged to have organized crime connections, who were also arrested, to extort \$1 million from developer Willard Rouse in exchange for ensuring that a bill Rouse needed to obtain financing for the first phase would pass council. By postponing a key vote, Bell did delay Rouse's application for an Urban Development Action Grant on which the financing was based, but it seems unlikely that this will jeopardize the project as a whole. —THOMAS HINE

*Mr. Hine is architecture critic for the Philadelphia Inquirer.*

*News continued on page*



*Left, conceptual rendering of Rouse scheme; right, the recently opened Great Plaza.*



# NEW! Pierce™ Lettering Cartridge

Featuring  
Convenient Handi-Tab™

The compatible\* lettering cartridge that sets a new standard of convenience, quality and value in the world of printed communications.

\*Use in Kroy®, 3M®, and Gestetner® Lettering Machines.



## FASTER, CLEANER LOADING WITH HANDI-TAB™

Exclusive Handi-Tab™ makes loading far easier... eliminates irritating "carbon finger mess."

Use a Handi-Tab whenever you load a cartridge.

## CHARACTERS WITH MORE DENSITY, DURABILITY.

Pierce and Data Card Corporation have combined forces to produce Ribbon-on-Tape™, the new "state-of-the-art" type on adhesive-backed tape. Long-

lasting, harder to smear and with less flaking, Pierce Handi-Tab lettering delivers better originals for you to copy or use for labeling.

## PATENT PENDING CARTRIDGE HOUSING.

Another Pierce plus! Our exclusive housing keeps tension consistent from beginning to end of your tape for precision dispensing. Elimination of extra wide

spacing and overprinting means more quality letters, more value per cartridge.

## HANDI-TAB™ LETTERING MAKES GOOD COMMUNICATIONS EVEN BETTER!

Use for: • Blueprints • Proposals and Reports • Labels • Overheads • Flyers • Headlines

## HANDI-TAB'S SUGGESTED 5 PAK PRICE \$79.95

Headlines were set with Pierce™ Handi-Tab™ Lettering.

'No-Ghost' Diazo: Black  
All-Purpose: Black



**PIERCE®** Pierce-Data Card, Inc.

P.O. Box 10699 St. Paul, MN 55110-0699 | 1-800-372-7377

Handi-Tab™, ribbon-on-tape™, registered trademarks of Pierce-Data Card, Inc. Pierce™, registered trademark, Pierce Business Products, Inc.

\*Registered trademarks of Kroy, Inc., 3M Co. and Gestetner Corp.

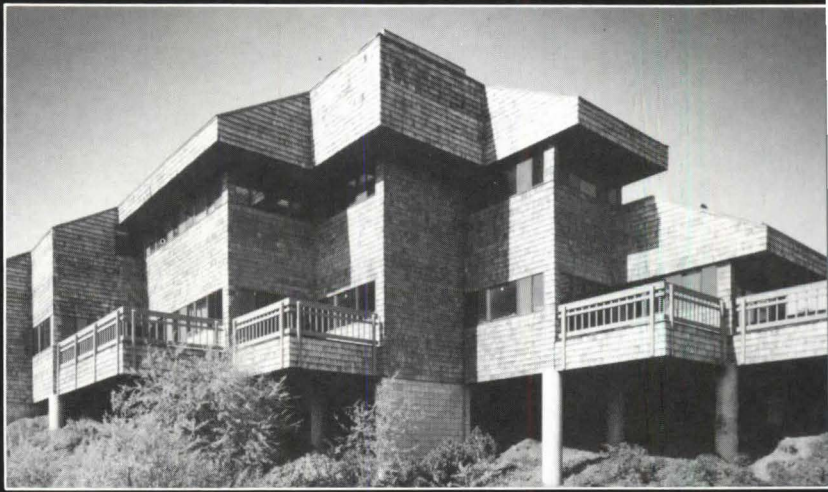
For your local Dealer or More Information on Pierce™ Handi-Tab™ Lettering Cartridges, Please Call 1-800-372-7377. In Minnesota Call Collect at (612) 430-2440. Or fill in this card and return.

Name \_\_\_\_\_  
Company \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
Phone \_\_\_\_\_ ARC 886

20405 6/86

Circle 8 on information card

# Solving a natural dilemma with fire-treated cedar shingles.



Fire. It's the ultimate nightmare. And when you've solved every other problem in a project, it's the last thing you want to worry about. But for Richmond Rossi Montgomery Architects, it actually was.

Their primary problem was to build a business and professional complex on a virtually unbuildable site—and at the same time maintain the natural harmony of the environment. The solution was a design for a series of gracefully shingled pyramids with gently sloping roofs. The only fly in the ointment was the Class B fire code requirement for the roofs. But since cedar shingles and shakes can be pressure treated to meet fire retardancy specifications, that dilemma was easily solved.

For free information on specifying and fire treating red cedar shakes and shingles for a project of yours, write to:

Red Cedar Shingle & Handsplit Shake Bureau, 515-116th Ave. NE, Suite 275, Bellevue, WA 98004



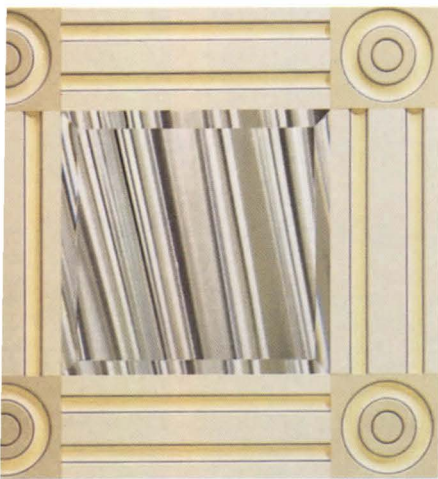
These labels on the bundles of red cedar shingles and shakes are your guarantee of Bureau-graded quality. Insist on them.

The Promontory, San Luis Obispo  
Richmond Rossi Montgomery Architects

**Red Cedar Shingle & Handsplit Shake Bureau**

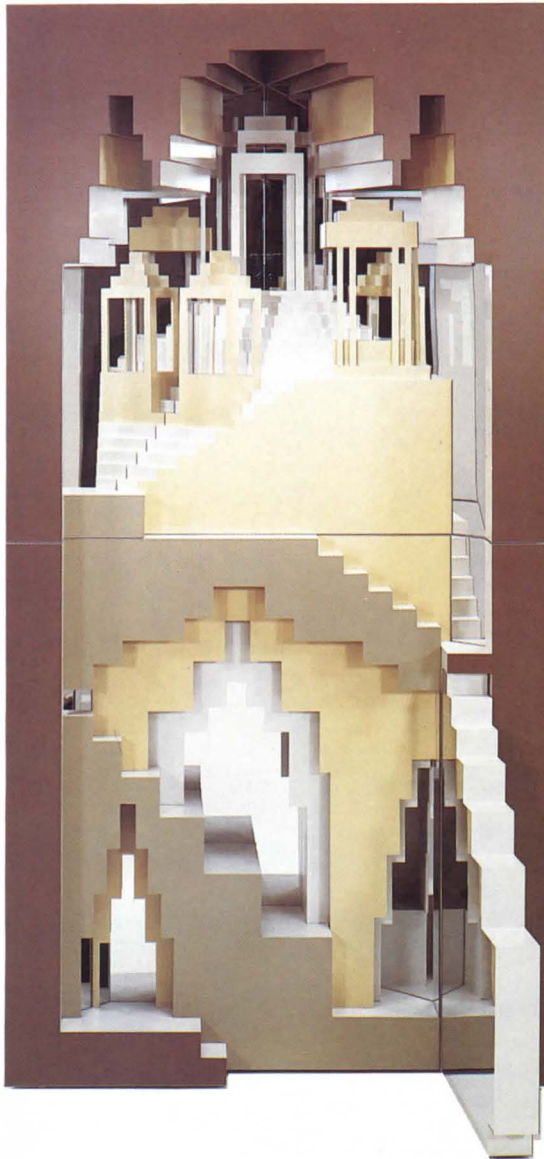
The recognized authority

Circle 9 on information card

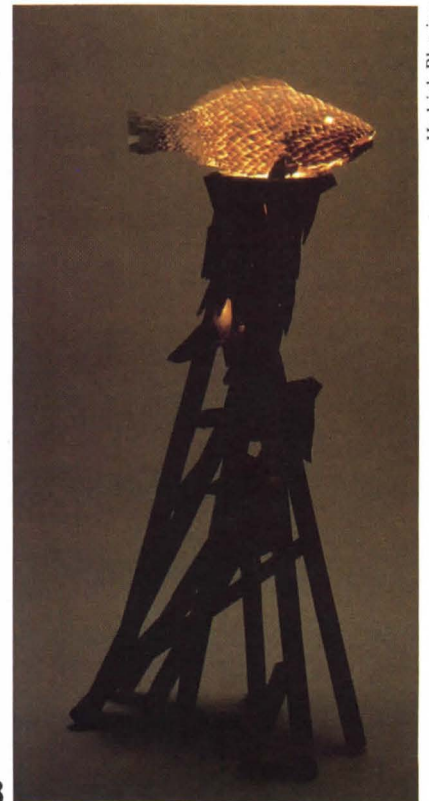


Arts  
Sculptural Objects  
by Architects

Hedrich-Blessing

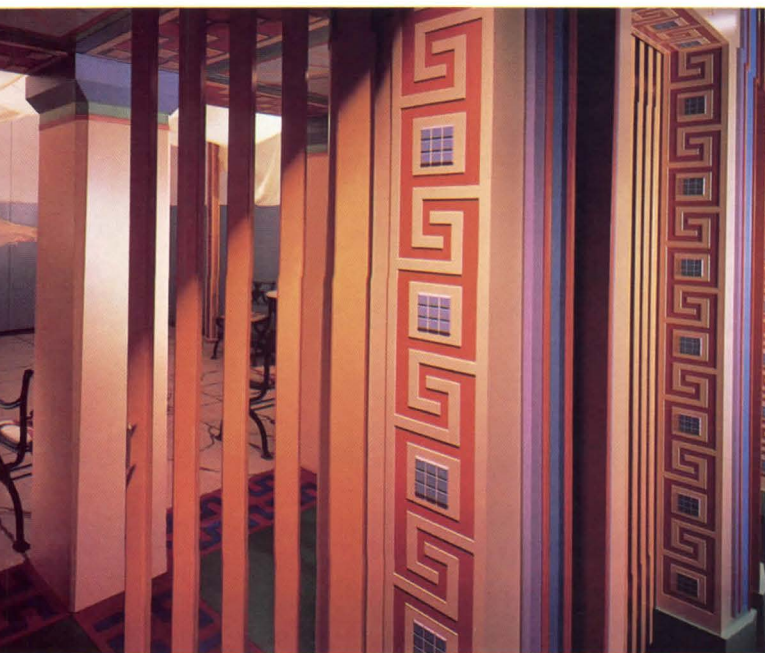


2



Hedrich-Blessing

3



These four colorful objects are part of the Formica Corporation's "Surface & Ornament" exhibition and competition for the creation of innovative furniture and conceptual objects utilizing ColorCore surfacing material. Organized three years ago, the program has grown to include works by 31 designers.

"Mirror in the Greek Revival Manner" by Robert Venturi, FAIA, (1) is a simple, classical detail measuring 36 inches square and constructed of tan and yellow ColorCore and mirrored glass. Charles Moore, FAIA, combined miniature stairways, cutouts, and architectural details (2) in his "Corner Cupboard." A light fixture, entitled "Ryba" (3), constructed of Douglas fir, glass marbles, and ColorCore, is the first of a number of sculptural animal designs by Frank Gehry, FAIA.

Formica's colorful showroom (4) in Chicago was designed in 1984 by Thomas Hall Beeby, AIA. —LYNN NESMITH

# Haws. Envision The Possibilities

A drinking fountain or water cooler should serve more than one purpose. Beyond a cool, refreshing drink lies the element of design. You know better than anyone—the right design choice can produce a dramatic effect.

Haws adds an entirely new perspective to the way you might normally think about drinking fountains and water coolers. Our full line of design-oriented fountains offers more of what you're looking for—Innovation. Creativity. And Beauty. Not forgetting the traditional characteristics for which Haws fountains are known—75 years of Quality Workmanship. Reliability. And Reputation.

When you really stop and think about it, the message becomes crystal clear. Haws drinking fountains and water coolers can meet all of your architectural needs. Envision the possibilities!



For more information, contact your Haws Representative, see Sweets section 15.7C, or phone the Sweets BUYLINE®



© 1985 Haws Drinking Faucet Company

**Haws**

Haws Drinking Faucet Company  
P.O. Box 1999 Berkeley, CA 94701  
415/525-5801 Telex: 33-6358

Circle 10 on information card



# VALANCE HEATING/COOLING: Finally getting the attention it deserves



After years in the shadows of the HVAC industry, Valance systems are making a move into the limelight. The steadily increasing interest in Valance heating and cooling seems to support claims by Edwards Engineering Corp. that Valance hydronic systems are inexpensive to install and maintain. Valance — the pioneer manufacturer of heating/cooling — also points out that Valance does the job of separate heating and cooling conditioning systems, but the all-in-one units are mounted out of the way on the ceiling. Valance uses circulating water chilled or heated by water chillers or boilers to provide year-round comfort. The feature of Valance is that no fans or blowers are used to achieve the end effect; so, operation is assured.

Valance systems look like a decorator's choice: a decorative baseboard radiator positioned near the exterior wall. In the summer, water running through the Valance terminals lowers room temperatures by natural convection. The cooled air gently falls to the floor to keep it comfortable. In the winter, heated air rises from the hot water terminal and warms the ceiling to obtain a radiant effect from the ceiling. For both heating and cooling, no fans or blowers are used.

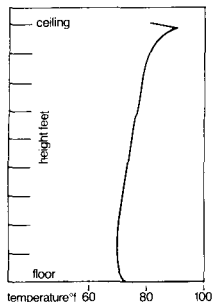
Valance systems can lead to dramatic savings in both new building installations and retrofits applications and they save operating and maintenance money, too. Some of the reasons will illustrate why:

Valance systems require no duct work, no exposed wiring or space between floors. Individual terminal units are easy to install so you can count on reduced labor and material costs — which will immediately lower overall construction costs.

Valance systems are shipped ready-to-install directly from the manufacturer: pre-cut units with all modifications and supplied with all mounting components. Each terminal unit includes a finned heat transfer coil and insulated piping. No line voltage, no wall modifications and no motor hook-ups are required.

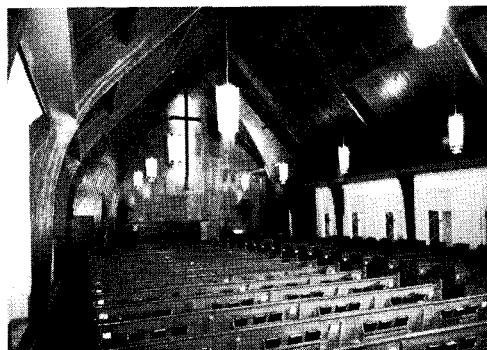
Valance systems are nearly maintenance free. They have no fans, blowers or motors to wear out or change. Walls won't streak and refrigerant requirements may actually drop.

Valance systems are energy systems. Tests have shown that a heating mounted on the ceiling provides a warmer floor temperature. (See chart 1) And the cooling provides a higher air velocity, almost free cool air at less cost than conventional air conditioning systems.



Valance provides economy, another key advantage is the system's silent operation. No fans, blowers or motors to create noise. Valance becomes an exceptional heating/cooling choice for institutions, of-

fices or companies that rely on a calm, quiet atmosphere in which to conduct business.

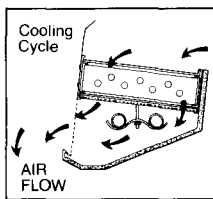


An excellent example of Valance heating/cooling systems is at a large institutional complex in Baltimore.\* Facilities there include a chapel, gymnasium and private school. Valance systems were installed in all the structures — in the chapel for cooling, the gym for heating and the school for both heating and cooling. Here's why:

The Chapel was an existing structure that already had baseboard heating — without any cooling system. To assure the comfort of its parishioners, the church's building committee knew a cooling system would have to be installed. The problem was that to install a forced-air blower system would have required extensive construction and modifications. Ducts either had to be placed behind walls, disguised in front of a wall or placed on or in the ceiling. All of these options would have meant considerable expense for the Church and would have closed the chapel for several weeks. The obvious choice, on the recommendation of a Baltimore engineer, was a Valance system — specifically an Edwards Engineering system.

Installation of the cooling system in the chapel took only days, during which period the chapel never closed. And the system was less expensive than other systems the church considered.

**When operating on the cooling cycle,** chilled water circulates through the tubing in the Valance coils. The air in contact with the finned coils is cooled, then falls to the floor, spreads outward, rises to the Valance unit and is re-cooled. Normally, all of the air in a room passes through the Valance system at least once every 7 to 10 minutes. This air flow eliminates stagnant areas and assures even temperatures throughout the room.



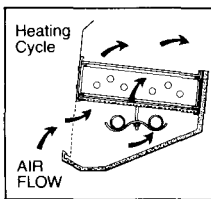
Now the Chapel is cool and comfortable all summer long. The minister never has to shout to be heard over a noisy forced-air system. The Chapel is completely silent. Says one church official, "The silence feature is extremely important for the Church. The Chapel is calm and peaceful. There's no competition between the minister and the cooling system. And our energy costs are a lot lower than we expected."

The gymnasium in this particular complex presented a completely different problem. The gym was being built from scratch by the

Church. After the success of the Valance cooling system in the chapel, the Church was particularly interested in exploring the advantages of a Valance heating system. Again Edwards was contacted.

The main problem with the 70' x 95' gymnasium was that it had no floor space available for conventional floor heating units. Construction costs for additional duct work were also prohibitive. The Church officials wanted the most economical option possible, one that would allow easy construction and maintenance, yet would still be effective for uniform heating. After thorough study of all available systems, Valance was selected. And the option to expand the system to include a cooling capacity was included. The result was an efficient, out-of-the-way heating system that required no duct work and helped the architects design an unusually clean, efficient, modern facility.

**When the Valance system heating cycle is in operation,** hot water circulates through the Valance tubing and warms the air which comes in contact with the finned tubing. The



heated air then rises to the ceiling and forms a blanket of warm air across the ceiling. Radiant energy from this warmed ceiling strikes the floor perpendicularly and is reflected to create a layer of warm air along the floor. In the gym, the Valance heating system proved to be efficient, economical and space saving — perfect for the needs of the gym.

One of the truly outstanding features of Valance systems is that heating and cooling can be managed through one hydronic system. This particular Church group was quick to take advantage of this feature. When the Church built its new high school, they designed a Valance Heating/Cooling system right into it. The 26 classroom school has capacity for 500 students and projected capacity of between 950 and 1100 students. The combined Valance system easily fulfills the needs of the school and allows the opportunity for simple expansion at a later date. It's also especially useful to the school for two other reasons: one, it's silent; two, it's off the floor, which means students can't damage the units and valuable floor space is saved.

This Church installation confirmed what other institution and commercial building owners have found. Valance Heating/Cooling systems are a better way. Clean. Efficient. Attractive. They surpass the capabilities of competitive systems for less costs. They are easy to install and maintain. They don't involve complicated wiring or plumbing. And they do all this for one reason: they operate according to the simple laws of heat transfer — letting natural convection and radiant energy do the work.

**The Valance Heating/Cooling system** is the modern choice in HVAC. If you have not used Valance yet, find out more about it... call Edwards Engineering today, US: 1-800-526-5201, or write: Edwards Engineering Corp., 101 Alexander Avenue, Pompton Plains, NJ 07444.



101 ALEXANDER AVE., POMPTON PLAINS, N.J. 07444  
Phone: (201) 835-2800 TELEX: 130-131

Circle 11 on information card



Located in Arlington, VA, The Arlington Hospital is a full-service general hospital. Staffed by more than 700 licensed physicians, the 350-bed teaching hospital has been affiliated with Georgetown University School of Medicine since 1950.

## “Scrubbing up at The Arlington Hospital is always a successful operation with Sloan OPTIMA<sup>®</sup> No-Hands Systems.”

Cleanliness and efficiency are two essential aspects of providing responsible patient care. In a busy 350-bed teaching hospital, maintaining a sterile environment is a must. The Arlington Hospital has discovered an efficient way to ensure cleanliness with the installation of 58 Sloan OPTIMA No-Hands systems.



In the emergency room, the operating suites, and the labor and delivery rooms, Sloan OPTIMA No-Hands systems are helping to reduce maintenance, enhance cleanliness and promote

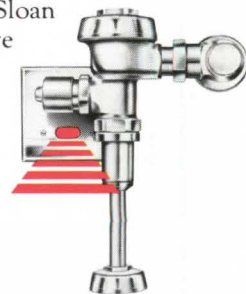
water savings. An electronic sensor “sees” the user, and the OPTIMA system automatically turns the faucets on and off—only as needed. Awkward arm- or leg-actuated faucets are eliminated to provide a quick, no-hands scrub-up.

The results: a more sterile, efficient scrub station. Reduced maintenance and water usage. And greater convenience for medical personnel.

Easily installed in any new or retrofit situation, the Sloan OPTIMA system meets all building codes and readily adapts to existing sink and plumbing hookups. The system is also compatible with soap dispensers, hand dryers,

shower heads, and more.

Ask your Sloan representative about Sloan No-Hands automated systems. Or write us.



**SLOAN VALVE COMPANY**  
10500 Seymour Avenue, Franklin Park, IL 60131  
*A Tradition of Quality and Pride*

# ARCHITECTURE

This is our third annual review of architectural education. As in the past we have selected five schools of architecture from different regions of the country, under different ideological imprimaturs, and present them with all the color, idiosyncrasies, and contradictions that a school, as a collection of human beings, is bound to have.

In working on this issue, we take an investigative, anthropological approach to our subjects. We visit with the tribe for a few days, talk to chieftain, high priest, and native alike, learn the customs, language, rituals, and taboos that govern the study of architecture at a particular place. We then weigh what we have heard and what we have seen and compose a portrait that, we hope, is a faithful likeness.

We also hope, for the schools, that these profiles carry a shock of recognition, like hearing your own voice on a tape recorder; a certain familiarity with ourselves as the strangers others perceive us to be. That's the best way to have a fresh look, as faculty or student, at a place you think you know very well.

—MICHAEL J. CROSBIE

*(Dr. Crosbie was editor in charge of this and the two previous issues devoted to schools of architecture. D.C.)*



# Academy Above Well-Known Waters

*Cornell University's department of architecture. By John Pastier*

Conventional wisdom has it that there are three crucial factors to consider when evaluating a piece of property: location, location, and location. Architecture schools are more complex propositions, but location must be an important consideration in any assessment of Cornell University's.

Cornell definitely has location, in the form of a splendid hilltop site threaded by rushing gorges and overlooking Lake Cayuga in upstate New York's rolling Finger Lakes wine country. According to local tradition, Frank Lloyd Wright once declared Cornell's setting to be the most beautiful in the country. (Alas, he said it largely to add force and symmetry to his assertion that the university's architecture was the worst in the country.)

On the other hand, lacking a local urban context and isolated from metropolitan centers, Cornell is not a promising location for the teaching of architecture. Comparison with the Ivy League's other architectural schools underscores those deficiencies. It is the only one that lies outside the East Coast metropolitan corridor. Columbia and Penn occupy close-in precincts of New York City and Philadelphia, and Harvard is just a few subway stops from the heart of Boston. Yale adjoins downtown New Haven, and although the city is small, its texture is urban and it is rich in history and significant architecture. Only Princeton duplicates Cornell's small town setting, and by way of compensation, it is only an hour's drive from Philadelphia and New York. Ithaca is nearly five hours by car from the nearest metropolis, New York, and at present Pittsburgh is the largest city to which it is directly linked by air.

Such isolation is a decided handicap for an architectural school. It deprives students of tangible and easily accessible examples of successful architecture and urban structure. It severely reduces practice opportunities for faculty members and, conversely, precludes the use of good local practitioners as adjunct faculty. Similarly, outside jurors cannot be used in great numbers. It also means that students and faculty will not be able to avail themselves of the benefits of other architectural institutions or figures in the community, for there are none. In short, architecture is an urban and experiential art, and there is a certain paradox inherent in attempting to teach it in bucolic isolation.

Fortunately, what is paradoxical is not necessarily impossible, and Cornell has managed to adapt to its isolation, soften its effects, and even turn it to advantage. The department of architecture at Cornell is completely dependent on its own resources; geography has created a condition of nearly total self-reliance. Here, architectural education is not a casual process, but very much a conscious act of will.

For such a school to succeed, its students, faculty, administration, and library must be of superior quality and physical facilities must be workable. (Among architecture schools, even some of the best-known ones, it is surprising how often that last factor is an impediment.) And beyond that, there must be some organizing strategy giving shape to the educational endeavor.

At Cornell, that strategy is the notion of the academy. Department chairman Jerry Wells questions the applicability of this

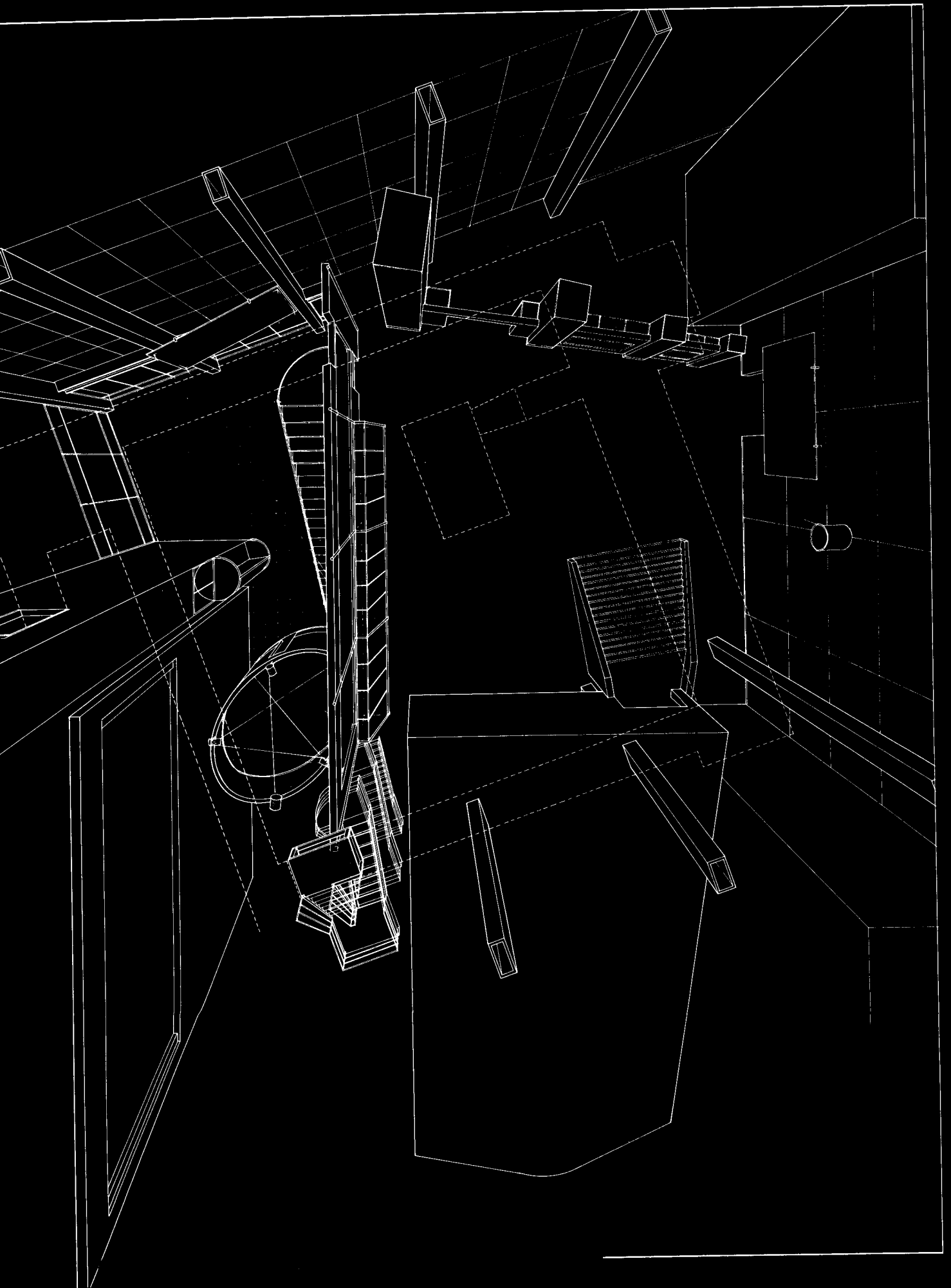
term, but it is an expression frequently uttered by his faculty and students alike. For the most part it is meant in the positive sense of a rigorous and structured institution, while occasionally it refers to a somewhat inbred and self-referential quality that hovers far above Cayuga's waters. Academicism is the institution's primary strength and subsidiary weakness; it defines Cornell's essential nature and serves as its vehicle to transcend isolation.

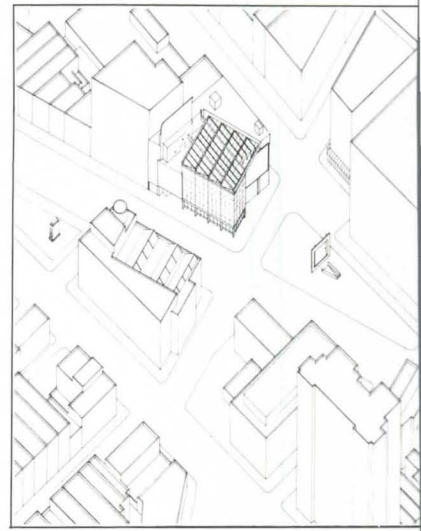
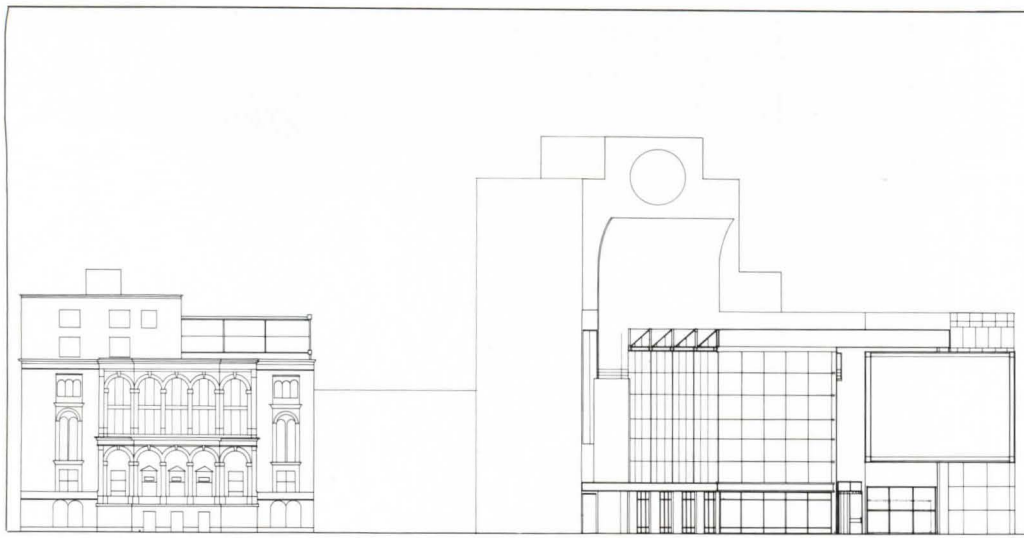
Established 115 years ago, Cornell's architecture program is the third oldest in the country. (MIT's was the first, and the University of Illinois' was second.) Appropriately, the college of architecture, art, and planning is housed in several old buildings, the centerpiece being Sibley Hall, a long, 19th-century round stone building crowned by mansard roofs and a shallow white dome. The program is the only one in the Ivy League that stresses undergraduate education (three-quarters of the 400 students are working toward their first degree). Indeed, it is the only one offering an undergraduate professional degree, and the only one that makes a professional degree a prerequisite for admission to the graduate program. Unlike the others, it has not been dominated by a star practitioner during the postwar decades; there have been no figures such as Gropius, Breuer, Kahn, Rudolph Sert, Venturi, Graves, Giurgola, Moore, or Pelli on its faculty. It is not an incubator of architectural postmodernism; in many respects it is one of the few remaining outposts of modernism.

The larger institution is something of an anomaly; partly a land-grant public university comprised of several state colleges and partly a group of private, endowed schools and colleges of considerable prestige and cost. (Architecture, with an annual tuition of \$11,600, occupies the second category.) Because of Cornell's hybrid nature and its removal from the beaten path, an architecture faculty member suggests that its Ivy League affiliation largely means "playing them in football." Nevertheless, the school clearly benefits from its Ivy League status by being able to attract a quality of student and faculty member far above that of other, and often more favorably located, upstate New York institutions. John Maudlin-Jeronimo of the National Architectural Accrediting Board observes that since Cornell is the sole Ivy League school offering an undergraduate professional education "it attracts the best high school graduates from all over the country. They exceed all expectations for undergraduates." William McMinn, FAIA, dean of the college, finds that "the students are very well motivated, come well prepared, and don't need to be driven, but respond intelligently to suggestion."

Naturally, this enviable mechanism of attracting superior students can be effective only as long as the institution matches their superiority. Up until a generation ago, the school seems to have been good but not exceptional, producing solid and successful alumni such as Nathaniel A. Owings and Robert Alex

*Above, Sibley Hall, home of Cornell's architecture school; right, plan perspective of film museum and institute thesis project by Marianne Kwok, with John Shaw and Michael Hayes as critics.*





ander, FAIA, a one-time partner of Richard Neutra. This is not to say that it wasn't resourceful; to offset its geographic insularity, it originated the now-common practice of having visiting critics teach design courses. Still, in the mid-to-late 1950s, when I attended Cornell as an engineering student, the architecture program seemed ordinary and perhaps a bit backward. (As a last remnant of the Beaux-Arts system, students had to prepare carefully rendered drawings of the classical column orders, just as they do in some "advanced" institutions today.) Thomas Beeby, AIA, now dean of architecture at Yale, attended Cornell immediately after, during a dramatic transition from the old dispensation to the new one. "I started out in a late-'50s pragmatic curriculum," he recalls, "but as the school acquired ever increasing numbers of faculty from Texas, it became more formally oriented and its priorities became more academic."

The newcomers were the near-legendary "Texas Rangers," a group of talented young teachers that had been imported to the University of Texas at Austin by dean Harwell Hamilton Harris, FAIA, during a brief period in the mid-'50s that still stands at UT's high point. Their presence proved too rich for the blood of a conservative and intellectually provincial institution, and in short order Harris resigned and many of his young faculty migrated north to Cornell, later followed by some of UT's better students.

Consequently, by the end of the '50s Cornell's refugee faculty included John Hejduk, FAIA, now dean at Cooper Union, Werner Seligman, now dean at Syracuse, the late Bernard Hoesli, and Lee Hodgden and Colin Rowe, who continue to teach in Ithaca. (Their Texas students now at Cornell include McMinn, Wells, and professor John Shaw.) Beeby describes the intellectual atmosphere that resulted: "There was always a kind of fanaticism there. Isolation forced an over-focus, and an intense dialogue with the discipline. It was an incredibly demanding place." Stuart Cohen, a Chicago architect and educator who earned undergraduate and graduate degrees at Cornell a few years after Beeby, also remembers that while "Ithaca felt monastic in that it's so isolated, it also felt like we were at the center of something important that was happening—it made us feel special. I literally think that those people (the Texas transplants and their protégés) reintroduced history into architecture."

In time, Rowe proved to be the central faculty figure due to his work in the graduate urban design studio and teaching architectural history, as well as his passions for Le Corbusier, Renaissance architecture, and traditional European city form. While there was no real architecture or urbanism at hand in Ithaca, there was a first-rate library offering 100,000 volumes and 200,000 slides on a wide range of architectural subjects. With such research materials available, and given the faculty's aim to extend the principles of early modernism (as well as Rowe's more particular interests), the school seems to have operated more in a European world than an American one, and in an abstract visual mode rather than one cognizant of social, behavioral, and implementational realities.

*Above, elevation and axonometric of film museum from previous page. Right top, diplomatic center thesis by Leo Chow, with John Ostlund and Charles Pearman as critics; right bottom, New York visual arts academy thesis project by M. Y. Shin.*

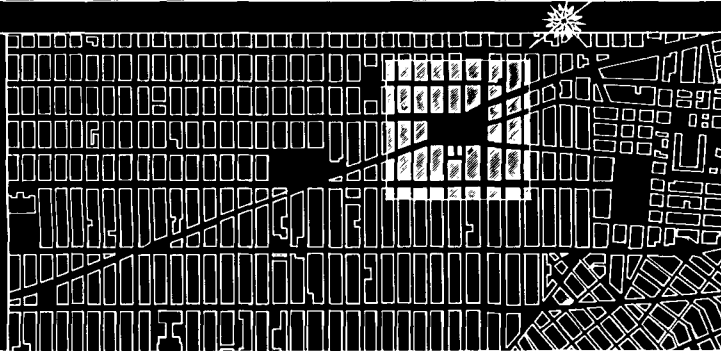
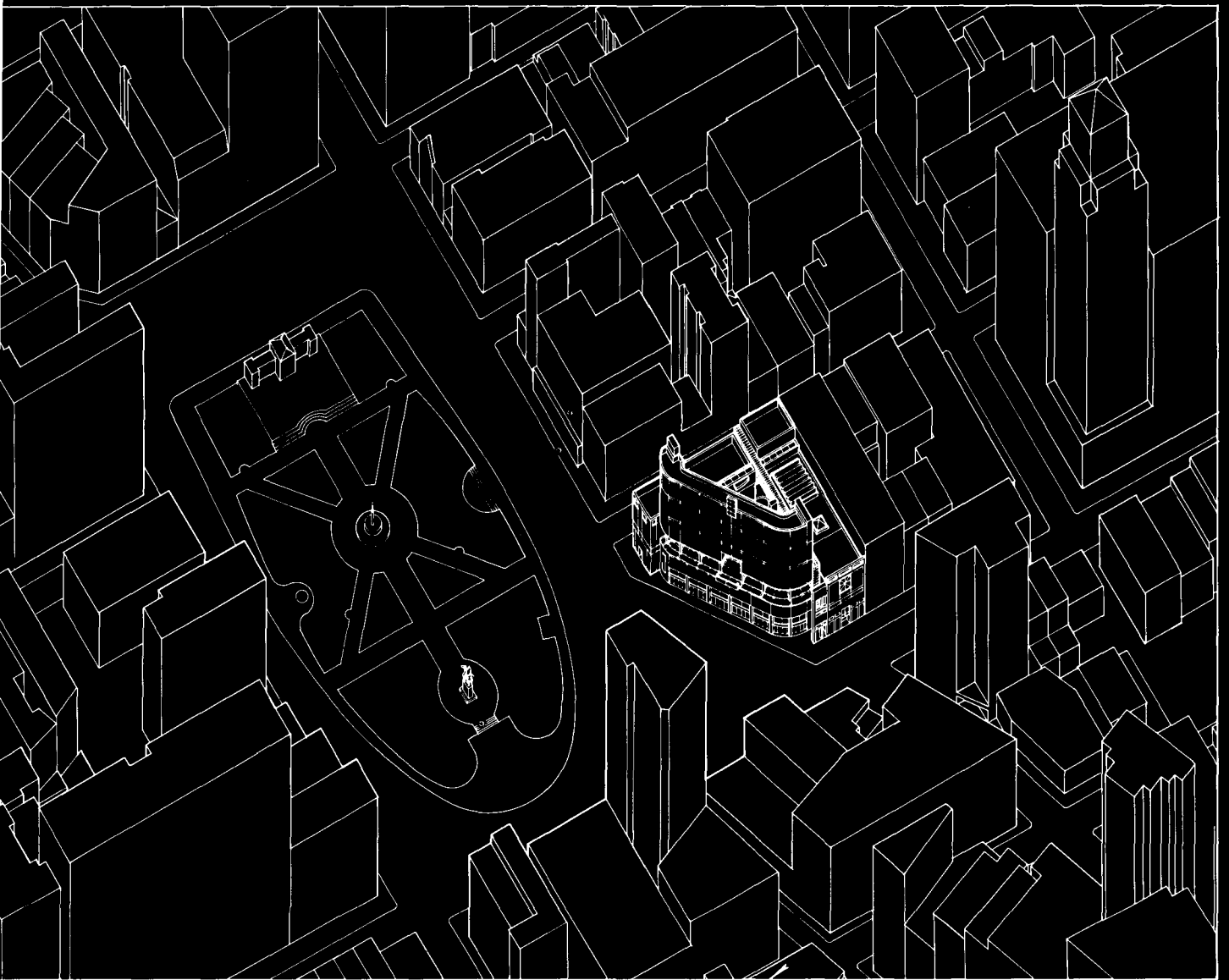
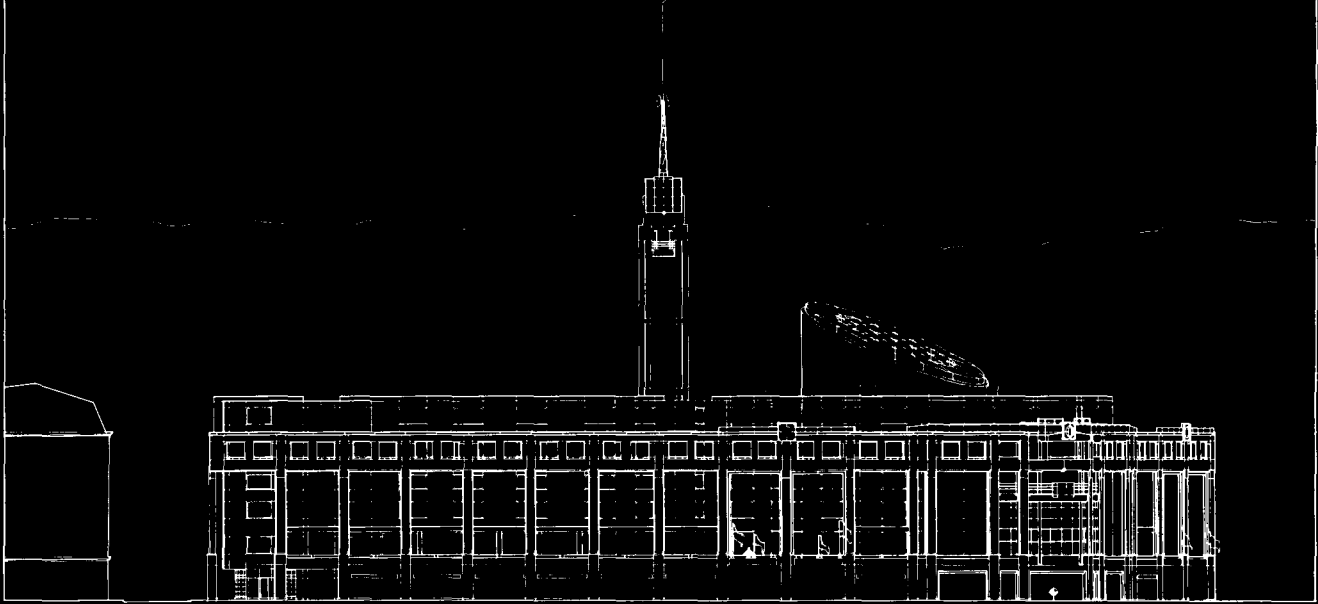
In architectural design, geometry and composition became major concerns, and densely figured floor plans based on skewed grids and reflecting a collage sensibility became a Cornell design hallmark: a purist reverence for Corbusian form and a fixation on dense, complicated, and not necessarily purposeful geometries. Even today, the stress remains on rigor and consistency of development rather than the more fashionable appropriation and application of historically derived elements. As one student put it, "architecture is not shopping."

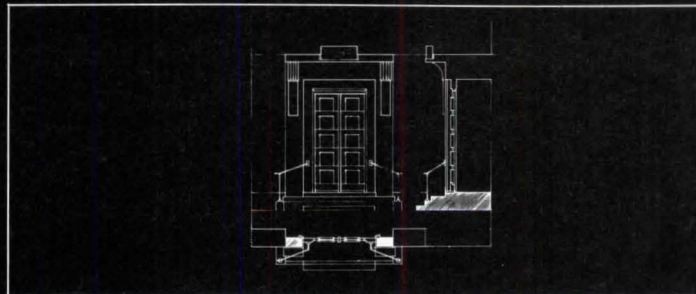
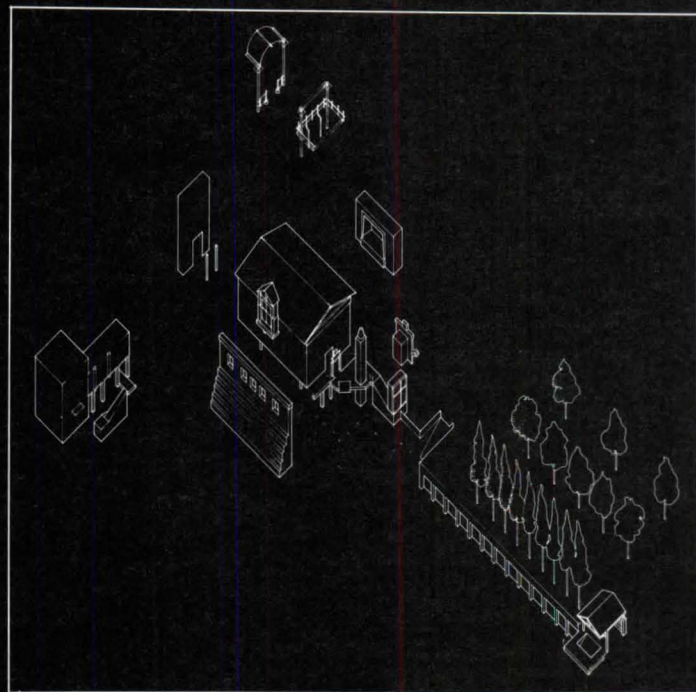
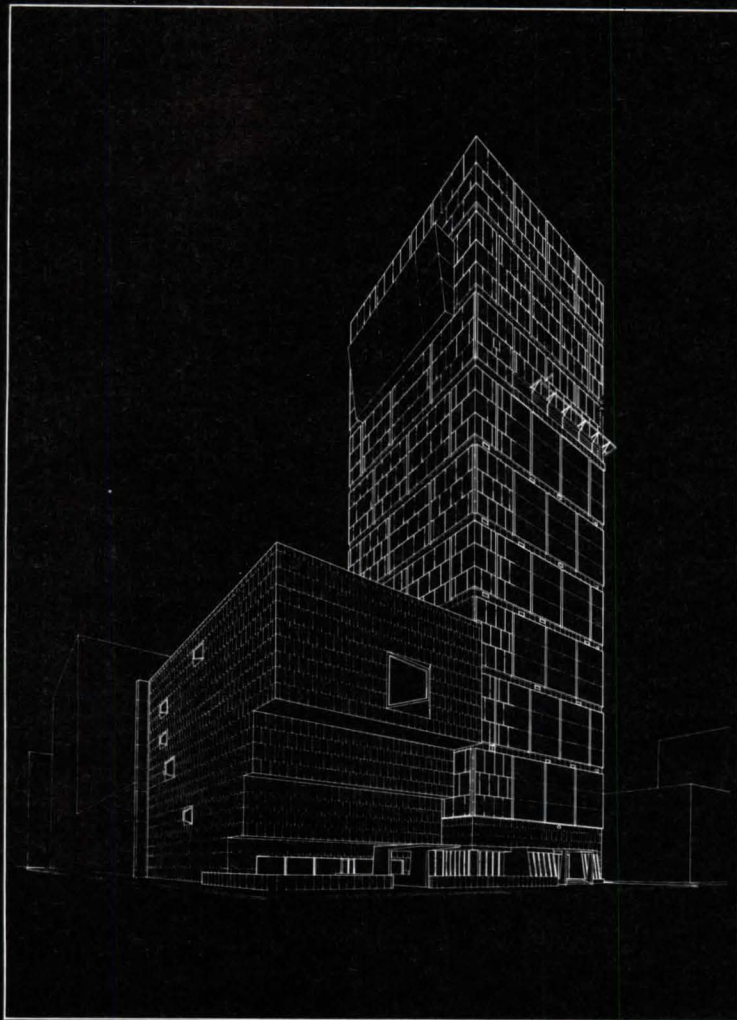
Rowe's graduate urban design studio, which began in 1963, took a somewhat different direction from the architectural design courses, and while it did not involve a large part of the student body directly, it nevertheless became highly influential and came to represent the school just as strongly as the collage-inspired floor plans. The studio focused on the figure-ground aspects of cities. After the first few years, the sites were frequently European, or, if American, were treated in a pre-20th century European manner. Existing solids and voids were mapped, and the new patterns were selectively proposed with the intention of resolving formal issues or introducing new compositional and organizational elements at a large scale. Often historic city patterns were documented as well.

The basic ground rule was to respect the traditional street line by forming continuous walls; the buildings were seen in plan as self-effacing urban elements rather than freestanding objects in space. Public spaces, of course, were also proposed, but as conscious components of the street pattern rather than as the residue of architectural form or a loosely woven urban fabric. The classic presentation method for these exercises were elegant black and white figure-ground diagrams of building footprints and open space. The focus was on two dimensions rather than three, and on issues of abstract physical form rather than use, transportation, cost, and implementation that actual urban designers must confront in practice.

Despite (or perhaps because of) its narrow focus, the urban design studio was a powerful educational force. It spawned several theories of urban form (contextualism, collision city, and collage city) and created an appreciation for context and traditional urban space that had been unthinkable under modernist dogma. These issues also worked their way into the undergraduate studios. The result was a school where the dominant urbanistic orientation was postmodern (remarkably, nearly 20 years ago), while the architectural outlook has remained primarily modern, even to this day. These interestingly yoked philosophies stem largely from Rowe's forceful and brilliant advocacy of Le Corbusier's architecture and his equally vigorous and thoughtful reiteration of Corbu's theories of urban form.

Recognition of Rowe's influence and of the architecture pro-





Above left, thesis for Whitney Museum addition by Jay Lampros, with Jerry Wells and Val Warke as critics; above right, thesis for courthouse in Essex County, Mass., by Laura Weiss, with John Shaw and Mary Woods as critics. Across page, first-year project for travel society headquarters by Paul Souellis.

gram as a whole was at first centered mainly in the Northeast, and even there it was not always appreciated. Sobriquets such as "the Corb Academy" and "Finger Lakes Formalism" were applied to the school and its activities. (At one point, there was even a mild internal protest in the form of T-shirts emblazoned with Corbusier's modular man inside a red circle with a diagonal slash through it.) But these were also left handed tributes to Cornell's discipline and clarity at a time when many schools were unraveling academically. John Hejduk credits (or blames) Rowe for nothing less than the introduction of postmodernism to architecture. Finally, recognition of the most official sort was bestowed on the school last year when Rowe was given an award for excellence in architectural education by ACSA and AIA.

Official honors usually have a way of coming well after the fact, and it may be that the ideas produced at Cornell attained their strongest force 15 or 20 years ago. Hejduk, while praising the school as "a great place" having "lots of spirit," and one whose "graduates do well in the American architectural profession," nevertheless feels that "there is no searching" there, and admits to a lack of interest in the school's activities over the last 15 years. And in the urban design studio, judging from documentation in the most recent issue of the *Cornell Journal of Architecture*, the vitality of analysis and effort on the part of students seemed strongest in the mid-to-late 1960s, when the basic ideas developed there were still fresh.

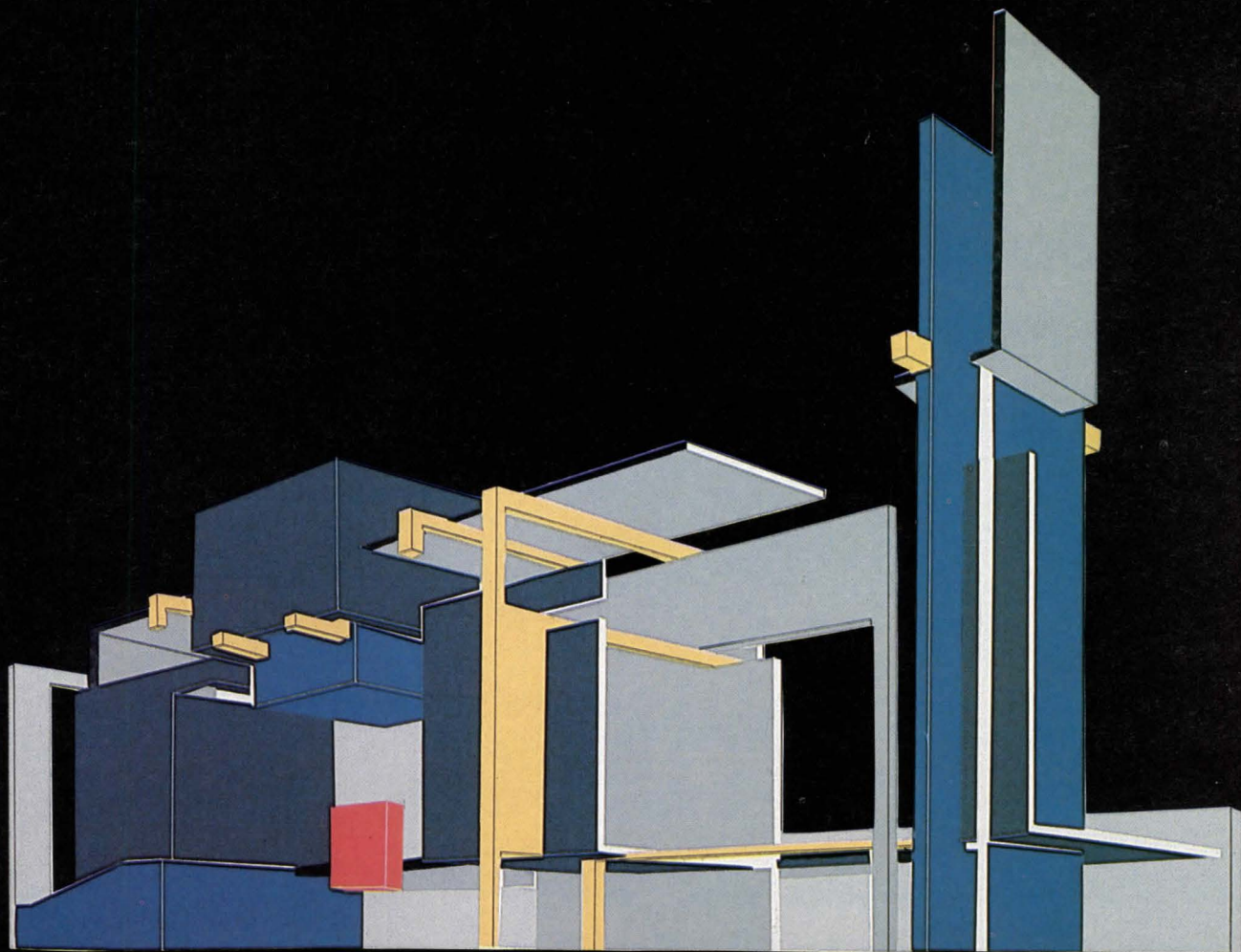
Even so, one may argue that this phenomenon is not a serious problem. The efforts of that period gave initial impetus and focus to the academy, but by its nature an academy is not a place where new ideas flow unceasingly year after year. Rather, it is a place of stability, traditions, and consistency, where high

standards are maintained. And in an institution where the emphasis is on undergraduate education, the nurturing of nascent abilities and the inculcation of basic values and discipline must be given high priority. In these respects the program is clearly effective, for by the end of the fifth year student work is highly competent and often quite mature.

Wells identifies the school's emphasis on design as its major strength and cites two factors that give particular substance to the studio work. First, "the whole faculty is highly influenced by urban contextual issues and teaches an analytical approach to the site as part of the city." This means that student designs "are not a product of the latest magazine issue, and are not decorated objects sitting on a corner." (Here it must be noted that context is seen almost exclusively as an issue of physical form and is defined in high art rather than vernacular terms.) The second factor is history, which is taught within the department and is strongly connected to theory. Besides Rowe, there are three full-time architectural historians on the faculty. Christina Otto is a baroque specialist who was for many years the editor of the *Journal of the Society of Architectural Historians*. Palladio scholar Martin Kubelik is part of a research team engaged in precise scientific dating of that architect's villas through the luminescent measurement. Mary Woods is a new faculty member specializing in American architecture, a subject that has not been given major attention at Cornell in the past. All three are involved in the design studios as jurors, and the design instructors themselves tend to be well versed in history and theory.

The school is very successful in developing a work ethic and a sense of community in its students, in part due to its isolation from the rest of the university as well as the world at large. There is nowhere to go and nothing to do but work on design. As McMinn puts it, "when you're here you're very much here, with no city distractions to compete with studio work. Students and faculty can focus and concentrate their commitment." Beeby remembers that "everyone lives in the building, partakes of an intense dialogue, and sops up information like a sponge."





one piece of graffiti on a studio wall proclaims that "good is freedom is slavery/design studio is easy." The pressure to perform and succeed is intense, as exemplified by one student who burst into tears after an unenthusiastic although not particularly negative final review of her thesis. But as hard as it is, students seem to adjust to the work and even thrive on it. One undergraduate calls the experience "crisis management. You have to learn how to deal with your schedule and not waste time." Another says that "it's such an honor to be here," while a third says that "you have to love it." Yet another student laments "there is little time for personal development." This is obviously an important issue for people coming straight from high school.

At the same time, there is strong camaraderie in the school. Students are pleased that there is not much interpersonal competition, but rather teamwork, a supportive atmosphere, and a sharing of discoveries. An undergraduate recalls how her non-architect roommates, aware of the program's near-legendary rigors, would "pamper" her on the limited occasions when she would come from the studio. This enviable arrangement lasted until one evening when they visited her in the studio to lift her morale, only to find radios blaring and people dancing. One roommate remarked, "you have a great time up here, and all along we thought you were going through hell!"

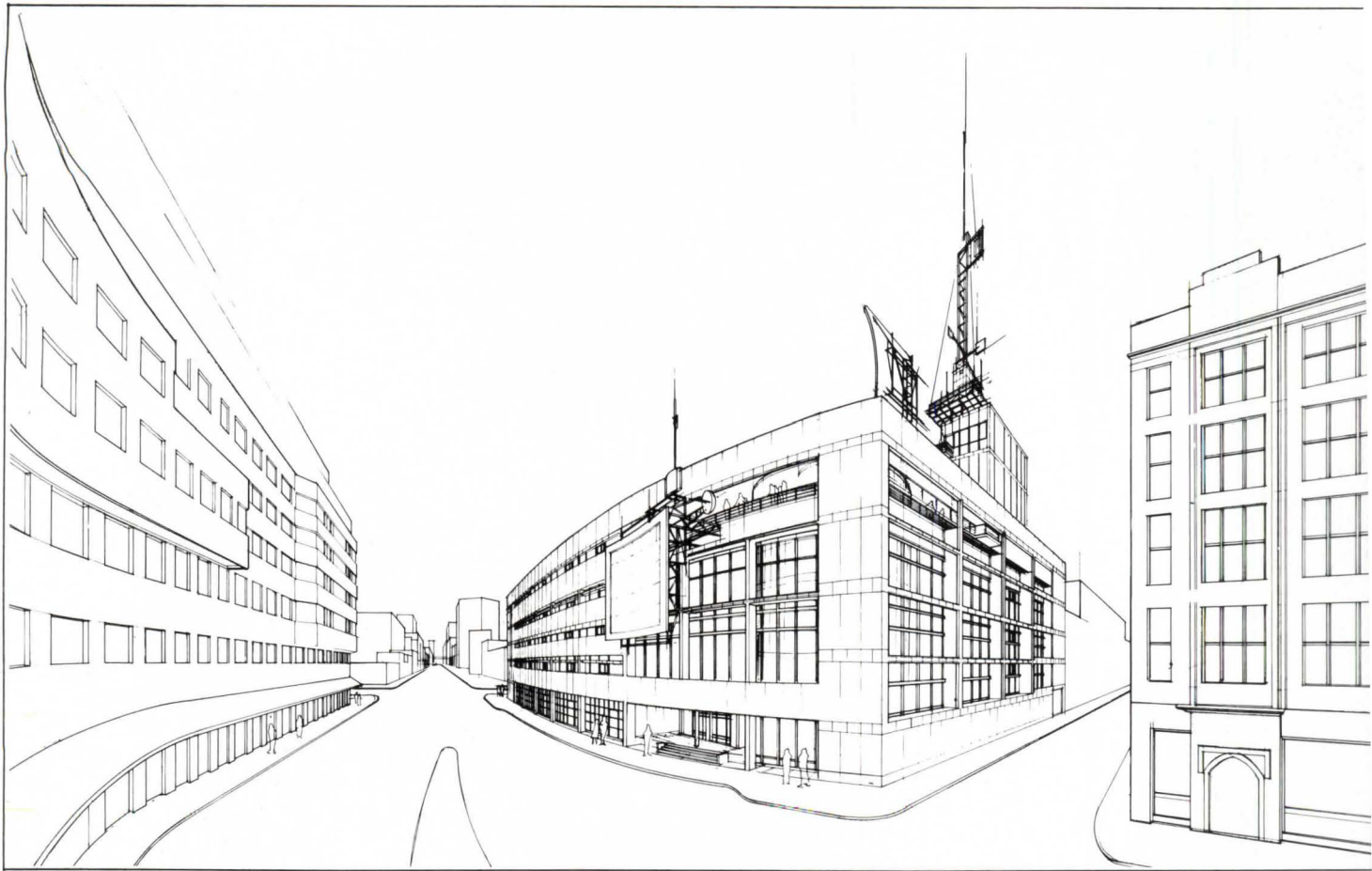
For all their enthusiasm, these students are also aware of many of the program's peculiarities. They recognize the isolation, and some call the program "a hothouse" and "inbred." One says that most of the professors were educated at Cornell, while another says "most" to "everyone." Actually, the proportion is high, especially among the design faculty, but certainly isn't total. At the same time, Cornell produces a good number of faculty for other institutions as well; indeed, the program's theoretical rigor and abstract concerns may be more suited to the academic world than to the pragmatic world of practice.

The proportion of Cornell students or faculty members who hold deans or department chairs at major architecture schools is

high, and includes Beeby at Yale, Alan Chimacoff at Princeton, Hejduk at Cooper Union, Wells at Cornell itself, Alvin Boyarsky at the Architectural Association in London, Judith Wolin at the Rhode Island School of Design, Werner Seligman at Syracuse, Stephen Fong at the University of Toronto, and, before its demise, first Peter Eisenman, FAIA, and then Stephen Peterson at the Institute for Architecture and Urban Studies in New York. Noting this ability to succeed in academia, Stuart Cohen compares Cornell's architectural graduates to psychiatrists who treat other psychiatrists.

But coupled with this specialization is another form of isolation. Just at Cornell's contact with the outside world is physically limited by location, so is it limited by an extreme selectivity concerning the people who become involved with teaching there. More than half of the design faculty is Cornell educated, and the outside jurors during my visit at the end of the spring semester were almost all graduates of the school. Two other points of nexus are the University of Texas and the Swiss Institute of Technology (ETH); their alumni plus Cornell's combine to form a strong majority of the total faculty and an overwhelming proportion of the design faculty results. McMinn feels that the faculty achieves diversity through its professional and academic experiences outside Cornell, but it may be that this is not quite enough. There is evidence of a consistency of viewpoint bordering on that found in a seminary, as well as a high degree of exclusivity. One symptom of this is the lack of any real link between the architecture and urban planning departments. Beeby finds that the school has "strong allegiances to people who are loyal" to its theories, while Cohen discerns an "anxiety about alumni who have gone off into the real world."

At the same time, it must be recognized that this selectivity is based very much on merit. The intellectual level of the faculty is inspiringly high, and, just as with the students, there seems to be a genuine sense of collegiality and mutual respect among the teachers. By normal standards, the proportion of deadwood and rampant careerism is refreshingly low.



*Above, broadcasting studio thesis by Clifford Chang, with John Shaw and John Ostlund as critics; across page, first-year architectural transformation of a bottle by Neil O'Shea.*

If there is a Cornell catechism, it is communicated during the core program over the first three years. In the next two, visiting critics studios, topical studios in housing, interiors, and industrial building, optional semesters in Washington and Rome, and finally the design thesis all provide opportunities for more independent and personally determined work. The contrast between thesis projects and third year design work is often startling and reveals frequent although far from universal departures from what is thought to be the Cornell style.

Furthermore, there are several harbingers of increased diversity on the horizon. Several members of the Texas group are approaching retirement age, and, for better or worse, their replacements will inevitably bring in somewhat different viewpoints. The younger history faculty is certainly not as Corbucentric as Rowe, and the addition of an Americanist to that staff may lead to greater interest in the architecture that we actually live with. The current student favorite on the faculty is Val Warke, a 31-year-old known for his imaginative design assignments. Last semester's problem was an amusement pier for a fictitious Massachusetts town that was so vividly described in the program that several students drove out to find it on their spring break. A recurring two-week problem is the set design for a standard repertory opera. The jury involves theater and music specialists from outside the department, including, on two occasions, conductor Rafael Kubelik. There are also plans for tenured half-time faculty appointments that will allow architects the flexibility of teaching while practicing away from Cornell's remote locale.

One change that has already occurred is a revamping of the first year design sequence. This involves, among other things, an elimination of specific architectural precedents as models for solutions. The results of this new approach have been dramatic; this year's freshmen (and freshwomen) have frequently produced work whose extraordinary quality makes it difficult to believe that most of them are still in their teens. Their performance cannot be entirely ascribed to the new pedagogical

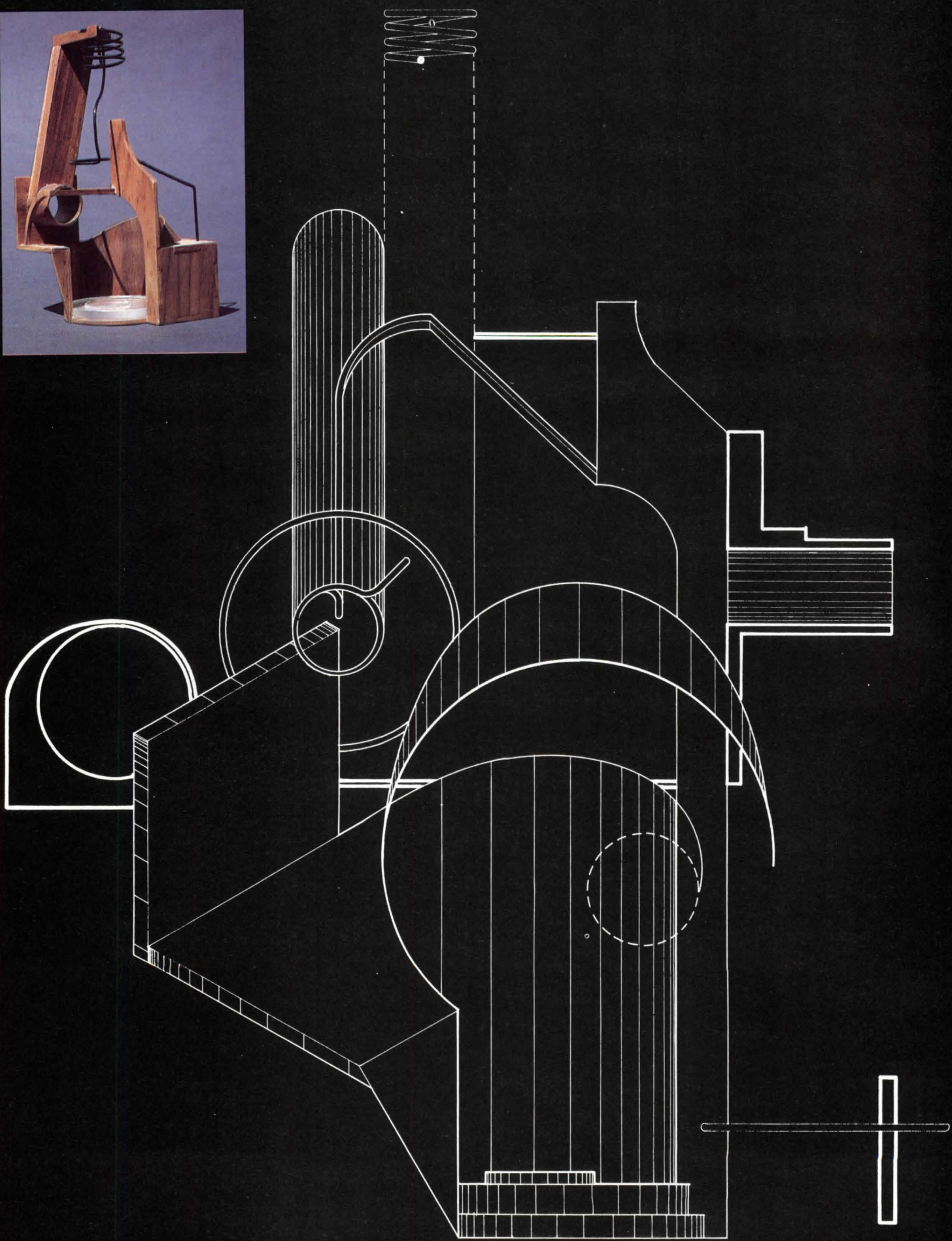
strategy; this is clearly a gifted class whose presence bodes well for the school's next four years.

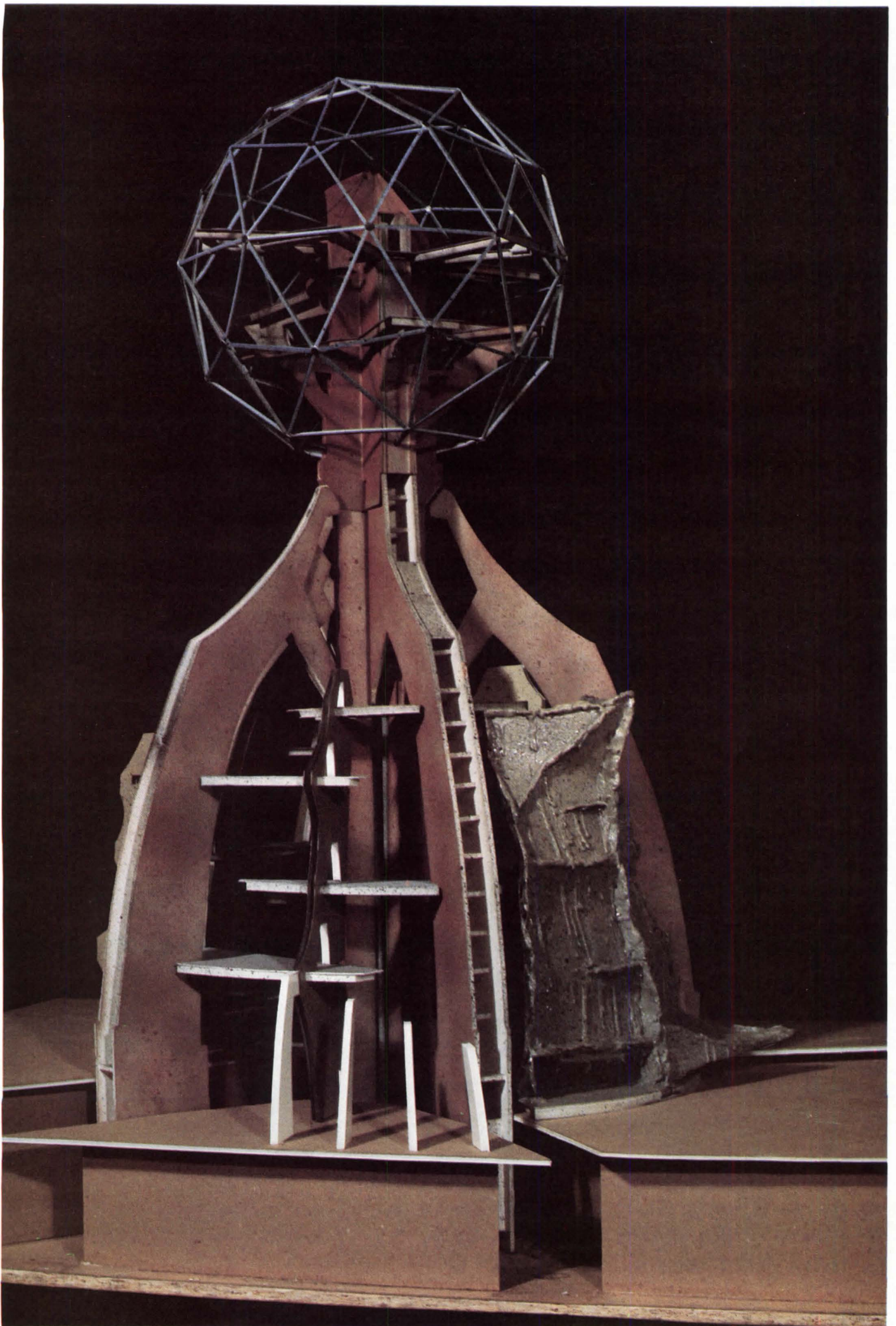
The Rome program is also new. The university has signed a lease on the Palazzo Massimo, and it requires little effort to imagine how dramatically a semester in that 3,000-year-old city could leaven the students' educational experience.

A considerably greater change has recently been announced. The college of architecture, art, and planning will undertake a major physical expansion, designed by Pritzker prize-winning alumnus Richard Meier, FAIA. This will involve tearing down one building, the somewhat nondescript Rand Hall, and adding on to the rear of Sibley Hall and extending laterally onto the Rand site, quite possibly with an auditorium element that would serve as a northern gateway to the liberal arts quadrangle. The new space would house offices for the three departments and new studios for art and architecture. The library would expand and Tjaden Hall, the old art department building, would become a creative arts center serving the university at large.

This physical enlargement, possibly doubling the size of Sibley Hall, might also result in an expansion of the graduate architecture program. McMinn is excited by the prospect of more and better studio space and by the educational possibilities inherent in placing the design studios in proximity with the art and computer graphics departments. (Cornell has developed some highly sophisticated computer graphics programs under the direction of professor Donald Greenberg, but the integration of this discipline into the architecture department has been hampered by space and adjacency constraints.) In new facilities McMinn envisions computer terminals within the drafting area in what he calls "the studio of the future."

Of course, there is always a danger that major physical change can have unplanned consequences. Often, old and cramped quarters are paradoxically better suited to the quirky chemistry of architectural education than spacious new ones, and there may be a considerable period of adjustment to such unaccustomed convenience. But the coming years will clearly be a period of flux at Cornell, and, in a place where remoteness can nurture a tendency to stasis and tradition, a time of dramatic change may be seen as promising. □





# Theory In-House, Practice in Offices

*University of Cincinnati's department of architecture. By Michael J. Crosbie*

use an architectural education pres-  
s one, presumably, for a professional  
er, there is constant tension between  
ry and practice. One graduates from  
vory tower of the architectural acad-  
to the down-to-earth circumstances  
e "real world" and often finds that  
itecture as a discipline bears little  
mbulance to architecture as a profes-

ne architecture program at the Uni-  
ty of Cincinnati exposes students to  
le of both worlds. It combines a thorough grounding in  
itectural theory and history with a co-operative program  
re students work in architecture firms. This allows the stu-  
s to engage in lofty, academic pursuits with the knowledge  
sooner or later they'll be pulled back to earth for a reality

ne school is large—approximately 500 students in a B. Arch.  
gram that takes six years to complete. There is also a small  
uate program with a handful of students pursuing a post-  
essional master's degree. The architecture department is  
of a college that includes interior design, planning, art,



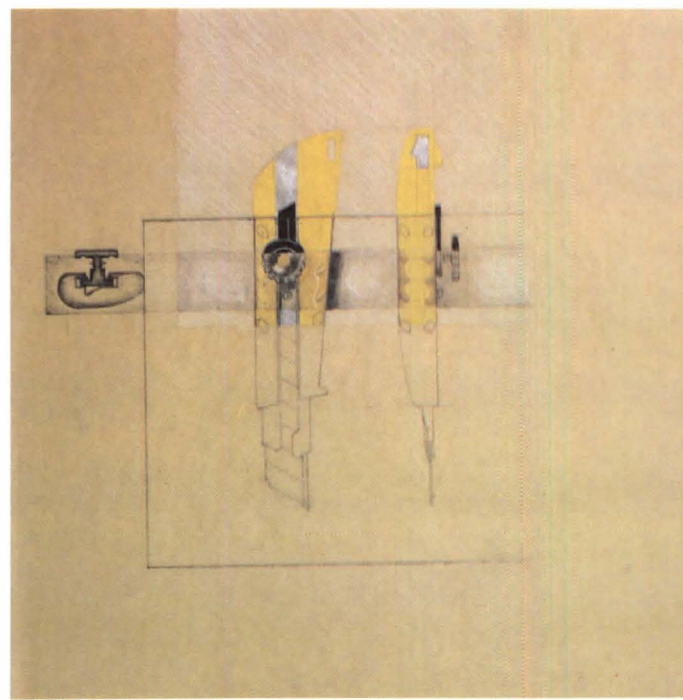
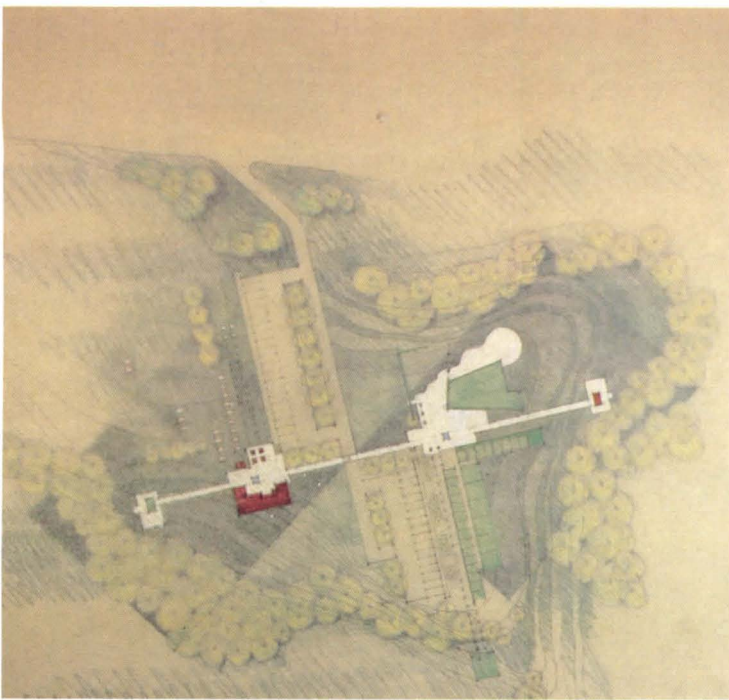
Michael J. Crosbie

fashion design, industrial design, and  
graphic design, and there is casual cross-  
pollination between programs. Fresh-  
man architecture and interior design stu-  
dents, for example, mostly take the same  
courses, and some studios have a mix  
of planning, interior design, and architec-  
ture students.

The mixture of students at Cincinnati is  
richer than you might expect at a regional  
school. Students are drawn from northern  
Ohio, Indiana, Kentucky, and West Vir-  
ginia because they see the co-op program as distinctive, says  
department head Gordon Simmons. The students are by turns  
positive and defensive about the school. There's a combination  
of Midwestern boosterism and a typically Cincinnati inferiority  
complex about being compared with the East or the West  
(Michael Graves, FAIA, and John Hejduk, FAIA, are intoned

*Above, U.C.'s Design Architecture Art & Planning building; across  
page, thesis design for insectarium at Washington, D.C.'s National  
Zoo by Tim Maggio; below, 're-presentation' of the elements of  
theater by Tom Bowman, with Philip Parker as critic.*





as Cincinnati grads). Active within their own organization, the students put together lecture series and pay for them with proceeds from a bagel stand. Their spirits are buoyant despite marginal facilities and overcrowded studios. According to Andrea Kahn, assistant professor, "The primary strength of the students is their regional, Midwestern openness. They're incredibly free from what I'd call stylistic preconceptions. They have a real vitality and willingness to learn."

What Cincinnati gives them is exposure to architectural ideas that are new and an insight into the workings of their chosen profession. The curriculum is structured so that the first two years are spent in required "foundation" courses concentrating on design fundamentals, theory, and history. In the second half of sophomore year, the class is split in two groups; one studies while the other works. The following three years are open with a minimum of requirements so that students can pursue interests of their own, while the last year is devoted to a senior thesis project.

"Many of our students come from modest backgrounds," says John Meunier, the director of the school who has been strengthening Cincinnati's program since he arrived from Cambridge University a decade ago. "They know their own worlds and the values of those worlds well. We get them excited about a new set of values that are available through architecture." Meunier describes the curriculum as a spiral, divided into sections that represent the various components of architectural education. "Students start in the very middle of the spiral, right in the middle of architecture," Meunier explains, by building during their first week as freshmen a cardboard shelter, which they have to sleep in overnight on the lawn outside the school. "It raises all the issues: firmness, commodity, and delight," he says. As they wind their way through the spiral in the remaining years, Meunier adds, the students are exposed in greater depth to a host of architectural issues.

Instead of semesters, the program is structured in quarters that run all year long. Half the time is spent in class and the other half in the field. While in school, there is a concentration on design, supported by courses in history and theory. The latter is presented as a survey of the theoretical models of analyzing architecture and creating it. "When you're in school," says one student, "it's a design school, and the professors do not emphasize the technical aspects of architecture. They really emphasize the art of architecture."

Even courses that pertain to construction and environmental systems are supposed to be approached from a theoretical stance, although Meunier admits that it is difficult to find faculty who teach them that way. "The traditions of methods and materials

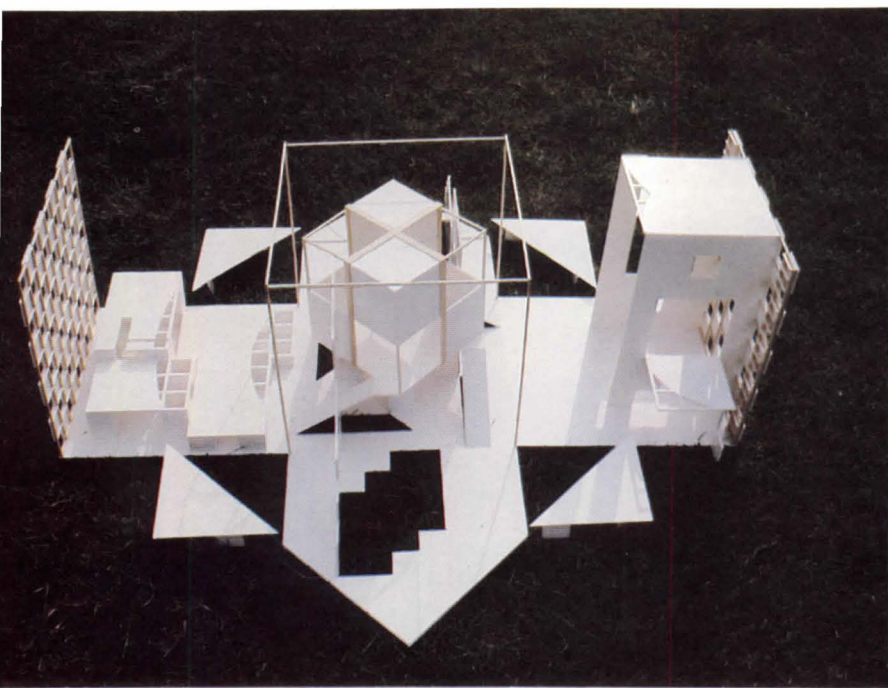
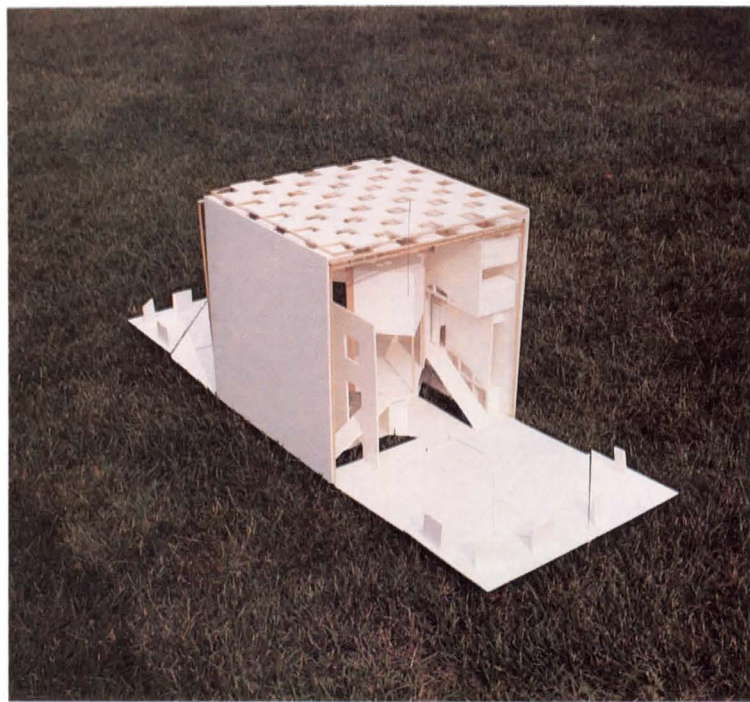
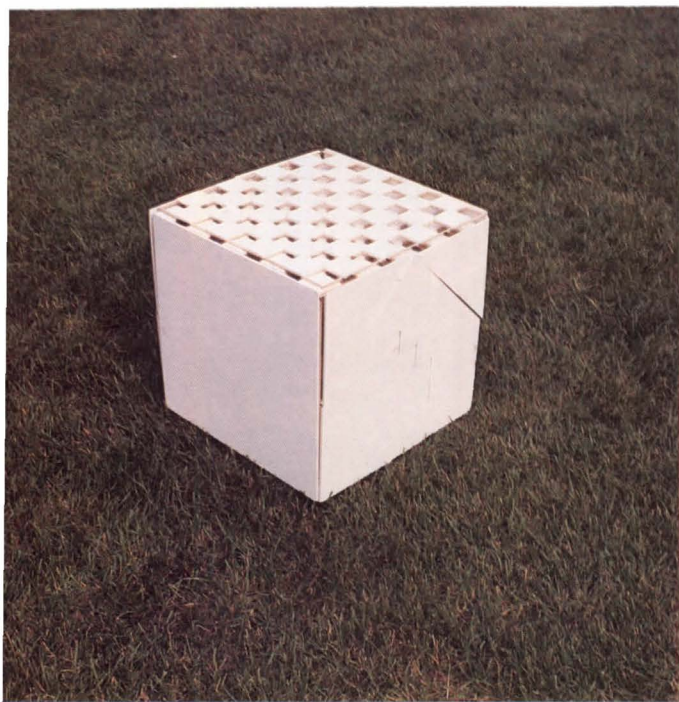
*Above left, site plan for a meteorology center by Lee Bloom with Philip Parker as critic; above, 're-representation' of mattress cutting tool at full scale by Tom Bowman, with Philip Parker as critic. Across page, top and middle, 'dimensions of a cube' project is an unfolding environment by Dana Shoup, with John Meunier as critic; bottom, section of cube project was designed as a musical instrument/stage, built, and played.*

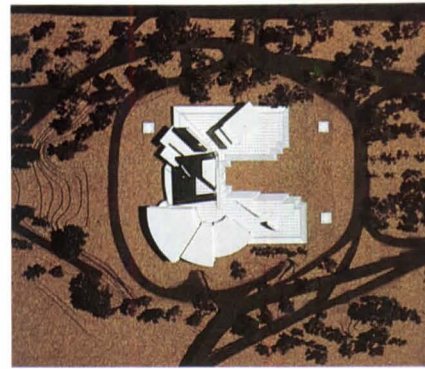
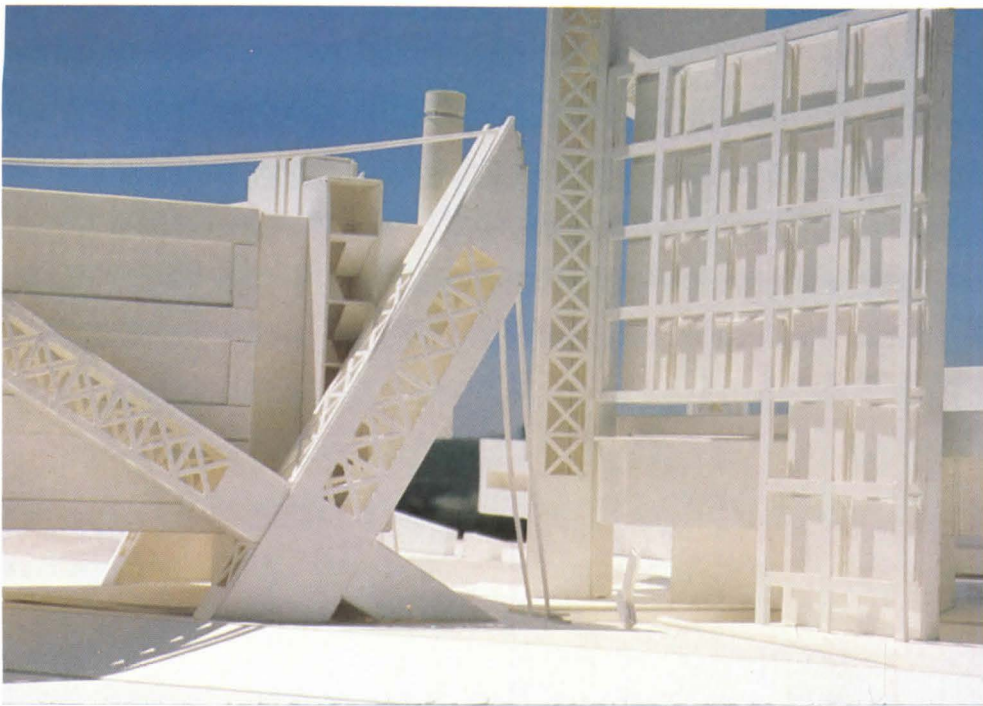
teaching are not exploratory," he says. The general assumption is that the nuts-and-bolts of architecture will be picked up in the co-op experience. "We don't have to worry about teaching kids working drawings, professional practice, specifications, all that boring stuff," says associate professor Dennis Mann. "It's much easier to learn it in an office, and it's pretty hard to teach theoretically anyway."

The faculty is held in high regard by the students, who admire them for their dedication and hard work. There is an older group of faculty, some of whom are graduates of the school, and a younger group who come from the East. While the students appreciate the new blood, they complain that many of these young professors stay only a few years and then leave. "We've had a lot of good, young professors come and go over the past few years," says one student. "They use the school as a stepping stone to move on to a better job. It breaks up the continuity." As one of these bright, new teachers, Andrea Kahn says that while people have come and gone, "I wouldn't say that the school is a springboard. There is a work load here on younger faculty that is greater than the average." Because half the students are on co-op and the other half are in class, courses often have to be offered twice a year, doubling the usual work load. Professors are also required to teach every other summer. "I think what happens is that people burn out," explains Kahn, "or perceive the possibility of burning out and choose to leave."

While there is a good collection of faculty, each with their own architectural interests, the school is free of polarizing, ideological camps. Mann explains that the faculty's varied backgrounds prevent this from happening and that such behavior isn't part of the Midwestern psychology. "The place has a 'let it be and let live' attitude. Everyone has a right to do their own work as best they can, and you don't spend your time trying to convince other people that they're wrong." He adds that the co-op program also discourages gurus and apostles because the students are constantly exposed to different values outside the school.

The middle years of the program allow students, with their grounding in the foundations of architecture, to explore their own interests during three years of elective courses with a minimum of requirements. "You can diversify or specialize," says





one student, "and can tailor your education to your own needs." These "TOPAC" courses, as they're called (it stands for "topical package") are also coveted by the faculty, because TOPAC allows them to pursue their own interests in the context of a lecture course, seminar, or studio. Students from different years are combined in these courses, "so you have a lot of exchange between upper and lower level people," says a student. TOPAC subjects have included structures, energy conservation, landscape, historic preservation, and, of course, theory and history.

The sophistication of this academic program is possible in the context of the co-op program, where students spend eight of their 22 quarters. The co-op program has by far the biggest impact on their lives, and it is what they seem to most enjoy talking about. The greatest asset of the co-op, most students agree, is that it allows you to discover early in your education what you like and don't like about architecture. "You definitely know what you're getting into as far as the profession goes," says one student. Another adds that alternating between school and work balances out the respective experiences. "Just when you get sick of school, it's time to go to work, and vice versa. It gives you the chance to integrate your idealism with the pragmatics of building."

The co-op program is practiced university-wide among 26 disciplines. The first of its kind in the country, it was started in 1906 by Herman Schneider, dean of Cincinnati's college of engineering. "By combining theory and practice by alternating discipline related work with study," Schneider wrote, "the resulting learning would be richer." The dean was also interested in the facilities and state-of-the-art equipment that could be utilized by students outside and without cost to the school.

In architecture, approximately 350 firms all over the U.S. are involved in the co-op program. Bruce Evans, who administers the program for architecture students, says that co-op experiences aren't meant to be internships "where students are in offices just to see what happens. We want the students involved in problem solving, working under time constraints, and learning to carry their own weight." Evans and an assistant help students decide where to co-op, make contacts with the offices, and keep track of who's going where. There is also information available on different cities, the cost of living, transportation, apartments, and entertainment.

The students who get the most out of co-op don't approach it with the idea that it's a break from school or a chance to earn a few bucks (although for many it off-sets the cost of college). Some divide the country up into regions or head for the big cities. Others decide to work for various size firms, from

*Above, site model and detail model elevations by Robert Bar... of his thesis project for an 'architectural history museum for Sigfried Giedion' on the site of the Philadelphia Museum of... The site was cleared except for the art museum's stepped podium which creates a base for elements of the architectural language of modernism. Across page top, thesis design for a museum for the Salvador Dali collection in Cleveland by John Willis; across page middle, thesis for a 'center for the study of change' in postindustrial America on an abandoned factory site in Youngstown, Ohio, by John Elicson; across page bottom, thesis design for Canoe Cove School in British Columbia by Dan Condor... includes many vernacular design elements.*

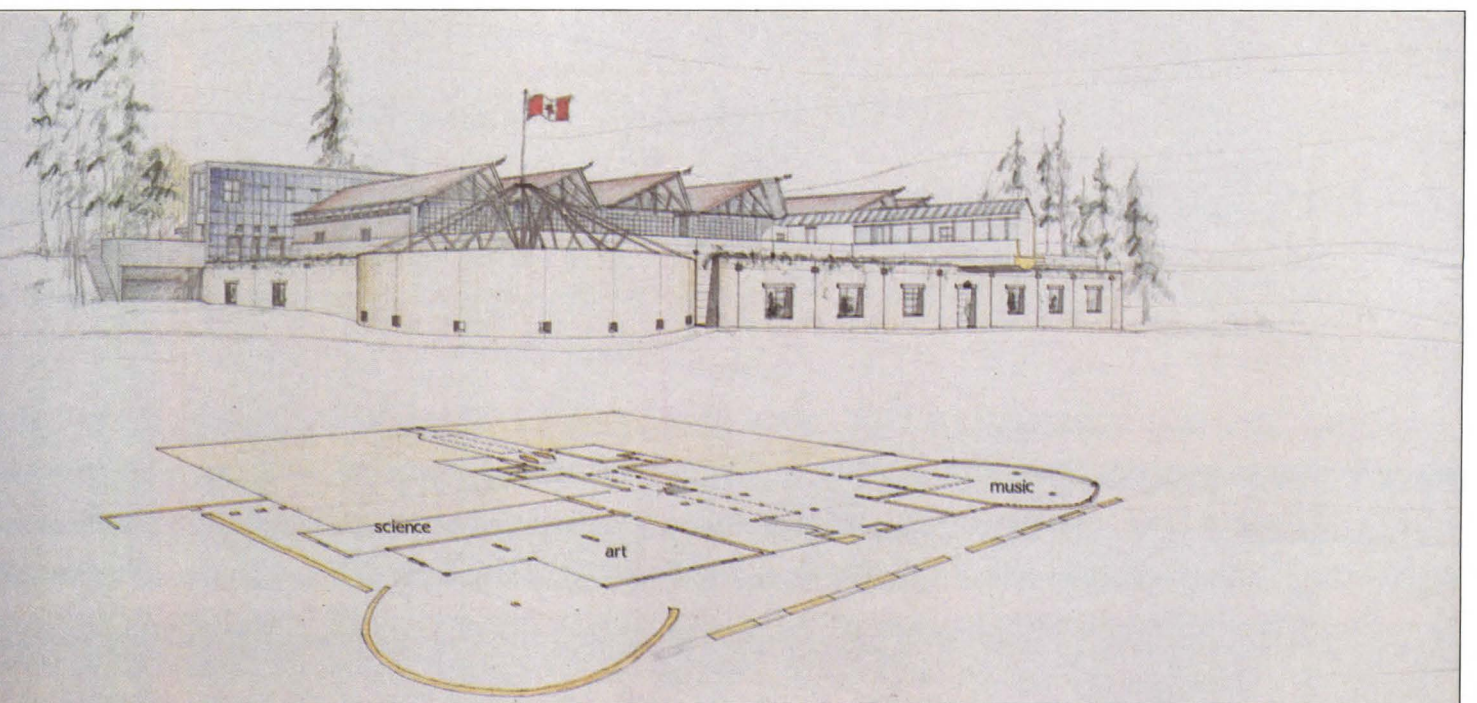
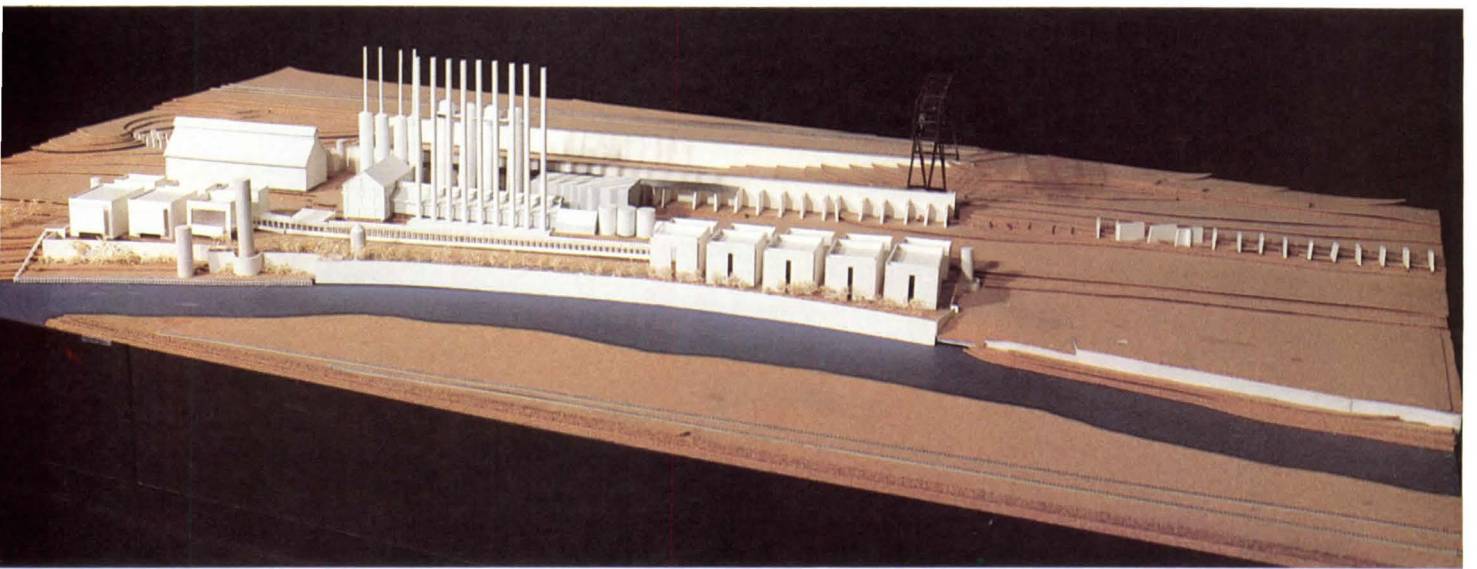
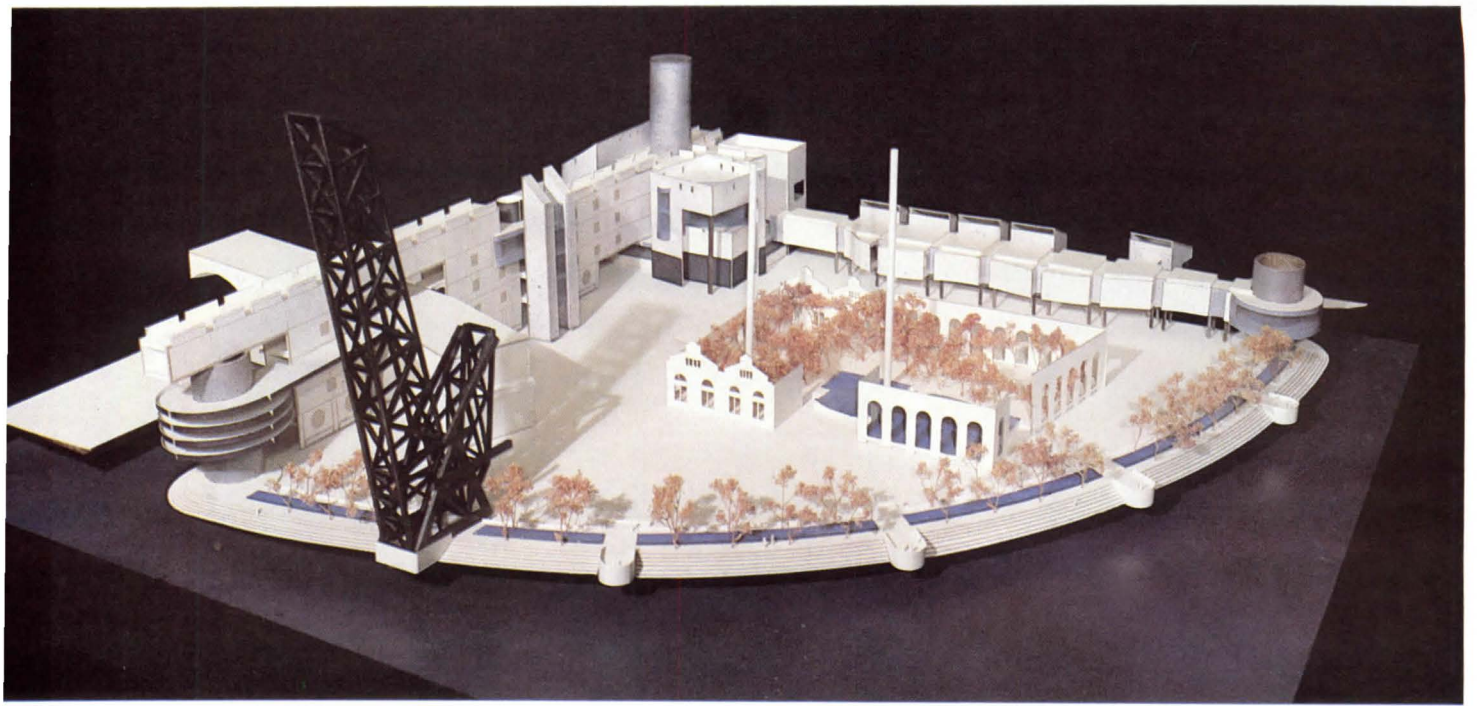
two-person operations to corporate offices like SOM that employ hundreds. There are those who work for government agencies, design/build firms, interior designers, big-name architects, and no-names. Some go abroad to Germany, England, Spain, or Finland, where two students are working this year. Married students with families, on the other hand, may work close to home. "You learn as much from what you don't like as from what you do like," says a student, who adds, "the co-op has allowed me to develop some professional goals."

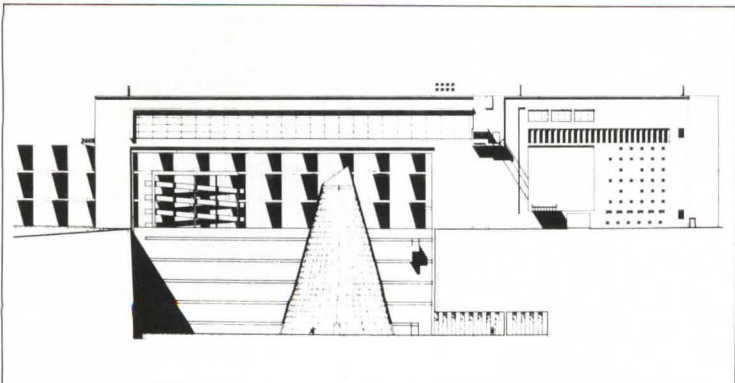
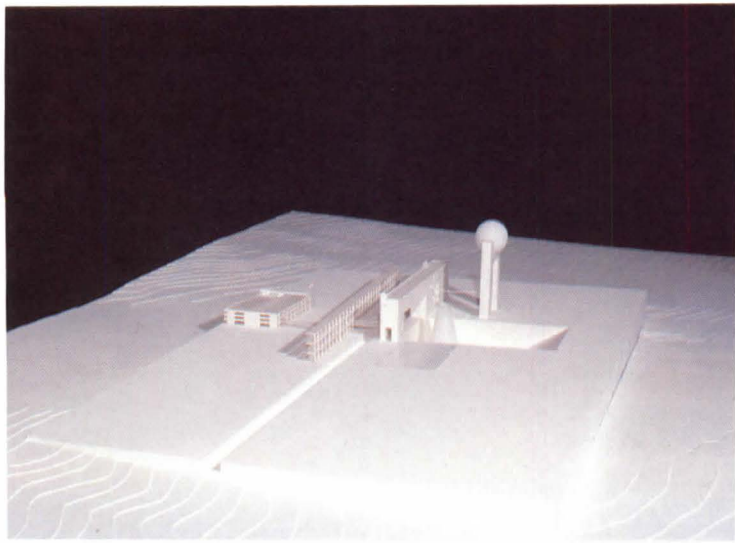
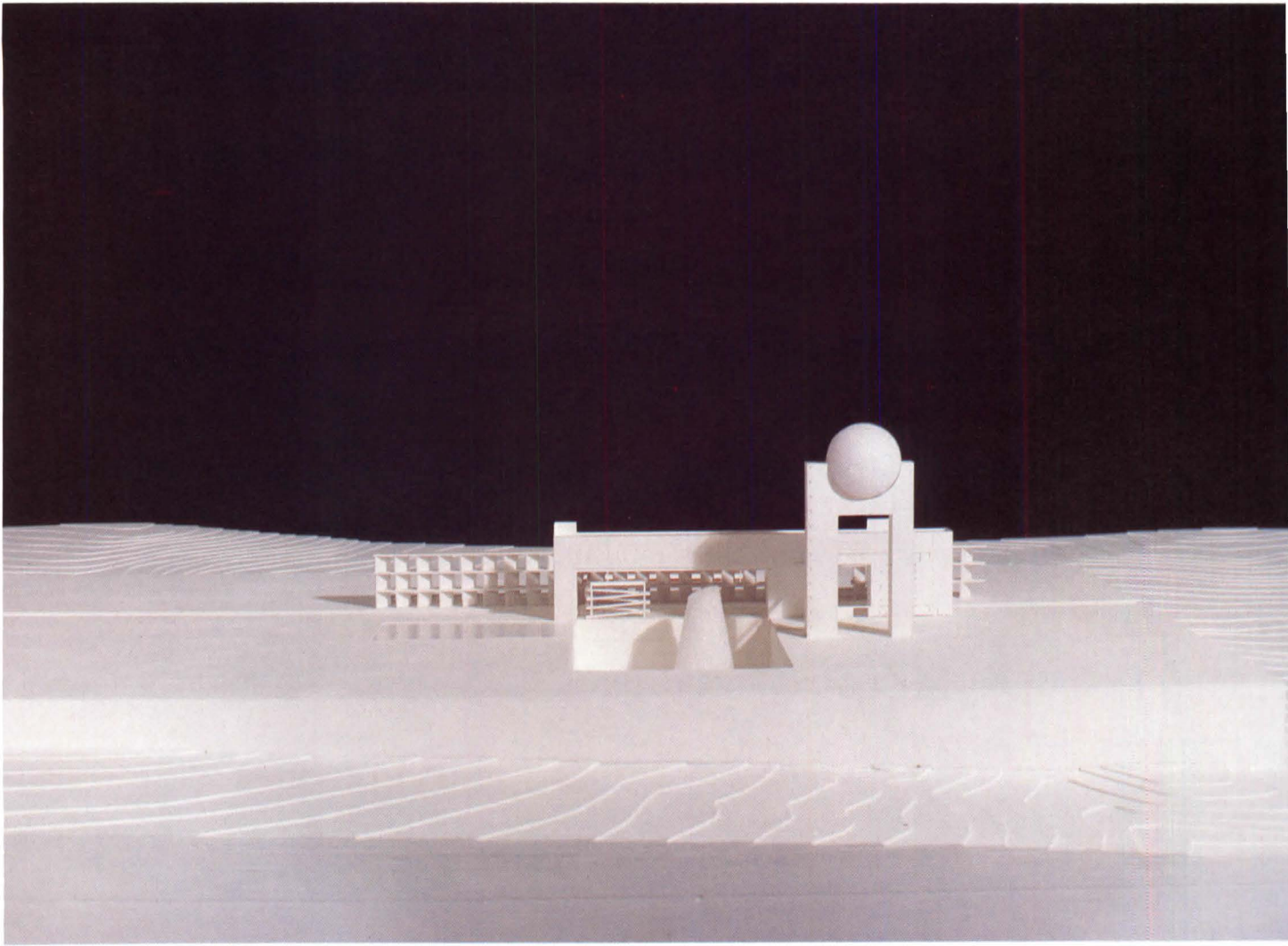
The students report that the co-op program is flexible enough to accommodate experiences that are outside the norm of office practice. One designed and built stage sets for a theater; another worked as a developer constructing spec houses. As the economic outlook has brightened, students have had a greater choice over their work experiences. Among the firms, the students have a reputation for being hard workers. "At every firm I've co-oped, testifies a student, "they've had nothing but good things to say about the program." Approximately 80 percent of the students are offered full-time jobs at co-op firms after graduation.

One of the dangers of the co-op program for the school is the clash of value systems. "Co-oping can reinforce a practical student's pragmatism," says associate professor Gerald Larsen. "The secret is not to measure the school against the office." Bruce Evans adds that, after students have returned from co-oping, "sometimes we have to fight for their hearts, because they've been in a practice situation where they might question the values that are being expressed in school."

But most times the opposite occurs, where the work experiences directly enhance and expand upon the academics. "It's really great to see how other good architects apply theory in the field," observes a student. "I worked for an architect in Boston and it was great the way he taught you his way of applying theory."



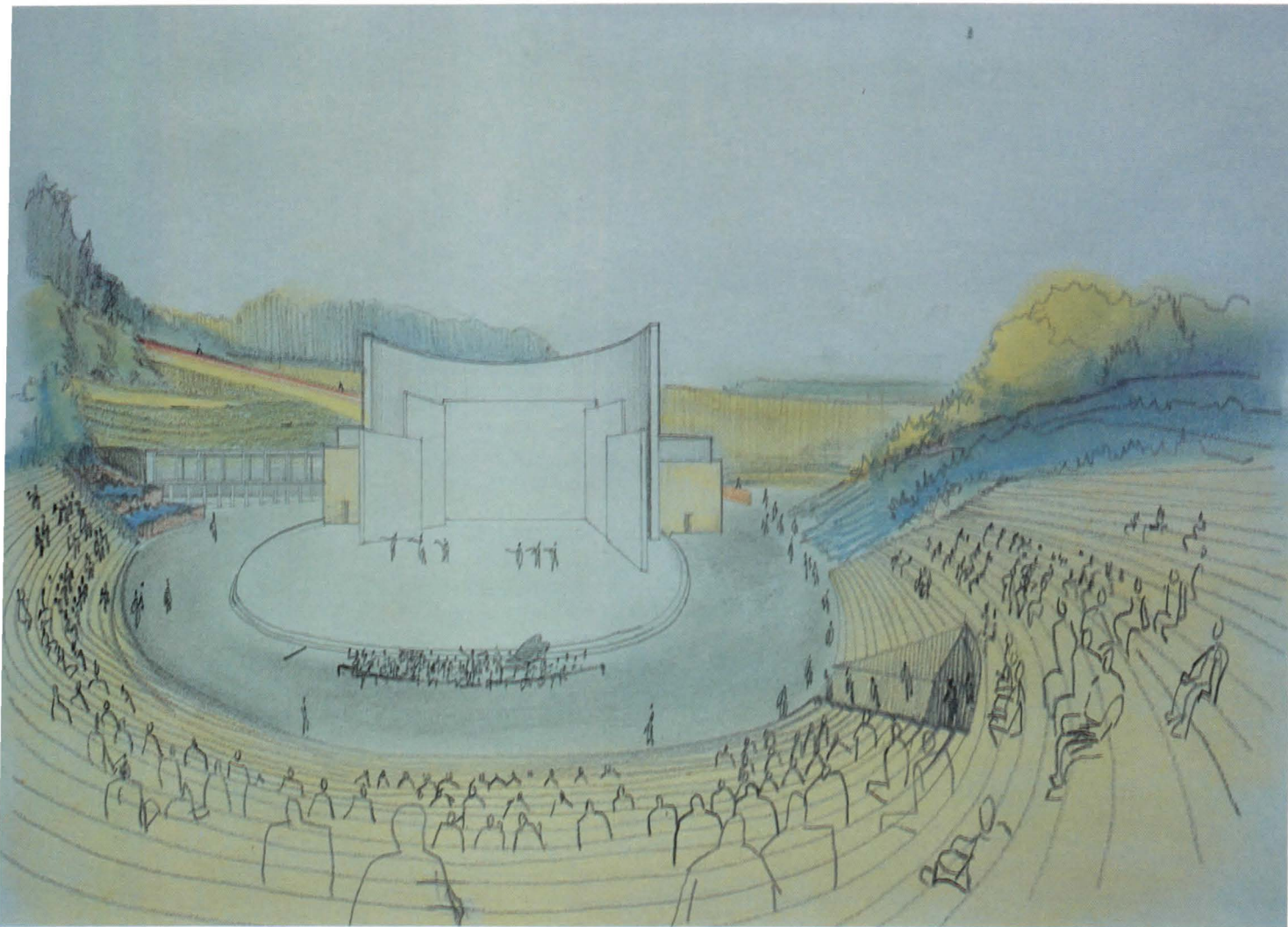




*Above and left, site model and elevation drawing of a thesis design for a museum of time, which incorporates an observatory on a New Mexico desert site, by Richard Anderson. Across the page, design for an amphitheater on a park site by Joseph L. Richvalsky, with Diane Arm Priest as critic of a TOPAC study that focused on the design of outdoor space.*

There are tangential benefits to the co-op experience, such as living in a different place, especially important for students who have never traveled far from home. "You learn to grow fast," one student remarks. John Hancock, who teaches architectural history at the school, says that "students become interested in the past of the places they visit. Historical awareness becomes important to them in the co-op experience." Others come back home with a different sense of themselves. "Co-op exposed me to Cincinnati in a different way," relates a student. "I walk the streets differently and notice things I never had before. It prompted me to ask questions about my own neighborhood."

The flip side of co-oping is that some firms view the program as a source of cheap labor, giving students monotonous and low-paying jobs. Then there's the sheer exhaustion of picking up and moving every 10 or 12 weeks. "Your life is shaken up," says a student. "The road wears you down; pack your stuff up, head for Philadelphia, try to find an apartment with a three-month lease while riding around in a loaded car, take a bath at the station. It's terrible in a way, but it's a great challenge and experience." Another drawback is the perception that outsiders look at Cincinnati as a trade school because the students work part-time. "I've run into some Harvard kids who think what we do at school is ink drawings of plumbing runs," groans one student. "And I've found it odd that after four years of architecture school and a year of working, I was still being paid less than someone with a degree in art history who was in their



er at Yale. Is it going to affect what happens down the line as an opportunity goes?"

The co-op program also plays havoc with course offerings, some of which are available one quarter and not another. "If a course is offered one quarter it's not guaranteed that it'll be offered the next quarter," says one student, "and if you double section [work two quarters back to back], you might miss a lot." Another points out that "there's no continuity between the quarters. I've always taken classes in winter/summer quarters, and spring/fall quarters have the best lectures and classes."

Although the co-op program is quite valuable in giving the students a peek at the work world of architecture, the office and school experiences are more complementary than integrated. Some students at the school feel that more could be done to make practice a part of theory. "The co-op hasn't been exploited," remarks Dennis Mann, who adds that there should be some way of uniting the two. Mann teaches a course on the architect's professional role in society, and co-oping could be used as field experience for such a course.

"Co-oping should offer a critical assessment of their jobs," says Andrea Kahn, beyond the rating forms that students complete on the firms they've worked for. Some of the issues that should be addressed, she proffers, "are why theory and practice are so radically separated in the office, and what does an architectural education have to do with what architects do in the field."

The work experiences should indeed come under the same critical examination that one might expect of any other part of the curriculum. Being outside the direct control of the school, these experiences demand close attention.

The students proudly point out that they are eminently qualified to go into an office upon graduation, pick up a pencil, and get to work. But this confidence makes one a little uneasy in

that the students seem to accept the practice of architecture uncritically and all too comfortably. Maybe it's just the times. Students everywhere today are more interested in how their education translates into a career and how they can market their skills. They should, however, contemplate what they're witnessing in the offices with some academic rigor.

John Meunier seems daunted by the prospect of drawing co-op into academics. "It's difficult to conceive of a real integration, because the experiences that students have are so different," he says. But one might assume that it is precisely because there is such a wide range of experiences that the co-op program offers an opportunity to study a cross section of the profession, noting how the structure, location, and size of a firm might affect practice, along with the social, economic, and political climate. And might the students, well grounded in theory, contrast the explicit and implicit value systems of the firms? Gerald Larson reports that last year in his studio on skyscrapers, students began to critique designs based on the theoretical systems that appeared to be in operation at offices where they had worked, such as Kohn Pedersen Fox, SOM, and Murphy/Jahn, and then compared them.

The body of knowledge about practice that the students return with might also feed into the graduate research program, making it, in effect, a center for the study of professional practice, perhaps the only one of its kind in the country. With comparative study, the day-to-day practice of architecture might receive a sustained critique that only a handful of sociologists has attempted. Over time such information would form a base from which to conduct historical study.

The University of Cincinnati is to be lauded for an architecture program that has made the most with limited resources and facilities. It can only enhance its practice of theory with the theory of practice. □

# Where Students Actually Build

*University of North Carolina at Charlotte's college of architecture.*  
*By Marguerite N. Villecco*

Only about 15 years old, the college of architecture at the University of North Carolina at Charlotte has nonetheless seen architecture change dramatically during its lifetime. The founding principles, values, and formal assumptions have been challenged inside and outside the profession, and the college has had to take its first steps in uncertain times. The results are somewhat paradoxical—optimistic but flawed.

The college exudes a spirit and confidence that makes it tolerant of change and eager to try new ideas and exploration. Students seem happy with their choice of schools, and faculty enjoy an atmosphere that emphasizes teaching and contact with students. The school avoids many fashions of the day—in rhetoric and form—and boasts a widely praised fifth-year professional degree program. Students and faculty are not afraid to get their hands dirty and find a direct connection between architecture and building natural and appropriate.

Beyond the school, Charlotte is in the midst of a major construction boom: “The Texas developers are moving in.” Liberal state banking laws making Charlotte the financial capital of the Southeast; some notable design and economic leadership by the banks in revitalizing the city; a mayor, Harvey Gantt, AIA, trained as an architect; and a university committed to real estate as an institutional activity—all combine to make the place and opportunity for architectural practice exciting. Students graduating from the college can actually *do* architecture.

Then the paradoxes. In part, because the school is new, it lacks the structure for critical reflection. It is quick to criticize itself but unclear and inconsistent in some decisions. It holds on to certain ideas, quickly runs through others, and the reasons or criteria beyond the force of personalities seem unclear. Avowed support for pluralism sometimes masks deeply felt and unresolved differences; students sense this and establish their positions early. There is sometimes less debate and exchange about different approaches to design than parallel play.

The building boom is more notable for its quantity than its quality (with notable exceptions), and the area's need for architectural perspective beyond the actual footprint of a building is clear. There are issues of urban design, public space, preservation, and residential development that need to be, yet seem not to be, addressed. The school has made a number of attempts to work with the city, the local professionals, and the community through seminars, consulting, and projects. But the concerns don't seem to penetrate the curriculum on either pragmatic or theoretical levels.

The school is in the right place at the right time to become a strong regional voice for good design. Most of its students come from the area, and most will practice there. Few may get professional degrees, but many will stay involved, directly and indirectly, with environmental design. The emergence of the sunbelt city as a type and the region's unique material and cultural qualities suggest *important futures* for its students and a critical role for the school.

The campus is modern, architecturally undistinguished, and essentially rural. Located to the north of Charlotte, where growth



is concentrated to the south, the university has sought to stimulate growth in its direction through creation of a high-technology industrial park and University Place, a mixed use development aspiring to 38,000 residents and combining 1950s planning with 1980s postmodernism. Dubbed University No-Place by the students, the development nonetheless stimulates debate and design experimentation on the boards, as well as some design jobs and the real possibility of commercial success.

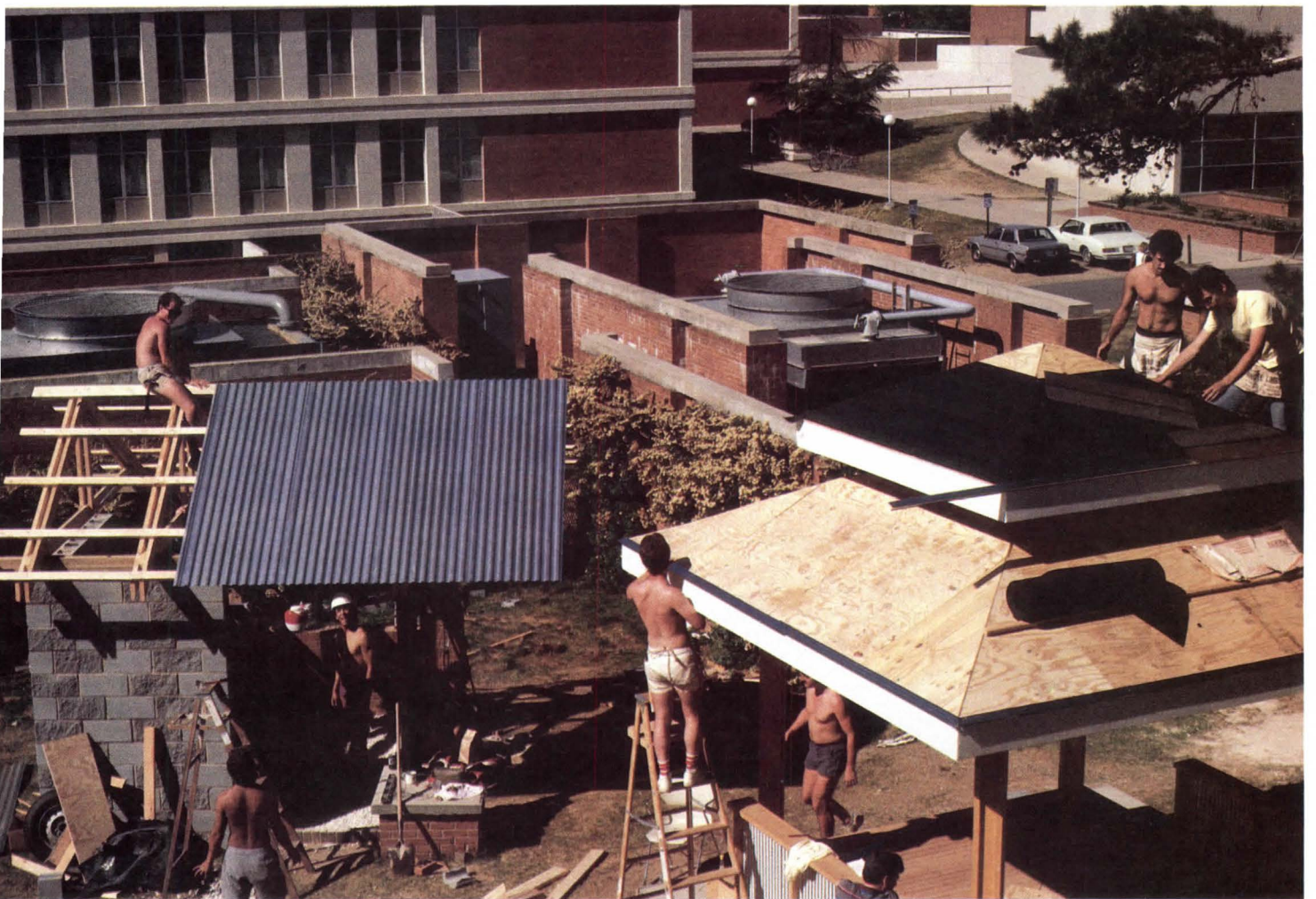
The school of architecture is easily identified on campus, not because of its building (the former library of Charlotte College, a women's community college that was later taken over by the university), but because of the structures surrounding it. At first glance, it seems natural and appropriate to see architecture students building; the assorted towers, pavilions, and pergolas on the lawn are clearly experiments in design, material, and technique. It is on the double take that the scene becomes extraordinary—architects draw, not build, and architecture students rarely touch a brick.

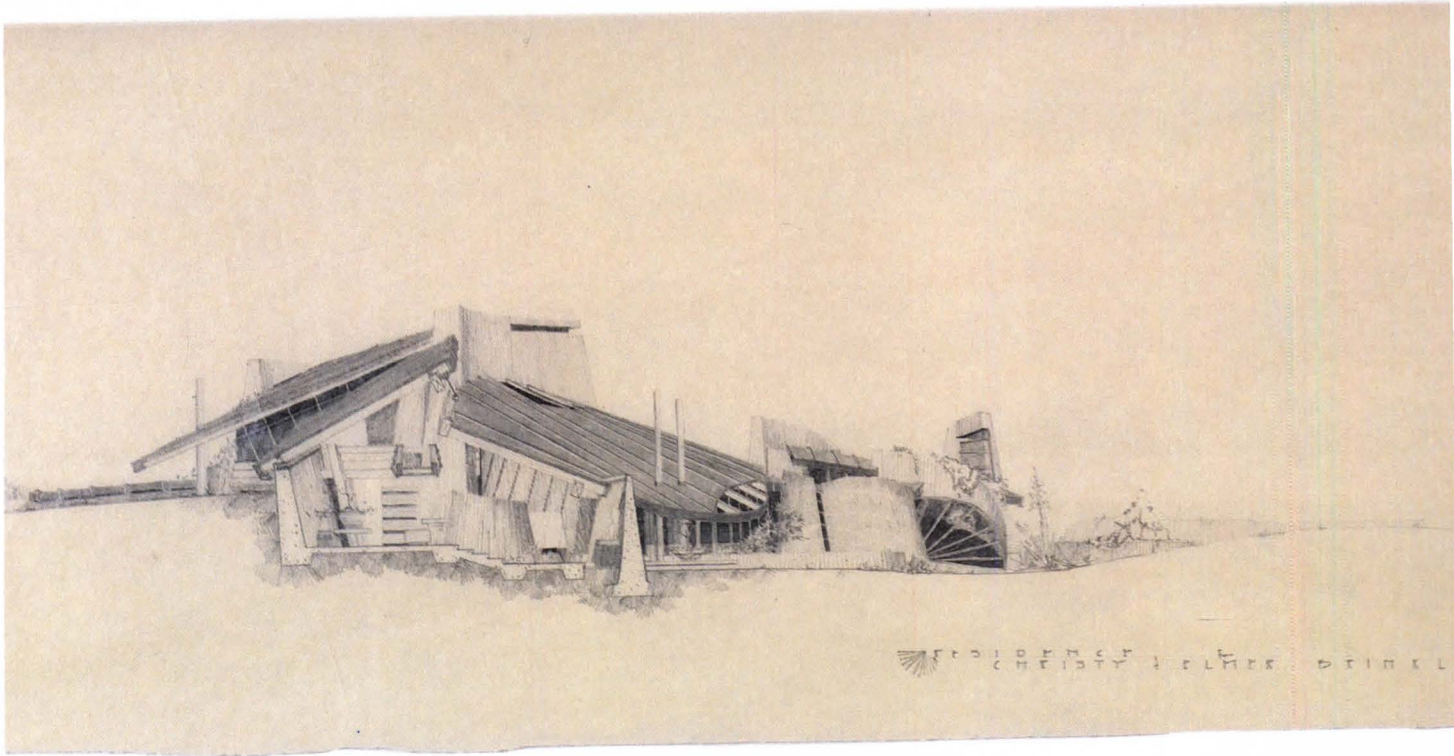
But here, dozens of students are trundling sand, mixing mortar, laying bricks, and adjusting their concepts of structure (especially after some settlement of a planned 30-foot tower). Helping them are faculty and community volunteers, including members of the local construction unions and firms donating sand and other materials. A product of the second-year spring studio, these structures are intended to stay up “at least five years.”

Before the five years are up, however, the college will have moved. Gwathmey Siegel & Associates, in partnership with the Charlotte firm of Ferebee Walters & Associates, is designing a new building, which will be a “foreground” structure located near the entrance to the campus. The change is symbolic as well as practical, signaling the prominence of the school of architecture as well as providing faculty and students with more of a better studio and classroom space.

The current space is not ideal, but not atypical either. And architecture students are good at adapting space to their needs. Inside, the building is a construction site of another sort, with a clear progression from first year to fifth year in structural preferences. The first-year spaces are open, filled with models, cardboard, used pizza boxes, paint, glue, and students lacking sleep but talking architecture. By third year, the spaces are more constructed, with clear, if circuitous pathways. The style is disparate and slightly desperate: nylon tents, paisley bedspreads, sprayed corrugation, construction fragments, damaged chalkboards, and a Union Jack as a secular Sistine ceiling. Scattered about are old bikes, screen doors, posters of Einstein, random signs, cans, more soiled pizza boxes, and students, day and night alone or huddled. Occasional screams interrupt the private rhythms of earphones and more even sound of conversation and design criticism.

*Above, brick building housing UNCC's architecture school is neutral background for tower and pavilions of the architecture students' design and construction. Right, students on the site of second-year building projects, with Robert Anderson as critic*





Fifth year is the culmination of education and interior construction; here the spaces are nearer and more professional, but completely labyrinthian. A series of dead ends confounds, and the precinct is clearly defined by one small entrance. The usual array of posters, drawings, models, and artifacts is here complemented by photographs of dogs and children, reminders of the families these students, who have often been out of school for several years, too rarely see. (Even the dean's reserved parking place is marked "24 Hours.")

Pluralism has been raised to the status of philosophy at the college. Any discussion of content and direction is prefaced by reference to pluralism as predominant. Here both students and faculty agree.

Says dean Charles Hight, "The emphasis on pluralism is a real commitment; it is *the* way to do architecture in a public university." Robert MacLean, who coordinates the third-year studios, adds, "We're concerned with architects, not the profession. It's an issue of education versus training. Design is the exploration of ideas, and better ideas come from breadth."

Students echo the sentiment. "We have a free—or semi-free—dialogue between students and different architects, attitudes, and approaches. Within the school there are faculty one might call intellectual, or organic, or spiritual (go to the site and things will be revealed to you), or humanistic (community and environmental concerns)," says Eric Lindstrom, fourth-year student.

Many students chose UNCC because they felt it was not ideological and that they would have a choice. Several chose it over North Carolina State, the older, more established sister school, although there seems to be very little competition for students between the two. One student chose Charlotte because it was "more design-oriented than N.C. State" and another chose it because Charlotte was "less narrow and technical than Raleigh." A number cited the fact that Charlotte was new and seemed more exciting. Ann Rogers, a first-year student, chose UNCC because "I felt at home here and like an outsider there." Many students and some faculty spoke of the cooperation at Charlotte between students and faculty. Noted Robert Campbell, contributing editor to *this magazine* and a frequent visiting critic at Charlotte, "They know that architecture is a collaborative art and they help each other. The students are really nice people and not super competitive. Students at many better-known

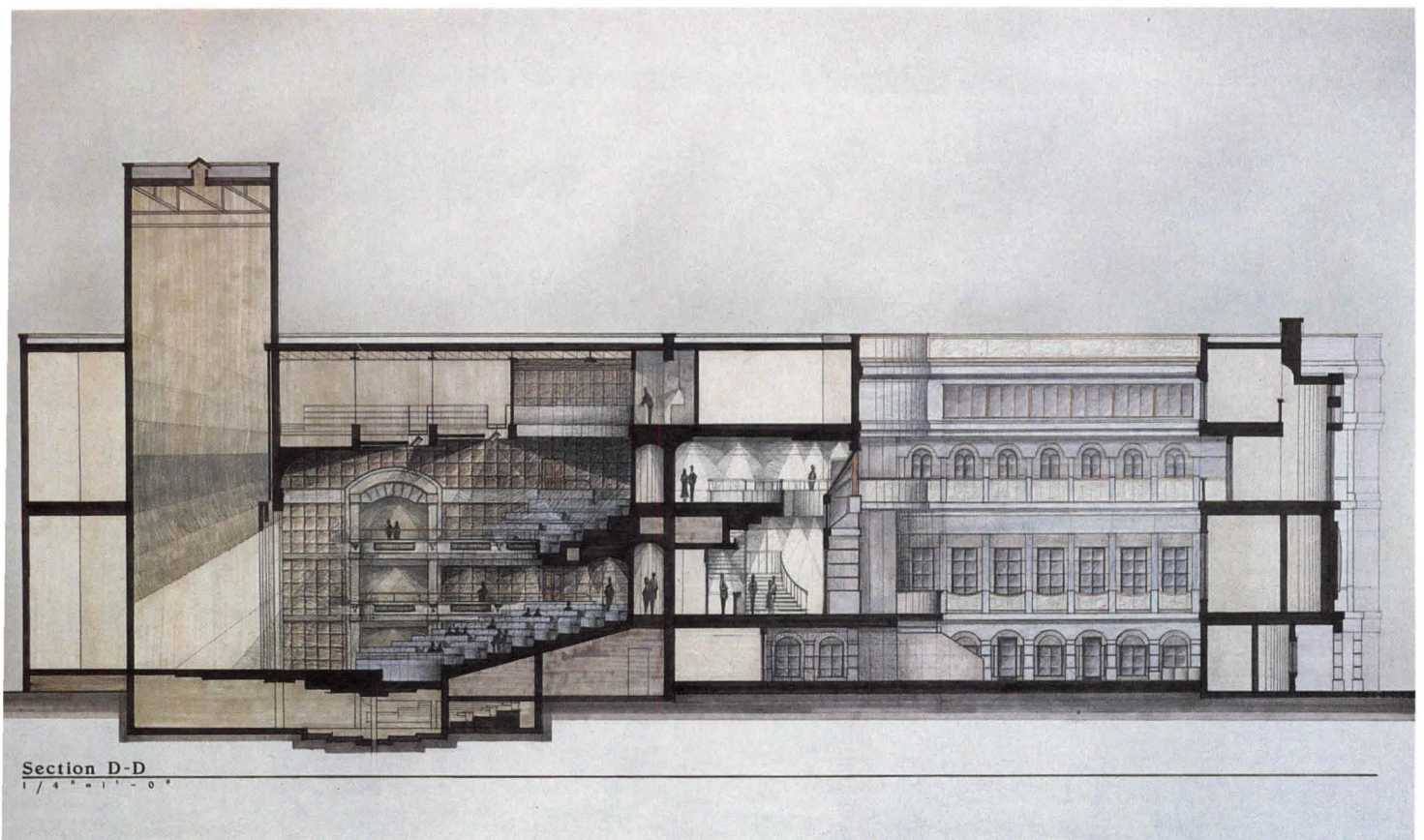
schools haven't figured out this aspect of architecture yet." The school also takes pride in avoiding stylistic clichés. Schools too often become "scoundrels of style-consumers," say the students. "We do things *with* style, not *in* style."

The coveted pluralism, however, seems at times more defensive than descriptive of UNCC. Several viewpoints do exist and each has its own spokesmen, but some are more equal than others. Students frequently describe the school in terms of organic versus nonorganic, and activities or visitors are similarly described as organic or not. In that sense, the framework for debate is set: There is organic and then there is everything else. Everything else covers a wide range, from contemporary theoretical debates using John Hejduk, FAIA, or Peter Eisenman, FAIA, as references, to issues of regional design, international concern, community service, and energy-conscious design.

Associate professor Dean Vollendorf, a disciple of Bruce Goff and Frank Lloyd Wright, says, "There are three kinds of strong schools: the open school, the benevolent dictator, and the hermit. We're an open school." But a strong personality empowers an ideology. Vollendorf's influence on students is legend: He challenges, cajoles, and loves them. A number of outstanding fourth-year students want to be "organic architects" as a result. Note one: "I want to hire out to organic architects around the country. Go where I have to go to get with good architects. Later may practice and teach like Fay Jones."

In part, Vollendorf's influence is passion. "There's a rumor that they want to take Dean Vollendorf out of first year and restrict him to fourth year. There he'd be one more teacher. They want to put more neutral people in the first year, the further out in later years. Concentrate on space and composition early and not put students in heavy ideological situations early," says Eric Lindstrom, a student who will enter the fifth-year program. "This is a problem. Only several students in the third year understand Dean. Dean doesn't give answers; he talks in parables and riddles. Others say we all do 'Dean buildings,' but the projects are different. A lot of teachers seem to have all the answers, but don't build. I have to question that—Dean's done over 30 buildings. It's upsetting to see him not performing at his best and fighting the system. We're going to fight!"

This is precisely what disturbs some critics. They note that students must choose between ideologies and have little basis



understanding such choices. "There's a kind of cult mentality that happens at schools. Students are intense, young, mock values of their parents, work late at night, and have little formal education," says a visiting critic supportive of the school. "The first year is a particular source of controversy, and changes are in the making. Currently, the first year calls for 21 hours (seven credits) of studio. There is little time for anything, or anything else. "Architecture, architecture—I dream it, eat it, drink it, and sleep it. The only people I know. There's no time to meet people outside," says Ann Rogers, a student with an interior design degree. She's not complaining, but brings to her first year a broader background than an 18-year-old. "They're not prepared for any other choices," says Nelson Benzing, AIA, who directs the fifth-year proposed degree program. "There's no time to concentrate on anything else—history suffers, as an example. There's little cultural emphasis. And a lot of the time is spent waiting for board crits. It results in students doing 23 credit hours in the third year because they haven't passed physics yet." The school invests a lot in visitors, and there is agreement that both faculty as well as students benefit. For students, it brings them to the source: "It makes me feel I'm where the action is. I've actually talked to Charles Gwathmey about the Guggenheim." The program also provides some license: "Faculty tell us to experiment, but then say we've gone too far. Visitors show the real extremes, and help to push the faculty." For faculty, the visitors provoke debate and provide a way to gain perspective or complement special expertise within the faculty. The visitor program is not without controversy, however. The visiting critic studio is considered easy as well as glamorous because visits may be infrequent and teaching assistants or recent graduates carry the class, leaving some students to their own devices much of the time. Special events, such as this year's symposium and exhibition on new Charlotte architecture, may have little reinforcement in the school. In some cases, ideas and projects are left hanging, neither criticized or complemented. Further, there is controversy about who selects visitors. Officially, responsibility rotates for schoolwide events and resides with student-instructors for related workshops, juries, and talks. The result is a long list of great diversity, but one indicative of polarities rather than consensus within the school. Visitors, for example, have included Eisenman, Michael Graves, FAIA, and Colin Rowe

*Across page, 'Residence for Christy and Elmer Brinkley' in Fresno, Calif., by Eric Lindstrom, with Arthur Dyson as visiting critic; above, thesis design of a playhouse in Charleston, S.C., by Rob Richardson, with Chris Morgan and Nelson Benzing as critics.*

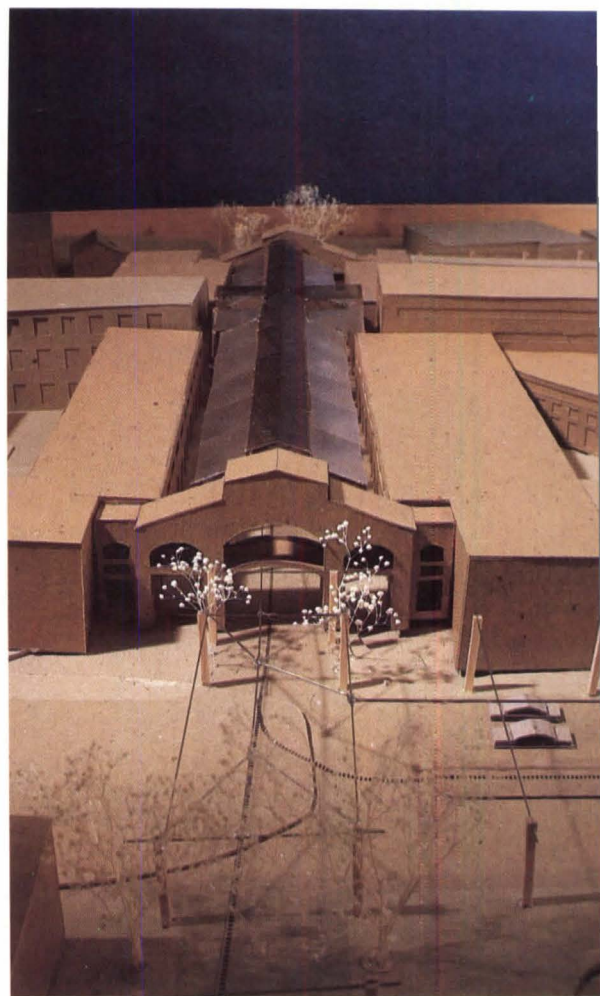
on the one hand, and such organic designers as Arthur Dyson and Wright's grandson on the other.

The polarization of the faculty erupted several years ago, with the dean, Charles Hight, at the center. Hight has been at the school about 10 years, and the original dean, Robert Anderson, remains on the faculty. In this sense there has been continuity at the school. Hight is considered a good administrator and teacher who cares about the school and is committed to architectural education as a professional endeavor. He is not a theorist and doesn't think as a designer, many say, but he's effective and a survivor.

The survival skills were honed when the faculty gave Hight a vote of no confidence. A visitor reports, "It was incredibly naive. At a faculty meeting there was a motion to fire the dean, and it passed! The faculty has no authority to do that, of course." Some tumult followed. Curriculum committees were formed and disbanded. Some faculty left. And Hight worked to regain the department and credibility. Structurally, there was an agreement that this year the college would appoint an in-house chairman to deal with curriculum and faculty issues, delineating the dean's administrative role more clearly. Directly and indirectly, changes in curriculum and attitude occurred. Most agree the crisis with Hight is over; he is no longer seen as the problem. But curriculum changes are in progress, attended by some degree of uncertainty. Notes Hight, "The school is young and very self-critical—perhaps too critical. But change is welcome; we are always changing."

Something few will say they want to change is the fifth-year program, which many people inside and outside the school consider to be among the best in the country. Benzing, its director, has been asked by a number of other schools, including Cornell and Columbia, to develop a similar program for them.

The program at Charlotte is considered so good that it causes problems. Of about 250 students at UNCC, only a few (four to nine) are admitted to the fifth year. For those entering in 1986, only four from the graduating class were admitted to the fifth



year. The result is that the school of architecture in fact gives very few professional degrees and that most students who go to UNCC will leave with a nonprofessional undergraduate degree. Most students are from the region and most will work there, many in Charlotte where firms are frequently headed by graduates of North Carolina State. Of those who leave with an undergraduate degree, only a few go for a professional degree elsewhere.

There is thus a strong discontinuity between the first four years at Charlotte and the fifth year. This year, the issue came to a head. Noted one student: "For four years they tell us we're wonderful and then they say we're not good enough to get into our own professional degree program." This was echoed by many students who felt they were not sufficiently informed along the way. "Students will often take the easiest courses, do well, and coast through—and they may not realize that the decision to take or skip a course in the first few years will make them ineligible for the fifth year later," a third-year student said.

This year, the school initiated a second-year review. Students must pass certain course requirements to be admitted to the third year. And, while some complained the rules were being changed midstream, most students agreed the review was good. Many felt there should be a review and advice session every year so that their curriculum decisions would be informed and standards clear.

It is true that in all architecture schools, many students will not become architects; the fact that only some students will get a professional degree is understood. But at UNCC, expectations are unusually high, it seems; the first-year curriculum currently has seven credit hours in studio; architecture is what is studied virtually all the time. The catalog says admission to the fifth year is a separate and competitive process, but many students see themselves as entering a five-year, not a four-plus-one program. Shock comes with a rejection in the fourth year.

For those who do make it to the fifth year, the experience is intense and quite different from the four years that precede it. Those admitted from the graduating class join others who graduated previously or attended other schools; the total number

*This spread, thesis project for Trolley Square in downtown Charlotte by Nancy Hoogmoed, with Chris Morgan and Nelson Benzing as critics. The project is rehabilitative in nature, closing a street between two existing buildings and creating a mixed use pedestrian mall inside a glazed Galleria.*

of fifth-year students varies between nine and 15.

The year is centered on a single project, which the student proposes on admission. A contract is then negotiated and written. It includes a project description; scope of professional services (for overall development, preliminary design, and design development); the design work phases; and a listing of final design documents (drawings, models, media, scale, format). The contract may change but serves as the signed agreement between designer (student), consultants (faculty), and client for the year.

The first semester is essentially research (typology, post-occupancy evaluation of similar projects, programming, etc.), and the second semester is essentially design. The final presentation, to an outside jury, is detailed and professional. Most of the designs deal with real projects, or those likely to be built. The students work with real clients and respond to real constraints. The best transcend the program and investigate an idea about architecture; all of them address a significant design problem.

When Benzing started the current program in 1979, the school had recently had an accreditation visit and the weakness of the fifth-year program was a major concern. The good students were leaving. Benzing proposed "a few recommendations for the curriculum." The basic idea was that fifth year should not be confused with a one-year graduate program. It should be a problem-solving year and reveal to students the nature of architecture as one of a family of activities that "are holistic and comprehensive in nature." The first-semester studio should be a "series of short-mode exercises and readings to examine the relationship of the design process and the nature of the design problem (including issues of design quality, community, site, economy and technical requirements). The student then develops a mat-





form determinants to put against the problem and determine starting point." A goal, says Benzing, is "to eliminate the feeling held by many students that they need the 'right' site, budget, etc. to be 'creative.' Aalto, for example, found constraints and opportunities. I want the students to understand this. The experience is process-oriented; the student needs to identify the problem, formulate a strategy, consider alternative responses, and develop a response. It's okay to do an architectural project, but the excellent project transcends itself into the realm of architectural thought."

Benzing is a tough critic of the school and the students. He gets outstanding work. But he is concerned about the education of the students coming into the fifth-year program. These are students of the 1980s. They don't share many interests and values of the faculty, and faculty doesn't challenge them sufficiently. I don't understand a coddling mentality. These students are into formal manipulations and don't engage the tough problems. They come into the fifth year, especially those right out of school, and they feel unprepared—they *are* unprepared." Fifth-year student March Sealy, whose project included an expansion and rethinking of University Place, called fifth year "another world. We explored many issues we never got in the first four years. I wish fourth-year at least approached this—it was a red reality. If I could redo the first four years, I would include programming—I didn't even know what that was—at least the basic issues. Here we had to do the research and then write.

structures—it was required, but it was too disjointed and not tied into by studios and buildings. There are lots of different ideas in the school, and a new structural person is helpful. But the fifth year is more intense—I wasn't expecting it." Sealy's project re-examined and changed most of the planning and design concepts of University Place. He went to the west side of the core lake and programmed a professional development center, a performing arts center, and additional retail space. The issue was how to respond to existing development without doing more of the same, which includes mixed use development along the lakefront and a central parking lot; cars and pedestri-

ans are separated. Sealy's concept was to reintroduce the grid, putting cars and people together, exploit the lake as a design feature, and show how a 19th century urban design could serve the 20th century with its new technology and synergy. "The idea was completely his," says Benzing. "A major step from the organic ideas about cities when he entered."

Bob Adams found the fifth year a time for "new approaches and lots of frustration. I would revert to my old ways and find they didn't meet the needs of the problem. But I learned from it. The school needs to make people more aware of what is needed in the fifth year: program, structure, basic design. Lots of students try to 'get by' and then don't have the requirements completed. Faculty need to be more critical: 'Take time off and think about it.' They're kidding students now." Adams' project took him to Atlantic City where he learned about the psychology and design of hotels and casinos. The purpose was to learn about the relation between behavior and design and how architects can make a difference; secondarily it was to learn how to design a gambling emporium. Adams combined research that included color, metaphor, security, economics, services, and drama. The result was a waterfront complex, Goffian in form, a deck of cards bigger than life that included myriad celebratory and subliminal suggestions to gamble. Overall, the emphasis is professional and the context exploratory. "This is the *professional* year. None of the projects are purely theoretical," concludes Chris Morgan, who teaches with Benzing.

"The biggest problem for the college of architecture is to overcome the difficulty of persuading students they are as good as any school, *anywhere*. It's difficult for them to believe," says Robert Campbell. "And they're going to have to believe it to be effective at the fast pace Charlotte is growing." Design practice is not an idea in Charlotte; it is a visible and active profession with enough jobs and opportunities for the best the college can provide. And more and more the school *is* sensing its own worth—and responsibility. John Urban, president of the student council, says, "UNCC *is* one of the best schools in the Southeast." Perhaps that's what Campbell means. □

# 'Nice School in A Nice City' Faces Change

*Tulane University's  
school of architecture.  
By David Dillon*

Ron Filson—arms folded, feet propped against the edge of his desk—is describing his agenda as dean of Tulane University's school of architecture in New Orleans.

"When I arrived everyone told me that Tulane was a tired school, where nothing much was going on. I was brought in to kick the place in the ass."

The arms unfold and the hands begin shuffling through a small avalanche of memos and magazines. "I've done a few things just to see what would happen," he continues. "I've offended some senior faculty members. But right now there is very little in the school that is not open to question."

"In transition," that hoariest of descriptive tags, probably fits the Tulane school of architecture better than any other. Founded in 1897 as a branch of the college of engineering, it has long enjoyed a reputation as a "very good Southern school," meaning one that is several cuts above Louisiana Tech and Louisiana State University, stiff competition for Rice, Cornell, and Carnegie Mellon. Over the years it's had a few stars and its share of Gropius and Breuer protégés, while generally remaining safely outside the orbit of architectural fashion. Modernism was generally given a rustic bayou twist, its stern moral imperatives tempered by the prevailing spirit of carnival and the enduring fascination with architecture as a parade float.

And yet the "Southern" part of the familiar epithet rankles Tulane administrators, suggesting a laid back, mint julep provincialism that doesn't square either with the composition of the student body or the school's decidedly national aspirations. Only 19 percent of last year's 320 undergraduates came from Louisiana. Forty percent were recruited from the Northeast, another 20 percent from the Midwest. S.A.T. scores are high—an average of 1150 for combined verbal and math—as is the tuition—\$10,000 for the coming year. All of this makes for an affluent, cosmopolitan, slightly pampered undergraduate population that is more socially homogeneous than its geographical profile might suggest.

"Tulane is a nice school in a nice city," says architectural historian Karen Kingsley. "It attracts upper, upper middle class students who have never known poverty and probably never will. You don't go to Tulane expecting to deal with the social and economic issues of architecture, the way you do at Berkeley, for example."

Filson's appointment in 1980 was part of a broad effort to enhance Tulane's national reputation. His predecessor, William Turner, had presided over a traditional five-year B.Arch. program with a mild modernist bias. Filson arrived with impeccable



postmodern credentials, having worked with Charles Moore and FAIA, at UCLA, participated in the Urban Innovations Group, and served as project architect on New Orleans' premier historicist stage set, the Piazza d'Italia.

There were widespread suspicions that Filson would be merely a Moore lieutenant who would transform Tulane into a branch of UCLA. Establishing The Architectural Coalition, a research and practice arm modeled on the Urban Innovations Group, didn't quiet them. Yet most of Filson's initial efforts were directed toward refining and updating the program established in the early 1970s. These included streamlining the curriculum, telescoping the theory and history courses into two-term sequences, adding courses and studios in computer technology and urban design, and overhauling the senior thesis program, which both faculty and administration felt had become excessively adversarial. The school now has its own architecture review, an ambitious and highly successful lecture series, and an Inter-American Forum for Architecture, established last year to exploit New Orleans' historically strong ties to Central and South America.

The most far-reaching changes have occurred in faculty hiring. Filson has systematically cast his recruiting net on the East and West coasts, among the Ivy League and California schools, while bypassing the old boy Tulane/New Orleans network.

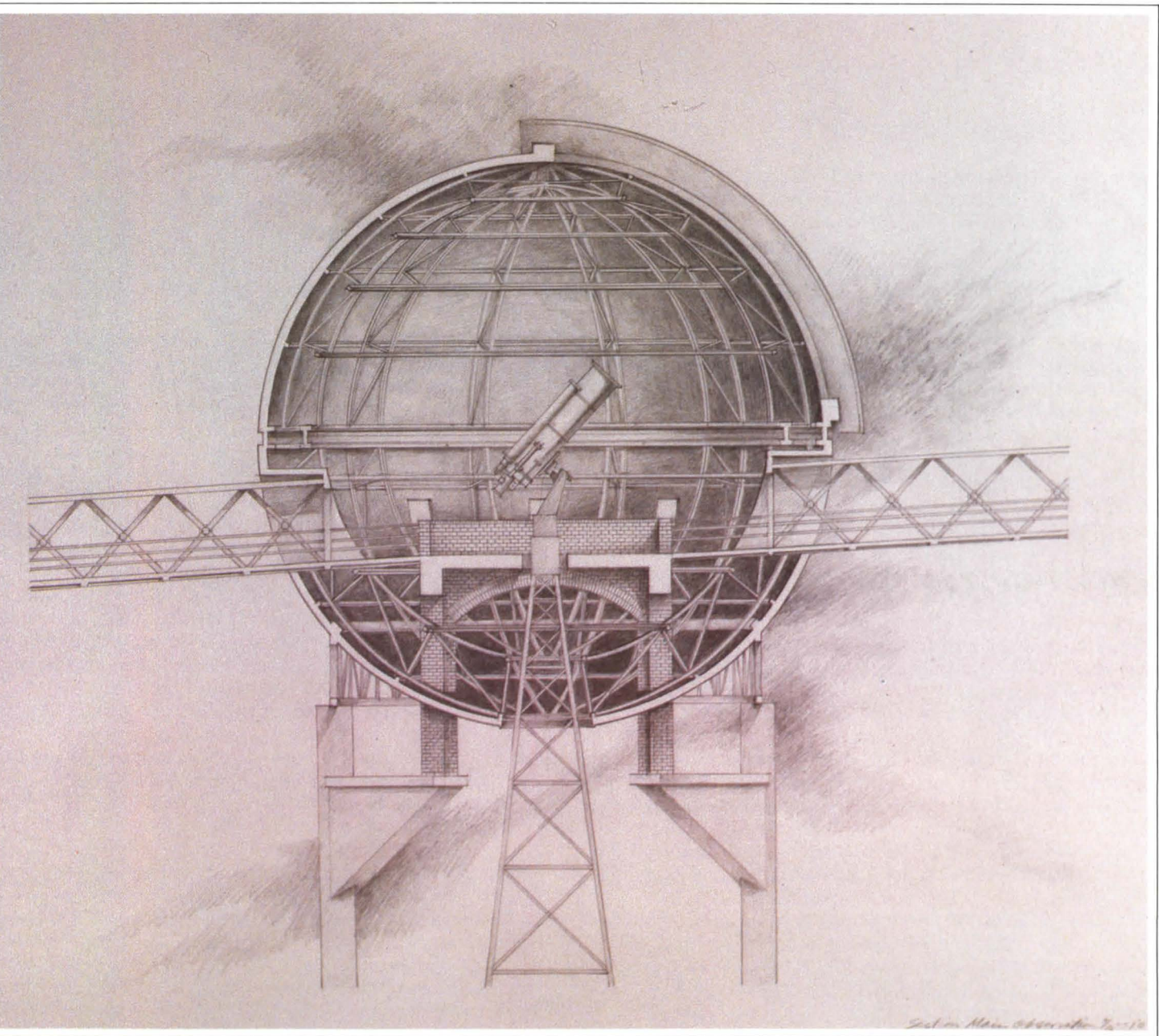
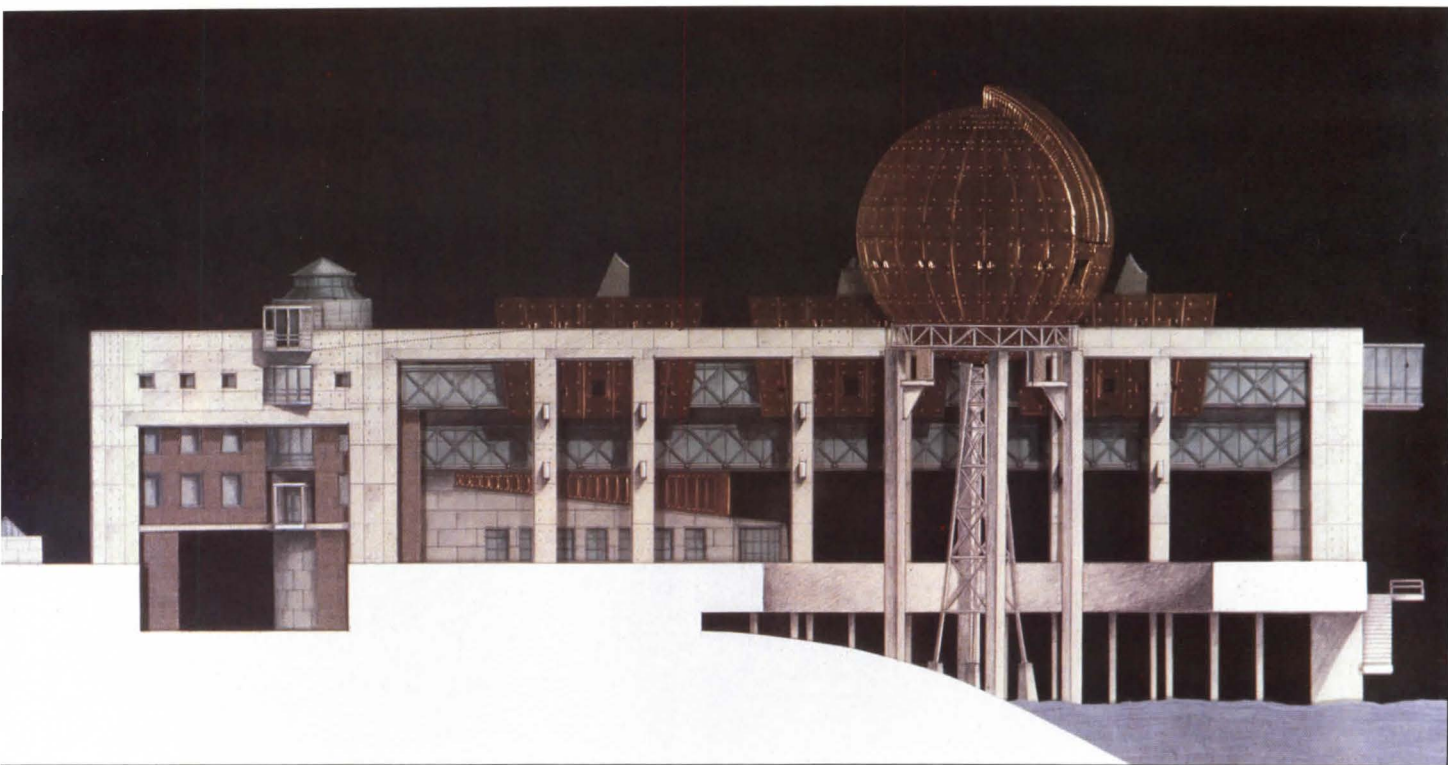
Such policies, not surprisingly, have produced a schism between senior and junior faculty, one based partly on ideology and partly on dramatically different perceptions of the value of critical theory. Filson has tended to hire teachers who also practice architecture, who are outspoken on behalf of their ideas. This young guard has sometimes disrupted the genteel collegiality that has prevailed at Tulane for years.

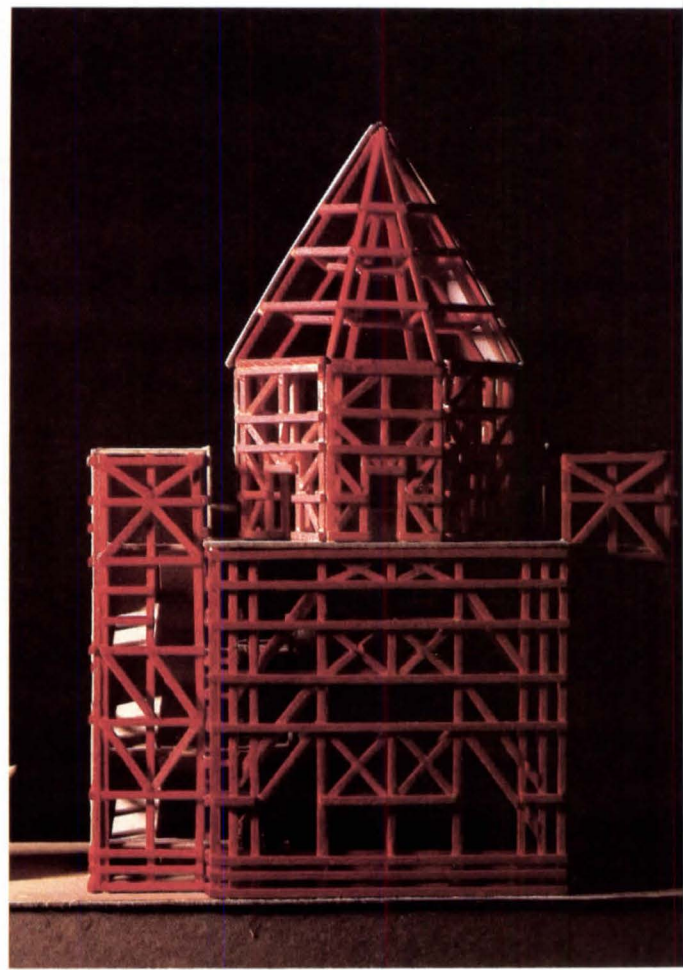
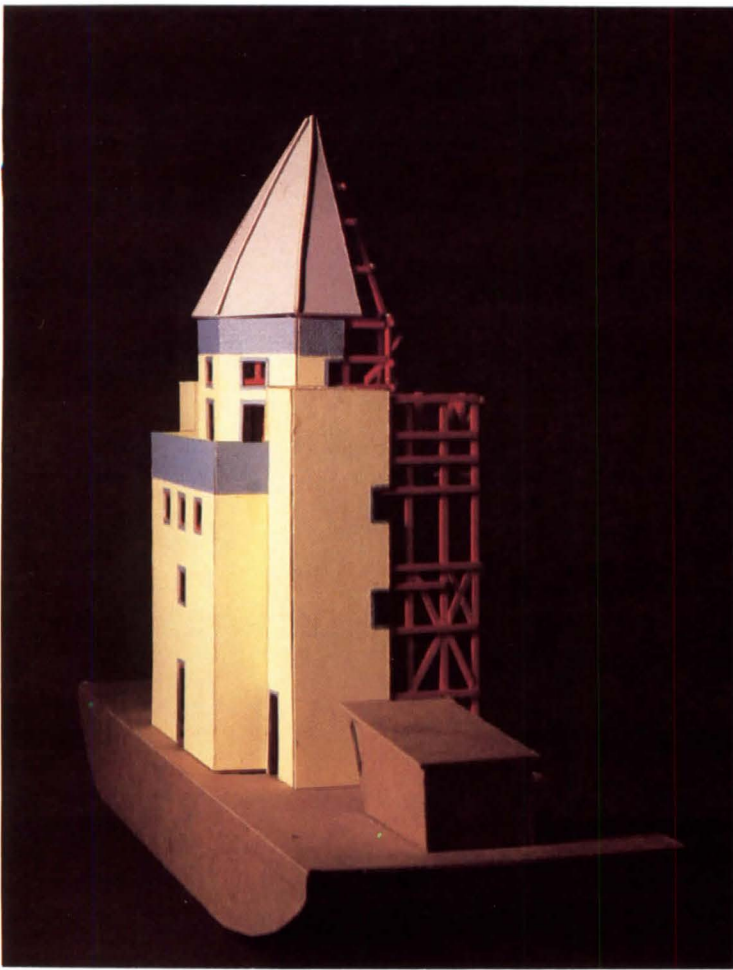
"Continuity in the faculty and in leadership have been hallmarks of this school," says professor James Lamantia, who has taught at Tulane since the late 1940s. "There used to be a consensus here. That's been fractured. We may be alive and kicking, but I don't know where we're going."

"One of the reasons I came to Tulane is that there was a wide range of points of view, and a lot of mutual respect," says former dean William Turner. "The family atmosphere within the faculty is gone. People don't respect one another's points of view."

Junior faculty, on the other hand, generally describe Filson

*Above, Richardson Memorial Hall, housing Tulane's architecture school. Right, thesis project for an observatory and park in New Orleans' Vieux Carré by Earl Tai, with John Klingman as co-*





as energetic but undogmatic, more concerned with stimulating new ideas than in laying down the ideological law. "Ron's strength is that he's educationally oriented and willing to let his teachers teach," says Mark Denton, a Yale graduate who served as assistant dean for several years. "His style is to come on strong, get a lot of things started, then hope that there are people around to carry them out. Sometimes there are and sometimes not."

"Ron has given me a lot of support and freedom," says assistant professor Bruce Goodwin, who taught previously at UCLA. "He's encouraged me to invent my own courses and has always backed me up when there have been problems."

Such internal wrangling is not unique to Tulane and may be resolved through retirement and natural attrition. A more complex matter is the school's relationship to New Orleans. The campus is located a few miles west of downtown, next to the Garden District, just off the St. Charles Avenue streetcar line. It is a tranquil and romantic setting that highlights many of the benefits and liabilities of studying architecture in New Orleans.

On the one hand the city is a cornucopia of regional and vernacular styles, an astonishing amalgam of the venerable and the slapdash, one of America's great design laboratories. Tulane's success in luring lecturers and critics from around the world is attributable largely to the city's reputation as an architectural and cultural center. Most would probably come for air fare and a beignet.

On the other hand New Orleans is perhaps the only Florentine municipality in North America, a place where family connections and baroque social codes play an inordinately large role in determining who gets what commissions. Certain local firms traditionally do the banks, others the hospitals or the schools. The overall quality of contemporary New Orleans architecture can, with charity, be called uninspired.

"People in New Orleans don't give a damn about building," says William Calongne, who retired from Tulane two years ago after more than 40 years on the architecture faculty. "They care about eating, going to parties, having carnival, but not about what they live in."

All of this makes New Orleans—and by extension Tulane—a

*Above, structural analysis of Aldo Rossi's Teatro del Mondo; first-year student Hank Scollard, with Michael Crosby as critic*

frustrating place for young architects, who find themselves torn between affection for the city and the need to practice. Some leave town for the summer to pursue commissions elsewhere in the country; those who remain have to contend with the problems of a self-protective design community and the difficulty of doing contemporary architecture in a city that is always looking over its shoulder at the past.

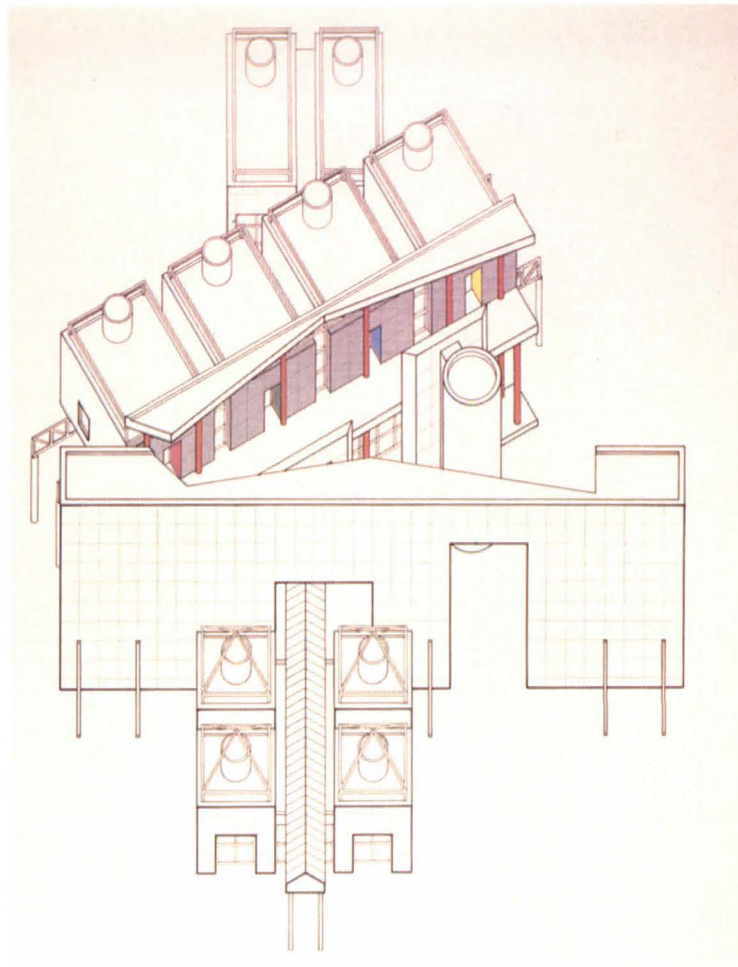
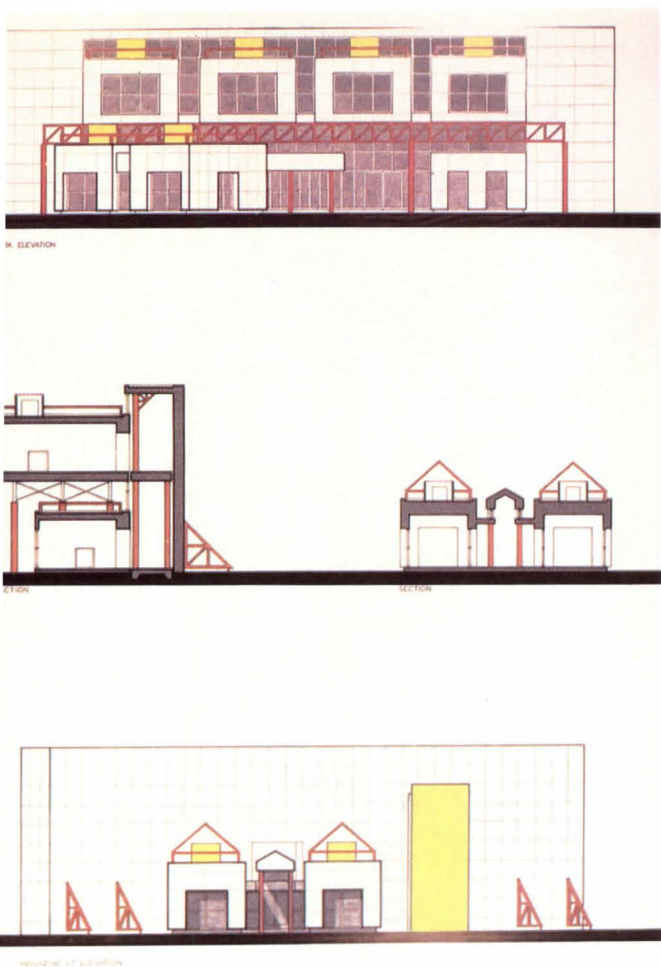
"New Orleans is more receptive to good design than it was 20 years ago," says Stewart Farnet, AIA, president of the New Orleans Chapter/AIA. "But this is still a conservative city. People like to hold onto what they've got. They don't like change."

The Architectural Coalition was established in 1981 to help alleviate this chronic problem. It is a profit-making group, created by faculty with student assistants, that undertakes projects in architecture, planning, and urban design. To date, most of these have been small-scale residential and retail ventures, funneled mainly through Filson, who has since opened his own office. The coalition also organizes and administers architectural competitions, including the 1983 competition an addition to the New Orleans Museum of Art.

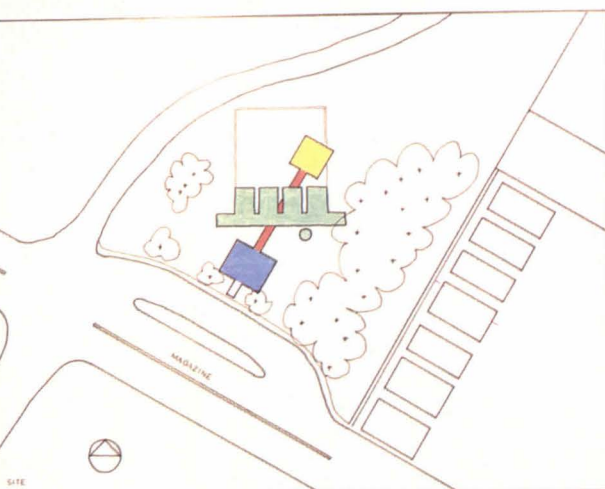
The consensus is that the Architectural Coalition is a promising idea that has yet to find its role. It continues to be hampered by the severely depressed New Orleans economy and by the absence of a clear relationship to the rest of the program, especially the upper level studios.

"The coalition ought to be taking on things that nobody else will touch," says David Slovic, visiting Luce Professor of Architecture and Society. "There have been proposals in the French Quarter, for example. That might be something for the coalition to look into. If it's only about doing buildings, that's the wrong purpose for it."

Other aspects of the Tulane curriculum are somewhat traditional, and therefore somewhat easier to evaluate. Tulane considers itself a design school, in which technical courses are offered as elements of the overall design process, not as ends in themselves.



Above and left, design for a preschool in New Orleans by second-year student Taylor Dawson, with Ben Ledbetter as critic.



selves. "At LSU you can turn in a set of working drawings for your thesis, but not here," commented one student, summarizing in one sentence the general thrust of the Tulane program and the school's sense of separateness from its neighbors.

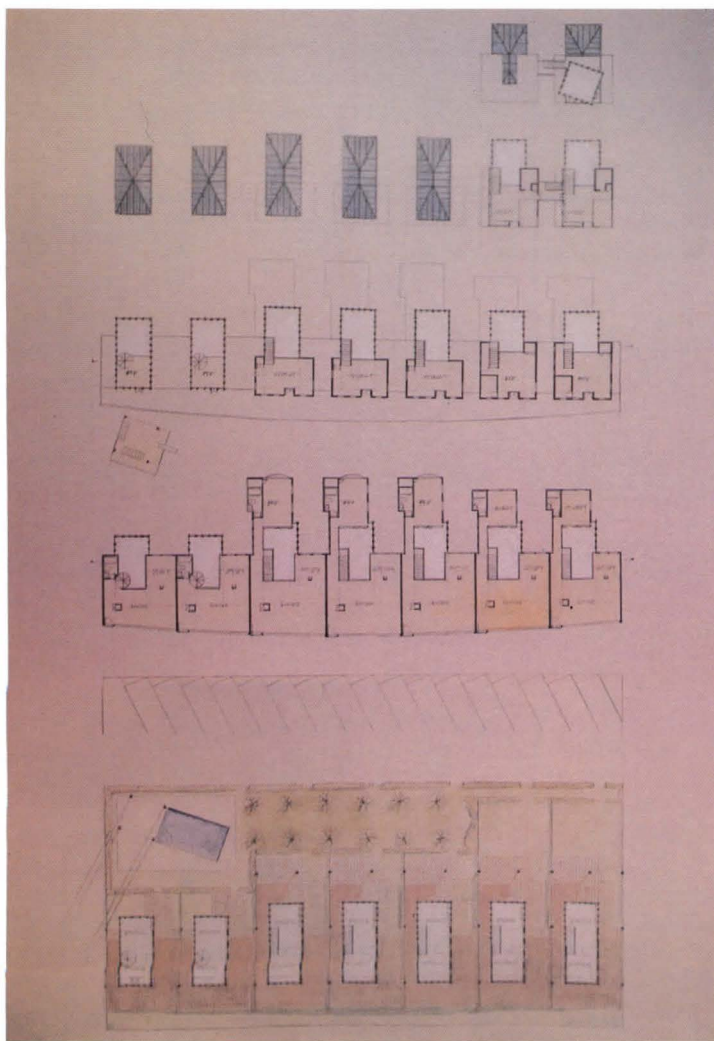
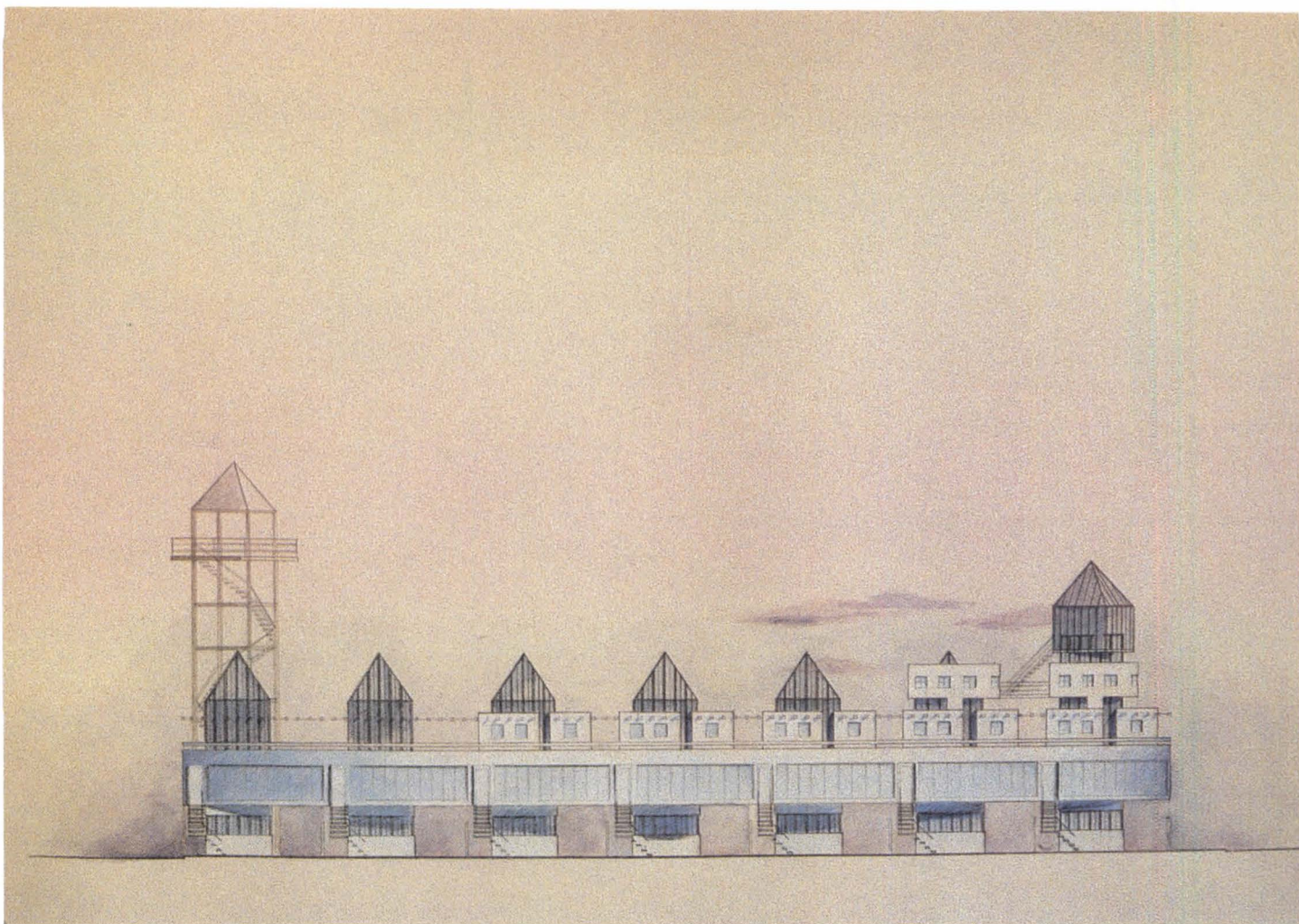
Undergraduates in the five-year program take 186 hours of courses, ranging from the standard courses in structures and mechanics to electives in history and theory and a range of introductory and advanced design studios.

Tulane University has a reputation for strong interdisciplinary programs, but in the school of architecture this usually means encouraging undergraduates to take additional courses in the liberal arts. The school offers joint degrees in architecture and engineering and architecture and business, but Cooper Union it is not.

Studios during the first three years are taught by teams of instructors, while those in the fourth and fifth years are organized into "platforms," taught by one instructor and focused on a single design problem. This year's platforms included large housing projects, a museum, and several urban design studios for specific sites in New Orleans. The latter are notable in that Tulane historically has remained aloof from the gritty problems of New Orleans. These platforms were an overture toward establishing a closer relationship between town and gown.

The major curriculum change in the past several years has been the reorganization of the senior thesis. Previously, the thesis was considered just one more building. A student made a proposal, and if it was accepted went ahead. If not, he might be assigned a canned project. Critiques tended to be brief—15 to 20 minutes—with the juries put together in-house. The mood was intense, and the failure rate often high.

After repeated complaints from students and alumni, the spirit and intent of the thesis was drastically changed. A thesis is now viewed as a vehicle for exploring an architectural idea in depth over one or two semesters. It is expected to have intellectual content instead of being just a bigger building. The isolated and



*This page, 'Seven Houses for Dispossessed Oil Barons in Nat...*  
*second-year student Don Cantillo, with Robert Schenker as a...*

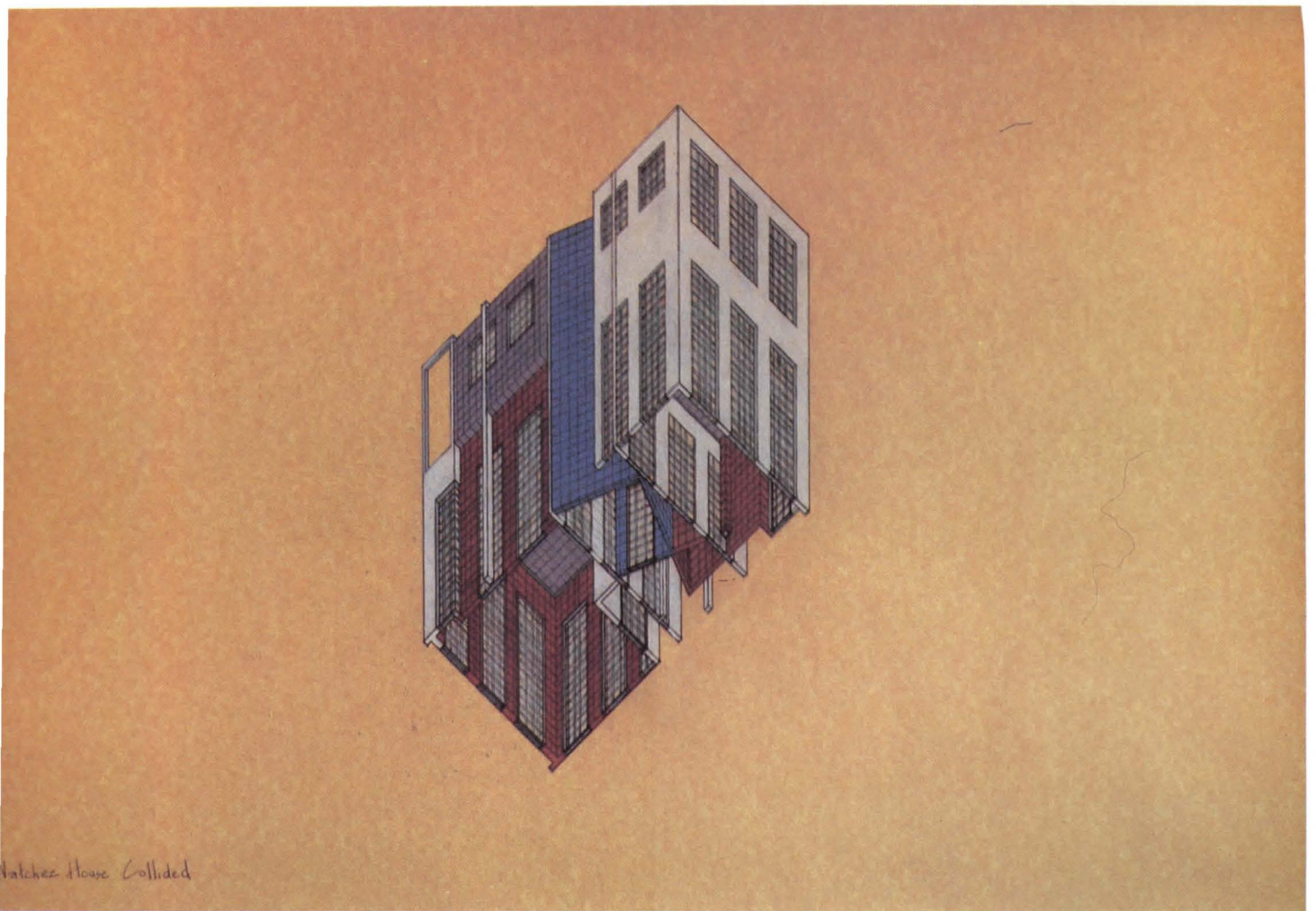
sometimes perfunctory reviews have given way to a general gallery exhibition in which all projects are on view at once, and each is juried by at least three examiners. Visiting critics are now regular part of the proceedings.

The quality of this year's thesis projects, predictably enough, ranged from marginal to brilliant. Yet with few exceptions, they tended to be grounded in ideas rather than in the manipulation of forms. Even modest projects tended to have complex and ambitious programs. Subjects ranged from refugee camps in Central America to churches, racetracks, nature centers, a training facility for the New Orleans Saints, and a scientific observatory on the Mississippi River. Urban concerns were very much in evidence, including a proposal for Westway in New York City and a high-rise office/condominium for Columbus Circle. In keeping with Tulane's cultivation of a variety of viewpoints, the theses projects also displayed a broad range of formal and stylistic concerns, from typology and neoconstructivism, to modernist postmodernism, and a smattering of Gulf Coast vernacular.

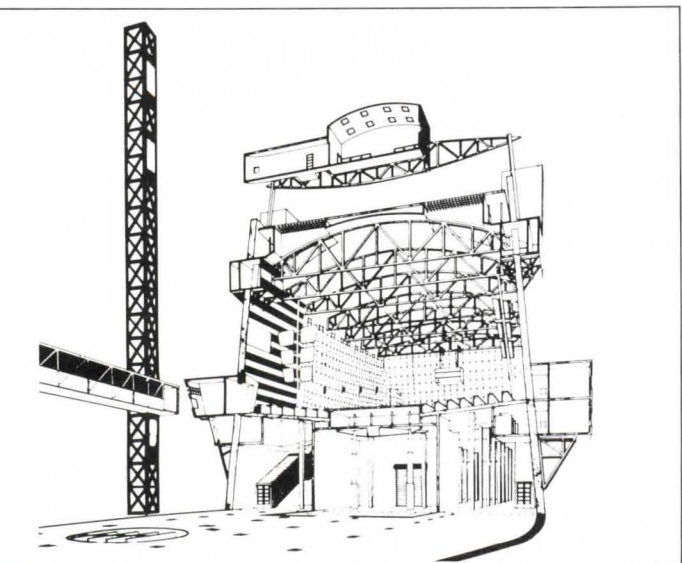
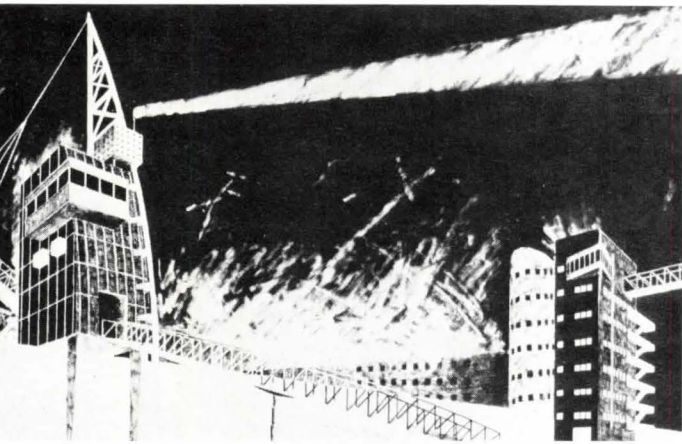
All classes are currently held in Richardson Memorial Hall, a handsome turn-of-the-century building on the old campus. In most such buildings, it gives the school a focus and a sense of identity. It is also somewhat longer on character than space. A fire last winter has forced a major renovation, however, so chances for additional studio and gallery space are improving.

If Tulane's school of architecture is in transition, the obvious question is where is it going and how is it going to get there.

"Tulane has become an increasingly more lively place," says Donlyn Lyndon, FAIA, professor at Berkeley and a former member of Tulane's advisory council. "The question is whether they can consolidate their gains and make it a place of real attraction. Being a good school will attract some people, but to have any impact nationally the university will have to commit resources to make it a center of things that nobody else has."



Natchez House Collided



Above, unit from 'Seven Houses for Dispossessed Oil Barons in Natchez' by second-year student Laura Millhauser, with Ben Ledbetter as critic; left, thesis project for a center for nuclear disarmament in East Berlin by Brian Andrews, with Malcolm Heard as critic.

Of the many balls that Filson has thrown into the air, some have been caught and some have been dropped. The Architectural Coalition is one enterprise that needs re-examination. Another is the master's program, which currently has six students, no scholarships, and no outside funding. Filson himself describes it as "a remedial program for foreign students." Others refer to it more bluntly as a joke. "Tulane has a graduate program in name only," says Martin Moeller, a recent graduate. "It should either forget it or go all the way. Either course would be fine, but not the present situation."

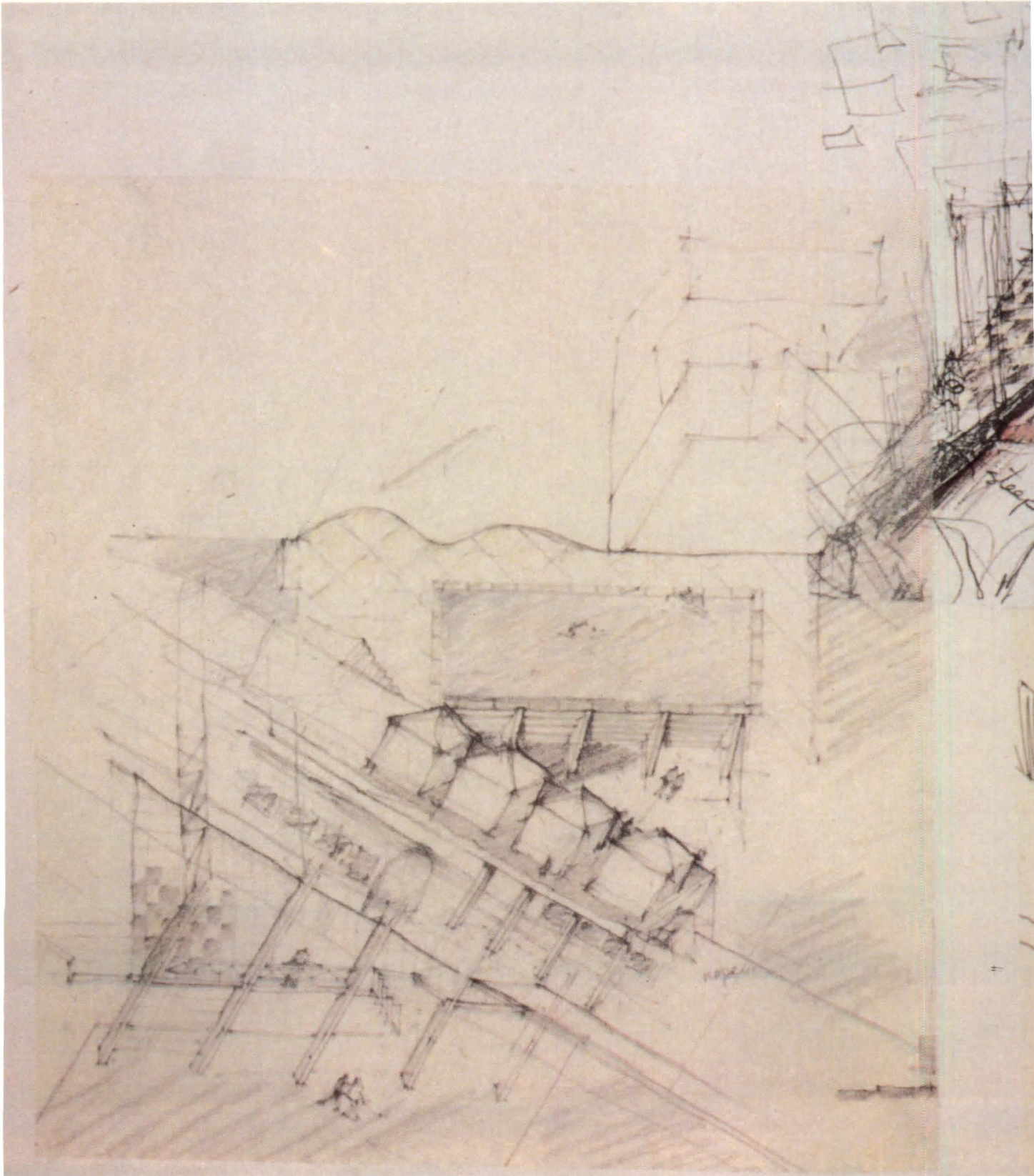
Improving the master's program would require a financial commitment that the university may be unwilling or incapable of making. With an endowment of only slightly more than \$100 million, it requires that every tub sit on its own bottom. Moreover, the university's commitment historically has been to educate undergraduates, and despite the existence of distinguished graduate programs in medicine and Latin American affairs, that commitment is unlikely to change.

Against the problems must be balanced the school of architecture's considerable strengths. The basic ingredients for genuine distinction, as distinguished from regional prominence, are already present. The school is sanely sized, in a compelling city, with an energetic younger faculty, and bright students who could just as easily have ended up at Cornell, Berkeley, or some other prestigious university. Tulane students were winners in this year's precast concrete and Design + Energy competitions sponsored by ACSA. Another student received a traveling fellowship from the Skidmore, Owings & Merrill Foundation. The basic program is solid on most major fronts, daring and innovative on several. The next few years should determine whether Tulane belongs in that next echelon. □

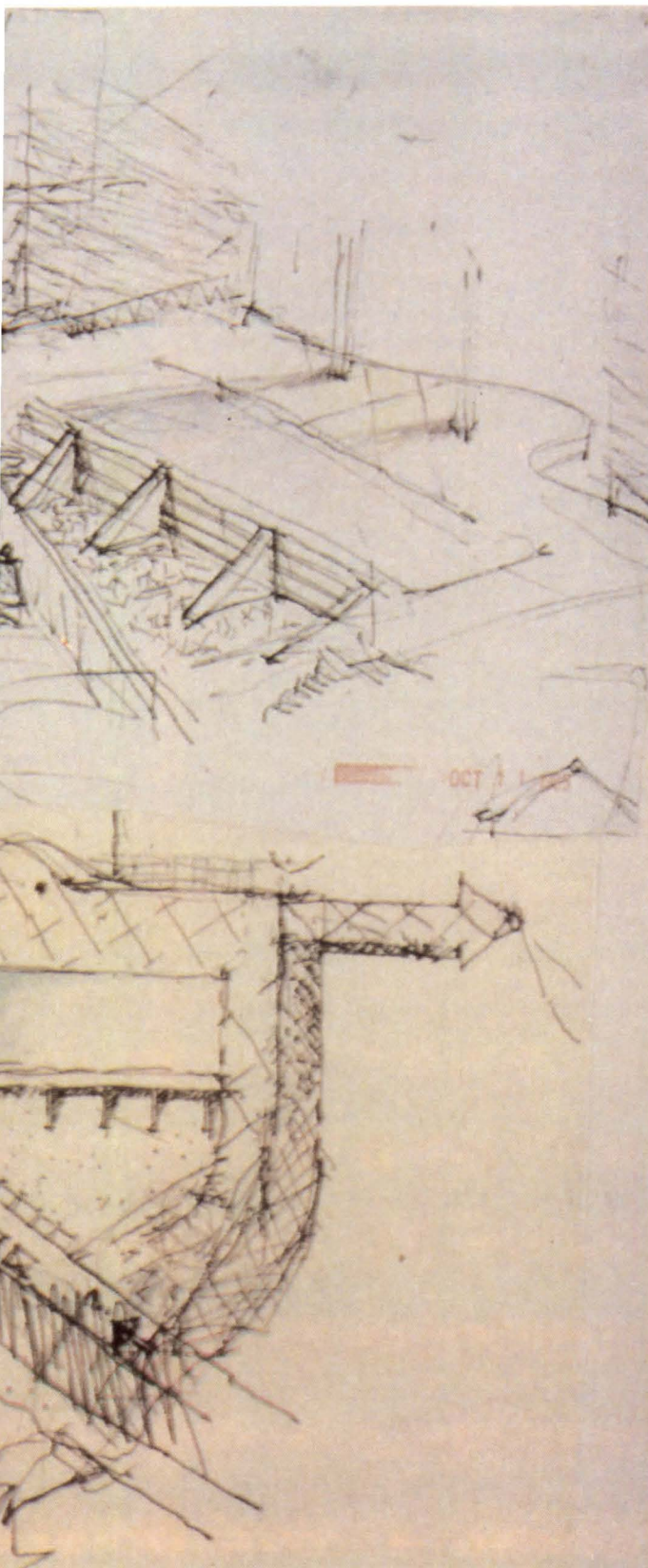


# A Rich Mixture of People and Offerings

*Massachusetts Institute of Technology's department of architecture. By M.J.C.*







The Massachusetts Institute of Technology in Cambridge, Mass., was the first school of architecture founded in the U.S. The program commenced in 1868, and among those who have attended the school are Louis Sullivan, the Greene brothers, Cass Gilbert, Raymond Hood, Louis Skidmore, and I. M. Pei, FAIA. It is a small school: Out of a total student population in the architecture department of approximately 300, less than half are enrolled in the M. Arch. professional degree program.

The others are scattered throughout other degree programs, including a Master of Science in Architecture Studies (a post-professional research degree); a Master of Science in Visual Studies (which concentrates on computers, video, telecommunications, and graphics); and a Doctor of Philosophy. There is also a collection of MIT undergraduates majoring in architecture, a good many of whom continue into the M. Arch. program.

Within the school of architecture and planning, students have access to various study centers and research programs, including the Laboratory of Architecture and Planning (which initiates and administers research within the school); the Media Laboratory (where research in communications is conducted); the Center for Real Estate Development (which studies the development field and offers a master's degree); the Aga Khan Program for Islamic Architecture; and the MIT-Harvard Joint Center for Housing Studies.

Thus, the architecture department, despite its small size, exists in an academic environment rich with a diversity of activities, interests, faculty, and students. If anything, the mix can be intimidating for those trying to carve out an architectural niche for themselves. "I think one of the difficulties that some students have here is focusing," says adjunct professor Richard Tremaglio. "It's a potpourri of stimulation."

There's a family atmosphere at the school, "fathers and sons," as John Myer, FAIA, department head, describes it, with a little more attention now to the daughters who make up 40 percent of the enrollment. Because MIT is the nation's toughest academic institution for admission, it goes without saying that it's populated by some very bright people. The students are a diverse group themselves, particularly the graduate students. "They're older than the typical graduate population," says John de Monchaux, dean of the school, "and they've been doing other things very often, such as woodworking or television production.

"Typically in a studio, you'll have MIT undergrads who've decided to major in architecture and upper level people like a 35-year-old Air Force veteran who decided to come back to school. You get this extraordinary range of people who are street wise and just plain kids, all working in the same class. It's a very powerful mixture."

The students report that it's this rich mixture that produces a studio climate of learning from each other, sharing ideas with an absence of the paranoid competitiveness that's common at other top schools. "We get a lot of desk crits from each other, after the profs have left," says one student.

What draws them to MIT, in part, is the prestige of the insti-

*Across page, top, MIT's Rogers hall as it faces the Charles River. Left, design for public pool and community center by Greta Jones, with critics Edward Cullinan and Mark Beedle.*

tute itself. "There are undergrads who come to MIT because it's MIT, and they've always been interested in architecture," says Myer. Undergrads declare their major at the end of freshman year, and some approach architecture with an interest in media arts and communications technology. A small number, Myer admits, sees architecture as an easy way to get through MIT. "Maybe they perceive us as 'soft' or feel more familiar with our issues," he says.

The department, in fact, is something of an anomaly in MIT and its techy, hard science image. Myer has described the department as a humanistic barnacle on a great ocean liner of technology.

The graduate students come for more conscious reasons. Most are interested in an approach to architecture that has evolved from the ferment of the 1960s, when many of them were in grammar school. "MIT deals with architecture on a human basis and with social concerns," one student explains, "not formalistically."

This student adds that he was shocked the first time he walked into the fourth floor studios in MIT's domed main building, which are an intricate and messy conglomeration of jerry-built wooden platforms constructed out of found objects, interspersed with partitions of glass block and decorative brickwork, all of it added to and modified year after year. "It's made me understand more what MIT's about. The individual has some influence over his environment."

"There's an interest here in the process of architecture and its discipline," explains another student, "and not necessarily the product. It's not an attitude concerned with specialities."

The faculty describes what "MIT is about" by pointing up the fact that there probably aren't many schools (save for Berkeley, MIT's academic soul mate) where architecture is approached in quite the same way. "In formal terms, the school for a long time has not followed the fashions very much," says William Porter, FAIA, former dean of the school. "We draw on the roots of form that are found in vernacular as well as monumental buildings, in the fabric of cities as well as the cities' great figural buildings, in ordinary as well as extraordinary building."

Also part of MIT's concern is socially conscious architecture and the value of context, not just fitting a building into what's already there, but having the architecture accentuate the positive qualities of the context. Architecture is approached as open-ended, part of a greater environmental whole that will continue to grow in, out, and around the building.

"Form is the beginning of something, not the end of it," explains associate professor Jan Wampler, AIA. "It's an additive process—you do something, and then someone else does something to it. Form is a growing, organic thing. It grows from the land, the sky, and people. It's not static. It relates to water, the sun, dogs and cats, and everything else." It's a builder's esthetic that celebrates the physical construction of architecture. Among those venerated at MIT are Frank Lloyd Wright, the Greene brothers, Bernard Maybeck, R. M. Schindler, and Herman Hertzberger and others of the Dutch school. There is a tendency to discount architecture as object making, architecture as pure product, as might be characterized by the work of Aldo Rossi. There's also an MIT jargon that pervades the studios. People talk about frameworks, infill, optionality, assemblages, built form, facts of form, places to be. Studio projects tend to be small scale, with big buildings being accretions of smaller parts. There's usually a real site with real clients.

While there is a good deal of attention to architecture as it is generated out of the order of nature, there is little consideration of historical architectural precedents, as there is at many other schools. Maurice Smith, one of the most powerful theorists at MIT who has taught there for 30 years, lays the matter out patently: "We made a conscious decision to keep post-modernism out of here, and we're probably the only school that's been able to do it." Smith associates the current preoccupation with historical precedent in architecture with our collective, unconscious dread of nuclear war. "When there's nothing to look forward to, you start looking backward, toward history."

The irony of this position at MIT is that the school has one

of the best architectural history departments in the country service its Ph.D. programs, and is underutilized by the majority of students. Says Stanford Anderson, a member of MIT's history faculty, "The design faculty is alienated from any kind of historical study, and I think people of my and Maurice's generation are at the tail end of the modernist period, where there was a mistrust of history." If this resistance to history is based in the fear that such study encourages students to appropriate architectural forms for inappropriate purposes, then it may be excusable. But the study of architectural history also tells us where we've come from, who we are, and where we might go. One could argue that we can't possibly go forward *unless* we look backward. After all, MIT's position has a place of its own in architectural history.

The graduate curriculum, much like MIT's architectural programs, is open in regard to how students can meet its requirements. Students are encouraged to design their own programs, find their way by threading through the myriad offerings within the department, the school, and the institute. They can also take courses at Harvard and Wellesley. The openness of the curriculum and the mind-numbing range of possibilities demand that the student be directed and motivated. "Someone who needs his or her hand held won't do well here at all," says one student. "There are so many resources here that some people come in like a kid in a candy store. If they don't know what they want, they might end up trying a bit of everything."

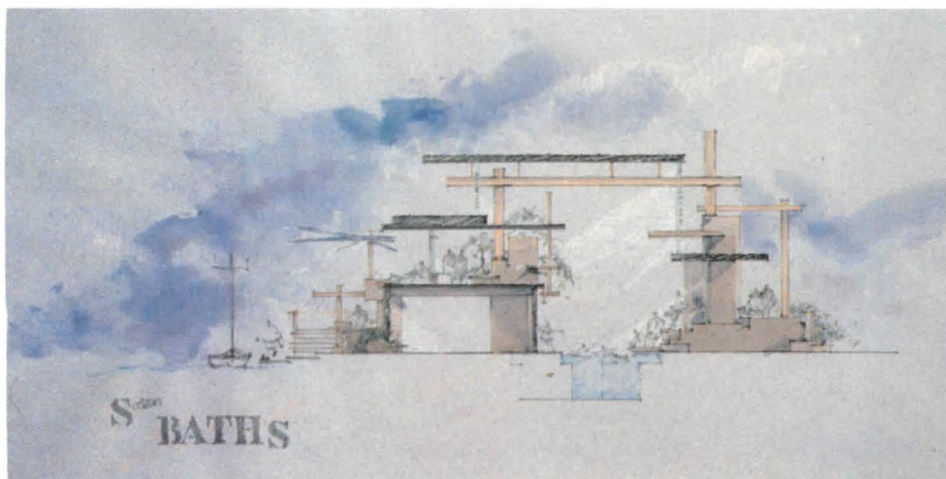
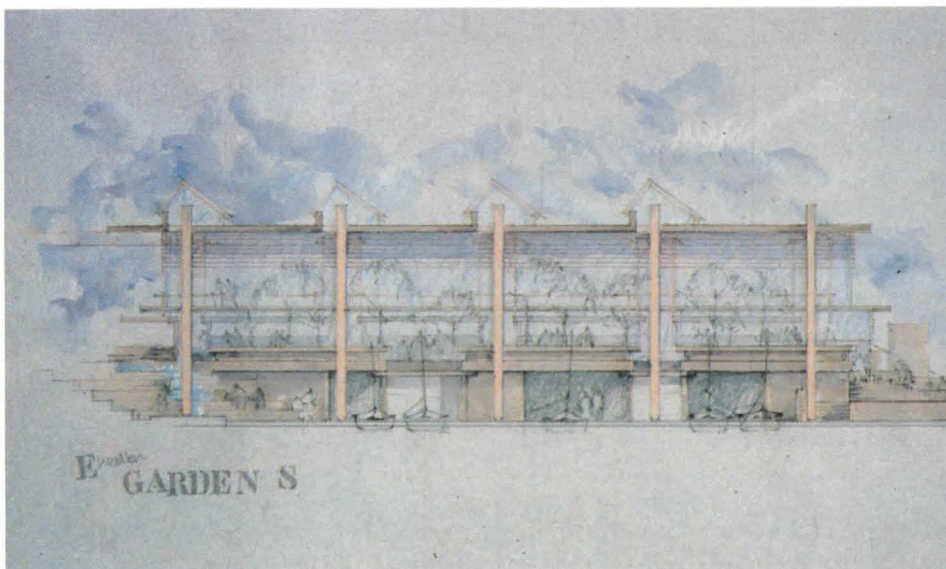
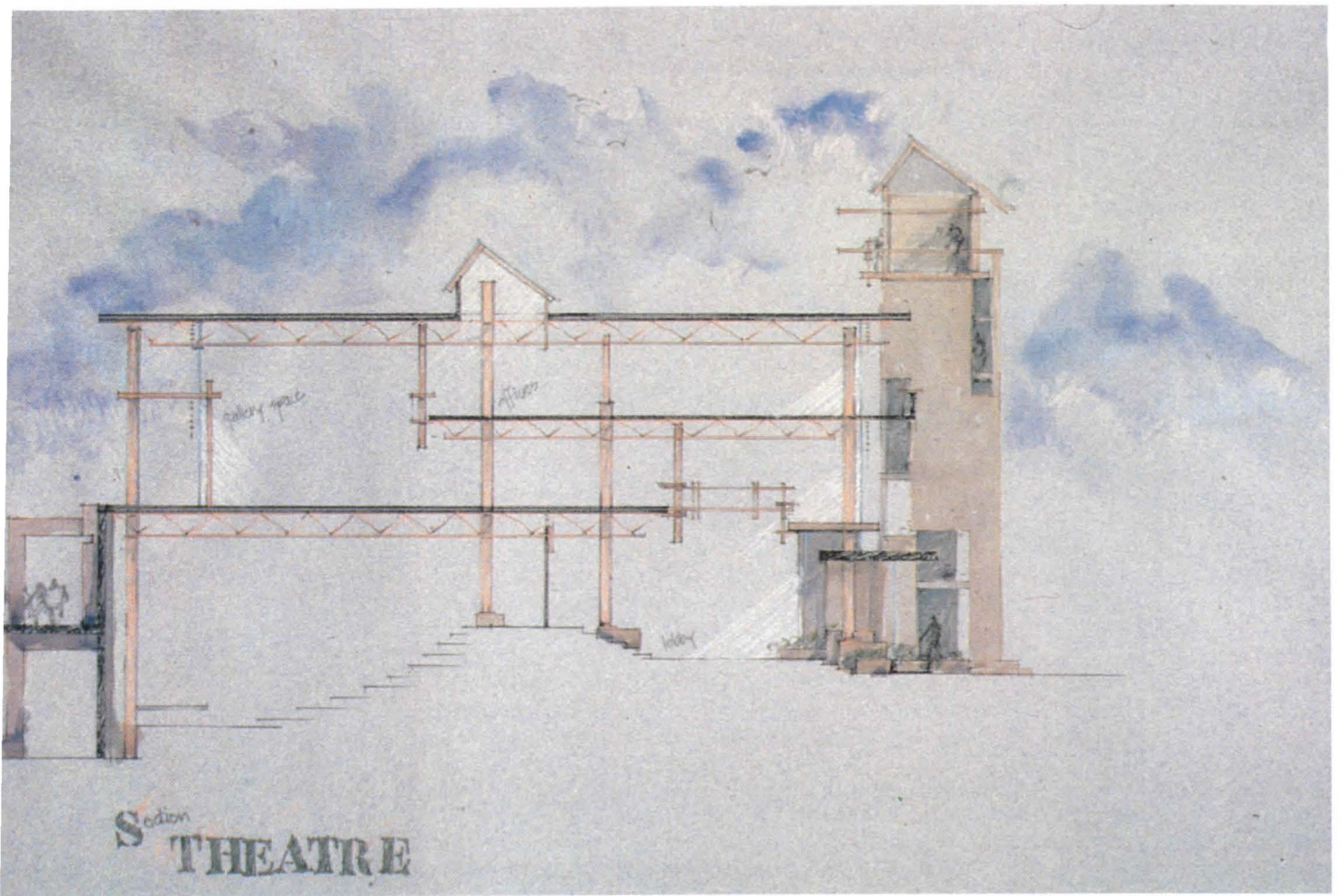
The flexibility of the program also leaves it open for lots of abuse by students who might steer clear of courses such as building science. "I bet you could go through here without taking standard structures class," admits one student, while another advises that that may not be a bad idea, considering that building science instruction at MIT, ironically, "is abysmal. If you want to learn about structures you go to Harvard."

To give students an even wider range of design subjects from which to choose, MIT offers workshops that usually count for half studio credit and focus on particular design issues. John Habraken, former department head who pioneered the workshop idea, says that "you can teach some aspects of design better outside the studio. In the workshops you have formal presentations and discussions by faculty, and the normal assignments may be papers." Workshops have included such subjects as site planning, computer-aided design, collage.

To help students make choices about what courses, especially studios and workshops, might best serve their interests, a booklet of course evaluations is published after each semester, assembled by a student committee, which describes the content of each studio with student comments on how useful the studio was. Next year there are plans to display student work from previous studios. At the beginning of each semester, during an afternoon of "show and tell," teachers present what projects and issues the studio or workshop will address. Afterwards, students talk with the professors to determine whether the course is best for them, or whether their interests might clash with those to be pursued in class. After students sign up for their prospective studios, Jack Myer and a committee put together studio groups with an eye on not only the students' preferences, but also a range of individuals—strong and weak students, graduate and undergrads. (This last mixture is practically unheard of at most schools. While the *mix is generally* welcome, a few graduate students complain about being treated as second class citizens.)

Myer says that the process of advising students in finding their own paths is weak. "We're looking into how to make it better, but it's not easy to get faculty people to commit to regular interview times on top of everything else they're doing. You're hooked on your own hook, and MIT in the main is like that," Myer explains. "It's a place where learners follow learners, as opposed to being taught."

*Right, sections of a design for a public building on the Chao River, incorporating public baths, a garden, outdoor theater, promenade, and assembly areas, with Fernando Domeyko as critic.*



A factor encouraging students to focus their interests with a minimum of experimentation is the cost of going to MIT. Next year, annual tuition will be \$12,000. With other fees and living expenses, the total comes to approximately \$20,000. While the encouragement and resources are there to design your own education, the students are always conscious that the meter is running and that all of this self actualization is costing a bundle. "A lot of us are going heavily into debt," observes one student, "and it's very difficult in a profession not noted for generous remuneration." In response, the school pressured MIT for better student support. "We threatened to do a faculty standback," says Myer. "That's where the faculty agrees not to receive all its pay and puts some of it toward student support." To avoid embarrassment, the institute raised support to over 50 percent of need and a program is now in place to cap student debt at about \$22,000.

Also related to money, and responding to the lack of a readily accessible body of technical architectural knowledge, plans are under way for a building technology program within the school that will both provide training in technology and conduct sponsored research for clients. Areas of research might include energy, building evaluation, materials and construction, air quality, and lighting, and results would be available on a subscription basis. (The two-year-old Center for Real Estate Development operates similarly, conducting research, offering a master's program, and making its expertise available to its 90 or so corporate and individual members, who pay an annual fee of \$10,000 and \$5,000, respectively.)

The work that MIT students produce marks the school as something different from the mainstream of top-notch architecture programs. There are not many flashy presentations with airbrush on mylar. Most tend to be modest and sketchy, rendered on yellow tracing paper. Models are of chipboard or sometimes assembled of objects picked up in the halls or out of trash bins. "Apparently at Harvard, people stop designing a month before the studio ends and then they draw," explains one student. "That doesn't happen here. You're designing while you're working on whatever presentation you've got, and it's okay if you've drawn it at different stages of completeness." This method of presentation, instigated more by the faculty than the students, meshes with MIT's emphasis on the process of design and with the fact that architecture is in a constant state of flux.

Jan Wampler states that in his studio last semester, "I told people that there were no final drawings and that I wanted the best sketches they'd ever done on yellow trace. I wanted them designing an hour before the project was due, during the review, and after, because that's what a good building is about."

Some students find the parameters of drawing confining in that their architectural expression is limited by the media. "People complain that they never learn how to produce a finished drawing," says one student. "Others feel that they need completed products at the end of studio so they can put together a portfolio to get a job." Last year a popular course presented a survey of architectural drawing techniques from the 19th and 20th centuries, and another drawing course is planned for next year. When enough students demand such courses, the administration usually responds.

The architecture department, in fact, has been slowly adjusting to criticism of the program from within. Jack Myer explains that in the last three years the department has undergone a self-critique amid concerns that the school, by virtue of not following fashionable architectural trends, has become isolated and a bit defensive about its position, which is perceived by some as being mystical. In December 1984 a student petition landed on Myer's desk, expressing concern about low student morale and a lack of architectural debate within the school. "There is a remarkable scarcity of intellectual exchange," the petition, in part, stated. "The faculty has no apparent concern with the expression of their ideas to the architectural world outside our walls and does not encourage this expression from the students." Changes were made, including a student forum for airing concerns to the administration and a call for greater diversity within the school.

*Right, above and below, design for a small library by Ken Raab and Jennifer Munde, respectively, with Imre Halasz, Willia Porter, and Chester Sprague as critics. The design was part three-phase project that included a week-long sketch problem analysis of an existing library, then expansion of the design.*

This in turn prompted a small but vocal group of students interested in bringing in other points of view and communicating MIT's position to a larger audience, to organize a week-long design symposium this year called "An Architecture of Substance" (a title that causes some faculty and students to wince). Among the invited speakers were Peter Prangnell of the University of Toronto, Wolf Prix of Coop Himmelblau in Vienna, Japanese architect Fumihiko Maki, Hon. FAIA, Zaha Hadid of the Architectural Association in London, and Los Angeles architect Eric Owen Moss, AIA, each of whom spoke about his own work as substantive architecture. Along with the usual gab fest activities was a design charrette problem involving students from 19 architecture schools who were invited to participate in the symposium.

"It's a standard rap about MIT that it's locked into the 1960 case. It just might be a little tired, or need to be revved up and that's why we started the symposium. It was largely to bring in other points of view, but also to celebrate the MIT point of view." Although the organizers admit that the high level of energy at the symposium was not easily transferred to the department as a whole (the event took place between semesters and there was a dearth of MIT attendees) it did allow MIT's position to be challenged and contrasted, in one instance during the charrette review.

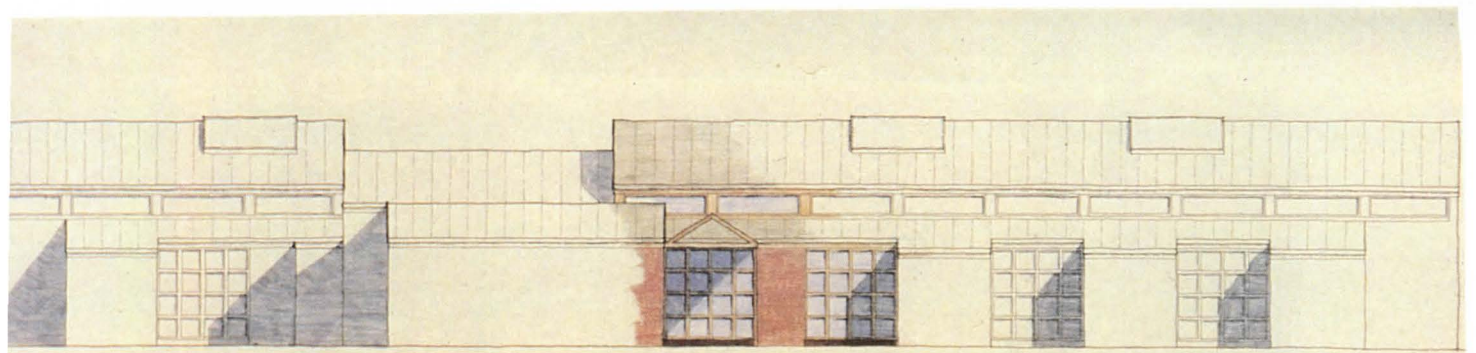
Maurice Smith found himself sparring with Michael Hays of the Rhode Island School of Design, a school that is anathema to MIT. The resulting confrontation of ideologies threw Smith in position in relief, and several students mentioned that they had never seen him in finer form. That, in essence, should be the purpose of bringing MIT into some larger arena of architectural debate—to allow its own position to be sharpened and developed.

The administration's plans for expanding diversity within MIT include the continuation of a "distinguished visitors" program which has included Aldo van Eyck and Gottfried Böhm. Myer says that visitors average two or three a semester and more often than not are sympathetic to MIT's position. "I think there's appropriate and inappropriate diversity," says Myer. "Could I fruitfully get someone like Zaha Hadid here? No, I don't think for more than three days." Böhm is scheduled to visit again this coming year, along with Tucson architect Judith Chafee, FAIA.

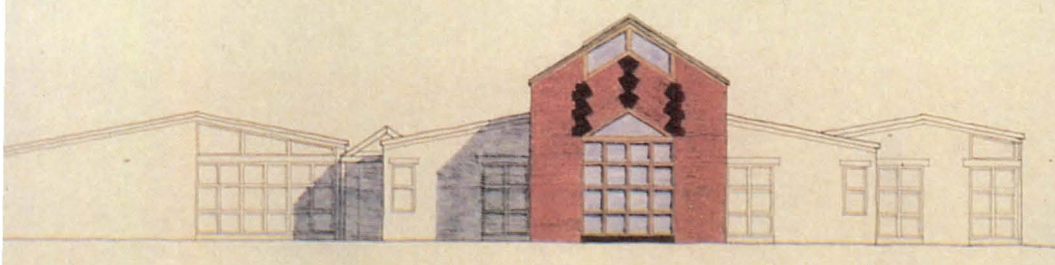
There are also two new design faculty members scheduled to begin this year: William Hubbard, who teaches at UCLA and is with the Urban Innovations Group in Los Angeles, and Eric Schneider-Wessling, a West German architect. Hubbard, a mid-'70s graduate of MIT's Master of Science in Architecture Studies program, says that he's looking forward to learning more about MIT's design approach and will be teaching an introductory studio and a sure-to-be-popular drawing course. Schneider-Wessling, at this writing, is contemplating the logistics of transplanting his work to MIT. Both should be interesting additions.

This is a school that proceeds at a modest pace, and no sweeping changes at MIT are in the offing. The general feeling is that the school offers a valid position, not particularly popular at this time, but one that can be strengthened and should be communicated to a wider audience (although the faculty publishes infrequently and the students do not produce a glossy journal like Harvard's or Yale's). Most students share the feeling that MIT should hold on to what it believes, despite architectural fashions. "In combining social purpose with timeless concern one student remarks, "MIT will find its time again, as it did in the 1960s and '70s."

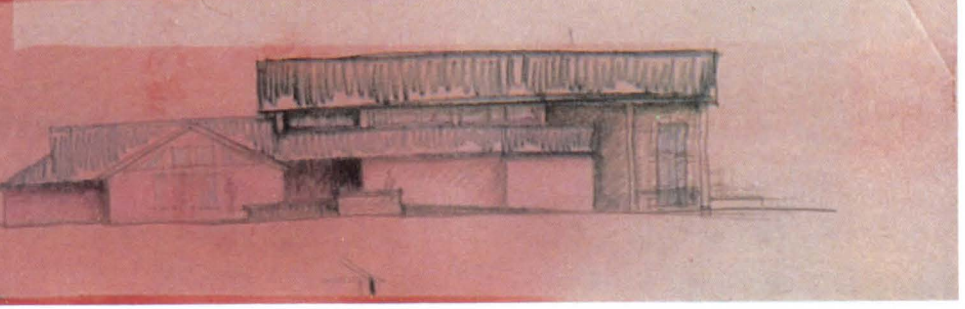
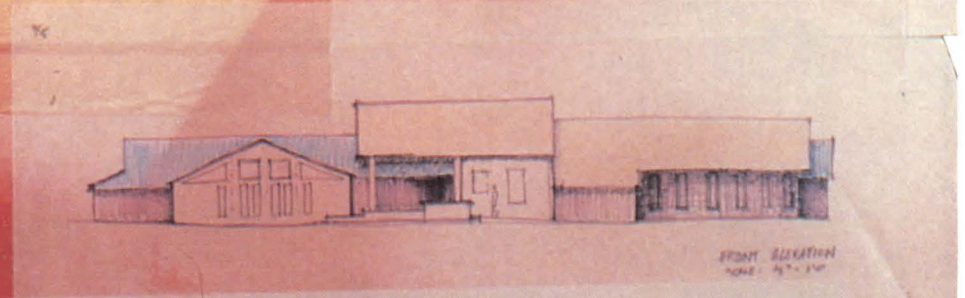
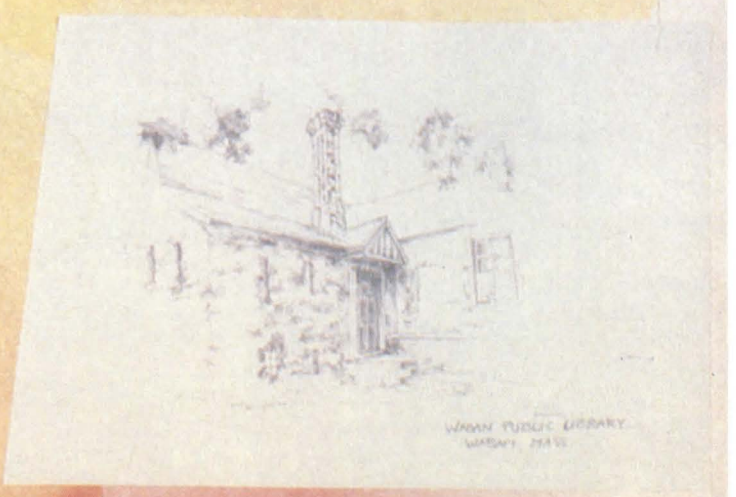
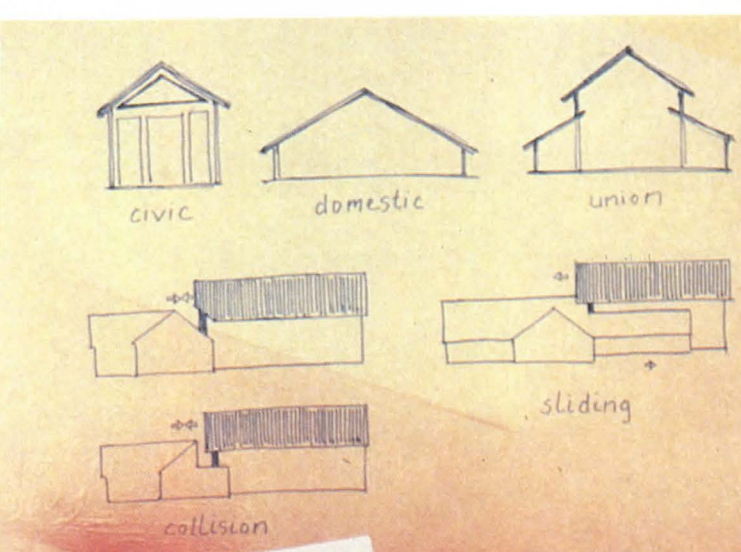
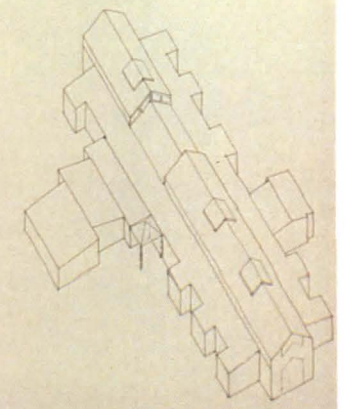
Meanwhile, how does MIT fit into architecture in the age of Reagan? Jan Wampler, who says his kids call him a relic of the '60s, smiles. "We're just waiting for the 1990s to roll around."

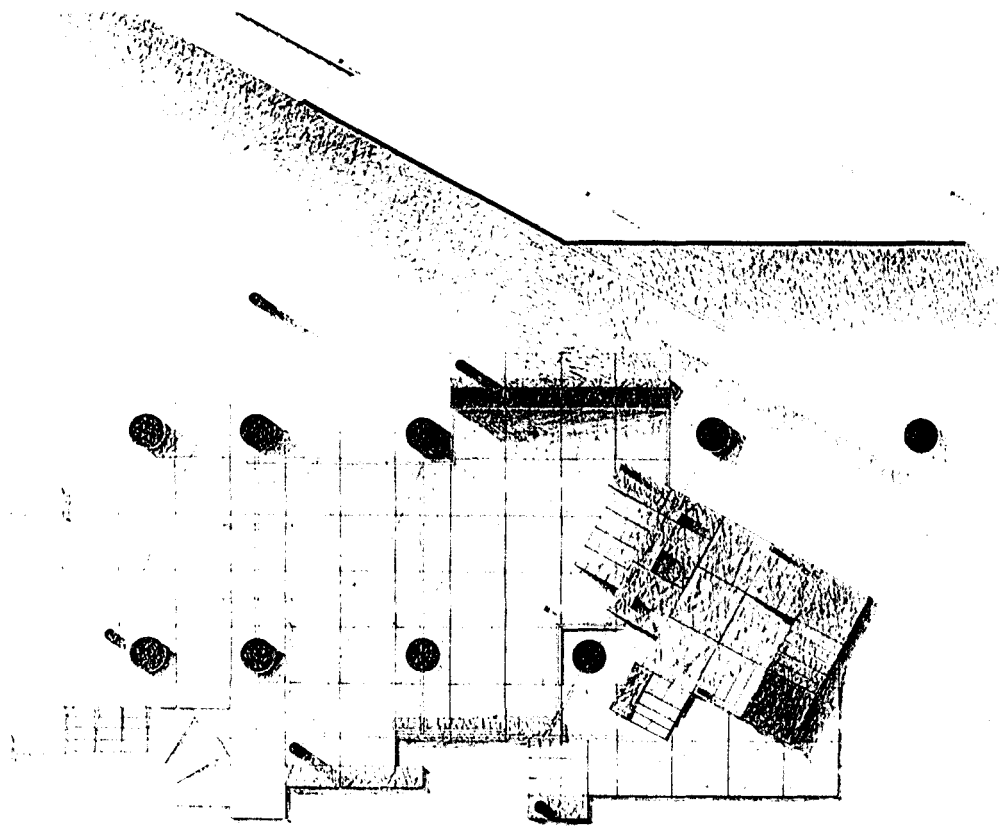


NORTH ELEVATION

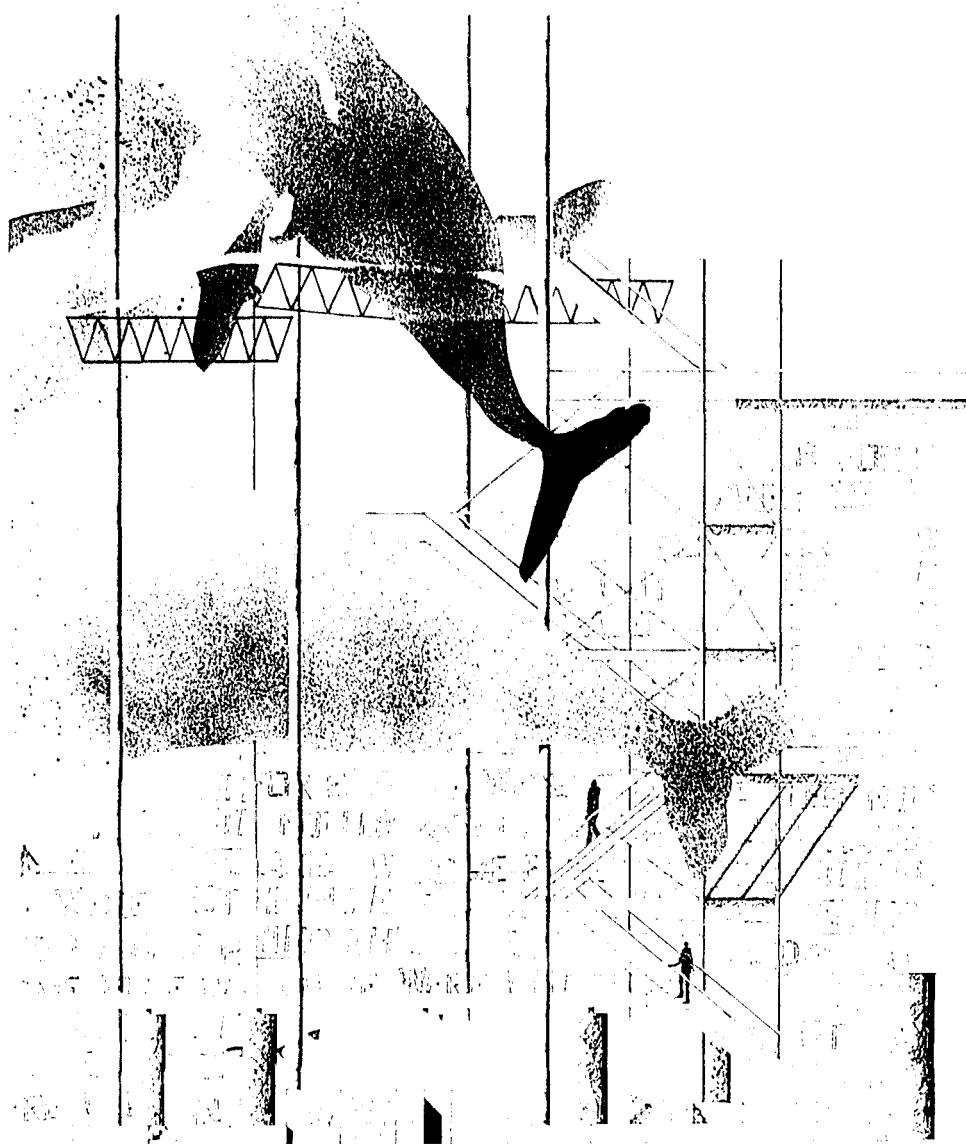


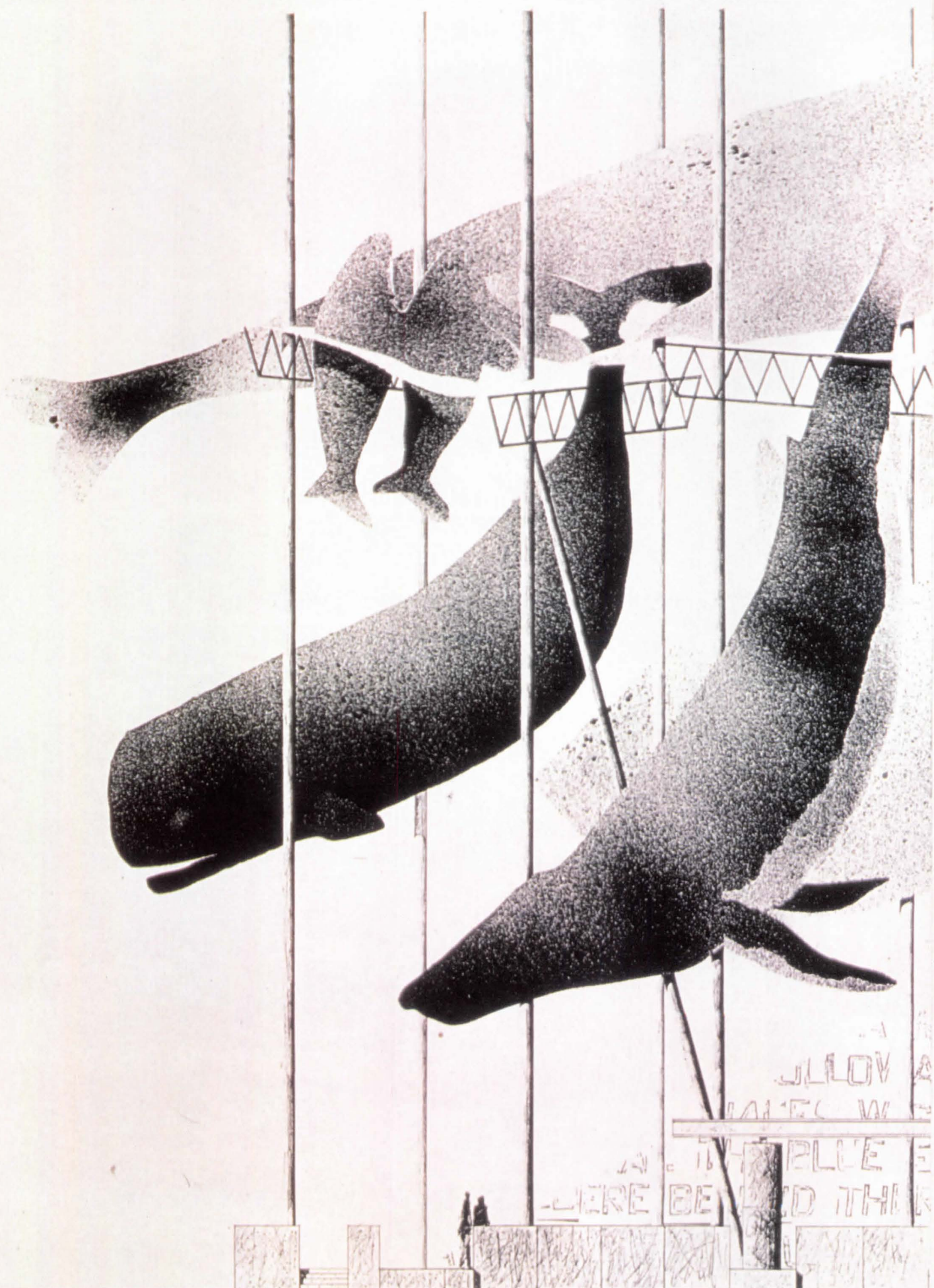
WEST ELEVATION





*This spread, design of a building on MIT campus for the exhibition of marine life by Greta Jones, with Elin and Carmel Corneil as visiting critics. The building, for which the student assumed the role of curator, was to contain artifacts of the designer's choice 'with emphasis,' according to the program, 'on effective and elegant structure, light, and detail.' □*





JULOV A  
MATEC W  
PLUE E  
HERE BE

# *Kaleidoscope*







## *Justice Center Comfortable in Its Dramatic Surroundings*

It isn't a particularly innovative building, nor was it meant to be. As architect William Muchow, FAIA, says of his Eagle County justice center, "the layout is traditional for a jail. We wanted it to be a comfortable, unpretentious building that people would be comfortable going into, a building that would tie in with its surroundings."

In the interests of fitting the justice center in with its site in the long, low foothills of the Rockies, Muchow created a low-profile building with linear massing parallel to the land's contours. He combined its exterior split face and ground block in a way as to make the building appear to be made of stone. The modest looking, remarkable mainly for its peak-roofed, glazed entry before which two free-standing fluted columns stand as if on duty.

Asked if this signaled a departure for him, staunch modernist Muchow replies, "I don't think so. We are trying to make a statement that this is where the courts are, and using columns is the way of doing it."

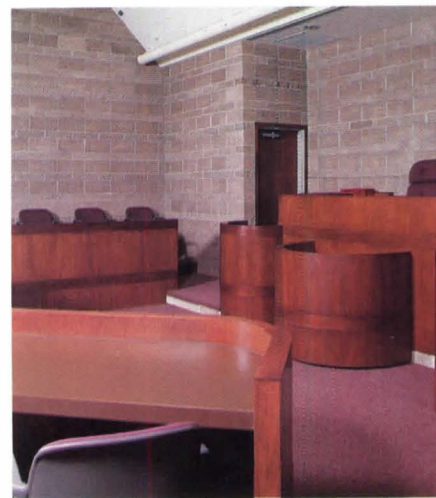
The justice center contains separate quarters for the sheriff's office and district attorney, which are in the two-story building, and the 48-bed detention center, which is in the single story build-

ing. All three facilities are connected by a central, glazed, and skylit spine that acts as lobby, contains all the public spaces, and divides the single-story from the double height building. This spine is heated by sunlight that enters from the south and also warms the north-facing block walls. Although this provides some energy savings, the principal benefit, as Muchow acknowledges, is environmental. He calls the public corridor/lobby "a somewhat happy space."

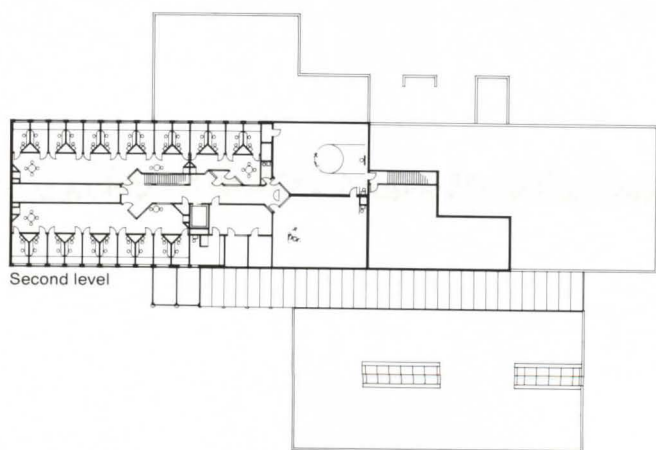
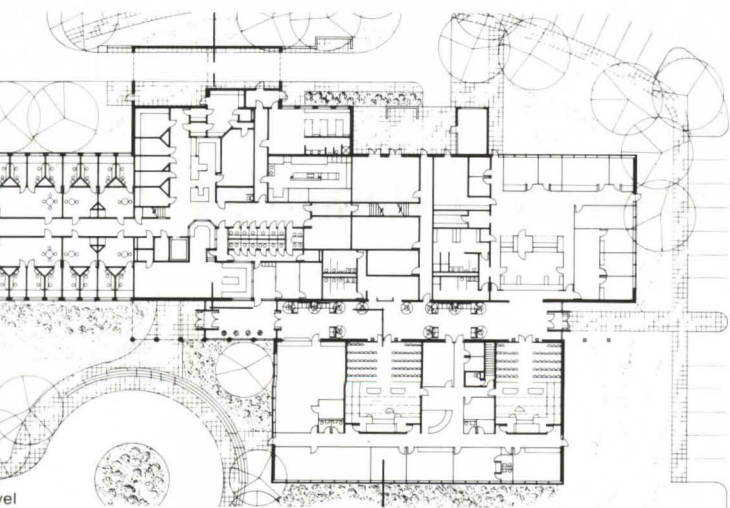
The architect was directed to provide for future expansion and configured the building so that each section could be extended—somewhat like a sausage—the sheriff's offices and courts to the east and the jail to the west.

Economics, finally, governed "a lot of what happened with the justice center," says Muchow, referring to the building's minimal square footage and materials. —ANDREA OPPENHEIMER DEAN

*Across page: the peaked and glazed entrance becomes a skylit lobby/public corridor within, which links the justice center's two buildings and its facilities for the sheriff, district attorney, and detainees. The freestanding columns in front of the entrance, says architect William Muchow, signal no change in his consistently modern approach, but mark the building as a court. Above, as seen from a distance, the center's massing is linear and low and parallel to the site's sloping contours, and its materials complement the valley location in the Rocky Mountains.*



*Above, interior lobby/corridor with translucent panels insulated to a .15 u-value providing daylighting and passive solar heating to the public spaces and courts. The environmental advantages of the glazing, however, outweigh its energy benefits, according to Muchow. Above right, the courtroom. Across page, a second view of the classical columns, this time at dusk, standing like Pretorian guards before the relentlessly modern, block and glass building.*



## *A Fire Station Softened by Domestic Forms and Finishes*



In Fire Station No. 3, Zervas Group Architects (formerly Johnson, Erlewine & Christensen) attempted to soften what functionally must be a tough and technical little building. They did this by using residential scale and detailing on the outside and domestic design and materials within.

The site, in a mixed residential and commercial neighborhood near downtown Bellingham, Wash., had on it a large, turn-of-the-century house and flat-roofed fire station of similar vintage. The new station occupies the approximate footprints and volume of the two old buildings combined, while at 8,800 square feet it more than doubles their usable space.

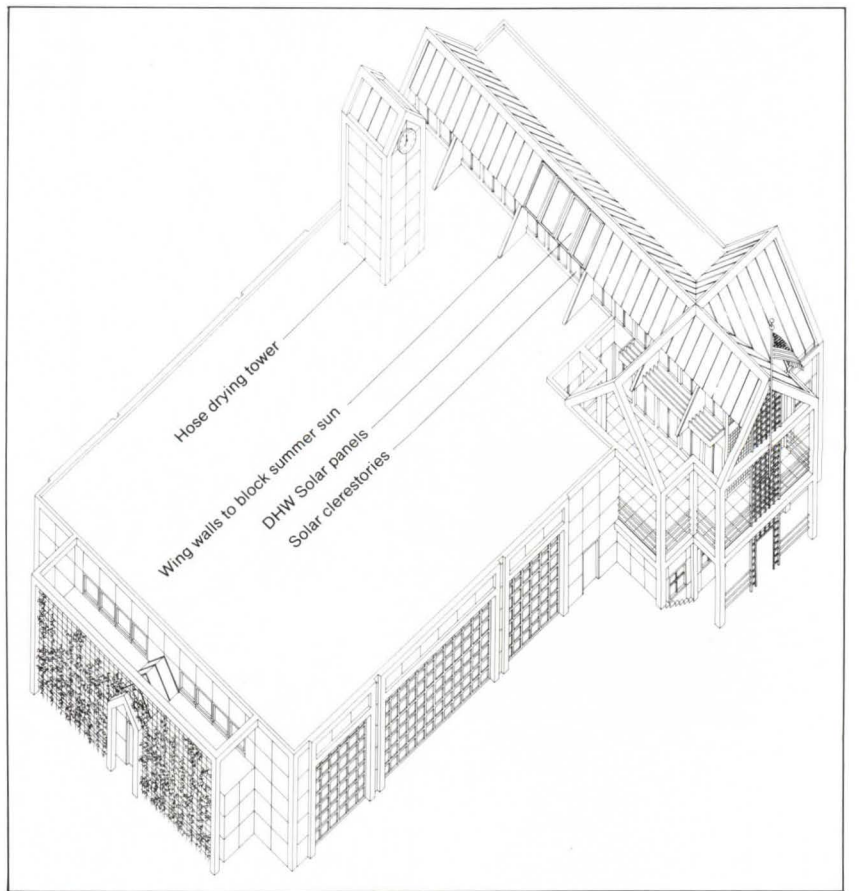
No. 3's exterior walls of fiber-reinforced cement panels are recessed within a boxy Dryvit frame that defines the old buildings' volumes and roof forms. Behind a clipped patch of lawn and well-kept flower beds, the new station pays respects to its Victorian neighbors with a crisp, domestic-scaled entrance under a trellised second-story porch. The roof is standing seam metal.

On the first floor, offices, a locker room, and a dormitory open, a short flight up, to the big room where the trucks are kept on the flat-roofed west side of the station. Above the offices and dorm, noninstitutional furniture makes the kitchen/dining/living spaces seem homelike. In good weather, the living space expands into the porch/roof deck, which overlooks the double-height hall on one side and the apparatus room on the other.

Above the hall and extending over the rear living area, a south-facing clerestory runs from building front to back. Positioned inside the clerestory are translucent water tubes, an automatically controlled insulating curtain, and exhaust fans—the only hints that No. 3 is partially solar heated.—JOHN GALLOWAY

*Mr. Galloway is an architect and freelance writer in Seattle.*

*Above and above right, exterior walls are recessed within framing. Brass pole on right side of front porch is recycled from former station on this site. Right, windows at right in prior photo give views into equipment side of the station. Clerestories light spine on 'house' side.*



*A Visitors Center Makes Sophisticated Use of a Familiar Form*

---





Point Reyes National Seashore is a 71,000-acre wildlife reserve on the Pacific coast, just north of San Francisco, with great stands of redwood, gently rolling meadows, and miles of shoreline teeming with marine life. It is here that Sir Francis Drake landed in 1579, and through here the San Andreas fault breaks the land with an earth-bound lightning bolt. Near the park's entry is an old barn (one of many in this region dotted with dairy farms) that served as a ranger station and visitors center until the building was dismantled and the ground beneath it and made the building unstable. A new visitors center, designed by Bull Volkmann Stockwell and sited not far from the old barn, combines the presence of its predecessor with a warm, rustic interior to welcome and orient Point Reyes' two million visitors yearly. The pristine form of this building survived a battery of replacement panels that included the National Park Service, the Coastal Resources Association, the Golden Gate National Recreation Area Commission, and representatives of the Sierra Club and local conservation groups. The board and batten cedar exterior is clad with a corrugated concrete panel roof that recalls the metal roofs of nearby barns but is more durable in the sea air. Restoration is kept to a minimum, puncturing the building at windows and in the monitor that pops up above the ridge line.

*Opposite and above, center from park entrance, showing barn door hardware. Shadow line under eave is screening to repel nesting barn swallows. Top, southwest view shows verandah.*

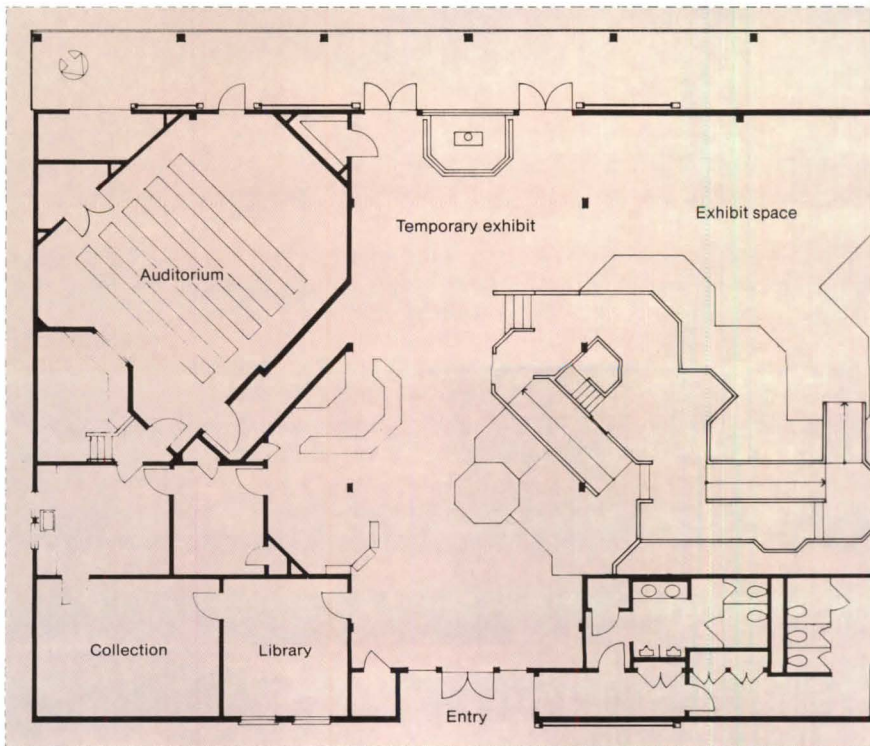
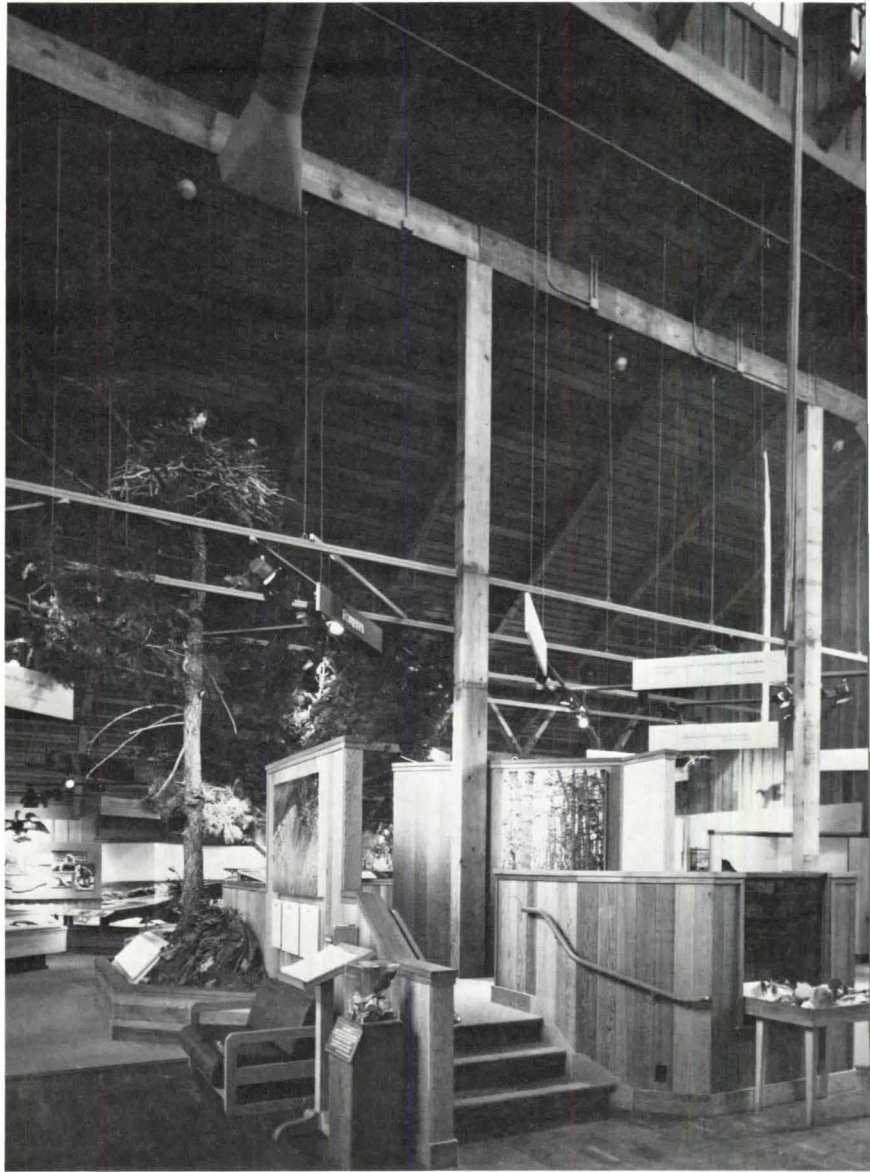
All the sash is barn red, adding just the right dose of color to an otherwise subdued exterior.

Inside, through a sliding barn door, is a public gathering space of cathedral-like quality extending the width of the building. One's eyes are drawn up to the heavy timber trusses whose members cross in the light of the clerestory monitor. All the hardware is the same barn red as the sash, save for industrial light fixtures and air-handling equipment. A wood-burning stove, too small for this grand space, sits at the terminus.

Functions that require little natural light, such as an auditorium, offices, and an exhibit area, are tucked under the low part of the roof. The exhibit, designed by Dan Quan, is a multilevel condensation of Point Reyes' natural, geologic, and historic highlights. The staff reports that the building has been well received by visitors, a few of whom have asked whether it's a renovated barn. "We wanted the building to look as though it has always been there," says Hendrik Bull, FAIA. And so it does.

—MICHAEL J. CROSBIE

*Below, center's cozy conversation area with wood-burning stove offers view out to verandah and park beyond. Right, portion of compactly designed exhibition near conversation area uses artificial spot lighting to dramatize information on Point Reyes. Across page, view of the interior from the entrance. Ductwork in trusses captures warm air from clerestory and distributes it below. Floor is durable end-grain wood block.*







# Vector



At American Olean, our imagination is always focused on finding new directions in design materials—to create materials that will add new dimensions to the worlds you create. New Vector™ can help you take this aesthetic leap into the future.

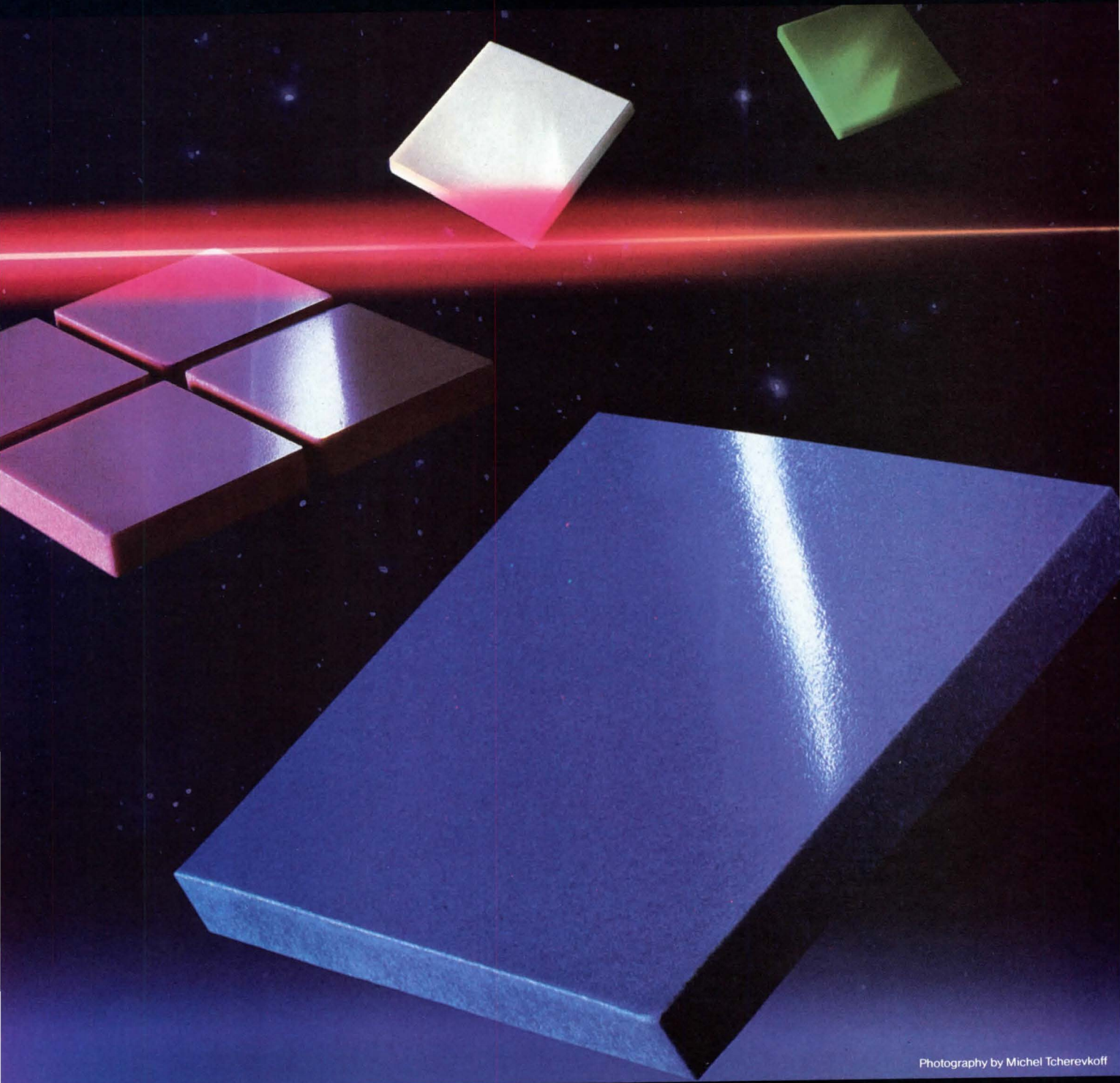
Vector. A totally new porcelain ceramic material with the lustrous, space-age Dymalon™ shine. Technologically advanced and developed by the industry's most ambitious research effort. In 34 vivid, luminous colors, and the right size to make your

ideas come alive.

Bring a new focus to your projects with new Vector. For information, write American Olean Tile Company, 3312 Cannon Avenue, Lansdale, PA 19446-0271. Or call (215) 855-1111.



**American  
Olean  
Tile**  
A National Gypsum Company



Photography by Michel Tcherevkoff

**Touch the future with American Olean**

*Circle 13 on information card*

# 'The Interior Landscape of Human Imagination'



**Mask of Medusa.** John Hejduk. (Rizzoli, \$35.)

John Hejduk's is an architecture of interiors. The interiors are not what we commonly associate as the insides of buildings, but rather the interior landscapes of human imagination. It is an architecture that gives form to our inner world as it is defined by memories, dreams, nightmares.

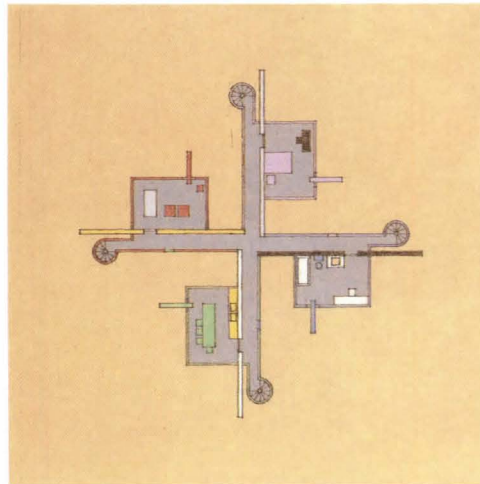
Anyone who has met Hejduk or witnessed him lecture knows of his passion for architecture. The man is obsessed. This book is a record of that obsession, more diary than portfolio. It's a journey through Hejduk's architectural attic, filled with finely crafted drawings, models, articles, poems, sketches, notes, conversations with friends.

If there is anything that joins these artifacts from nearly 40 years of a professional life it is the implication that the architecture that we dream and the worlds that we build are reflections of ourselves, and that is what makes architecture rich. As trite as this may sound, the inner landscape was pretty much ignored by modernism in its quest for an architecture that purported to be sanitized of subjectivity: form without fantasy. No wonder that today we find so much of that architecture alienating.

This book is cyclical in that Hejduk's journey takes us from the subjective,

through the objective, and back. He starts by showing us projects from the 1940s and '50s, completed as a student at Cooper Union (where he is now dean), the University of Cincinnati, and Harvard. There are drawings illustrating Aesop's fables that are childlike, full of innocence and humor. The architectural projects are earnest in their attention to program and utility. His work from the late '50s through the early '70s is, by contrast, distinguished by hard-edged formal investigations, such as his Texas houses, wall houses, and diamond houses.

Then in the mid-'70s the work takes a turn. The projects are less architecturally referential and more allegorical, with titles such as "Cemetery for the Ashes of Thought," "House for the Inhabitant Who



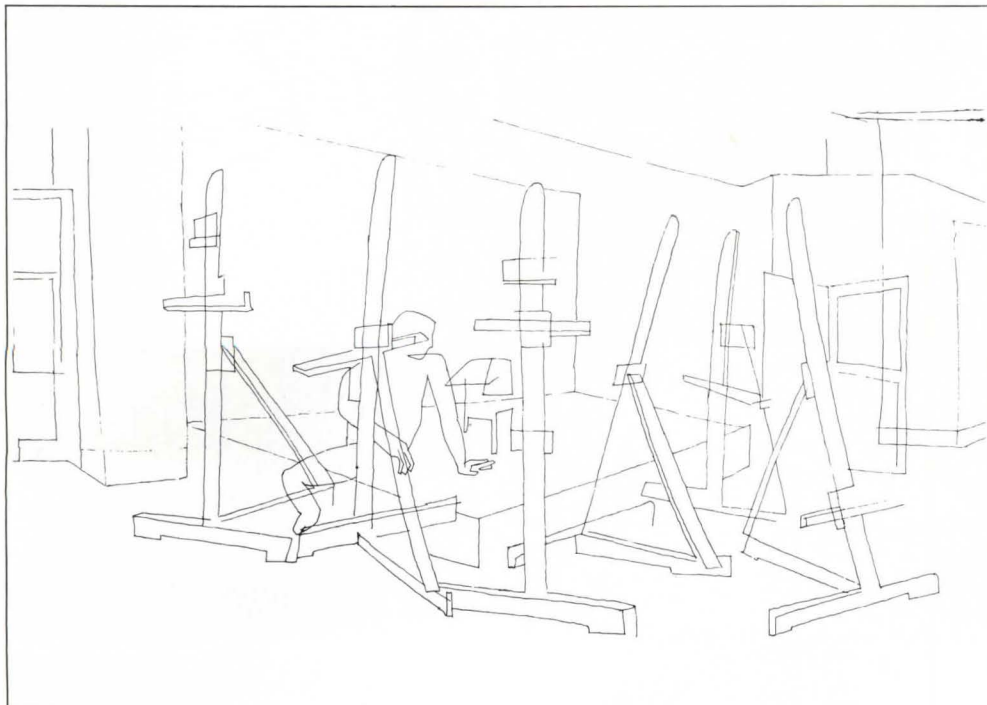
Plan of 'North East South West House,' late 1970s.

Refused to Participate," "Silent Witness." They are accompanied by long, complex programs that are fables, seemingly more important than the architecture itself. In a project called "Lancaster/Hanover Masque," for example, there are pages and pages of amazingly detailed descriptions of the places within a town of Hejduk's invention and how the lives of its inhabitants (at least one autobiographical) are related to these places. We find a kinship between these elaborate settings for mythic ritual and the simple drawings for Aesop's fables 30 years earlier. Hejduk has, in a sense, come home again, an older and wiser traveler.

Hejduk's explorations of architectural space have taken him into the realms of poetry, music, and painting. He is fascinated by the metaphorical space of a poem, the space within a musical instrument, or the implied space in paintings of Juan Gris, Mondrian, or Edward Hopper. But the spatial realm that pervades this book is that which exists inside each one of us, that space between our conscious and unconscious selves, between body and mind, day and night.

Early in the book Hejduk talks in an interview with Don Wall (who teaches Cooper and New Jersey Institute of Technology) about reading a children's book to his daughter and being struck by a drawing for the "Babar the Elephant" story. The top half of the drawing depicts

*continued on page*

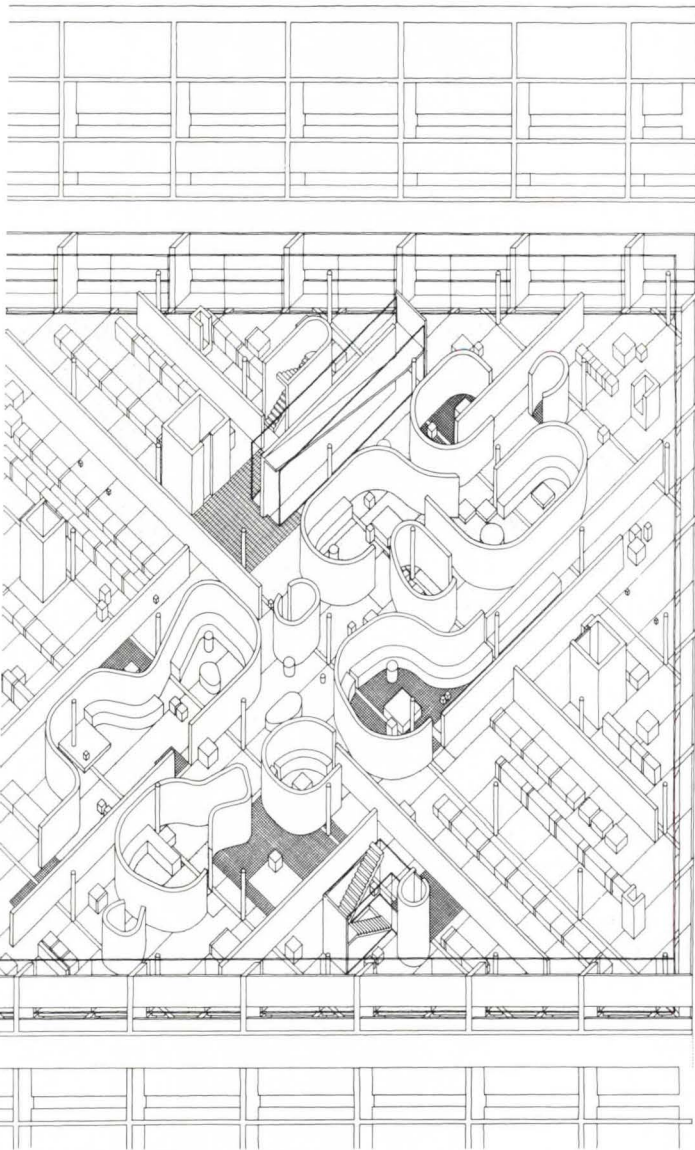


'Studio Class' completed while a student, 1947-'54.



'Italian Sketch' completed during Fulbright scholarship, 1954.

# BOOKS

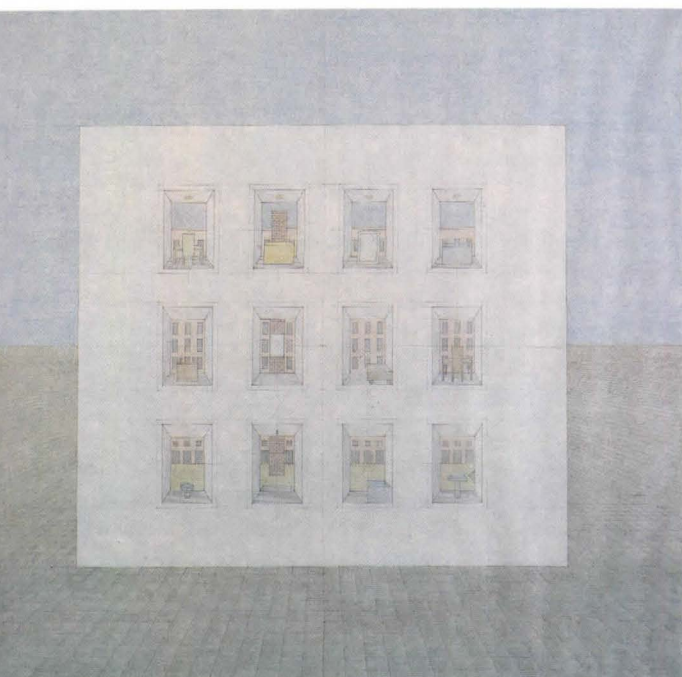


ometric of 'Diamond Musuem C,' 1967.

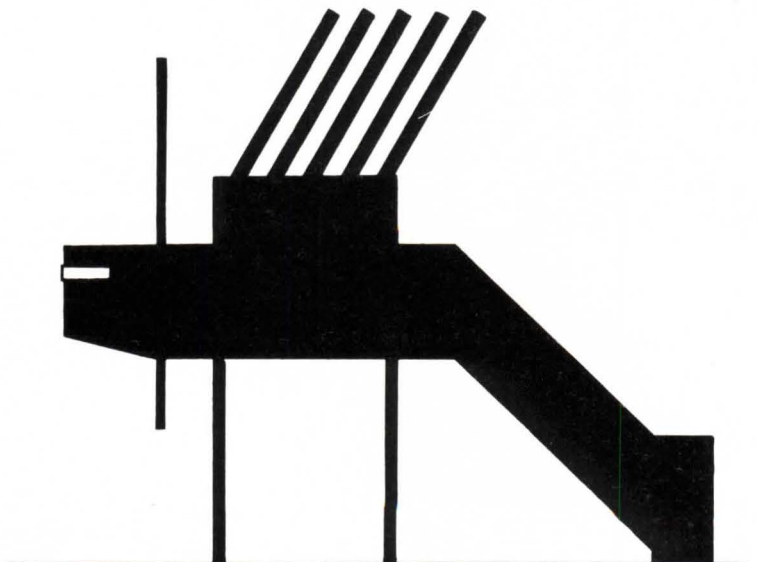


'Italian Sketch' completed during Fulbright scholarship in Italy, 1954.

Kim Shkapich



e for the Inhabitant Who Refused to Participate,' 1979.



'Security.'

### Books from page 75

flying elephants labeled goodness, hope, and optimism. The bottom half is inhabited by monsters captioned greed and jealousy. What intrigues Hejduk is that the elephants and monsters are the same animals showing different sides of themselves.

Later in the book he recounts a story told to him by Indian architect Charles Correa, which, for Hejduk, "makes architecture great. 'There are two people on a ship looking over a calm ocean. Just at twilight, the still ocean parts and the fin of a shark comes up. Maybe for two seconds. Then the fin drops down. Both men are terrorized.' It hit the architect Correa that all great architecture . . . has underneath its plane of calmness, monsters. In the depths of the volumetric, monsters are down *there*."

This element of terror beneath the surface is, for Hejduk, present in the paintings of Hopper, whose sun-drenched, empty rooms with their gaping voids fill one with a sense of dread. It is also there in one of Hejduk's favorite films, Stanley Kubrick's "The Shining." The director turns the benign architectural space of a hedge maze into a prison where Jack Nicholson as the possessed protagonist (whose personality flips constantly between a joker and a demon) becomes lost and freezes to death in a blizzard.

"Architecture is always an edge condition," writes Hejduk, and it is kept vital by its balance between light and dark. In this way it reflects the space within all of us—the void that separates our conscious and unconscious states, our social selves that mask the monsters lurking about beneath.

If there is an implied message in this book, it is a call for us to examine our motives, both conscious and unconscious, in the creation of an architecture that is open enough to admit our dreams and fantasies, irrational as they may be. Just as Plato tells us that the unexamined life is not worth living, so too an architecture that does not measure and make room for our interior dimensions is not worth building. Ultimately, as *Mask of Medusa* shows, the most potent architecture we can create is the one that we design and build in that space contained by our own skulls.—MICHAEL J. CROSBIE

### **An Arcadian Landscape: The California Gardens of A. E. Hanson, 1920-1932.** (Hennessy & Ingalls, \$22.50.)

This book is one of the series on California architecture and architects edited by David Gebhard, who has contributed the introduction to the present volume, describing its historical niche. Without that contribution we would have just a collection of feisty anecdotes about the late great movie moguls and their *environmental* foibles. Of course, that is still what the book is—a romp through the golden years of Hollywood, to be shelved with similar books on, let us say, Addi-

son Mizener and the golden years of the Florida land boom.

It was not just the movies that brought wealthy clients and a new spectacular life to Southern California. It was oil. It was the nouveau riche everywhere, in Pasadena, in Montecito, and other favored locations. And Hanson, himself, fully aware of what was taking place, had a fall-back position in land development and more modest housing that might be worth a second volume. But Harold Lloyd, Charlie Chaplin, Douglas Fairbanks are the pegs on which Hanson tells his tales.

The bidding of such clients is memorable. To build a golf course on four acres. To transplant huge trees—immediately. To incorporate a historic chapel from Italy. To replicate a cascade from the Villa Medici. To create for little Gloria Lloyd a miniature farmstead only a little more modest than Marie Antoinette's. Fortunately, money was seldom lacking, the California climate and nurserymen were cooperative, and the end product was frequently convincing—and clients were satisfied.

Hanson brings it all to life. He writes brightly and persuasively, and the photographs are a pleasant mixture of the professional work of the landscape architect and Hanson's own more intimate snapshots. Architectural history needs more firsthand accounts like this. It also needs more meaty historical monographs like Gebhard's essay to set the stage for them and show why they aren't just trivia.

—FREDERICK GUTHEIM, HON. AIA

---

*Mr. Gutheim is a Washington, D.C., educator, critic, and planner.*

### **Computer Data Center Design: A Guide for Planning, Designing, Constructing, and Operating Computer Data Centers.** Robert F. Halper. (Wiley, \$25.95.)

It's said in the foreword of this book that computer innovations may last for several years, but a data center has to endure for decades, surviving the transitions brought about by computer technology. The book begins with a hair-raising account of how a fictitious firm called Murphy Engineering made mishaps and caused panic in the development of a data center. The aim of the book is to give help on the avoidance of such errors and problems in the relocation, renovation, or creation of a data center. The author offers detailed explanations of everything from project management to occupancy and operations, giving information on site and structural planning, space planning, and equipment.

**The A/E Marketing Book of Forms.** Compiled and with section introductions by Carol McConochie. Sponsored by the *A/E Marketing Journal*. (Practice Management Associates, 10 Midland Ave., Newton, Mass. 02158, \$45.)

Collected in this book are marketing

forms used by A/E firms of varying sizes. The intent is to help architects and engineers plan, organize, manage, and monitor marketing efforts from initial contact to project summary. If one of the forms seems appropriate for your use, advise the compiler, photocopy it and use it for a couple of weeks. You will certainly have to adjust the form, but even a small piece of it may be "just the inspiration you've been looking for to transform your current system from adequate to ideal, or from hopeless to salvageable." This is a "idea book," more or less.

### **Behavioral Issues in Office Design.** Jean D. Wineman, editor. (Van Nostrand Reinhold, \$40.)

This readable book explores the dynamic role of human behavior in the design and management of an office setting and points to specific research that has been accomplished. It will come as no surprise to learn that the experts agree that worker satisfaction is directly related to productivity. It is also pointed out that if worker satisfaction is to be achieved, there must be closer collaboration among professionals in the design and decision-making process and that workers themselves should be more involved and have more individual choice in the control of their work environment. Contributors to the volume—professionals from this country and Europe—discuss a vast array of topics, among them workplaces as symbols of power; open versus enclosed workspaces; and future directions in office design.

### **The Airport Passenger Terminal.** Walter Hart. (Wiley, \$49.95.)

With years of experience as an architect and airport consultant and for 18 years director of properties and facilities planning for American Airlines, Walter Hart, AIA, brings to this volume in-depth knowledge of this building type. The book gives concrete information on every aspect of the subject, from apron terminal geometry, master plan, forecast considerations and space layout to the details of sign programs. The final section centers on a discussion of eight airports and their terminals. The book is liberally illustrated with plans and diagrams.

### **The Search for Form in Art and Architecture.** Eliel Saarinen. (Dover, \$7.95.)

First published to critical acclaim in 1948 under the title *Search for Form: A Fundamental Approach to Art*, this unabridged reprint is the only edition now in print. Saarinen analyzes form as to its origin, meaning, nature, import, and source, and then deals with the creative instinct, organic order, form and vitality and form and time. The third section of the book discusses form in the province of reasoning, relating it to truth, logic, function, color, decoration, space, theory, and tradition. □

# TOP LEVEL INTELLIGENCE.

**Build R/26 structural roof systems in one step with TUPS™: the smarter, faster way to build.**

Smart architects have discovered an intelligent way to stay on top of current demands for higher energy ratings *and* lower costs.

They go to the very *top* and choose a structural, insulating roof system panel that can save energy, reduce cost, eliminate labor-intensive steps and cut time.

They choose TUPS.

Only TUPS features a load bearing, stress skin panel integrating structural Homasote 440 Boards with an insulating core of rigid polyisocyanurate foam.

In just one step, you can install an interior ceiling ready for paint or other finish. And an energy efficient layer of insulation. Plus a structural nailbase



ready for shingles, slate, tile, BUR or single-ply membrane roofing system.

All with one-step TUPS roofing panels. That's intelligence at the top level.

For full details, call (609) 883-3300. Or write The Homasote Company directly.

Panels sizes, nominal 4' x 8', 10' and 12' with T & G Long Edges	Nominal Thickness	
	4"	5"
R-FACTOR AGED	19.2	25.48
R-FACTOR SYSTEM*	20.43	26.71
Lbs. per sq. ft.	4.2	4.4
Foam Thickness (nominal)	2½"	3½"

\*Includes air film and asphalt shingles.

## homasote

C O M P A N Y

P.O. Box 7240, West Trenton, New Jersey 08628-0240

### SMART ARCHITECTS CHOOSE HOMASOTE.

5666

## BRIEFS

### Architectural Scholarships.

The Texas Society/AIA and the Texas Architectural Foundation awarded architectural students from six Texas schools of architecture over \$76,000 in scholarships and grants for the 1986-87 academic year. The recipients were from the University of Texas, Austin; University of Texas, Arlington; Texas A&M University; Texas Tech University, University of Houston; and Rice University.

### Infill Housing Project Competition.

The Dayton View Historic Association, Inc., and the Ohio Arts Council/Ohio Humanities Council are sponsoring a competition for the design of an infill housing project in a turn-of-the-century, inner city neighborhood. Cash prizes of \$1,500, \$500, and \$250 will be awarded. The deadline for submissions is Sept. 15. For more information, contact Jeffrey Wray, AIA, 40 W. Fourth St., Dayton, Ohio 45402.

### New York State Fellowships.

The New York Foundation for the Arts has awarded fellowships of \$5,000 to New York state architects to encourage "independent, creative work" as part of its artists' fellowship program. The 1986 fellows are: Stanley Allen, Samuel Anderson, Dan Coma, Neil Denari, Leslie Gill,

Laurence Green, Wesley Jones, Peter Pfau, William Lane, Andrew MacNair, Mark Robbins, Donna Robertson, Rebecca Shanor, Laretta Vinciarelli, and Marek Walczak.

### Product Design Awards Competition.

The Resources Council has set Sept. 15 as the deadline for an interior furnishings product competition. Products must have been made available for sale between June 1, 1985, and July 31, 1986, to be eligible for entry. The entry fee is \$100 for members, and \$150 for other firms. For more information, contact the Resources Council Inc., New York Design Center, 200 Lexington Ave., Suite 227, New York, N.Y. 10016.

### Student Competition Winners.

Ann R. Parker of North Carolina State University and Marta Perlas of the Southern California Institute were honor award winners in the design for aging competition sponsored by the American Institute of Architects Students. Both students received \$4,000 prizes. A \$1,000 prize was given to Sybil Graffunder of the University of Minnesota. Karl F. Dakteris of California State Polytechnic University, Pomona, and a three-member team comprised of William Suarez, Jose Gonzales, and Douglas Cooper of Tulane University each received \$750 prizes.

### Architectural Reference Guide.

The 1985 edition of *The Architectural Index* references ARCHITECTURE, *Architectural Record*, *Arts and Architecture*, *Builder*, *Interior Design*, *Interiors*, *Landscape Architecture*, *Progressive Architecture*, *Solar Age*, and *Architectural Technology*. Articles are listed under project type, subject matter, architect or designer, and location. Copies are available for \$18 from *The Architectural Index*, P.O. Box 1168, Boulder, Colo. 80306.

### Architectural Study Tour.

International Design Seminar is organizing a 15-day study tour to Central Europe beginning Oct. 15. The seminar is offered in conjunction with the department of architecture of the Art Institute of Chicago. The tour will address the development of esthetic ideas and historical styles in architecture, art, interior design, and furniture in Central Europe. For more information, contact Kenzie L. Lupton, IDS, 4206 38th St. N.W., Washington, D.C. 20016.

### Loeb Fellows Awards.

Fourteen architects, planners, and design professionals have been awarded Loeb Fellowships by Harvard University Graduate School of Design for the 1986-87 academic year. They are: Antonio DiMambro, architect, city planner, and president of

## CITY DEVELOPMENT DEPARTMENT CITY OF KANSAS CITY, MISSOURI

*The City Development Department of Kansas City, Missouri invites you to consider joining our expanding team of Planning Professionals. Within the next six months, the Department will seek to fill nine positions in the classifications and salary ranges listed below:*

CLASSIFICATION	MONTHLY SALARY RANGE
Planner I	\$1,639 - \$2,440
Planner II	\$1,989 - \$2,822
Planner III	\$2,795 - \$3,930
Planner IV	\$2,795 - \$4,570

*Education and experience in the following areas is desirable: urban design, site analysis, landscape architecture, zoning review and urban economic analysis.*

*To obtain job profile and benefit information, please send a resume and salary requirements to Keith Hines, Administrative Officer, City Development Department, 414 East 12th Street, Kansas City, Missouri 64106. Deadline for submission of resumes is September 12, 1986.*

*The City of Kansas City, Missouri is an equal opportunity employer.*

## Dean, College of Architecture and Environmental Design Arizona State University

Arizona State University invites applications or nominations for the position of Dean of the College of Architecture and Environmental Design. ASU, a major research university located in the Phoenix metropolitan area, consists of 11 colleges with a total student enrollment of 40,000.

The College includes three academic units: the Department of Design, the Department of Planning, and the School of Architecture. Graduate instructional programs are offered in the areas of Urban Planning, Architecture, and Energy Planning and Technology. Undergraduate programs include Interior Architecture, Industrial Design, Urban Planning (including Landscape Architecture), and Architecture. There are 45 full-time faculty members and a number of part-time faculty. Enrollment in the College is currently 1,000 students.

The Dean is responsible for promoting research, teaching, and service excellence; managing financial resources; and representing the College within the University and the community.

Candidates should possess an advanced degree or equivalent professional qualifications in one or more of the fields represented in the College. Previous university administrative experience is required as is the demonstration of outstanding professional leadership.

The starting date is negotiable. Salary is competitive.

Nominations or applications will be accepted until an appointment is made; however, screening of credentials will begin September 1, 1986. Correspondence should be addressed to: Dr. Samuel Kirkpatrick, Chair, Dean of Architecture and Environmental Design Search Committee, Social Science Building, Room 109, Arizona State University, Tempe, AZ 85287. ASU is an equal opportunity, affirmative action employer.



unitas, Inc.; Lorraine Downey, director of environment department, City of on; Mary Decker, executive director Metropolitan Planning Council; Margaret McCurry, design partner, Tiger-Fugman McCurry; David Dillon, ARCHITECTURE contributing editor and architecture critic, Dallas *Morning News*; Alicia Conway, planner and president, In Pedersen Fox Conway Associates; John Huxley, horticulturist and formerly executive director, Green Guerillas, Inc.; John Rosen, architectural photographer; Thomas DeCamp Burns, architect, principal of Burnstudio Architects; Donna Pitt, marine policy and legal specialist Allison Williams, associate in design, Moore, Owings & Merrill; Susan Frey, in chief, *Landscape Architecture Garden Design*; Nellie Longworth, ecologist and president of Preservation on; and Richard Ridley, architect, and principal, Richard Ridley Associates.

**Traveling Scholarship Winner.**  
Scott Kilbourn, a 1979 graduate of Portsmouth College, was awarded the 1986 Traveling Scholarship by the Boston Society of Architects.

**Army Corps of Engineers Award Winner.**  
The Child Care Center at Ft. Bragg, N.C., Ferebee, Walters & Associates has been selected to receive the honor award

in the Army Corps of Engineers design and environmental architectural awards program.

**Frampton Named Chairman at Columbia.**  
Columbia University's graduate school of architecture, planning, and preservation has named Kenneth Frampton as the chairman of the division of architecture.

## CREDITS

**Eagle County Justice Center, Eagle, Colo.,** (page 62). *Architect: W.C. Muchow & Partners, Denver.* Ceiling surfacing system: U.S.G. Acouston. Doors: Kawneer, Western Howow Metal, Southern Steel. Elevators: Elevator Tech Inc. Environmental control systems: Johnson Controls. Floor surfacing: VPI, Lees. Foundation: Barcus. Handrails: Meyers & Co. Lighting: Sterner, Lithonia. Roofing: Johns-Manville. Waterproofing and sealants: Okon. Plumbing: Delany. Flush valves: Sloan. Plumbing fittings and showerheads: Acorn. Sprinklers: Grunan. Toilet stalls: General Partitions. Washroom and bathroom accessories: Bobrick. Water closets: Kohler. Communication/intercom: Jentel. Raised floor system: Tate. Lockers: Republic. Security and fire detection: Jentelco. Signage: Karman Ltd. Exterior wall surfacing: Valley Block. Skylights: Kalwall. Hardware: LCN, Russwin, Hager, Von Duprin.

**Fire Station No. 3, Bellingham, Wash.,** (page 66). *Architect: Zervas Group Architects, Seattle.* Environmental control systems: Stafa Control Systems, Hydrotherm, Modine, Trane, Weather Rite. Flooring surfacing: Design Weave, Armstrong, American Olean, Flexco. Roofing: AEP. Waterproofing and sealants: Rexnord. Communication and intercom: Western Electric. Kitchen: Jenn-Air, General Electric. Lockers: Sico. Public address: Bogen. Security and fire detection: Viking, Fire-Lite Alarms. Signage and solar equipment: Grumman Sunstream. Wall surfacing: Dryvit, Glasweld, Knoll Textile, Wolf Gordon. Windows: Fentron, ICW, Kalwall. Skylights: Lair-Swanson.

**Point Reyes Visitors Center, San Francisco** (page 68). *Architect: Bull, Volkman, Stockwell, San Francisco.* Ceilings: Owens Corning, Stonebrook 3. Doors: NWMA Standards, WIC Standards, Flush Wood. Environmental control systems: Hastings Furnace. Flooring: Oregon Lumber, Worthwood. Lighting: Hubbell, Halophane Prismatic, Prescolite. Roofing: IBP. Plumbing: Kohler. Water closets and fountains: Kohler, Haws. Stove: Vermont Castings. Signage: Daniel Quan Designs. Windows: Blomberg. Hardware: LCN, McKinney, Best, Von Duprin, Glynn Johnson. Paint: Cabot, Watco, Cuprinol. □

## Fry Reglet: Molding Interiors

**Aluminum Moldings.**  
finishing touch.

Fry Reglet Aluminum moldings — all dressed up in plenty of places to go. Curve them. Radius them. Make them shine. In a designer, rich in imagination, needs a wealth of solutions — Specify Fry, and added life to your ideas.

**Location:** South Bay  
California, Redondo Beach, CA  
**Architect:** RTKL Associates, Inc.  
Dallas, TX

**Interior and Drywall contractor:**  
Inc. El Monte, CA

1000 Palm Avenue  
Irvine, California 91803  
289-4744

Peterson Place  
Roswell, Georgia 30071  
441-2337

Look for us in Sweets. 9.5/Fr.  
Circle 15 on information card



# Interiors

© Wolfgang Hoyt/ESTO



“Haworth is a friendly company,” says Joyce Yokomizo, CRS Sirtine’s project designer for Haworth’s office systems showroom in downtown San Francisco. “We wanted to reflect the philosophy of service.” To that end, the design team held a CRS-style “squatch” with the people who would work there.

For the resulting 10,900-square-foot space on the second floor of the Golden Gateway Commons near Jackson Square, only the barest minimal device—a portable and-beam “light fence” of painted, six-inch diameter aluminum tubing (at right in photo left)—separates the staff work area from the showroom area. The staff is placed at the building perimeter to take advantage of views to the park; the showroom is at the building core to minimize distractions from the systems on display.

Two enclosures, custom fabricated for Haworth office partitions, stand prominently in the display area for use as a conference room and a library. They are topped by shallow, fabric-covered roofs (not part of the Haworth system) that give the room a festive air. — ALLEN FREEMAN

© Wolfgang Hoyt/ESTO



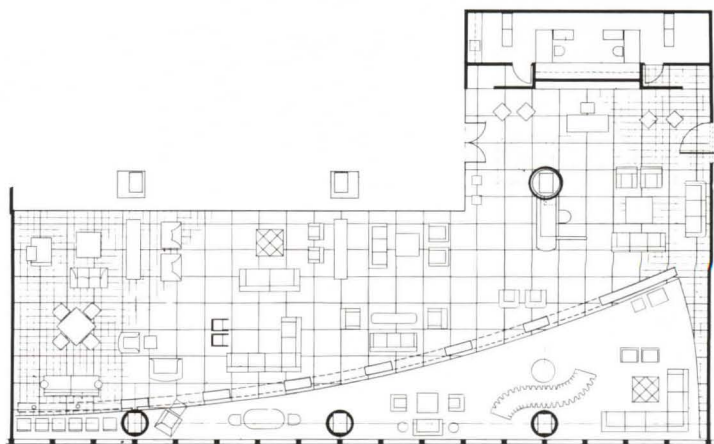


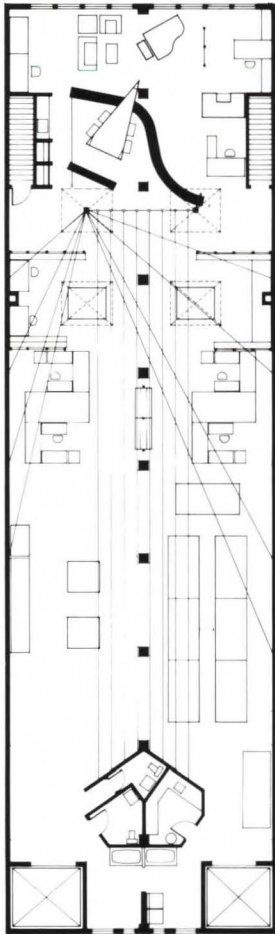
Stindig's wholesale showroom on the top floor of Houston's new Design Center is mostly minimal and modern. The exception is a curved wall (right) that the room's designer, Hambrecht Terrell International of New York City, constructed the length of the 4,300-square-foot space. The sweeping partition is plaster scored to look like limestone block.

Other materials are what they seem. Two columns along the side at the rear of the room (photo above, with one column reflected in the mirrored end wall) are sandblasted stainless steel with polished steel capitals. Square sconces (left in photo above) are in-house custom designs and are also sandblasted steel with polished steel edges. The reception desk likewise is steel, the floor is polished granite tile and carpet, and the ceiling is exposed ducts and structure, from which are suspended track lights.

To highlight the client's furniture, Hambrecht Terrell subdued the palette to black, gray, and white. And the designers reserved the view, a sweeping panorama of the Houston skyline through horizontal slit windows (left in photo right), for those who are seated. That, of course, is appropriate for a showroom of chairs.

—A.F.







Bannerworks, located on the top floor of a long, concrete-structure warehouse on the fringe of Seattle's Pioneer Square, reflects Wyatt Stapper Architects' commitment to an unusual degree. She is an architect/entrepreneur who designs and fabricates textile art used in buildings nationwide, and she has a strong musical bent. At the front end of Bannerworks is the reception/living space with a baby grand. Next is a presentation space (above) that, in its form, mimics the piano form. A triangular-poured-in-place concrete conference table thrusts through a vertical slit in the partition, the table's shape prescribing the view of a slide projector from the other side of the partition.

Under four pre-existing skylights a couple of layout tables sprout from the floor as inverted pyramids (above left). Beyond are sewing and production areas (right); a dyeing space, flanked by two freight elevators, anchors the end.

Following on the plan but not yet installed in these photos were taken are two sets of high-tension lines, one radiating from the other parallel, from which works in progress are suspended. On the plan, they suggest the way strings are arranged around the baby grand. — A.F.



# Before you specify a product, specify a directory. MASTERGUIDE.™

MASTERGUIDE™ is exactly what you need, a complete specifying and buying directory for architects, contractors, engineers, and spec writers. It's the only comprehensive directory that you can keep on your desk—right where a directory belongs.

Over 70,000 suppliers are included in an easy-to-use format, organized in the 16 standard divisions of CSI's MASTERFORMAT. And with a directory that's so complete, those hard-to-find suppliers are suddenly at your fingertips.

MASTERGUIDE is published in five regional editions so that wherever you work—from Maine to California—you have an extensive listing of nearby sources.

This is the directory designed by working professionals for working professionals. Because you need quick, up-to-date, and accurate product information, you need MASTERGUIDE. It's as simple to order as it is to use: just pick up the phone and call 1-800-874-7717, ext. 68; in California, call 1-800-831-6900, ext. 68.



## MASTERGUIDE™

The Official Specifying and Buying Directory of The American Institute of Architects

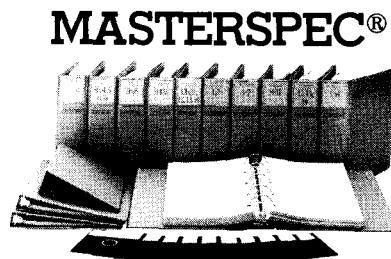
Get What You Need, When You Need It.

Circle 20 on information card

# When you want to make every spec-writing minute count.

See the front runners how they beat the  
The answer is **MASTERSPEC®**.  
Whether you use it exclusively or  
augment your office master,  
**MASTERSPEC®** helps you get  
ahead by shaving crucial hours  
off your spec writing  
with the system that's  
becoming the industry  
standard. Plus your time-  
sheets will reflect a dramatic  
increase in billable hours.  
Will your company  
be out in front? With  
**MASTERSPEC®**, it's just  
a matter of time.

**MASTERSPEC® AT:**  
 Convention, June 8-11,  
 Antonio Convention Center.  
 Convention, Booth 1829,  
 9-22,  
 Angeles Convention Center.  
**SYSTEMS® '86**,  
 260, June 24-27,  
 McCormick Place, Chicago.



In hard copy & diskette

It takes a lot of work out of  
a lot of your work.

## SPEC THIS OR CALL 800-424-5080.

You'll receive your complimentary portfolio complete with  
MASTERSPEC® Table of Contents and a sample  
MASTERSPEC® section.



Name \_\_\_\_\_

Title \_\_\_\_\_

Firm \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

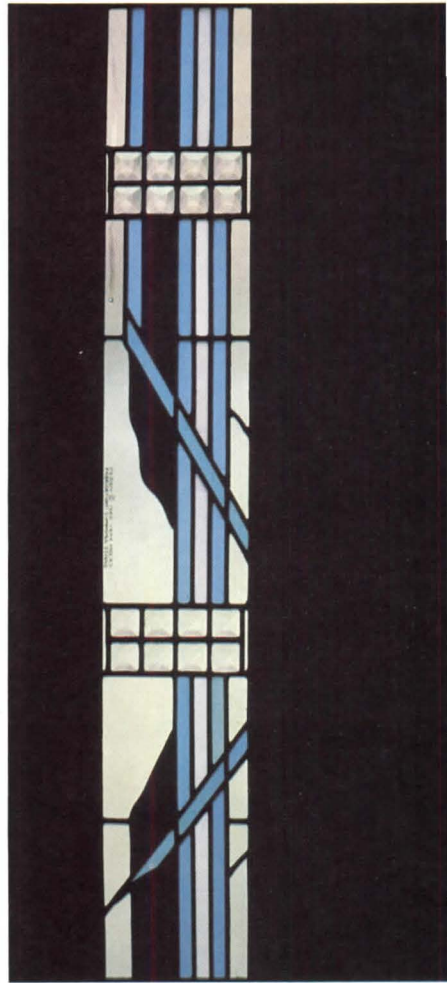
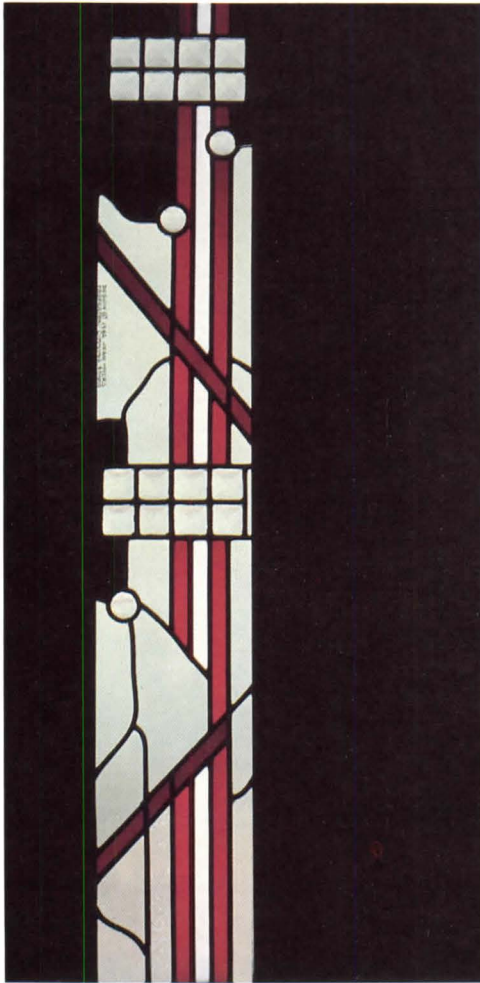
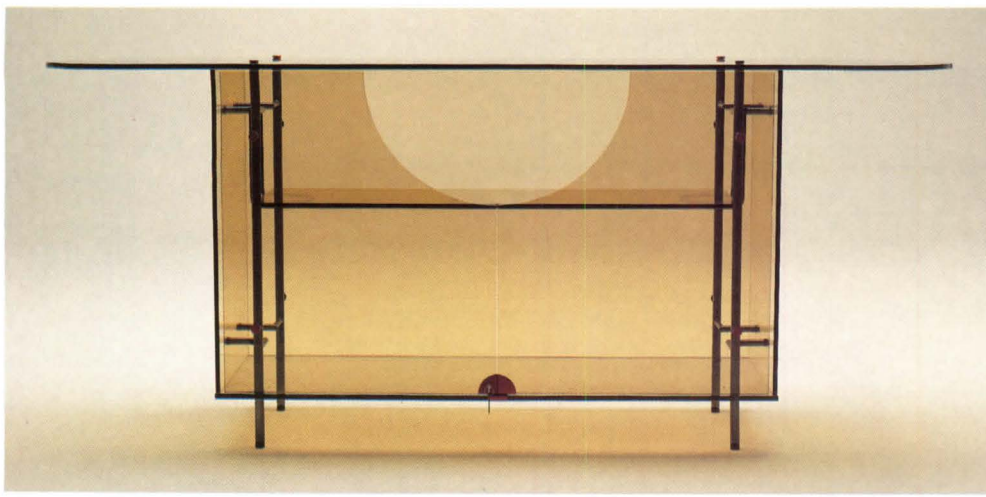
( ) \_\_\_\_\_

Telephone \_\_\_\_\_

A 886

MAIL TO: AIA Service Corporation, 1735 New York Ave., NW  
Washington, DC 20006

1



## Products

2

Thema's La Badessa table and display case (1), designed by Alessandro Lenarda and Gastone Rinaldi, has a demountable display window with a epoxy-lacquered tubular steel frame in a variety of colors or chrome. The unit has a key lock on the panel and measures 47x15x32 inches with an oval-shaped, 79x18-inch top. (Circle 201 on information card.)

Jean Myers works with architects and clients to design custom stained glass windows for churches, synagogues, office buildings, and houses. Two colorful, geometrical designs (2) are entitled "red slivers" and "blue slivers." Each panel measures four inches wide and four feet high. (Circle 202.)

Sapho sink kit (3) from Porcher includes a wall-mounted, white porcelain sink with a swivel cap pop-up in red epoxy. A

matching, off-center brass faucet and two single towel bars are also included. (Circle 203.)

Origami table lamp (4), designed by Cairoli for the Italian firm Seccose, has an adjustable metal arm and a synthetic resin base with a regulating switch for two light intensities. Available in red, white, or black, the fixture measures 6 inches high. (Circle 204.)

The Hill House arm chair (5) by Charles Rennie Mackintosh is reproduced by Cassina for Atelier International. Design originally in 1905, the chair and matching settee are available in stained walnut or ebonized ashwood and are upholstered in two re-creations of original fabric designs, as well as custom designs. (Circle 205.)—LYNN NESMITH

*Products continued on page*





3



### Roofing System.

SPR-100 single-ply roofing system has a roof membrane with a prefabricated installation system. The membrane is a reinforced Dacron polyester knit fabric that is designed to resist punctures, tears, and abrasions caused by high winds, roof traffic, and rooftop equipment. During the coating process, a molecular bond is formed between the fabric and the coating to prevent the entry of moisture or chemicals into the membrane. The material comes in rolls of 10-, 15-, 20-foot widths and 100-foot lengths, as well as custom sizes. The patented built-in tab fastener system allows attachment to the deck without penetrating the exposed membrane. (Armco Building Systems, Cincinnati. Circle 196 on information card.)

### Gypsum Wall Panels.

Saxon steel-faced gypsum wallboard panels are designed to endure rough treatment and to require little maintenance. The steel facing is wrapped around the panel edges to create a smooth, decorative look at the wall seams and to allow for batten-free installations. Developed primarily for use in commercial, institutional, and laboratory installations, the panels have a nonporous steel surface that resists chemical and bacterial penetration. Panels are available in two standard colors—beige and off-white. (Gold Bond Building Products, Charlotte, N.C. Circle 199 on information card.)

### Door System.

Traditional French doors have heavy wood jambs and five-inch stiles to improve strength. The door comes with flush-mounted head and foot bolts on the wood weatherstripped astragal, and a four-fin sweep with water drip cap is designed to prevent air and water leakage. Glazing options include single tempered or insulating tempered glass. The single glazed door is available with a removable storm panel to provide additional protection against air infiltration. The door is offered with rectangular grids or divided lights in single tempered or insulating tempered glass. (Marvin Windows, Warroad, Minn. Circle 194 on information card.)

### Tiles and Panels.

Armstone floor tiles and wall panels are made of more than 90 percent marble aggregate with full polished and selected honed finishes in 12 colors. Tiles are available in 12- and 24-inch squares with 3/8- or 3/4-inch gauges. (ArmStar, Lenior City, Tenn. Circle 193 on information card.)

### Commercial Carpet.

Wool Check collection of commercial carpet is Kara-Loc woven of 100 percent imported wool. Featuring a tailored checkered pattern superimposed on a basket-weave texture, the carpet is available in 13 colors. (Karastan, New York City. Circle 197 on information card.)



### Storage Unit.

Modular tower storage system (above), designed to form low tables, television stands, and bookshelves of different heights, is made of a die-cast aluminum base and three different steel re-inforced rigid expanded polyurethane components in black, white, yellow, blue, pink, and green. Stack shelves and terminal shelves of different sizes are designed to be slipped onto a revolving tube. The system also contains bookends that can be placed in various positions. (Kartell, Engineered Custom Plastics Corporation, Easley, S.C. Circle 180 on information card.)

### Ventilators.

Penn Airette exhaust and supply roof ventilators have a low contour, axial fan for exhaust or fresh air supply in heavy industrial applications. The housing is constructed of heavy gauge galvanized steel, and structural steel mountings support the motor and drive assemblies. (Penn Ventilator Co., Philadelphia. Circle 181 on information card.)

### Sconce.

Visa CB 1400 wall mounted lighting fixture (below) has a 12-inch diameter translucent glass bowl with a polished solid brass arm and mounting. The sconce measures 5 1/2 inches in height and extends 13 1/2 inches. Incandescent, quartz halogen, or twin tube fluorescent lamping is available. (Visa Lighting, Milwaukee. Circle 233 on information card.)



### Cast-Iron Stove.

Focus stove is designed to burn either pea or nut coal as its primary fuel or can be converted to burn wood with an optional conversion kit. Available in blue, brown, or black, the cast-iron stoves are accented by a baked-on porcelain enamel finish on the fire viewing and ash door. Three ceramic glass front windows allow full fire viewing. A fully baffled firebox and thermostatically controlled primary air inlet produce consistent heat output with less fire tending, and a ash shaker grate is designed to make ash removal easier. (Dovre, Inc., Aurora, Ill. Circle 182 on information card.)

### Vinyl Flooring.

The Coventry brick collection of solid vinyl floor tiles is designed for commercial, institutional, and residential installation. Tiles have a 1/8-inch gauge and measure nine inches square. The brick pattern on the tiles is scaled with actual brick, and deep natural grouting is designed to provide a rustic appearance to the finished flooring. (Azrock Floor Products, San Antonio, Tex. Circle 183 on information card.)

### Skylight with Vent.

DDCV skydome series of insulated skylights for commercial buildings is designed to provide daylighting and ventilation with minimal condensation and heat loss. Insulating skylights have sealed acrylic double domes with nine- or four-inch-high aluminum curbs. The curb is capped with a framework of low-conductivity thermoplastic, and the inner and outer sides are separated by one-inch-thick glass fiber insulation. The four sides of the vinyl framework are fused at the corner for a solid seal designed to prevent air and water leakage. The unit comes in five standard sizes, ranging from 22 1/2 x 46 1/2 inches to 46 1/2 inches square. Glazing options include clear glass over clear glass, bronze tinted glass over clear glass, and inner panes of high-performance, low-emissivity glass. (Wasco Products, Inc., Sanford, Me. Circle 184 on information card.)

### Kitchen System.

Pre-engineered kitchen unit includes a wall hung microwave oven with time control and variable power knob. (King Refrigerator Corporation, Glendale, N.J. Circle 185 on information card.)

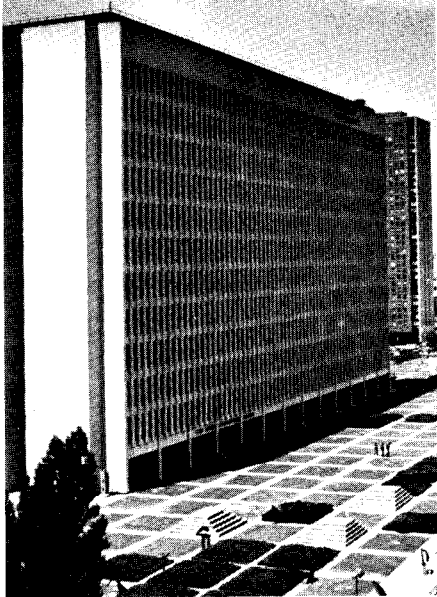
### Lettering Machine.

Leroy automatic lettering machine for architects, engineers, and graphic artists operates with a typewriter-style keyboard that allows quick input of alpha and numeric characters and commonly used symbols. A scrolling, 16-character liquid crystal display with cursor allows editing and correction of information before it is penned onto the drawing. Repetitive notes and information can be stored in a 1,5

*continued on page*

# What Do These Prestigious Buildings Have In Common?

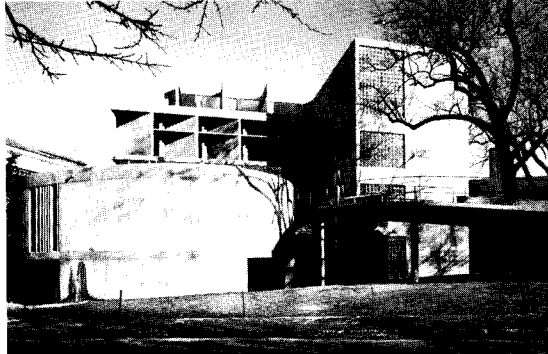
**FORDHAM UNIVERSITY**



**SEALED WITH POLYSULFIDE 1965**

*Lincoln Square of Fordham University  
New York, NY  
Architect: The Perkins & Will Partnership*

**CARPENTER CENTER, HARVARD UNIV.**

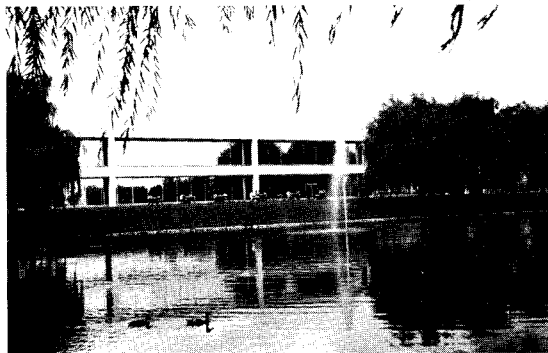


**SEALED WITH POLYSULFIDE 1963**

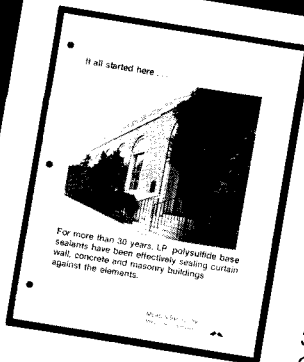
*Carpenter Center For The Visual Arts  
Harvard University  
Cambridge, Massachusetts  
Architect: Le Corbusier*

*United Airlines Headquarters  
Libertyville, Illinois*

**UNITED AIRLINES HEADQUARTERS**



**SEALED WITH POLYSULFIDE 1966**



To find out about other prestigious buildings that have been sealed for more than 15 years with Morton Thiokol LP® polysulfide base sealant, send for your copy of, "It All Started Here".

Morton Thiokol, Inc.  
Morton Chemical Division  
Mkt. Comm. Dept AIA  
333 W. Wacker Dr.  
Chicago, IL 60606

# Specify National— the Practical Choice, by Design.



We feature GM cars like this Cadillac Sedan de Ville.



AIA members deserve National attention.<sup>®</sup> And all the special services that includes. See for yourself. When you compare the cars, the rates and the conveniences, National Car Rental is a great travel value.

#### **Special low unlimited-mileage rates.**

Just show your AIA Executive Card at the time of rental at most major locations to receive the special low rates for which you qualify. You pay for the gas you use and return the car to the renting location.

#### **"No strings" One-way rentals.**


National has designated a portion of its fleet for one-way travel. That allows us to give you a one-way rate that's just \$15.00 a day more than our

regular low rental rates. And there's no drop-charge at participating locations.

#### **Top-condition cars.**

 National's cars were named "best in overall condition" by the United States Auto Club in studies they conducted on the major car rental companies. That says a lot about our priorities and the level of comfort you can expect. And, you can select just the size and popular model to fit your driving style.

#### **24-hour Peace of Mind.**

 Considering the great condition of our fleet, you'll probably never need this service. But it's nice to know that National provides 24-hour emergency road service, backed by Amoco Motor Club all across the

U.S. Assistance can be a toll-free call away, anytime of night or day.

#### **Guaranteed Reservations.**

At National, you can call just 24 hours ahead to request a Guaranteed Reservation using most major credit cards. Available at participating locations, this service gives you leeway to allow for the unpredictable. If a meeting lasts longer than expected, you can rest assured your National car will be waiting—even if you arrive up to 12 business hours later than scheduled.

At National, we've got a plan for your comfort and convenience. It's called National attention.

For reservations and information, call 800-CAR-RENT<sup>™</sup> or your travel consultant.

 **National Car Rental<sup>®</sup>**



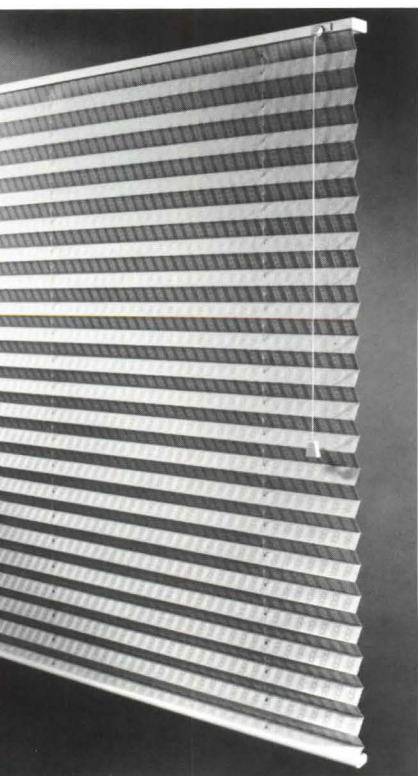
In Europe, Africa and the Middle East it's Europcar. In Canada it's Tilden.

cts from page 88  
 oke memory. Additional features in-  
 centering, grid spacing, and auto-  
 ng. The unit can be used on a draft-  
 machine or any flat surface. (Keuffel  
 er Co., Parsippany, N.J. Circle 198  
 ormation card.)

**Basins.**  
 ous china basins are available with  
 or platinum decorative trim lines.  
 s can be custom ordered in any color.  
 sta, Inc., San Francisco. Circle 211  
 ormation card.)

**ing Fixtures.**  
 and ceiling mounted lighting fixtures  
 ommercial and residential installa-  
 are available with incandescent or  
 ntensity discharge lamps. Incandes-  
 units have an A-lamp, R, or PAR  
 tor lamp; HID units are provided  
 deluxe mercury, metal halide, or high  
 ure sodium lamps. (Halo Lighting,  
 Grove, Ill. Circle 213 on information  
 )

**ed Window Shades.**  
 by Strip—Fashion Pleat” window  
 e (below), designed by Janet Birch,  
 de of a dobby weave fabric with a  
 e and satin textured finish. Made of  
 ercent polyester, the fabric is fin-  
 and heatset to provide pleat reten-  
 Shade is designed to be used as a  
 lete window treatment or under coor-  
 ed draperies in residential or com-  
 ial installations. Color options range  
 natural earth tones, to soft hues, to  
 t colors. Shade components and  
 ting hardware are color coordinated  
 tch the textured fabrics. (Grabert  
 stries, Middleton, Wis. Circle 214 on  
 ormation card.)



**Suspended Wood Ceiling.**  
 Interlock suspended ceiling system is com-  
 prised of interlocking wood stringers each  
 miter-notched on connecting 24-inch cen-  
 ters to produce panel-like squares. Each  
 juncture of the assembly is secured by  
 wood screws into predrilled holes. The  
 grid will accommodate standard ceiling  
 panels of 2x2 or 2x4 feet. The structural  
 integrity of the grid requires fewer wire  
 supports than conventional metal ceiling  
 grids. (Interlock Concepts, Inc., Zeeland,  
 Mich. Circle 195 on information card.)

**Bathroom Unit.**  
 Washmobil is part of a new Italian series  
 of bathroom wash basins. Available either  
 wall hung or freestanding, the enameled  
 tubular steel units include a mirror, towel  
 bars, faucets, soap dish, and glass holder.  
 Basins come in red, yellow, white, and  
 black. (Hastings Tile & Il Bagno Collec-  
 tion, Freeport, N.Y. Circle 229 on infor-  
 mation card.)

**Window System.**  
 Curved window panning system is de-  
 signed to fit over the existing frames and  
 sills of all standard ProComm commercial  
 window units. The system permits the  
 entire window unit to be weatherized.  
 (Season-All Industries, Indiana, Pa. Circle  
 228 on information card.)

**Shading Device.**  
 SlopeShade is an operable exterior shad-  
 ing device for skylights, sun rooms, and  
 other slope glazing. Available in tiltable  
 retractable and nonretractable models, the  
 device is compatible with Baumann exter-  
 ior horizontal blinds and automated con-  
 trols. (Baumann, Wauconda, Ill. Circle 192  
 on information card.)

**Thermal Break System.**  
 Isolock thermal break provides a contin-  
 uous barrier between the outside and  
 inside framing members to help reduce  
 heating and cooling costs and to mini-  
 mize condensation and frost build-up. The  
 indented cavity is designed to eliminate  
 the movement of the thermal material  
 within the cavity to prevent leakage and  
 to increase flexibility. The system is incor-  
 porated into Kawneer's 8225T thermal win-  
 dows and seamless mullion framing system.  
 (Kawneer Co., Norcross, Ga. Circle 186  
 on information card.)

**Insulation Board.**  
 Fireshield rigid insulation board is made  
 of particles of expanded perlite, selected  
 cellulose binders, and a sizing agent.  
 Designed with fire resistance and adhe-  
 sive properties, the chemical and fiber  
 composition provides internal strength  
 when bonded to the Torchskin membrane.  
 The board's surface incorporates a perfor-  
 ation pattern to allow melted bitumen  
 to flow inside. (International Permalite,  
 Inc., Ontario, Calif. Circle 191 on infor-  
 mation card.) □

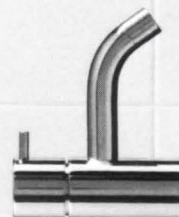
Telephone 617 492-4000  
 Telex 951650

Charles Square, Suite 300  
 Cambridge, Massachusetts 02138

Kroin Incorporated

**Kroin**

A lot of people don't recognize this  
 lavatory faucet designed by Danish  
 architect Arne Jacobsen.



Most don't know that it accepts a  
 specially designed handicap handle and  
 integral pop-up as well as a unique  
 selection of valves to control  
 everything from temperature, to  
 volume to flow duration.

What a lot of people ought to know is  
 that Kroin offers an entire system of  
 counter and wall-mounted fixtures for  
 the kitchen, lavatory and bath.

Plus, the complete collection is  
 available in 10 bright epoxy colors,  
 polished brass or chrome.  
 Most important, everyone should know  
 that the complete series is built to  
 withstand the rigors of commercial use.

Kroin Sanitary Fittings: for those who  
 know the best.

Circle 80 on information card.

# ADVERTISERS

**James P. Cramer**  
Group Publisher

**Robert G. Kliesch**  
Publisher

**Linda C. Cherry**  
Eastern Sales Manager

**James A. Anderson**  
Western Manager

**David S. Godfrey**  
General Manager

**Jesse Sims**  
Manager, Production and Business  
1735 New York Ave. N.W.  
Washington, D.C. 20006  
(202) 626-7484

**Christi L. Wilkins**  
Assistant to the Publisher

**Nancy Mottershaw**  
Assistant Production Manager

**ADVERTISING SALES OFFICES**

**Atlanta** (214) 386-8953  
Charles J. Midgley  
12810 Hillcrest, Suite 123  
Dallas, Tex. 75230

**California** (619) 450-6462  
James A. Anderson  
5830 Oberlin Dr., Suite 300  
San Diego, Calif. 92121

**Chicago** (312) 663-4116  
James A. Anderson  
Geoffrey Welch  
Barbara Mitchel Friscia  
53 West Jackson Boulevard, Suite 1604  
Chicago, Ill. 60604

**Dallas** (214) 386-8953  
Charles J. Midgley  
12810 Hillcrest, Suite 123  
Dallas, Tex. 75230

**New England** (212) 685-4114  
Anna M. Matranga  
Linda C. Cherry  
267 Fifth Ave., Suite 1110  
New York, N.Y. 10016

**New York City** (212) 685-4114  
Anna M. Matranga  
Linda C. Cherry  
267 Fifth Ave., Suite 1110  
New York, N.Y. 10016

**Northwest** (619) 450-6462  
James A. Anderson  
5830 Oberlin Dr., Suite 300  
San Diego, Calif. 92121

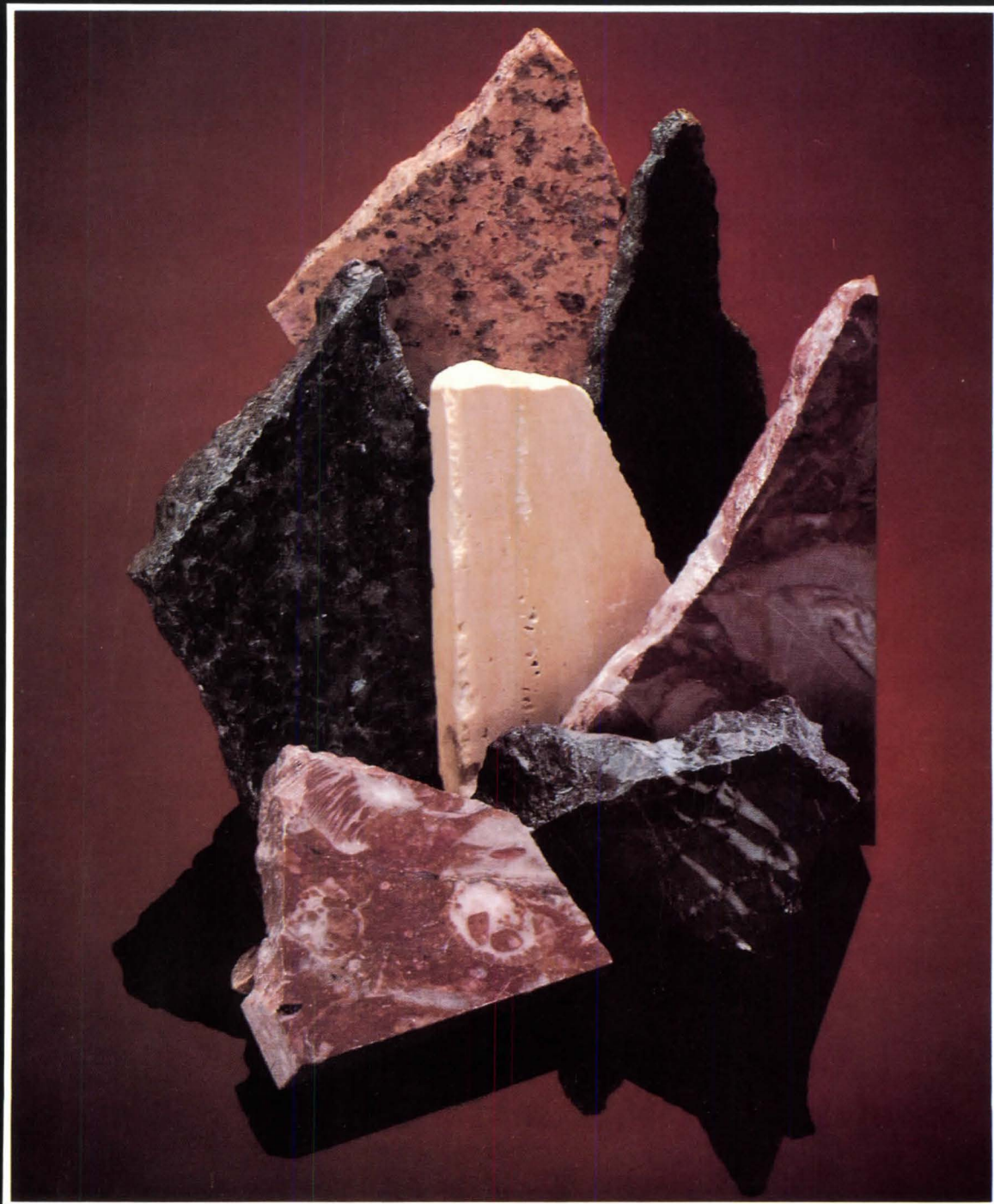
**Philadelphia/Pittsburgh** (215) 639-3731  
Linda C. Cherry  
3 Neshaminy Interplex, Suite 301  
Trevose, Pa. 19047

**Washington, D.C.** (202) 626-7471  
Linda C. Cherry  
1735 New York Ave. N.W.  
Washington, D.C. 20006

**Canada/Up-State New York** (416) 833-6200  
Donald C. Fenn  
148 King Road E.  
King City, Ontario LOG 1KO CANADA

Circle No.	Page No.
17	AIA/SC Professional Systems . . . . . 85
13	American Olean Tile . . . . . 72-73 <i>Ketchum Adv.</i>
5	American Standard . . . . . 13 <i>Calet, Hirsch &amp; Spector, Inc.</i>
25	Arizona State University . . . . . 78
6	CNA Insurance . . . . . 15 <i>Frank C. Nahser, Inc.</i>
22	City Development Dept. . . . . 78
11	Edwards Engineering Corp. . . . . 23 <i>Knudsen Moore Schropfer Inc.</i>
2	Forms + Surfaces . . . . . 2 <i>Sherrill Broudy Assoc.</i>
15	Fry Reglet . . . . . 79 <i>McNall &amp; Blackstock</i>
10	Haws Drinking Faucet Co. . . . . 22 <i>Mandabach &amp; Simms Inc.</i>
14	Homasote Co. . . . . 77 <i>Gillespie Adv., Inc.</i>
16	The Italian Marble Center . . . . . Cov. 3 <i>A division of the Italian Trade Commission</i>
	Kawneer Co., Inc. . . . . 7 <i>Garrison, Jasper, Rose &amp; Co., Inc.</i>
4	Kawneer Co., Inc. . . . . 8-9 <i>Garrison, Jasper, Rose &amp; Co., Inc.</i>
80	Kroin Inc. . . . . 91
21	Lutron . . . . . Cov. 4 <i>Lutron Marketing</i>
3	Manville Corp. . . . . 4-5 <i>Broyles, Allebaugh &amp; Davis, Inc.</i>
18	Morton Thiokol, Inc. . . . . 89
19	National Car Rental . . . . . 90
20	PacTel Publishing . . . . . 84 <i>Sharp Communications</i>
8	Pierce Business Products . . . . . 19 <i>Clarke Livingston Assoc.</i>
9	Red Cedar Shingle . . . . . 20 <i>Cedarcrest Adv.</i>
12	Sloan Valve Co. . . . . 24 <i>McKinney Inc.</i>
7	U.S. Brick . . . . . 17
23	United States Gypsum Co. . . . . 1 <i>Marstrat</i>
1	United States Gypsum Co. . . . . Cov. 2 <i>Marstrat</i>

# Marble From Italy. The Natural Choice.



Italy. For more than 2,000 years creating the standard, with dedication, superior craftsmanship and quality. Marble from Italy. The natural choice for your architectural and design needs.

**The Italian Marble Center**  
499 Park Avenue • New York, New York 10022 • (212) 980-1500  
A division of the Italian Trade Commission.



*Circle 16 on information card*

**NEW**

# Thin Profile Lighting Controls

**NOVA T<sup>☆</sup>**

(Nova T-Star)



*Undercut back plate gives  
Nova T<sup>☆</sup> a unique floating  
appearance.*

→ | | ← .130"  
→ | | ← .295"  
(excluding backbox)

## Streamlined Elegance—Just Over 1/4" Thin

- Wallbox dimmers for incandescent, low voltage and fluorescent lighting
- Touch-switches and slide switches for non-dimmed circuits
- Controls available for High Power and Pre-Pack systems
- Five colors—white, beige, gray, brown, and black
- Custom finishes, engraving, and silkscreening available

*Call today for a color brochure:  
(800) 523-9466, (800) 222-4509 in Pa. Or write  
Lutron, Suter Rd., Box 205, Coopersburg, PA 18036*

This product is covered by one or more of the following U.S. Patents: 3,735,020; 3,746,923; 3,927,345; 3,824,428; 3,919,592; 3,927,345; 4,350,935; 4,207,498; 3,731,142; DES 227,557; and corresponding foreign patents. Foreign and U.S. Patents pending. Lutron and Nova are registered trademarks. Nova T<sup>☆</sup>, High Power, and Pre-Pack are trademarks of Lutron. Copyright © 1986 Lutron Electronics Co., Inc.



**LUTRON<sup>®</sup>**

Circle 21 on information card