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June 6-7: AIA Conference on Architectural Media, San Antonio, Tex. Contact: Ravi Waldon at Institute headquarters, (202) 626-7429.

June 8-11: AIA Annual Convention, San Antonio.

June 8-14: American Solar Energy Society Annual Meeting and National Passive Solar Conference, Boulder, Colo. Contact: Susan Burley, 2030 17th St., Boulder, Colo. 80302.

June 9-10: Institute of Business Designers Annual Conference, Chicago. Contact: IBD, 1155 Merchandise Mart, Chicago, Ill. 60654.

June 9-13: American Society of Hospital Engineering Annual Conference and Technical Exhibition, St. Louis. Contact: Nancy Montenegro, ASHE, 840 N. Lake Shore Drive, Chicago, Ill. 60611.

June 11-17: Second International Conference on Making Cities Livable, Venice, Italy. Contact: Suzanne H. Crowhurst Lennard, Box QQQ, Southampton, N.Y. 11968.

June 13-14: AIA Conference on Housing, Denver. Contact: Ravi Waldon at Institute headquarters, (202) 626-7429. June 14: Preparation Seminar for the NCARB Architect Registration Exam, Dallas. Contact: H.L. Murvin, 500 Vernon St., Oakland, Calif. 94610.

June 16-18: Intelligent Buildings Business Strategy Conference and Exhibition, New York City. Contact: Cynthia Parsons, Online International, 989 Avenue of the Americas, New York, N.Y. 10018. June 16-19: International Earth Sheltered Buildings Conference, Minneapolis. Contact: John S. Vollum, 222 Nolte Center, 315 Pillsbury Drive S.E., University of Minnesota, Minneapolis, Minn. 55455. June 16-20: Course on Infrared Technology Fundamentals and System Applications, Ann Arbor, Mich. Contact: The University of Michigan, College of Engineering, 300 Chrysler Center/North Campus, Ann Arbor, Mich. 48109. June 17-19: Conference on Promoting Downtown-New Opportunities on Main Street, Des Moines, Iowa. Contact: National Main Street Center, National Trust for Historic Preservation, 1785 Massachusetts Ave. N.W., Washington, D.C. 20036. June 17-20: Course on Managing and Operating Housing for the Elderly, Washington, D.C. Contact: NAHRO Professional Development Programs, P.O. Box 2847, Washington, D.C. 20013.

June 18-20: Water Works—A Great Lakes Waterfront Workshop, Toledo, Ohio. Contact: The Center for the Great Lakes, 435 N. Michigan Ave., Suite 1733, Chicago, Ill. 60611. June 18-21: The Pacific Coast Builders Conference, San Francisco. Contact: Jane Goldman, PCBC, 1107 Ninth St., Suite 1060, Sacramento, Calif. 95814. June 22-29: The Society of Women Engineers Convention and Student Conference, Hartford, Conn. Contact: SWE, 345 E. 47th St., Dept. NM, New York, N.Y. 10017. June 23-27: A/E Systems '86, Chicago. Contact: Michael Hough, P.O. Box 11318,

Newington, Conn 06111. June 25-27: ARCHITEX '86 Exhibition, London, England. Contact: Truemist Professional Exhibitions, 96-98 Chiswick High Road, Chiswick, London, W4 1SH, England.

June 26-27: AIA Architecture for Education Conference, Washington, D.C./ Charlottesville, Va. Contact: Charlotte Yowell at Institute headquarters, (202) 626-7410.

June 30-July 1: AIA Historic Resources Conference, Providence, R.I. Contact: Ravi Waldon at Institute headquarters, (202) 626-7429.

#### LETTERS

**Historicism in the '80s:** The arguments of James Marston Fitch reported in the February issue [page 10] against present building design reflecting the past seem both puzzling and off-the-mark.

So much of the new architecture has gotten beyond the "historicising eclectism" Fitch denigrates. In almost every city now there are expressive and strong new buildings that take the argument to the streetand win. One also has to wonder what a building "of our time" means? Is that blueceramic curtainwall from the '50s, grim and brutal concrete from the '60s, mirror glass on a prism from the '70s? If architects today want to use precast concrete panels outlined with deep molding rather than flat with the gummy seams showing, isn't that of our time and isn't that a better use of technology? Turn around the case against replication of artifacts-and you can ask: Shouldn't the '80s addition to a '60s glass-and-steel box be of stone with pedimented top to show difference? It's a false line of reasoning.

More important than the style battles are the issues of urbanism and context. The new choice of expression in our time eliminates any excuse for ignoring these factors. The larger precedents of how cities and towns have been made successfully (in the U.S. as well as Europe) deserve the attention of such concerned and credentialed individuals as James Marston Fitch. The rest is tempest. *Philip Morris* 

Executive Editor, Southern Living Birmingham, Ala.

Museums as Showcases: Now that the January issue is safely past and your incisive survey of contemporary museum building is completed, I wanted to compliment Andrea Oppenheimer Dean's perception [page 28], even as I add some thoughts for contemplation.

One is that I believe there are differences between buildings that form part of existing organizations and those that are built for totally new institutions. Admit tedly the latter are rare, but all the more reason to distinguish between the two types. Whether considered from the demands of site, the specifics of circulation, or questions about identity, buildings like Isosaki's are responding to different needs than the six buildings that follow Andrea Dean's essay. His is an attempt to establish the identity of an institution out of whole cloth, without apparent reference to anything other thar the architect's own work. How different is the task at Hood, or Williamsburg.

A second concern is the question of how museums are to be judged as *public* institutions. *Are* they really any such thing Or, as Philip Johnson suggests, are they merely yuppie meeting grounds that cor tinue their elitist origins? In fact, many museums were conceived of as free to *a*. citizens, regardless of social or economi status. But what has happened to that idea? Does the theory of culture-aseducation rather than culture-as-the-clu succeed? What, for instance, is the socia statement these buildings make about museums and the profession itself?

> Hugh Hardy, FAI. New York Cit

Firm of the Year: Your article on Esherick Homsey, Dodge & Davis, winner of the AIA firm award [Feb., page 28] was most enjoyable, well written, and informative That is my kind of architecture. I do, however, regret the publication of fourletter words in such a fine magazine. Pleas refer to page 32, line 16, last word and t page 36, line 32, eighth word. There ma be others.

In this period of so-called chaos in arch tectural design, let us, at least, keep it clean! J. Aubrey Kirby, Al Winston-Salem, N.

Back to 'Elegance': Your new cover desig is beautiful! In an era when a great deal of graphic design and architecture striv for aggressive ugliness, your magazine seems to have gone the other directionback to simple elegance. Your new logo type also seems practical, as evidenced by how comfortably it accommodated tl very different Charles Moore and Josep Esherick cover photographs.

I also like the new sections, Heritage ar Kaleidoscope. In fact, the whole magazir keeps getting better. Henrik Bull, FAI San Francis

**Correction:** Our coverage of the Houst Design Center (March, page 76) omitte the credit of Lloyd Jones Brewer Assoc ates, Houston, which collaborated with Cambridge Seven Associates.



Eljer presents exciting new concepts in contemporary baths from seven leading international designers.

To our customers: This brochure will be seen this spring by millions of readers in leading consumer publications.



#### The designs are theirs...but the choice is yours.

For more than 80 years, Eljer has been a respected name in quality plumbingware. As the bath becomes more sophisticated and elegant, Eljer has searched the world for designers and designs that lead the way, that set the trends rather than follow them.

The new products and designs we present here are examples of Eljer's emergence as the new style leader in fixtures and faucets for the kitchen and bath.

Eljer commissioned seven internationally-recognized designers to create bathrooms for today, bathrooms that are as striking, as functional, and as full of rich surprises as our new line of international fixtures.

The result of this year-long effort is bathrooms which display a vibrant expression of personality and lifestyle—a far cry from the strictly utilitarian bathrooms of yesterday.

#### Exciting things are taking shape at Eljer.

Eljer is redefining what bathroom fixtures should be, taking the ordinary and making it extraordinary. At the same time, Eljer is creating a renaissance in bath design on an international level.

Some examples: Eljer's new octagonal lavatories with integral vitreous china cascade water spouts. New whirlpool baths with four hydro-therapeutic jets. And newly-designed matching continental toilets and bidets.

We're very excited about all of this. Once you see the shape of things to come on the following pages, we think you will be too.

Sophie Robert

#### Meet the Eljer international design group.

Lyn Peterson and Kristiina Ratia. Designers Lyn (R), from New York, and Kristiina. from Finland are a dynamic and prolific team. Their imaginative interiors have appeared in House Beautiful. Home, House and Garden, and other publications. In addition, such clients as Ralph Lauren and Marimekko have used their home furnishing designs.

Gunther Krieglstein. Gunther is well known throughout Europe for imaginative and far-ranging plans for the building industry. He has created products. exhibits and designs for numerous companies, winning awards and setting new standards. He is a sought-after consultant and known worldwide for his expertise in design.

and Jean Michel Wilmotte. When President Francois Mitterrand of France had his private apart-ment at the Elysee Palace redecorated. Sophie and Jean Michel did the design work. They've also done the offices of the French Ambassador in Washington, D.C., the interiors for the palace in Saudi Arabia. the Indian Embassy in Paris, the Brazilian Embassy in Cairo and the Merrill Lynch offices in Paris.

Stephen special-izes in architectural and interior design. Consid-ered a designer's designer. Stephen served as Architectural Editor of Better Homes & Gardens and contributes stateof-the-art solutions to many of the home decorating magazines. Among his major clients are Boise Cascade. Georgia-Pacific, Maytag Company and the American

Plywood

Association.

Stephen Mead.

#### Michael de Santis.

Michael's work appears around the globe – from the United States to the French Riviera to the Middle East. Many of his interiors have appeared on the covers of <u>Architectural</u> <u>Digest</u> and <u>Interior Design</u>. Michael has received many awards including the prestigious Hexter Award. He is the designer of the model apartmen at New York City's Trump Tower, which is now receiving extensive national attention



Michael de Santis shows how a bath can be a room of beauty and place to relax and be soothed. 'When I saw Eljer's

bath fixture line in a new, muted dusty rose color, it evoked a feeling of softness and tranquility. It was a color, I knew, that would be comfortable for both men and women.

"Which led me to design this bathroom. I wanted an oriental feeling. an environment of harmony. That's why I placed a skylight above the bath. By looking through the skylight, you may watch the sky, sun, moon and stars. The Sohji screens also help set the mood.

'Underneath the skylight is Eljer's

Renaissance whirlpool, selected for its oversized width which allows one to luxuriate as the water swirls about. "For lavatories.

I chose the Helene Shampoo rectangulars and encased them in a white lacquer 'floating' vanity. Note the Crescendo faucets in clear acrylic with gold trim. They, too, give a floating feeling. "The Windsor water

saver toilet and Valencia bidet blend well together and are placed side by side. "Today, with imagin-

ation and the wonderful Eljer products available, the bathroom can be as beautiful as any room in the house?

Michael de Santis' PIQUANT bath features the following Eljer products: Renaissance Bath. Helene Shampoo Lavatory. Windsor Toilet. Valencia Bidet. Crescendo Faucets. Chrysta Accessories.

Fixtures shown in Dusty Rose.

.





Tet Splash by de Santis.



### Michael de Santis talks about how he designed Jet Splash.

"I especially envisioned this bath for a penthouse apartment, using four black lacquer columns on either side of palladian-like windows. Eljer's Continental bath fits in perfectly with the neo-classic look I wanted to achieve.

"To carry out this unifying theme, I placed Eljer's new *Romanique* lavatories with integral spout and faucet mirrored niches, one on side of the bath, for his ar her use.

"I also put Eljer's Pati toilet and Valencia bidet s by side. On either side of bath, you'll notice there ar leather cushions. Just wh person needs to rest, to g out the window, or to thir

For the interior designer, ; black and gold prodre bold and well ned, and a welcome on. They make a very atic room."

ło

Michael de Santis' JET SPLASH bathroom features the following Eljer products: Continental Bath. Patrician Toilet. Valencia Bidet. Romanique Oval Lavatory. Grandela Faucets. Astoria Accessories.

Fixtures shown in Versailles Onyx.



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ymphony

by Robert and





#### Sophie Robert and Jean Michel Wilmotte introduce Symphony.

S.R.: "We have found in Eljer's new color, 'Versailles Ruby,' the inspiration for the design of this bathroom."

J.M.W .: "Versailles Ruby is a warm, vibrant hue. A very original and perfect color for the bathroom. Just look at this Renaissance whirlpool bath. Its deep, ruby color says you

can really relax here." S.R.: "Just as you can rela the sofa under the skyligh rotunda. It is a perfect pla for conversation, little sec J.M.W.: "On either side of bath, we have the 'lady's' 'gentleman's' area with El new Jonguil octagonal w basins, delicately outlined a gold border."

S.R.: "For greater privacy have put the toilet and bic

nd a partition. Here we used Eljer's luxurious piece *Patrician* toilet and hing *Valencia* bidet. An rtant detail—the Patri-; flush is nearly silent." **V.:** "The bathroom we created is a space red to comfort and pri-We believe it's a place e you can renew yourphysically and mentally."

Robert's and Wilmotte's SYMPHONY bath features the following Eljer products: Renaissance Bath. Patrician Toilet. Valencia Bidet. Jonquil Octagonal Lavatory. Dimension Faucets. Grandela Water Spout. Chrysta Accessories.

Fixtures shown in Versailles Ruby.



1 0

thena by Robert and Wilmotte.

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#### Sophie Robert and Jean Michel Wilmotte discuss

Athena. J.M.W.: "The decor of this room is dominated by the opposition of opaque and transparent materials-the natural and the sophisticated. S.R.: "We used glass, patinated metal and wood as our basic decorating materials-taking special care to match the wood veneers of the walls to the Satin color of Eljer's bathroom fixtures. J.M.W .: "In our bathroom, space is divided. Doublesided mirrors separate the bathing and lavatory areas from the dressing table."

**S.R.:** "In the center of the room is Eljer's Continental whirlpool bath. It's quite a comfortable and relaxing place to be in with its anti-sliding base and brushed gold grab bars." J.M.W.: "As in all the bathrooms we design, we've isolated the *Patrician* toilet and Valencia bidet from the rest of the room, while the Eljer Lorraine pedestal lavatory is in the center of the room, facing a floor-to-ceiling mirror room divider.

8

S.R.: "To complement Eljer's new fixture designs and colors, we've created a bathroom with a warm, personal and contemporary atmosphere. In France we would say a bathroom with 'ambience'." Robert's and Wilmotte's ATHENA bath features the following Eljer products: Continental Bath. Patrician Toilet. Valencia Bidet. Lorraine Pedestal Lavatory. Grandela Faucets. Clarisse Accessories.

Fixtures shown in Satin.







### Gunther Krieglstein's bath adapts to the human

form. "My design is inspired by the human body, which has no sharp corners and is round everywhere. From this idea, I decided my bathroom should have no corners either; that everything in it should be round, even the bathroom fixtures and accessories.

"That's why Eljer's beautiful new Contoura bathroom fixtures and accessories fit my idea so well. Each of these pieces has round, sculptured shapes, accented by flowing art lines. "The Contoura two-

piece toilet has a round

tank with a pushbutton flush on top of the tank. A matching bidet complements it. The lovely Contoura pedestal lavatory has round faucets and matching ceramic soap dish and a toiletries shelf placed over the lavatory. Even the Renaissance bath fits nicely into a rounded niche-a perfect place to read a book, eat some

fruit, even drink a little champagne. "In the ancient Roman houses, the bathroom was a spa, a place to relax. But why not? Why shouldn't we enjoy the bathroom as the Romans? Let's do as the Romans did:

Gunther Krieglstein's BLUE MOOD bath features the following Eljer products: Renaissance Bath. Contoura Toilet. Contoura Bidet. Contoura Lavatory. Avante Faucets. Contoura Accessories.

(

Bath shown in Glacier Blue. Toilet, bidet, and lavatory available in Blue Ice.





Rhapsody by Mead.



#### Stephen Mead shows how Eljer's Glacier Blue can unify a bathroom space.

"In this bathroom, I use color and detail to achieve an attractive and comfortable cohesiveness in a rather fragmented space.

"That's why I chose Eljer's new Glacier Blue for the fixtures. It is a classic color that does not intrude nor overpower the design, yet it is a color that is strong enough to unify the bathroom.

"Eljer's Coventry toilet is an elegant, new one-piece that features a slightly higher profile than most one-piece units and mates well with Eljer's Valencia bidet. "The lavatory is another Eljer design. The *Reminisce* is a luxuriously roomy 30-inch by 20-inch oval in vitreous china. I've also selected a new line of Eljer faucets. called *Ambiance Round*, which I find quite attractive. "The bath – Eljer's

"The bath – Eljer's Continental model – is a deep, restful whirlpool unit installed in a platform and centered under a fixed-glass window.

"In all, the harmonizing effect of using color, texture and pattern results in a bath that encapsulates and encloses the user in a cozy, inviting atmosphere."



Stephen Mead's RHAPSODY bath features th following Eljer products: Continental Bath. Coventry Toilet. Valencia Bidet. Reminisce Oval Lavatory. Ambiance Round Faucets. Amente Accessories.

Fixtures shown in Glacier Blue.





A STRUCTURE COMPLETENCE COMPLETENCE

Why Lyn Peterson (R), and Kristiina Ratia chose a high-tech feeling for this bath.

L.P.: "We chose to decorate our Eljer bath in an eclectic high-tech style, because high tech combines high style and technology."

**K.R.:** "In many ways this bath is engineered rather than designed. The two new Eljer *Jasmine* octagonal lavatories are separated by the width of the *Nobility* bath, creating two separate spheres of activity."

L.P.: "The colors of the bath fixtures, which includes the Coventry toilet and Valencia bidet. are sleek and achromatic — Eljer's Classic Gray and Platinum. They're great decorating colors." K.R.: "A bathroom like this desanctifies design. These Eljer bath fixtures and these surfaces – marble, tin, ceramic, sheet rock and chrome – are straightforward and honest." L.P: "They all deliver as promised. To us, this is what the bath is all about: private, personal and performance oriented. It works."

SEN 3



A MARCH AND A CONTRACT OF A CO

Peterson's and Ratia's METRO BATH features the following Eljer products: Nobility Bath. Coventry Toilet. Valencia Bidet. Jasmine Octagonal Lavatory. Dimension Faucets. Chrysta Accessories. Path shown in Platinum

Bath shown in Platinum. Toilet, bidet, and lavatory in Classic Gray.







Stephen Mead reveals how modern materials suit Eljer's Sandalwood bath fixtures to a "T".

"Since I wanted to use Eljer's new Glencove bath and wall-surround system, I chose modern, man-made materials for the bathroom's interior to complement the supersmooth feel and look of this bath unit.

"For the wall, I used a laminate which provides an easy transition from the bath material, and results in easily cleaned and maintainable wall surfaces. "I found the sculptured, high-style shape of Eljer's New Emblem toilet attractive. Its Sandalwood tan color playing well against the dark brown rubber tile floor. Ditto for Eljer's Valencia bidet.

"Eljer's new and exciting *Donegal* hexagonal lavatories fit in perfectly, too. I've set two of them into the vanity at an interval that allows two people to use the space without congestion.

"Overal, I believe the color scheme results in a comfortable, upbeat atmosphere for an onthe-go couple needing space to spread out in a visually stimulating bathroom."



Stephen Mead's TAOS BATH features the following Eljer products: Glencove Bath and Wall-Surround System. New Emblem Toilet. Valencia Bidet. Donegal Lavatory. Orleans Faucets. Clarisse Accessories.

Fixtures shown in Sandalwood.



#### ljer presents bathroom accessories ith an international difference.

Itch the exciting look in our five new lines of bathroom accessories. There's an international vor to help set off the daring look of Eljer's new bathroom fixtures and faucets. Fashioned om chrome, gold plate, crystal and porcelain, each is designed to match every designer's eam perfectly. See them all at an Eljer showroom soon.



Chrysta Series Swirling crystal accents capture the light and reflect the rich look of these accessories. In crystal with gold or crystal with chrome.

#### **Contoura Series**

Made from the same porcelain, and in the same art deco style as Eljer's new Contoura line of bathroom fixtures, these accessories are matchless. In Blue Ice.





Astoria Series Gold striping on ceramic, with gleaming gold metal on surrounds and bars, creates a fantasy look of high style. Flowing curves harmonize with almost any bath decorating idea. Ceramic in onyx, ruby or white.

#### Clarisse Series

Clear acrylic and gold accents glisten and sparkle throughout this line. Clarisse makes a rich and beautiful statement anywhere it's used. In gold and clear acrylic or chrome and clear acrylic.





#### Amente Series

No mistaking what this gleaming line of accessories says. Every inch reflects a bold, opulent look and makes any designer scheme look fabulously rich. In combination chrome and brass.

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Where else in the world can you find faucets with a look like these? Only from Eljer, the maker who has exciting new ideas coming from all over the globe. Like the faucets shown here, some with curves as gentle as the moon's. See for yourself. Look at all of our new Eljer faucets in an Eljer showroom soon.



#### Orleans

This faucet line provides a subtle yet elegant hint of tradition in its attractive cross handle design. A variety of dazzling finishes provide a touch of contemporary style to the cross handle design.





#### Dimension

Form and function combine in the attractive cervical handles of the Dimension faucet line. A selection of attractive finishes allows you to complement your bath fixtures to suit your style.





#### Crescendo

A crystal remembrance of days gone by, simple graceful styling is the mark of this traditional style faucet line. Optional brown or white onyx handles and chrome or gold finish.

#### Innova

Unmistakably contemporary, the Innova line combines sculptured metal with translucent acrylic. Optional brown or white handles are available in chrome or gold finishes.



## Eljer offers a complete portfolio of these designs plus a variety of adaptations...to fit your bath dimensions.



The ideas shown here can be a starting point for your own bathroom planning.

In fact, to help you do just that, Eljer has developed a series of brochures with hints on taking the exquisite styling of these rooms and applying them to your own needs. There are model numbers of each of the Eljer bath fixtures in the plan, plus model

numbers and descriptions of the Eljer faucets and accessories used. Featured is an alternate list of building materials and decorating items for more practical sizes and budgets.

For a complete set of brochures, send \$5.00 to Eljer, Three Gateway Center, Pittsburgh, PA 15222. You'll get additional advice on bath design from some of the world's top designers, and have it right at your fingertips. You'll also see how Eljer's exciting new products and colors can give you a stylish bathroom for the eighties and beyond.

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### Awards and Competitions Gottfried Böhm Named Recipient Of Eighth Annual Pritzker Prize

To those who follow both architectural awards and the rise and fall of architectural reputations, the Pritzker prize for 1986 will be baffling. Established in 1979 by the owner of the Hyatt Hotel chain, Jay A. Pritzker, as a "Nobel of architecture," the award has followed a rather predictable path: Philip Johnson, FAIA, 1979; Luis Barragán, Hon. FAIA, 1980; James Stirling, Hon. FAIA, 1981; Kevin Roche, 1982; I. M. Pei, FAIA, 1983; Richard Meier, FAIA, 1984; and Hans Hollein, Hon. FAIA, 1985.

All of these winners had well-established American reputations, either through residence and work or through their frequent appearance in exhibitions and publications. All were essentially superstars of the architectural world, and even if Hollein had not built much, his small and exquisitely crafted work had been well known and avidly followed since the 1960s.

The 1986 Pritzker prize to Gottfried Böhm, Hon. FAIA, is more adventurous; it goes to a virtual unknown in American architecture, and to a body of work that lies outside the prevailing American stylistic channels. Indeed, much of Böhm's work challenges American perceptions.

The work of the 66-year-old Böhm (pronounced berm) is located almost entirely in West Germany, the exceptions being several early churches in Brazil and Formosa and a children's village in Italy However, he has undertaken projects an competition designs for sites outside Germany, and recently he has taught at MIT and the University of Pennsylvania This recent exposure certainly contributed toward the Pritzker recognition.

Both Böhm's grandfather and father were architects; his father was the leading Catholic church architect in Germar from the 1920s to the 1950s. Böhm train in Munich in both architecture and scul ture and worked with his father until th latter's death in 1955. This intensely spi itual background and artistic training ha remained important elements in Böhm' work; he seeks to transcend the functior and programmatic, and he also paints murals for some of his buildings.

The spiritual transcendence that Böh seeks is most firmly rooted in that strai of German art and architecture known

Above, Pritzker prize winner Gottfried Böhm and some of his most celebratec works: left, the Bergisch-Gladbach Civ Center, 1980; and right, Bensberg town hall, 1964, erected on the ruins of a me ieval fortress. Across page, above and below, exterior and interior of the Chur of the Pilgrimage in Neviges, 1964.


## NEWS

as expressionism. As a design movement expressionism probably didn't exist; rather, it involved an attitude toward architecture that was romantic and intuitive, combining elements of fantasy, modernism, and tradition. Böhm's father favored the traditional side, and in Böhm's recent work, the use of gables, pediments, or towered facades is not a postmodern irony but a reach to and transcendence of the past.

The Bensberg Town Hall of 1964 indicates that a dialogue with the past is nothing new for Böhm. It was built as an extension on the ruins of a medieval fortress, and Böhm reinvents the Gothic sensibility with the rugged, almost geological tower and rough cast form work. The tower does make a bow to the expressionists and perhaps most overtly to Lyonel Feininger's cover for the first Bauhaus manifesto.

Böhm's best-known work is undoubtedly the Church of the Pilgrimage at Neviges, completed in 1964. Its vast crystalline forms of concrete remind one of German expressionist films such as "The Cabinet of Dr. Caligari." Juxtaposed against the sharp forms is a broad path of gracefully curving steps leading past the rounded facades of the pilgrims' hostels. What might be expected to be a heavy, confining interior is revealed to be open and expansive, a thing of wonder, light, and space. Böhm designed the stained glass windows. The church at Neviges deserves to be ranked with Wright's Unity Temple and Le Corbusier's Ronchamp as one of the great religious monuments of the 20th century, both for intensity of feeling and spatial achievement.

Free-form concrete continued to be Böhm's preference in materials until the early 1970s, when, as he claimed, it became too costly and the supply of craftsmen ran out. Steel and glass and more obviously industrialized and prefabricated components seemed to draw his attention. His drawing style changed markedly, from denseness to light. The types of buildings he designed changed also-fewer churches and more town halls and commercial buildings. The best-known of these works, the civic center at Bergisch - Gladbach, delights in a visual complexity. Tied to a late 19th-century baroque former pub, the civic center's facade is composed but yields an ad hoc quality, with such competing elements as towers, bays, hoods, and awnings. It recalls elements of the past without historicizing. The interior is perhaps less successful to American eyes, for Böhm tends to incorporate a variety of motifs ranging from high-tech to kitsch. continued on page 36 Awards and Competitions from page 35 Yet, as an experience, the spatial drama and intricacy are compelling.

Böhm is just reaching that point when the truly big and important commissions arrive. Some of his recent projects have revealed an unfortunate systemization and regularity of both plan and form. Whether this will become his mature style—which happens to many architects as they become more institutions than individuals—is, of course, unknown. One does hope that the Pritzker and the ensuing fame will still allow him to pursue his own particular intuition in creating some of the most remarkable, and possibly great, buildings of the last half of the 20th century.

The 1986 award ceremony took place in two parts. On April 16 at the Museum of Modern Art, Böhm was presented with a \$100,000 tax-free gift. A second formal ceremony was to take place on May 7 at Goldsmith's Hall in London, when he was to receive a bronze sculpture by Henry Moore.

Jurors for this year's selection were J. Carter Brown, Hon. AIA, director of the National Gallery of Art in Washington, D.C. (chairman); Giovanni Agnelli, chairman of Fiat in Torino, Italy; Thomas J. Watson, chairman emeritus of IBM Corporation; Ricardo Legorreta, Hon. FAIA, of Mexico City; Fumihiko Maki, Hon. FAIA, of Mexico City; Fumihiko Maki, Hon. FAIA, of Tokyo; and Kevin Roche of Hamden, Conn., winner of the Pritzker in 1982. -RICHARD GUY WILSON

Dr. Wilson teaches architectural history at the University of Virginia.

#### Foster's HongkongBank Wins R. S. Reynolds Award

The HongkongBank building, designed by Norman Foster Associates of London, has won this year's R. S. Reynolds memorial award for distinguished architecture. The award's jury, which consisted of R. Bruce Patty, FAIA, Canadian architect Jack Diamond, and Eugene E. Aubrey, FAIA, cited the building as a "collaboration between the architect and the modern-day, hightech aluminum craftsman and his technology. The finesse of the design and the contribution the building's plaza makes to the community and its urban setting is commendable."

Located on the northern coast of Hong Kong Island, the 47-story building is composed of two rows of four tubular steel columned towers at three heights, braced at each floor by horizontal members. Suspension trusses at five levels, expressed on the exterior, join the towers, which are also cross braced at each of the five levels. This elaborate structure is clad in approximately 1 million square feet of aluminum panels with a fluoropolymer finish.

In his critique of the HongkongBank

Right, night view of the HongkongBank.



Young Hispanic Architects Competition Winners. Adolfo Perez, a graduate of Harvard University who now practices in Cambridge, Mass., was selected as the first place winner for his proposal for a new police station house in the Bronx in the second annual Hispanic talent search architectural competition. (Main entrance elevation shown above.) Second place was presented to Carlos Garcia-Bou, a graduate of the City University of New York school of architecture. Bernardo DePablo of Port Washington, N.Y., was awarded an honorable mention. The winners were presented prizes ranging from \$3,000 to \$500. The jurors were William Raczko, AIA; Abraham W. Geller, FAIA; Alexander Kouzmanoff, FAIA; Terrance Williams, AIA; and Fernando J. Domenech, AIA. Hamilton Smith, FAIA, a partner of the firm Gatje Papachristou Smith, served as the professional adviser. The competition was sponsored by Castro-Blanco, Piscioneri & Feder, Architects, of New York City.

in ARCHITECTURE (Sept. '85, page 74) Hiroshi Watanabe described the building's 170-foot-tall central atrium as taking "Wright's idea of the 'etherealization' of space, made manifest in the Larkin Building, even further." The atrium and the banking hall that surrounds it are accessible by escalators from the lower level public plaza, above which the building lifts its skirt. The atrium can also be viewed from the surrounding office floors and their balconies.

At the building's four corners are stacked services such as toilets and airconditioning and electrical systems, which are comprised of 139 modules prefabricated in



Japan and plugged into the structure, each module weighing between 28 and 33 tons. The building is crowned by a helicopter pad and four maintenance cranes.

Watanabe noted that "visually, the building is a closed form, despite its slight asymmetries, setbacks, and voids that suggest an incompleteness and capacity of the building to grow," adding that breaking the exterior into five levels demarcated by the trusses "does reduce the scale of the building as the architect intended." Functionally, the interior is sectioned into a number of "open plan, vertical zones," as Watanabe described them, "to encourage the development of 'village units,' each with its own identity, in which escalators allow easy mobility and face to face communication."

While critics of the HongkongBank have claimed that it is more monument than office building, Watanabe found it a symbolic pivot "around which the city can revolve. Foster, with his preoccupation with vertical circulation, and the atrium over the plaza that affords a view of the passing populace, has captured the spirit of the city." News continued on page 41

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

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New modular fixtures answer multiple remodeling needs: advanced optics mean better lighting, wide range of options gives design flexibility, four-week shipment keeps projects on schedule.



You can insist on the look and quality of the best linear lighting —even if you're up against a tight completion deadline. Remodeled spaces have all the lighting problems of new construction without the benefit of long lead times.

This carefully-designed space is actually the clubhouse of the Minnesota Twins baseball team—a far cry from the bareconcrete and exposed-pipe image we usually associate with a locker room.

Despite its remarkable luxury, this job suffered under the usual remodeling constraints: an existing structure (the Metrodome) and the pressure of time (the opening of baseball season).

The designers wanted the look of linear fixtures and the even lighting that only a high-quality lensed indirect fluorescent system can deliver. Unfortunately, highquality linear systems need eight to twelve weeks for delivery—acceptable for new construction but too long for timesensitive remodels. Here, the answer lay in a newlydeveloped modular system: FasTrac by Peerless, which promises four-week shipment on any order of up to 1000 feet.

#### Softshine optics: on the cutting edge

These 6" round linear fluorescent fixtures offer seven of the controlled optical systems that established Peerless as a leader in lighting technology.

Here, note the even ceiling and upper wall illumination, overall shadow-free environment and lack of glare. These twolamp fixtures, hung 10' apart, use a wide spread Softshine lens that distributes the light into precisely the right viewing areas.



A selection of specially-designed lenses distributes light facet by facet. This up light combines wide spread with low lens brightness.

This diagram, generated by research computers at Peerless, shows how the light strikes each individually-designed lens facet, then fans out over a wide area while the lens retains a comfortable low brightness.

#### FasTrac design options: impressive

FasTrac's modular aluminum extrusions come in 4,'8' and 12' standard lengths and twelve standard colors, in one-lamp and two-lamp versions.

A quick-connector system allows the fixtures to rotate, so they can serve either as up lights, down lights or wall washes. Peerless offers seven different Softshine lenses plus the option of white or matching colored baffles.

Through the use of joiner hangers, fixtures can be made into a continuous run of any length, and black neoprene flex connectors allow configurations. All FasTrac options and components are available on the four-week shipping schedule.

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### Congress Considering \$3 Billion For Increased Embassy Security

egislation to spend \$4.4 billion on secuity efforts overseas, including an unpreedented \$3 billion for new and upgraded mbassy buildings (that figure is more han has been spent to date on the entire mbassy construction program since World Var II) is making its way through the J.S. Congress. The omnibus terrorism bill hat authorizes the program passed the House of Representatives March 18, by a ote of 389-7 and is now pending in the senate, staff members of which visited everal overseas installations during the Easter recess. Following expected passage here and President Reagan's signature, he next step would be for the Adminisration to seek an annual appropriation of funds.

The State Department has told Congress t needs to build more than 70 major new embassies and rehab another two dozen luring the next five years in such locaions as Santiago, Istanbul, Vienna, Tel Aviv, Algiers, Copenhagen, Madrid, and Bangkok, among others.

Despite the tremendous increase in unding, the State Department's Office of Foreign Buildings Operations (FBO) inends to retain its three-decade-old panel system by which architects are selected and their projects reviewed. Designs about o move into construction, according to FBO, include chanceries in Dacca, Bangadesh, by Kallmann, McKinnell & Wood, and in Muscat, Oman, by James Stewart Polshek & Partners. An embassy combound in Amman, Jordan, by Perry Dean Rogers & Partners is in final design. A ong-delayed design by Gatje Papachristou Smith for Damascus, Syria, has been on 10ld because of a necessity to change the site and now is unlikely to be built, according to FBO. A similar fate befell a design by Benjamin Thompson Associates for Ottawa. Neither site met the strict new security guidelines.

According to Representative Daniel A. Mica (D.-Fla.), approximately one-quarter of the funds will be for the purchase of new or additional land. All new embassies must be set back a minimum 100 feet from the street, as suggested by the Inman Committee report (see Sept. '85, page 56), a requirement that will nearly preclude construction in urban areas. Addressing a policy forum, "Terrorism: Building the Best Defense," sponsored by Enserch Engineering and Construction in March, Mica related how a car bomb outside the new embassy in Lisbon did not damage the Fred Bassetti-designed facility because of the 100-foot setback. "We could have had another Beirut," said the congressman, who is chairman of the subcommittee on international operations of the House Foreign Affairs Committee, which oversees the building program.

Mica indicated that the proposed legislation would mandate extensive congressional review of new embassy construction. He declared to the conference guests, mostly government officials, that because of Gramm-Rudman deficit reduction law and the massive amount of funds to be expended, the legislation "lets us look at every single project before we go into construction. . . . You will probably see the most complete and total scrutiny of spending under this program that you've ever seen." He cited such elements as the seller and purchase price of the land as well as "what types of furnishings," among others, in explaining what he described as "micro-management" by the Congress. To a number of panelists present, the implication was that Congress would start reviewing esthetics, and there was memory of the Wayne Hays era, when that Ohio congressman brought FBO's efforts to a halt. Referring to an unnamed ambassador who ordered the removal of a metal-detection device from an embassy lobby, Mica said, "We put it in the bill. We can and will start to override the ambassador."

Mica also stated that the requirement for a 100-foot setback was in the legislation. That assertion has proved incorrect —it is in the State Department's regulations—but it prompted much discussion

Below, U.S. Embassy office building in Kuala Lumpur, Malaysia, by Hartman-Cox Architects of Washington, D.C. at the afternoon session of the Enserch conference, nonetheless. Christopher Degenhardt, president of EDAW Inc., landscape architects, and a member of the National Research Council Building Research Board committee of the National Academy of Sciences investigating embassy security, pointed out that the new setbacks will demand vast amounts of land. A typical 40,000-square-foot site when required to incorporate a 100-foot setback would grow into a 160,000-square-foot site. He noted that as an ameliorative effect, a wall "doesn't have to be at the perimeter"-he suggested a location in the woods as a possibility-and said that alternatives such as berms or a moat will also meet security needs. The weak link, he said, is at "the access points," and the solution there is fewer such entries.

Architect George E. Hartman Jr., FAIA, designer of the new U.S. embassy in Kuala Lumpur, Malaysia, believes that such vast amounts of land and its concomitant cost make sites absolutely prohibitive anywhere near a city. He thinks an embassy's "representational factor," which results in part from close-in urban sites, should not be abrogated without close examination. Hartman also believes criteria for security should be established, not legislated, and "then let FBO and the architects solve them." The architect also suggested two building types-central courtyard and underground-as likely to result from the new emphasis on security, which reduces outside windows to a minimum. "In a funny, strange way, Edward Durell Stone's famous New Delhi embassy may be the prototype for the future," he stated. It is rectangular in plan, surrounding an open court.

George M. White, FAIA, architect of the U.S. Capitol, also questioned the prescriptive approach, saying, "Nobody ever said legislative language was the answer to problems. As a matter of fact, it often creates them, as we are seeing here." White also noted, "Everybody's an expert when *continued on page 45* 





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#### Fovernment from page 41

comes to architecture." He pointed out nat "design of buildings is only one aspect f preventing terrorism," and suggested nat architecture must be combined with etter intelligence and improved training f personnel running X-ray and metal etector equipment, for example. Archiect Stuart L. Knoop, AIA, chairman of ne afternoon panel and another memer of the committee studying embassies, njected a note of unfortunate reality, eclaring, "You can't protect against abolutely every possibility."

C. Paul Robinson, an executive with basco Services Inc. and a former secuty official at the Los Alamos National aboratory, in closing the conference, sked, "Can we make a science out of esigning buildings to protect against terprists?" The answer, he said, is "not yet." obinson sees "room for lots more innoation and lots of thinking."

Earlier, there was one positive sign, at ast as regards FBO's architecture proram. David R. Dibner, FAIA, senior vice resident of Bernard Johnson Inc. and hairman of the committee studying future mbassies, reported in the morning seson that in its charge to the committee, Congress felt there could be a design of specific embassy, the embassy of the iture. Have one and place it all over.' ibner said that in his committee's delibrations, "it became obvious that you can't ave just a standard embassy." Therefore, uid Dibner, the former GSA assistant comissioner for design and construction, his anel had developed design criteria and uidelines for security. The panel's report as been sent to the State Department, hich is now reviewing it to see what, if ny, parts can be released without comromising security.

-CARLTON KNIGHT III

#### ederal Task Force Supports iability Insurance Reforms

he Reagan Administration has fully ndorsed the recommendations of a govrnment interagency task force on the liaility insurance crisis and is drafting gislation to make significant changes in ability coverage, including limits on attoreys' fees and restrictions on damage wards for "pain and suffering."

Although the task force did not recmmend specific legislation, the Admintration's legislative package is expected be based largely on the 80-page report iat it presented to the President on March 7. The task force, headed by Assistant ttorney General Richard K. Willard, outnes the problems associated with skyocketing insurance premiums, availabily of coverage, and escalating damage wards. The report also contains eight commendations aimed at making insurnce more attainable and affordable. Comprised of representatives from the Justice and Commerce departments and the Small Business Administration, the task force found that a "veritable explosion" in the legal definition of liability by judges, legislators, and juries, as well as recent large underwriting losses by the insurance industry, have contributed to the crisis. However, the group determined the current tort system is the major cause of the availability and affordability of liability insurance, and reforms of tort law by the federal government could "significantly alleviate" the liability crisis.

Four specific problem areas were identified and addressed by the task force. The group criticized the move toward nofault liability, which penalizes professionals and companies even in the absense of any wrongdoing on their part, and the undermining of causation through a variety of questionable practices and doctrines that shift liability to "deep pocket" defendants regardless of the cause of the underlying injury. The report also noted the explosive growth in the damages awarded in tort lawsuits and the excessive transaction costs of the tort system: Approximately two-thirds of every dollar paid out through the system is lost to attorneys' fees and litigation expenses.

The task force recommended eight reforms of tort law aimed at controlling the insurance crisis. The report called for a return to a fault-based standard for liability that restricts liability to the party determined to be at fault and to base "causation findings on credible scientific and medical evidence and opinions."

The panel also recommended limiting continued on page 48

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#### Government from page 45

noneconomic damages, including "pain and suffering," mental anguish, or punitive damages, to a "fair and reasonable maximum dollar amount."

In addition, the group urged a limit on attorneys' contingency fees to "reasonable amounts on a sliding scale." (The report had found that in asbestos lawsuits over the last 10 years only 37 cents out of every dollar in awards were received by the victims.)

Other recommendations of the committee suggested eliminating "joint and several liability," that has allowed more than one party to be held liable for damages caused by one incident and reducing awards in cases where a plaintiff can be compensated by collateral sources to prevent a "windfall double recovery." The use of alternative dispute mechanisms to settle cases out of court was urged, as well as periodic rather than lump-sum payments of damages for future medical care or lost income.

Many states have already passed laws that relate to many of the recommendations of the federal task force, including setting maximum settlements and reducing double recovery. California has passed legislation that places a ceiling on damages awarded a victim for "pain and suffering," and Kansas and Oklahoma have adopted laws that limit the liability of design professionals for job site injuries compensatable under the Worker's Compensation Law.

The New York *Times* reported a senior White House official as saying that although the President was aware of the remedies being pursued by various states, federal legislation is also needed to avert a crisis in the insurance industry that could require federal government subsidies.

Another Administration official was reported to have said that the goal of the President's legislation is to "get tort law back on a more thoughtful footing," rather than to address directly the problems in many industries of an inability to get liability coverage.

In late March, two representatives of AIA testified before congressional subcommittees to urge legislation relating to factors that have contributed to the rising cost and frequent unavailability of liability insurance for many American architects.

Des Taylor, Hon. AIA, executive vice president of the Texas Society of Architects, in testimony before the House ways and means subcommittee on oversight, called for reform of the country's tort system. Taylor recommended reforms to return "fairness and equity" to the civil justice system, which were similar to the recommendations of the federal government task force. Taylor also urged Congress to provide appropriate sanctions for filing of frivolous lawsuits.

The chairman of the Institute's liability task group, Burton W. Thomas, AIA, testified before the House subcommittee on commerce, transportation, and tourism to urge passage of legislation that would set a federal standard of care for the safe removal and abatement of asbes tos. He also recommended that the Envi ronmental Protection Agency be required to adopt the National Institute of Building Sciences' guidelines on abatement procedures.

In his testimony, Thomas also stated that in 1985 almost half of the country's architects were sued, but fewer than one tenth were required to pay damages.

"Disarray in the insurance industry and the civil justice system have combined to create a liability crisis that is beyond the capability of architects to attack directly, said Thomas.

AIA has joined 11 other organizations in forming the new American Tort Reforr. Association, which was organized to reforr the tort liability system through federal and state legislation, education activities and the judicial system.

News continued on page 5





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#### *The Institute* Jandatory Code of Ethics To Be Considered at AIA Convention

laving received the approval of AIA's loard of directors at its meeting in March, new mandatory "code of ethics and proessional conduct" will be voted on at the nstitute's annual convention in San antonio next month. Copies of the code vill be sent to all component chapters nd will be available upon request to all nembers.

The code, which the board recomnended for approval at the convention, s the product of AIA's ethics task force, which began its work in November 1984. A preliminary draft was completed in the ummer of 1985, circulated among comonents and members for comment, and hen reviewed by the board (see Sept. 35, page 65). The code was also considred at the meeting of Grassroots '86 in anuary.

If approved at the convention, the new ode will replace the voluntary "ethical rinciples" that have been in effect since une 1980. AIA terminated a previous manatory code of ethics in 1979 after a rulng by the Justice Department that the ode's prohibition of supplanting violated he Sherman anti-trust act.

The new code, as was the previous one, s comprised of canons, ethical standards, nd rules of conduct. While the canons, ive in all, outline the broad principles of onduct, the 17 ethical standards delinete more specific goals "toward which nembers should aspire..." The 30 rules of conduct are mandatory, and violation of these is subject to disciplinary action n the form of admonition, censure, susension of membership for a period of ime, or termination of membership.

The first canon concerns general obliations and ethical standards. The secnd canon is on obligations to the public, he third on professional competence, the purth on obligations to the profession, nd the fifth on obligations to colleagues.

Enforcement of the code would be the esponsibility of a national judicial counil appointed by AIA's board. Formal harges could be filed with this council y members, components, or anyone "agrieved by the conduct of the members." 'he council would be required to defer ction on a charge to allow a compoent, if it wishes, to obtain an informal ettlement.

Ethics task force chairman Harry Iarmon, FAIA, says that the method of nforcement is a compromise between omponents who wish charges of misconuct to be settled at a national level and hose who wish to settle such matters ocally. "It does not give the chapters the uthority to levy sanctions," Harmon points ut. "They can only use persuasive powrs to resolve a matter informally."

If the code is adopted it will take effect

on Jan. 1, 1987. Before that time, Harmon says, a number of actions would be necessary: appointment of a national judicial council; development of procedures for components and members filing charges; development of training programs for components and the judicial council; appointment of staff to handle code-related matters; and preparation of required bylaws changes.

Justice Department officials have given informal approval to the code as it has been developed through seven drafts. It has now been submitted for official approval, "and there is every indication that the department will give it a favorable business review," Harmon reports. The department is expected to act before AIA's convention. As to why the need for a mandatory code of ethics, Harmon says, "It's important because it says that AIA stands for something."

#### The Rev. Robert H. Schuller Named AIA's Public Director

The man who commissioned the Crystal Cathedral in Garden Grove, Calif., television's "Hour of Power" minister, the Rev. Robert H. Schuller, has been elected the public member of the AIA board of directors. The senior minister of Garden Grove Community Church and the author of more than 20 books, he was elected in March at the Institute's board meeting in Los Angeles to serve a term expiring in December 1987. He succeeds Susan Stamberg of National Public Radio's "All Things Considered."

Norman L. Koonce, AIA, the Gulf States regional director who nominated the Iowa-born minister, said that pragmatic Schuller's "possibility thinking, probcontinued on page 56



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#### The Institute from page 53

lem solving, and motivational abilities [which] enabled his congregation of some 10,000 to occupy the \$21 million structure debt free" would serve the Institute well. He later said that Schuller "considers architecture to be an incarnation of God's creative process that lends dignity to man's use of his environment and his desire to gain inspiration in worship from it."

Schuller advocates humankind taking responsibility for stewardship and enhancement of the planet, one aspect of which is the built environment. "We all live on planet Earth," he says. "The skin cannot be stretched, and we need to protect it from ugly scars and enhance it by what we build."

Schuller is a long-time enthusiast of architecture. He commissioned Richard Neutra to design the Garden Grove Community Church's first building in the early 1960s. Later Philip Johnson, FAIA, and John Burgee, FAIA, designed the Crystal Cathedral, which was completed in 1980. That truncated star-shaped building, which bears some resemblance to a stylized version of a tent for a religious revival, is a white-painted steel space frame covered with 10,000 panes of mirror glass. The interior seats 3,000, and the chancel area can accommodate another 1,000 singers and

Right, Schuller beneath canopy of Johnson/Burgee's Crystal Cathedral.



instrumentalists. A mammoth door at th side opens to permit Schuller to address those parked in their cars, a reflection o Schuller's original ministry in California from the concession-stand roof of a drive in movie theater.

Lately, he has been thinking of building a small chapel, and although nothin, has resulted to date, he has talked with Johnson, Richard Meier, FAIA, Arata Isozaki, Hon. FAIA, and Frank Gehry, FAIA, about possibilities.

During an interview in his reception room under the Crystal Cathedral after Sunday service, Schuller said his interes in architecture was piqued while a student at Hope College in Michigan. "It was just enough to recognize there is an in structure and form," he says. After ord nation and serving a church in Chicago. Schuller moved to California in 1955 an began to preach at an unused drive-in movie theater where the parishioners remained in their cars. Inspired by that experience, and in need of permanent quarters, Schuller decided to build a 'walk-in, drive-in church." He engaged Neutra, who designed an extensively lanc scaped church that opened to the parkin lot on one side. The church was completed in 1962, and four years later a 14-story tower and an office structure als by Neutra were added.

Schuller's congregation grew rapidly, and in the 1970s he engaged Johnson an *continued on page 2*?



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### AIA Component Awards By Lymn Nesmith

Each year, as companions to the national honor award winners, we present buildings that have been honored by AIA's state, local, and regional component organizations. Although space limitations prevent publication of all the winners, the selection that follows represents a cross section of geographical areas, building types, and approaches. The presentation, starting here and continuing through the front and back of the issue, begins in Seattle and loops around the country, ending with the Northeast. A listing of included components is on page 70. Seattle Chapter. South Arcade, Seattle; Jim Olson and Rick Sundberg as former principals of Olson Walker Architects, Seattle. As the southern anchor of the Pike Place Market district, this 260,000square-foot complex of offices, housing,

shops, restaurants, and parking extends the pedestrian activity south above the waterfront, reaching toward the Pioneer Square historic district. To reinforce the social diversity of the neighborhood, the project is in a sense three distinct buildings. In the northernmost building, Market Garden, 61 low-income, single-room occupancy dwellings surround a courtyard. Twenty middle-income units are located in a lowrise section, the Newport Building. The tallest component, 98 Union, houses 59 luxury condominiums on 14 floors. A collaboration between the architect and local artists resulted in decorative elements including mailboxes, sculpture, and elevators cabs. The jury said that South Arcade "maintains the character of the market yet represents a new imagery and panache in the tower."



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Seattle Chapter. Gorton/Bounds Cabin, Decatur Island, Wash.; The Miller/Hull Partnership, Seattle. This 600-square-foot vacation cabin for a family of three is located on a steeply sloping, 100-footdiameter circular site in a planned development on one of the San Juan Islands. Approach to the house is by a wooded trail that leads to a recess entry porch with a Dutch door. Living and dining areas have sloping ceilings with heavy timbered beams and floor to ceiling windows that take advantage of panoramic views.

Wood-framed openings lead to the cabin core, which contains a bedroom, two sleep ing lofts reached by ladders, the kitchen storage space, and a bathroom. Heating is provided by a wood stove with thermc static controls; all of the glass is doublec glazed.
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#### AIA Component Awards



Alaska Chapter. Prototype Elementary Schools, Anchorage and Eagle River, Alaska (above); ECI/Hyer, Inc., Anchorage. The design for three schools was developed in response to varying site constraints and a strict energy budget. The narrow, linear plan was designed to minimize grade changes across the schools on three distinctly different sites ranging

from flat to steeply sloped. A central core separates primary and intermediate learning areas and allows sections of the building to be locked during community use of the facility. A traditional shed roof with clerestory windows admits sunlight to the corridors and classrooms. **Southwestern Oregon Chapter.** Drain Civic Center, Drain, Ore. (below); Lutes/Sanetel Architects, Eugene, Ore. Located one block south of the commercial district in a residential neighborhood, this 10,000 square-foot facility houses a public library and a multiuse community center with tal dormer windows facing the street. Flood zoning restrictions required the building's floor level to sit several feet above the ground plane.





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**California Council.** Storer Residence Restoration, Hollywood, Calif. (above); Eric Lloyd Wright and Martin Eli Weil, AIA. The restoration of this 1924 Frank Lloyd Wright house called for repair of the unique textural concrete block system, reworking the electrical, mechanical, and plumbing systems without altering the fabric of the house, and correcting additions by previous owners. The jury commented on the owner's commitment to the restoration and the architect's "sensitivity to the original piece."

Los Angeles Chapter. Norton Residence, Venice, Calif. (right); Frank O. Gehry & Associates, Venice. A ramshackle beachfront cottage was remodeled and enlarged to a 3,000-square-foot, four bedroom house for a retired lifeguard turned songwriter and his wife, an artist. Set atop the ground floor studio, the observation tower serves as a study. The exterior materials are stucco, corrugated metal, chain link fence, and tiles in bright blue, green, and yellow.







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**California Council.** Petal House, Los Angeles (above); Eric Owen Moss, AIA, Culver City, Calif. In renovating a onestory, wood frame tract house, the architect added a new master suite and bath to create a second floor, added skylights and a sloping roof in the enlarged kitchen, increased living and dining areas, added a small entrance rotunda, and extended a new porch toward the street. The garage was reoriented to provide space for a pool, and a second floor guest house/studio was added. The roof unfolds to create a top floor deck with a whirlpool bath.

Shay Residence, San Francisco (right); James Shay, AIA, San Francisco. For his own house on a sloping wooded site, the architect chose bay windows, a barrel arch roof, and materials that blend with the character of the neighborhood to create, in the words of the jury, a "sense of monumentality in a small house." The design includes space that can be converted to children's bedrooms in the future.



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Arizona Society of Architects. Manning House, Tucson, Ariz. (above); The NBBJ Group/Gresham Larson, Tucson. As part of the renewal of a downtown historic area, the city acquired this twice remodeled 1907 Spanish colonial mansion by Trost & Trost. In converting the flamboyant house to office space, the architect restored the original exterior and added detailing to the faceless additions to create a unified appearance. Original colors were restored and the arcades and porticos reopened. A small pavilion was added to define an entrance facing the west parking lot.

The Pavilion, Phoenix (left); Edward B. Sawyer Jr., AIA, Phoenix. The twostory, speculative office building was designed and sited to create semiprivate courtyards and a central, landscaped atrium, black steel pedestrian bridges and balconies, and a central stairway that culminates in an observation platform. The gently sloping metal roof and the articulated base of gray masonry blocks were selected to blend with the adjacent Arizona Biltmore Hotel by Frank Lloyd Wright.

A.F. Payne

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#### **AIA Component Awards**



Texas Society of Architects. LTV Center, Dallas (above); Skidmore, Owings & Merrill, Houston. The 50-story complex is the first commercial development in the Dallas Arts District. To encourage pedestrian activity, the building relates at street level to the adjacent Museum of Fine Arts, and a two-story skylit pavilion with shops, restaurants, and exhibition space stands separate from the tower. The lobby is a three-story rotunda, clad in white marble and bronze-cased panels of rosewood, containing a sculpture by Auguste Rodin. The jury said that the building sets "a new standard of architectural style for highrises."

Church of the Good Shepherd, Tomball, Tex. (right); Wm. T. Cannady & Associates, Houston. A new sanctuary for a growing Episcopal congregation has the form of a Greek cross with formal entry through a gabled roof porch and a skylit narthex. Exposed wood and steel trusses resting on four steel columns support the roof structure. The sanctuary is finished in oak paneling and plaster. The jury praised what it called a feeling of restrained celebration: "This really looks like a church, even with the postmodern vocabulary."



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Houston Chapter. Sweetwater Sales Center, Houston (above); Ray Bailey Architects, Houston. In converting a 650square-foot office trailer to serve as a sales and information center for a residential development, the architect added a large arbor to shelter the front door and a bay window. The trailer was clad with a diagonal lattice to be used for plantings. New trees were planted to link the building with trees lining the streets.

Christian Life Center, Houston (left); Denny Ray Wines Associates, Houston. A 69,000-square-foot recreation activities center for a Baptist Church was sited to be screened from the two adjacent major freeways and to take advantage of an existing grove of oaks and pines. The major circulation path, which also provides access from the parking lot to the existing sanctuary, has a 22-foot-high glass wall overlooking the trees. The plan is organized around the two basketball courts, and space for bowling, table games, roller skating, racquetball, crafts, and meetings border the courts on three sides. Soft cove lights illuminate the basketball courts at night.

#### AIA Component Awards





Denver Chapter. Navarre Building, Museum of Western Art, Denver; C. W. Fentress & Associates and John M. Prosser, AIA, Denver. Built in 1880 as the Brinker Collegiate Institute, the building was converted in 1889 to the Richlieu Hotel, a gambling hall and bordello that remained open until 1904 when the city outlawed such activities. According to local folklore, a tunnel under Tremont Street linked the building to the famed Brown Palace Hotel so patrons could visit the brothel without being seen. The museum was designed to create a contemporary exhibition space within the historic building for a diverse collection of 19th- and 20th-century paintings and sculpture by Western artists. A core consisting of a glass-enclosed stairway and an elevator provides vertical circulation. Patrons ascend to the uppermost gallery floor, down the glass-enclosed stairway beneath the cupola space, and horizontally through each gallery floor to follow a chronological progress from earliest Western art on the third-floor gallery to more contemporary works on the first floor. An opening between the second and third levels establishes continuity and allows sculpture to be viewed laterally as well as from above. The first-floor temporary exhibition area has a vaulted ceiling with indirect lighting.

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Colorado West Chapter. Beaver Creek Clubhouse, Beaver Creek, Colo.; Morter Fisher Architects, Vail, Colo. The clubhouse for a year-round resort 10 miles west of Vail is the first component of a three-building complex that will include a condominium apartment building and a lodge. The resort's strict design guidelines and the harsh winter climate lead the architect to choose the exposed laminated beams, clusters of hewn round columns, and extensive stone. Forms, detailing, and materials will be repeated in future buildings. The pro shop is located directly off the main floor lobby, and the top floor dining room and bar have panoramic views of the valley and the golf course. Locker rooms and health club facilities are located on the lower level. Jurors praised the building's "strong relationship to the site . . . and its well-resolved massing, proportion, and detailing."



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Minnesota Society. Wick Residence, Cohasset, Minn. (above); Damberg, Scott, Peck & Booker, Virginia, Minn. Located on a wooded site along the Mississippi River in northern Minnesota, the house was designed for a well-known doll designer and her carpenter husband who had requested a "Scandinavian look." Two barn-like wings are connected by a tall foyer reminiscent of a Finnish clock tower, and large windows are detailed with heavy pine trim. Living spaces are grouped in the right wing, and the left wing is a studio.

Pine Point Experimental School, White Earth Chippewa Reservation, Minn. (right); Thomas Hodne Studio of the Hodne/Stageberg Partners, Minneapolis. The architect worked closely with members of the Indian tribe to combine cultural traditions and functional needs. Classrooms and other educational functions are grouped around a central area for open school and community meetings. The building's round form recalls the traditional "mandan earth lodge," and colorful concrete entrance banner repeats the circular symbolism. "The recognition of the cultural traditions not only in the design of the exterior but in the basic plan as well is commendable," said the jury.



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Grand Valley Chapter, Michigan. Steelcase Kentwood Energy Center, Kentwood, Mich. (above); Daverman Associates, Grand Rapids, Mich. The architect's master plan for a 450-acre industrial complex provided for a centrally located energy generating facility. The system's primary fuel is coal, but it can also be powered by oil or gas. The building has a steel frame and a curtain wall of insulated glass in aluminum frames to provide public display of the interior energy systems. Heat generating and trestle distributing systems were painted in contrasting colors for identification and visual enhancement. The chimney is made of a European precast concrete.

Wisconsin Society of Architects. Gaetano's On the Grand, Milwaukee (right); Joseph Valerio, AIA, Chicago. Located within a downtown shopping arcade developed by Rouse, the restaurant has walls of gray marble accented with green stone stripping and tile porcelain detailing in primary colors. A series of walls separates the triangular space into private dining areas, and a circulation axis was created to draw people past the bar into the restaurant.



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Detroit Chapter. U.S. Customs and Immigration Inspection Facility, Detroit (left); Smith, Hinchman & Grylls, Detroit. The program called for a 7,000-square-foot customs building, a 2,000-square-foot bus inspection facility, and automobile and truck inspection lanes. Traffic patterns dictated the central location of the customs building on the 1929 Ambassador Bridge on the Canadian border and the placement of the primary inspection booths north of the existing booths. The building's footprint of approximately 20x150 feet was also dictated by traffic constraints. Punched windows, a projected base, ziggurat entry portals, and limestone coloration were chosen to recall detailing of the original bridge. The canopies are fascia panels of gray porcelain enamel. Michigan Society of Architects. Kessler Family Doghouse, Detroit (below); William Kessler & Associates, Detroit. The jury presented a special award for the architect's design approach and presentation of a doghouse. The needs of the client were determined and design criteria established in the same way the architect approaches larger projects. The program and design solution read, "The user is a single, middle-aged female whose basic needs were programmed at a living space of nine square feet. No cooking and/or eating areas were required, and sanitary facilities were to be found in the immediate environs. Among the design goals were: year-round use; temperature and weather resistant; rodent resistant; mobility and variable design options (materials, colors, etc.). The solution to this most complex program is submitted here illustrating a 48-inch-long, 30-inch-diameter spun air duct. . . ."







**Central Illinois Chapter.** Tri-County Women Strength Shelter, Peoria, Ill. (above); LZT Associates, Peoria. The shelter provides temporary living and counseling facilities for women and children who are victims of domestic violence and sexual assault. Play areas are fenced, exterior doors are secured and monitored, and parking areas are well lighted. The 8,800square-foot facility has a residential scale, and all security features were designed to blend with the neighborhood.

Michigan Society of Architects. Municipal Building Renovation, Village of Grosse Point, Mich. (below); Robert C. Wakely Jr., AIA, Farmington Hills, Mich. The Albert Kahn-designed village hall of 1918 had undergone six remodelings that had removed the original 13-foot-high arched windows and almost all of the interior finishes. The building was stripped to the original wood frame and masonry walls, and the interiors were completely reconstructed. A 6,000-square-foot addition se to the north behind a framed glass screer has brick coursing and patterns based on the original Kahn design. Police, fire, and public spaces are located on the first floor and village administrative functions occupy the second.




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**Chicago Chapter.** Cathedral of St. James, Chicago (above); Holabird & Root, Chicago. Numerous alterations had left this 1875 cathedral with only the outline of its original elegance. The entire wood floor structure was replaced and the pews and woodwork were stripped and refinished. The original stencil work was uncovered and 24 stencil designs recreated in 25 colors. A new shingled roof with copper downspouts was added, stone and mortar joints were repaired, and the stained glass windows were restored.

Bannockburn Green Retail Center, Bannockburn, Ill. (right); Hammond Beeby & Babka, Chicago. For a new shopping center in a wooded section of a suburb north of Chicago, the architect attempted to create the atmosphere of an 18thcentury mill. Materials and details include Douglas fir structural members bolted with steel angles and gusset plates, red cedar siding and cedar shake roof, stonework, and stucco. The complex is organized around a two-story stone office/retail building overlooking a mill pond.





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# ARCHITECTURE

## The Ninth Annual Review Of New American Architecture

A few years ago we noted that this annual issue was in essence an attempt to assess the state of the art of architecture in America by presenting the best recent buildings we could find in conjunction with one another and thus in perspective.

It remains so. On the following pages is a set of buildings of the editors' choosing; then a collection of views of what is right and wrong about current architecture from some astute observers outside the profession; then the 1986 AIA honor awards, starting on page 172. In the front and back of the issue are some winners of AIA component awards, broadening the issue's reach in terms of type and location.

Based on the buildings on these pages, our own opinion is that the state of the art of architecture in America is a healthy one. There is a great deal of originality here, but also a great deal of solidity. There is a notable degree of responsiveness to program and context.

In terms of trends there is little hard-core postmodernism; there seems to be less around generally. Direct quotations of that movement's leaders' motifs and mannerisms are rare. At the same time there is ample evidence of postmodernism's influence, particularly in three areas: a new freedom to experiment, the renewed respectability of ornament, and a revived respect for architecture's past. *D.C.* 



## Complex of Solid Regional Character

H.E.B. headquarters, San Antonio; Hartman-Cox. By Allen Freeman



First fic





Recognizing potential in a derelict, overbuilt Army ammun tion depot required an impressive leap of imagination by Warren Cox, FAIA. The result is an even more impressiachievement. Blessed with a sophisticated client, Hartman-Cc with Chumney/Urrutia have made over San Antonio's old ars nal complex into a corporate office complex of extraordinary Southwestern character.

During the Civil War, the Confederate Army manufactured bullets and leather saddles here; during the First and Second world wars, the U.S. Army stockpiled munitions. Today the cor plex comprises six dissimilar buildings—two of them faithfull restored, two extensively altered and adapted, one renovated, and one entirely new—on 12 acres south of and adjacent to dow town. One of the pleasures of visiting the H.E. Butt Grocery Co. headquarters is trying to discern the old from the new.

Another is the transition from the street entrance (photo above to the interior courtyard. You enter the grounds on the west side—away from the San Antonio River that flows in a concre channel on the east—through gates protected by a little militar style guardhouse. Hard on your right is a long, mostly one-stor building; directly ahead and a little to the left is an echo of th



uardhouse, a drop-off pavilion attached to a covered arcade. logether, the pavilion and arcade define an entry court from which you penetrate the building on your right at its doubleleight end piece, an entrance marked by a portico with heroic out friendly looking eared pediments. Now you are in a 35x65bot entrance hall, distinguished by 20 oversized columns, that eems neither grand nor small.

From a central reception desk you turn 45 degrees and proeed through oversized glass doors into the courtyard. Roughly 00x225 feet, its four sides are enclosed by an arcade, and ehind it buildings of one to four stories, all in cream stucco.

revious spread, H.E.B. from across the river in photo © Peter aron/ESTO. Above, complex through the entrance gate. The orm of the guardhouse in left foreground is repeated farther own at the entry court. Straight ahead is the north building; he west building is to the right. Aerial photo at left is oriented ke the plan, with the San Antonio River at the bottom and azebo at the lower right. On the plan, north building is allew, west and river buildings are largely adapted, south buildig is renovated. Twin of the south building is expansion space. At opposite corners of the courtyard, as if protected and afforded places of honor, stand two simple, limestone buildings—a long, uninterrupted arsenal (with thick walls, only two little slits for windows on the ends, and a vaulted ceiling under a gable roof, again with eared pediments)—and a stable. The arsenal is to become a museum; the stable a conference facility.

The courtyard, punctuated with rectilinear gravel pathways and limestone watercourses, is serene. It is not a place that you enter for the first time and want to say "Wow!" The subtleties of the courtyard and the play of buildings that surround it are best absorbed slowly. Had these buildings been sited, designed, and built from scratch, for example, the walls of the arsenal and stable probably would have aligned perfectly with the enclosing buildings (which they do not), and the long, west elevation of the arsenal, which contains that building's only entrance, would not have fit so snugly against the courtyard's west building. And the ensemble would have been duller for being more neatly configured. As in urban streetscapes built over time, imperfections have created tensions borne of necessity. What might have been turned into a movie set seems instead solid, permanent.

Interiors are also untrendy. Interior finishes are mostly plain



© Peter Aaron/ESTO



On these pages, views of the courtyard. Top, the two-story segment of the west building, from which you first enter the courtyard. Above, the north building, stable, acequia, and gravel paths. Top right, the stable from the porch-like arcade of the river building north. Right, pre-restoration view of stable.

vanilla—no rich marbles, no exotic woods. In public spaces, the floors are gray-green slate, and panel reveals are gyp board trimmed in painted wood. There are many different colors in the executive suites of the all-new north building, for instance, but none is saturated. New windows have been detailed to match the simple, old metal frames retained in the recycled buildings.

Selling groceries is an unglamorous, low-margin operation in which most of a company's workers toil in stores removed from headquarters. This was a prime consideration for the officers of H.E.B. Charles C. Butt, president and chairman of the family-owned chain, says that the last thing he wanted was an ivory tower for 500 of his 21,000 employees. (All 21,000 are called "partners... to reflect their participation in the management and growth of the company," according to a handout.) Opposed to corporate or personal ostentation, Butt told Cox that he wanted







he headquarters to be comfortable like a sturdy San Antonio ather belt rather than flashy like a Houston alligator belt. Butt had selected Cox's Washington, D.C., firm from a list rawn up by Jonathan Barnett, FAIA, of New York City. Barnett, ho rarely consults for corporations, made an exception for .E.B. "because they wanted to do something of high quality," e says. Of his final selection, Butt says simply, "I wanted an dividual—not just a firm—who could lead us through the procss, beginning with site selection." (Chumney/Urrutia later sociated with Hartman-Cox and, under a separate contract, esigned some of the office interiors. James E. Keeter was landcape architect.)

Before selecting the arsenal, the first choice of Cox, H.E.B. ad three additional sites under option, all green fields or wooded, in the developing north end of town. Butt's initial reaction to be arsenal was that it was too much work. It seemed a hopess hodgepodge of nine crammed-together buildings, with only be arsenal and stable having any architectural interest and the able particularly ramshackled. The former dates from the Civil 'ar; the latter from Reconstruction days. The rest were roune, built during the First and Second world wars and, though structurally sound, in general disrepair. Cox's proposal of selective removal and rebuilding around a courtyard was the clincher for Butt, who already appreciated the river setting, the practicality and symbolism of a central San Antonio site accessible to "partners" from all parts of town, and the potential for public good will generated by restoration of a local landmark. (H.E.B. conducts tours of the complex.)

Reportedly, Butt's contribution to the design was his tendency toward simplification. Flagpoles substituted for a tower at the entry court ("Charles said he didn't want a Blenheim," remarks Cox), and a swath of English grass for a courtyard pool. And simplicity is carried through in the choice of materials—common but durable, in the spirit of the stable and arsenal—and in execution of details. The details reference new to old, and they are integrated so well that you are hard pressed to know which are old and which are new.

The seamless look of H.E.B. hides five years of hard work. When I visited the complex in January, some droll "partner" had floated a rubber duck in one of the watercourses. It seemed a good analogy for H.E.B. Stay calm on the surface while you paddle like hell.

Below, the hypostyle entrance hall, with centered reception desk, in view toward the courtyard. Column capitals in this new room were borrowed and adapted from a cornice detail of the 1917 south building, seen through sapling branches at left edge of photo at right. Bottom, lobby of all-new north building.







Photographs © Peter Aaron/ESTO



### 'A Brotherhood of Geometric Parts'

Dining hall, Colgate University; Herbert S. Newman Assoc. By Michael J. Crosbie





Going away to college, being far from home for the first time, can be a lonesome experience. The location of Colgate University in Hamilton, N.Y., is beautiful but isolated. Set within the rural hills and dales of upstate New York, one might long for a welcoming environment like home. Colgate's new dining hall, the work of Herbert S. Newman Associates of New Haven, provides just the right domestic setting not only for nourishment, but for socializing with one's peers under gracious, natural light that is all the more coveted in this region of heavy cloud cover and gloomy winter days.

The dining hall is sited in the southwestern precinct of a campus that is distinguished by steep terrain. The college buildings are built on a series of shelves rising from north to south above a lake. With a backdrop of trees and the edge of the campus beyond, the dining hall establishes a refuge near the woods and serves as the terminus of a series of paths following the campus's terraces from east to west.

Approaching the building from the east, one sees the Ohio sandstone-framed portal held out from the gable end, with a hint of the white structure within. The older campus buildings are sharply defined boxes with taut skins made of an irregular green stone native to the area. In contrast, the dining hall is more a conglomeration of shapes, a brotherhood of geometric parts that at first glance might appear to be a collection of smaller structures. These appendages work well to direct one around the building to the entrance, especially from the approach to the northeast, where a gently curving, corbelled bay directs your eye to the next round element to the east, which has a tighter radius and sweeps one up and around a crescent staircase to the front door.

To the west of the corbelled bay, the building becomes boxy and stiff, seeming to grow as the grade descends, and holds up a flat palm as if to discourage passage around the corner to the

Left, dining hall from the northeast as its geometric forms advance up the site, directing diners to the sandstone-frame portal.





loading dock and service spaces. At the southeast corner, just beyond the entrance, another square element pops out to contain the flow of students into the building and stop the eye from exploring the dining hall's backside, which is uneventful and loaded down with a lot of necessary but ugly mechanical equipment, much of it, unfortunately, visible from the eastern approach.

Again in contrast to the neighboring buildings, the dining hall appears immovable, rooted to the site, its smooth, brick walls rising from a solid base of square-cut ashlar stone, as if from the shell of a ruin. The stone walls have a depth, owing not only to their sandstone canting but also to the pink mortar that ties in with the color of the brick. Except for one arched and one round window, the fenestration, like the stonework, is square-cut in a variety of sizes and is subdued with dark brown sash and frame.

Inside, through a short, vaulted airlock, one is greeted by a great lantern of a room, long and tall like the mind's image of an Elizabethan dining hall, stretching the length of the building. Natural light pours in through the south-facing windows at the roof's peak and a row of square windows, framed in gyp board to look like masonry openings. The windows are mirrored across the hall in unglazed openings that deliver additional sunlight into the dining spaces. The room terminates in a huge, brick fireplace whose corbelled opening and sandstone insert recall the entrance.

The inside of the dining hall comes as a surprise—a straight, ordered, rectilinear space that belies the collection of geometric shapes outside. Where is the rest of the building? Meal ticket in hand, we pass through a garden gate, pick up a tray, and

Above, approach to the dining hall from the east, with flankin older campus building and a hint of the luminous main hall. Roof of main hall is slate. Right, north view, with corbelled bay recessed into the building's ashlar base. Low, curved brick walls define the dining hall's domain and contain staircase.

walk to the left into the "scramble," a low-ceilinged area full o food service hardware and help, all the object of scrambling undergraduates who dart about assembling their meals. Unlike traditional cafeterias with lines, the scramble allows one to run immediately to the sandwich board, or hot food, or dessert, on beverages without having to file by each one. To the first-time user it's a bewildering task to steer around this dining dodge 'en but for those who eat here three times a day, the scramble car be mastered after a few meals.

Out of the scramble and back into the hall, for the first time it becomes clear that this large room is only marginally for sea ing, unlike a traditional dining hall. According to the architec the hall is to suggest a street, tree-lined and lit with copper fix tures and mercury vapor lamps, with seating along its edge in the style of a sidewalk cafe. The analogy seems a bit forced, considering that the majority of the circulation is across the hall's long axis from the scramble to seating. It appears more like a tile and slate-paved garden path—domestic in scale, green and warm with its oak furnishings (even tray dispensers, hot tables, and other service elements are faced in oak). Seating along its edges takes the form of comfortable oak booths with hefty rails that one steps up into, elevated from the pedestriar traffic.

Off the main hall, narrower paths lead to the secret spaces









behind the bulbous exterior. Each path is ramped and skylit, allowing one to survey the collection of dining areas available. To the northwest is a high-ceilinged square of space, subdivided into smaller squares defined by low walls. Due north is a shallow curve of space with a fan of windows framing views across the campus and to the hills beyond. And toward the northeast is a round space, divided into a half circle on one level and a quarter circle on another. Connecting all three spaces is a promenade with low brick walls, lined with tables and chairs, accessible from the three paths that take one into larger dining areas. The dining spaces range from intimate (with one table) to communal, providing a variety of settings suitable to whatever the diner's mood.

All of these dining spaces terrace down from the main hall to allow views through the building over each successive tier. It was the intent of the architect that the tier system would also allow diners to check each other out without being too obvious about it. The dining hall is, after all, a social center where gossip is swapped, tests studied for, and strategy planned for weekend dates.

There are two other areas for dining off the beaten path that might be discovered a week, a month, or a year after first visit-

Right, main hall from entry, distinguished by trees, light, oak furnishings, and fireplace at east end. Below, main hall from the east with view toward main entrance over oak booths.





Photographs © Nick Wheeler/Wheeler Photographics 1985







Above and left, varieties of seating accessible by ramps from main hall. Tai columnar elements in top photo are retu air ducts drawing warm air from skylit roof through unglazed windows in main hall. Right, view from main hall down skylit ramp, with view to the north.

ing the dining hall. Behind the fireplace is a comfortable nook with dark maroon felt wall covering, which makes it feel like a faculty club. In fact its furnishings are dark wood, and the room is often used by faculty or clubs. To the southwest is another dining area with walls washed with fluorescent lights that suggest daylight. The room's high point is a round dining podium naturally lit from above that offers views through the woods. If one really wants to be away from the action, this is the place to lounge.

Lounging, in fact, appears to be the dining hall's greatest amenity. Reportedly the students spend more time here than in the average college dining facility, and certainly the domestic quality of the place encourages students to linger in this home away from home. As in any homelike setting, the inhabitants are naturally curious about strangers. "A bunch of us were wondering what you were doing here," one student asked while I scribbled in my notebook. After my explanation she spoke for her friends: "We love to come here because it's a friendly place to eat and it feels like home. This dining hall was one of the reasons I decided to come to Colgate."



### 'Indeterminate But Handsome'

Seeley G. Mudd Chemistry Building, Vassar College; Perry, Dean, Rogers. By M.J.C.









he Seeley G. Mudd Chemistry Building at Vassar College in oughkeepsie, N.Y., responds on a variety of levels to its conext, but it does so without sacrificing its own unique and powrful identity. Designed by Perry, Dean, Rogers & Partners of loston, it assumes a posture on the campus that is respectful ut not timid.

The 42,000-square-foot building is comprised mostly of laboatory spaces for undergraduate chemistry instruction, with suport spaces that include offices, classrooms, and lounges. It is ited just southeast of Vassar's imposing Main Hall and next to ne facility whose function it replaces, the Sanders Chemistry building of 1909. The old chemistry building and the Sanders 'hysics Building of 1926 sit at right angles to each other, formng two sides of a quadrangle. Diagonally across this quad is lew England Hall of 1901, which, although small, defines a westrn edge.

The new Mudd building's program dictated energy efficiency, o a clear southern exposure was required. Sited northwest of ne old chemistry building, Mudd neatly completes the quad, *i*th its south wall facing the open space. Charles F. Rogers, rincipal in charge of the design, explains that after construcAbove and across page, Mudd building's all glass solar wall as it faces quad that it completes. Twilight view reveals square windows behind solar wall that align with wall's patterned design.

tion began on the new building a photograph of the site was discovered in Vassar's archives that showed the college's first science building, constructed in 1881, sitting precisely where Mudd is today. Although it recalls none of the Victorian/ Romanesque architecture of the original building (which was demolished in the 1930s) Mudd re-establishes a presence that the architects of the Sanders buildings no doubt responded to in creating the quad in the first place. So sited in the company of symmetrical buildings, Mudd in kind is symmetrical, the same width as the physics building, and placed on axis with it.

Mudd's exterior is indeterminate but handsome at the same time. Walls of solid brick seem pushed apart (or glued together?) by a rectilinear web of translucent glass block. On the north, the block is a veiled housing for the wealth of mechanical equipment necessary for the labs, culminating in a central tower crowned with vent pipes. Mudd's brick and limestone trimmed walls establish the cornice line of its neighbors and are scored



to recall the decorative brickwork of the older structures. Above Mudd's cornice line the building extends another story and a half, devoted entirely to mechanical equipment space, whose sheet-metal enclosure is rendered in verdigris green, alluding to the physics building's copper roof (the old chemistry building's roof, like Mudd's, is green painted sheet metal).

Sheltered by brick to the north, east, and west, Mudd demonstrates its energy features as it faces south with a long, solar wall. Patterned to recall the bay and panel composition of the Sanders buildings, the solar wall is all glass and creates a twofoot slot of air space against the building's brown, concrete block wall. Open at the bottom, air rises through the cavity and is heated. Fans at the cornice line pump the heated air into the mechanical system, which distributes it through the building. This surplus air is essential in the efficient operation of the 46 exhaust hoods in the labs, under which students work with chemicals. At this time, the hoods do not operate as effectively as they should, Rogers explains, because of insufficient dampening, requiring all the hoods to exhaust when only one is being used. Modifications to the system should solve this problem. The building also has active solar collectors on the roof.

As a link between the science quad and the larger collection of public spaces north, the Mudd building's "front" is necessarily ambiguous. Buildings on quads usually front on quads, as the older Sanders buildings do, and Mudd's south side is distinguished by a glass-block entrance that appears to grow out and down toward the quad like a crystal. But that's not Mudd's front. The north side is the main entrance to the building, and it is much more symmetrical and formal than the south side. You pass through a heavy, brick portal, which sandwiches a glass-

#### Above, north side, dominated by brick portal and glass-block exhaust stack tower. Across page left, detail of north entry anc plaque; right, opposite side of north entry from lobby.

block interstice, and on into a tall lobby. The lobby is midleve between the partially sunken first floor and the second floor. It's vaguely shrinelike too, displaying a portrait of the building': donor, which recalls the elaborate concrete plaque outside. Thes talismans were program requirements, and the architect has dis played them with relish.

Entering the building on axis, one then moves west to a stain case and up. The second floor, like the first, is devoted to lab spaces, dense with pipes, tubes, and other mechanical hardware and not entirely welcoming to the visitor due to its no-nonsense quality. It's proper for these labs to be uninviting to the outsider, maybe a little bit intimidating, because this is where mos of the instruction and learning takes place, and a visitor shoulfeel no more comfortable waltzing through than into a classroom. A row of work tables is strategically placed across the axis, in effect barring casual passage through the labs.

The vaulted and light-filled third floor, in contrast, is very hos pitable, made so by the immediate visual connection through public lounge and a large, square window to the physics building across the quad, whose limestone plaque is perfectly framed It beckons you on. To the east are two classrooms that are pinne together with a glance of the eye through a series of superimposed windows (shades can be drawn for privacy), offices, and a wavy, glass-block-walled faculty lounge. To the west are lavatories, a seminar room, and a library. Having reached the central lounge, you are midway through your journey, and again mov















Above, axonometric of processional path through building; left third floor lounge midway through procession; below, typical lab spaces on lower levels; right, shrine-like north lobby.

off the axis, this time to the east, into a glass-block enclosed staircase that winds down like a fly in a Ball jar, and are finally deposited into the quad, on axis once again with the Sanders Physics Building.

This sequence of entering through the north portal, passing through the building, and then arriving at the open quad replicates in miniature the experience of entering Vassar's campus through a main gate (which is actually a building), passing through it, and then arriving in a grand, open space on axis with Main Hall. Apparently the students have caught on to this shortcut through Mudd, Rogers reports, because they regularly go through it rather than around it.

The only problem with the Mudd procession is that upon close inspection one discovers that the building is actually off axis with the physics building by about three feet to the east. It's such a small error, of course, that you're not even aware of it while moving through the building, and it probably wouldn't make much difference to anyone but an architect. But in a quirky way it's appropriate, being detectable only by viewing the building from across the quad, because that's the view of Mudd from the quarters of the college's resident physicists, who know that even the seemingly ordered and rational universe has its own unsettling indeterminacy.

Mudd's interior is all nuts and bolts, taking its cue from the building's most important spaces, the labs, which occupy the center and are ringed by offices and service spaces. The two levels of labs, which were planned in collaboration with the chemistry faculty, appear to be models of efficiency, with all structure and mechanical equipment left exposed. Each floor of labs is divided into three areas, defined by movable cabinets, shelves, and exhaust hoods. The work tables are rendered in Vassar's own collegiate color of rose, and can be disconnected from the overhead mechanical equipment and moved around. Fluorescen task lighting, which can also be relocated, cuts energy consumption.

Spaces outside the labs are likewise bare-bones. In the north lobby the steel frame is mauve with staircase and railings (sport ing the same ornamental cross-bracing as found in New England Hall) in green. In the lounges and classrooms partitions are always exposed as infill between the steel members. As Rogers points out, this kind of interior demands that the building trades pay close attention to the quality of their work, which is usually concealed. Except for some instances of shoddy drywall work and sloppy painting, the trades shine through. Revealing the building in this way, such as how the brick curtain wall ties into the steel frame, is pedagogically akin to the work conducted in the labs: an investigation into the nature and structure of things. As such, the Mudd building wouldn't make a bad architecture school either.  $\Box$ 



### Texture, Color Animate A Set of 'Shoe Boxes'

Sports facility, University of California, Berkeley; ELS/Elbasani & Logan. By M. J. C.



The University of California at Berkeley's new recreational sports facility is a temple for toning. The result of the sheer demand of more college students who want to pump iron as much as they want to pass tests, Berkeley's recreational sports building is on the order of a huge health club, separate from intramural sports and open to the entire university community.

The local firm of ELS/Elbasani & Logan was given a tight site for this building, which includes handball/racquetball courts, exercise rooms, three gymnasiums accommodating seven basketball courts, administration offices, and parking for 230 cars (it also covers and makes accessible eight pre-existing subterranean handball courts). The site is hemmed in on all sides by boundaries that allowed no encroachment: to the north, a baseball field; to the west, a concrete-walled stadium from the 1930s; to the south, Bancroft Way, which defines the southern border of the campus; and to the east, Harmon Gymnasium (built in 1931) and a pool. The architect parceled the program into three distinct building blocks, set on a flat podium that hovers above the sidewalk and street as they slope west, with parking below grade. The largest of these three blocks (which contains two gymnasiums, four exercise rooms, and nine handball courts) is



Above, sports center as it faces Bancroft Way, the campus's south ern border; far right, entrance on Bancroft with administration spaces above; right, detail of scored and colorful south wall.

four stories tall. This block extends to the street edge and take center stage, bookended by the smallest block to the east (which is three stories tall and contains the facility's main entrance and offices), and to the west by an intermediate-sized block (also three stories and containing a field house gymnasium).

The program required that the interior of the two larger masses have as little natural light as possible, so fenestration could not be used to break down their large scale and mitigate their presence on Bancroft Way, with its small residential and commercial buildings across the street. A university stipulation that the facility be naturally ventilated and cooled without airconditioning, however, required a significant square-footage of louvered vents, which the architect broke down into a variety of square modules that were then manipulated to decorate the "shoe boxes," as Donn Logan, FAIA, calls the blocks. The block farthest west, containing the field house gym, is perforated on its north and south sides with large louvers, blank panels, and







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exit doors, with small louvers grouped at the center. The larger block is punctured by a row of louvers at its midsection.

The building's appropriately scaled entrance through the smallest of the three blocks faces a deep, south plaza, distinguished by a path of red concrete that rolls out to Bancroft Way like a carpet. The entrance lobby doesn't live up to the red carpet, though, because here the facility's security-conscious management has placed a bingo table, folding chair, and stanchions for the student guard who checks I.D.s. But once past this makeshift Checkpoint Charlie, things only get better. Just beyond the entrance, part of the old Harmon gym's exterior has become an interior wall, proudly displayed like an archeological fragment that pins the old and new buildings together. The wall fragment now serves as a portal into Harmon, and has been painted beige to match the new facility's public space.

To the west of Harmon's wall, a large and (for a recreational center) sumptuous, skylit atrium extends the length and height of the center block, revealing at a glance almost the entire building interior and knitting together the individual blocks. On the atrium's north wall are glass-enclosed handball courts with windows above, the entire plane recalling the exterior arcade. At the west end of the 250-foot-long atrium is the entrance to the field house gym. This west wall of the atrium is a composition of bands in buff and terra cotta. In fact it's more like an exterior wall that passes through the atrium and back out again, distinguishing the field house gym as a separate block. The atrium's south wall is almost hidden behind a grand, double staircase accessible from either end of the space. At ground level, one walks beneath the staircase to enter the four exercise rooms, devoted to weight-lifting, martial arts, combative sports, and dance. All four are decorated in soothing colors-mechanical equipment and structure in pastels-and illuminated with nonglare, mercury vapor uplights. Padded wainscoting in each room recalls the building's familiar banded motif.

About a third of the dance studio's area was recently partitioned off by the university to accommodate a campus-run sports equipment store that now opens onto the building's exterior south arcade. This renovation was not done by ELS (and looks it), but it does activate the arcade, something Logan had wanted early in the design but which was discouraged by the recreational sports department.

The staircase's first landing brings one to the mezzanine level, allowing views down into the exercise rooms and access to the curved-front balcony overlooking the atrium. The mezzanine extends from the administration offices into the field house gym as a small balcony and stair; it was to connect with a running

Left, giant stair in atrium leading to double gymnasia, with access portals to four exercise rooms on ground level; below, atrium from east, with glass-enclosed handball courts along north wall.



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©Mark Citret







Above left, view into field house gymnasium, whose entrance on ground level is framed by atrium's west wall, above right. Across page, gate-like exhaust ducts from underground parking punctuate stair from Bancroft Way to west side plaza.

track that would circle the gym at midsection, but the track was deleted. At the stair's top are twin gyms in which the steel structure and diagonal bracing are revealed. ELS also redesigned circulation through Harmon, its new swimming pool locker rooms, and seismically upgraded the 55-year-old building, all with the same sensitive touch evident throughout the new facility, no doubt responsible for the center's campuswide popularity with the students.

The most sweeping and memorable use of color and decoration is on the sports facility's exterior. As it extends to the street edge, the largest block meets the podium with a concrete arcade, its back wall banded with subtle shades of peach and punctured with high, square windows, shrouded in the shadow of the arcade. Above the arcade the block becomes stucco, painted bluish green and grays. A darker gray band marks the floor level of the gyms and cascades down the block's east and west sides, contained by zigzagging fire stairs. The top band of bluish green makes the block dissolve into the sky, while a lighter gray articulates the building's steel frame. On the south elevation the bluish green band is diagonally scored to suggest the steel bracing behind the walls (curiously, the same diagonal bracing in the east and west walls is not expressed outside).

The field house gym is treated differently, rendered in a single shade of peach, banded with thin, aluminum channels in terra-cotta, which do a similar diagonal dance on the south facade, only without the precedent of steel structure behind. This box has a terra-cotta-colored lid, meant to suggest Berkeley's tileroofed campus buildings (but, as university officials nervously cautioned, not so red as to suggest Stanford!).

All of this massing, banding, scoring, and color effectively reduces the perceived size of the facility and animates it, while simultaneously drawing upon a palette of decoration that is local in its associations.  $\Box$ 





## Adapting a Gritty Hillside School

ı Wilkes-Barre, Pa.; Bohlin Powell Larkin Cywinski. By Andrea Oppenheimer Dean



nfashionable and refreshingly coarse textured, the gritty cits of the Northeast grew up at the turn of the century, flourhing with the hegemony of steel and chemicals, railroads and aterpower, textiles and coal. Many of the their old mills and ctories, even some of their downtowns, fell derilect, with the emise of the industries that sustained them, though some old uildings have recently been restored. Among them is the George 7. Guthrie School of 1914-15 on a fringe of Wilkes-Barre, Pa.

The former school, which was abandoned in 1970, occupies hilltop site embracing the once important coal town with a rotective gesture as did castles of old, which, from afar, its rear evation resembles. It is a tough-looking old brick bastion with tower to each side, one for stairs, the other an air shaft. The reet facade, on the other hand, which is the one that was meant be seen up close, is reminiscent of such buildings as Macktosh's Glasgow School. With ample glazing and a continuous ornice under a hipped roof, it has an elegantly functional look. or 1914 the building was innovative because of its steel strucre, abundant natural light, thermal comfort, and efficient use 'energy.

Its present use is an unexpected one. In part as a civic gesre, Intermetro Industries purchased this dilapidated school a residential neighborhood and hired Bohlin Powell Larkin ywinski of Wilkes-Barre, Pittsburgh, and Philadelphia to conrt it into corporate headquarters.

Since one requirement was to provide off-street parking, the chitects turned the building front to back, creating a new axis, id converted what was once the playground into a parking lot. he former street elevation the architects simply restored, pairing brick, terra-cotta, and stone.

The new entry facade, (formerly the rear of the building), oks at close range like a found object from some arcane expresonistic time. Partner Peter Bohlin, FAIA, recalls, "We were tickd to have such a nice, strange thing with interesting massing



Above, the tough, rough-looking former rear elevation, now the front, with new entry, photos left and top.

to deal with." The architects here added site work (lights, bollards, benches) with an industrial look "to fit the building's toughness," says Bohlin. As a new entry they created a freestanding masonry and steel trellis structure reaching almost to the roof so that it could be seen from a distance. And, because this elevation faces southeast, they also mounted over the first three floors motorized awnings that automatically respond to weather changes.

Inside the building and out, the architects tried, at one and the same time, to clearly distinguish the new from the old while creating echoes of the old in the new. Bohlin, therefore, worked largely within a "tough" esthetic look, which works well outside but less successfully indoors. The new vestibule, for instance, a place of passage between outside and in, is paneled in mahog-





This page: Above, view of side and former front elevation (no the rear), also shown at left. Right: top, looking from lobby to peak-roofed vestibule paneled in mahogany and stainless steel, center, lobby looking toward reception desk; bottom, a top floor conference room with interior overhead skylight.

any and stainless steel—the company produces steel productsand resembles a bank vault, though some employees apparent call it the mausoleum. Its relationship to the new lobby as wel as the old portions of the building is more iconographic and intellectual than visual. As Bohlin admits, the new public portions of the building, especially the lobby with its heavy band ing, hard edges, giant classical details, and peaked shapes are in his words, "more predictable and mannered" than his usua work. Missing is the sure sense of nuance, subtlety, and gentle humor of his best work, as seen at the Girl Scout Center in Miquon, Pa., (May '84, page 168) and the house for Norman Gaffney (Mid-May '81, page 175).

Very successful, on the other hand, is the manner in which the designers have capitalized on the inherent characteristics of the building. They removed partitions between classrooms to create a mix of open and private offices, glazed the origina stair to bathe it in natural light, replaced window sash throug out, incorporated modern double glazing, rebuilt and reglaze skylights, and used the building's original high ceilings, natur light, and views to create spaces that are bright and airy even in bleak weather. The abundant daylight, of course, also reduc energy consumption.

The building's top floor is also its high point architecturally Used for executive offices, it consists of attic space beneath a hipped roof separated into offices that are illuminated by slantin overhead skylights and resemble little houses. These spaces a marked by soft natural light, a comfortable scale, fine detailin and a balance between architectural elements that convey a ser of energy and activity on the one hand, of quiet and calm on the other.









Below, small seating arrangement between two fourth-floor offices, each of which receives natural light from two tiers of skylights. Right, top floor elevator lobby with view toward glazed stair.  $\Box$ 















## Stately Ensemble Unified by a Courtyard

Bulfinch Square, Cambridge, Mass.; Graham Gund, FAIA. By Robert Campbell



Bulfinch Square is a miracle the accomplishment of which reuired so many lucky accidents that, in retrospect, the whole hing seems as improbable as a nuclear freeze. Yet it happened.

It seems crazy, as you look at this fine cluster of buildings oday, that they were supposed to be demolished. But as the Cambridge Historical Commission wrote in its 1965 guide to East Cambridge: "Dating back as far as 1814, these solid, red-brick, 9th century structures are soon to be replaced by a skyscraperpriented complex of modern buildings and landscaped plazas."

The new skyscraper – a county courthouse – did get built, right cross the street from what is now Bulfinch Square. You can ee this grim concrete tower, carefully masked in shadow by the hotographer, in the background of the photo above. Luckly for the future Bulfinch Square, the skyscraper construction vas plagued by a major scandal. Because of the brouhaha, a eform slate of county commissioners came into office in 1974. They canceled the rest of the proposed redevelopment. Then, n 1976, the Preservation Tax Act was passed in Washington. In 977, Cambridge created a Multicultural Arts Center and this new organization began looking for a home. In 1979, money became available from a federal Urban Development Action Grant. (By then, one of those reform county commissioners, 'aul Tsongas, was a U.S. senator, and the congressman from Cambridge, Tip O'Neill, was speaker of the House.)

Had any link failed in this Rube-Goldberg sequence of events, Julfinch Square would almost surely not exist today. It simply vasn't "economically viable," as we say in our odd contemporary ngo. It still isn't, for that matter, and may not be for a few more Facing page, the 1814 Bulfinch Building from inside the block; above, the opposite side facing Third Street in East Cambridge.

years. What Bulfinch Square possesses is a longer-term kind of value that will, sooner or later, translate into profit.

Bulfinch Square is a group of former county government buildings—courtrooms, mostly—the oldest of which (the one with the cupola) was originally designed by Charles Bulfinch in 1814. It has been fully renovated, partly as commercial restaurant and office space and partly as a home for the Cambridge Multicultural Arts Center. The architect and developer is Graham Gund, FAIA.

Viewed as either architecture or urban design, Bulfinch Square is one of the best American historic renovations of recent years. Working with the delicacy of a surgeon, Gund amputated a clutter of infill buildings that had concealed the architectural form of the complex. He sutured the resulting wounds in the old buildings with new construction that appears, literally, to be equal in quality to the original work—a remarkable achievement in our age of slapdash crafts. Documents were searched, of course, for every hint of evidence of the buildings' original appearance. A new porch, for instance, is copied from an original now known only from an 1850 lithograph. Where such evidence was lacking, Gund chose not to imitate historic styles, but instead to invent with gusto and confidence in the spirit of the originals.

The result is an informal grouping of compatible buildings from different eras pulled into unity by a central courtyard. The ceremonial facade of the oldest of the buildings, with its cupola and porch, fronts onto the courtyard, giving this space the sense







of being a center. The courtyard also reaches out to organize Bulfinch Square's neighbors by creating a new north-south axis. The axis runs from the imposing portico of the 1896 Registry of Deeds, which stands across Otis Street to the north, through the courtyard and on to the aforementioned Middlesex Courthouse tower on the south.

The axis makes Bulfinch Square the center of something larger than itself and begins to make urbanistic sense out of the whole three-block area. At this writing, unfortunately, the effect is incomplete. The city is supposed to close off Otis Street between Bulfinch Square and the Registry, making it into a linear park (to be designed by Carol Johnson) that will connect up with the major new Lechmere Canal Park a block away (also being done by Johnson). On Bulfinch Square's south side, bureaucrats have rejected Gund's intelligent proposal to bridge his axis across Thorndike Street into the second floor of the courthouse tower—even though the tower was designed to have its main entrance at this elevation, and even though the doors are already in place, now hanging helplessly a full story above the sidewalk. Gund responded to this rebuff by designing a gazebo at what would have been his bridgehead. It is now under construction.

Even in its present state, however, the courtyard is a lively new piece of public realm added to the city. It is evocative of its past without being obsessed by history, for its strongest connections are those that reach out to the contemporary world around it and to the future.

In the interiors, the architectural restoration work is often stunning. Abandoned for a decade, with windows broken, with floor and ceilings devastated by water damage, with furnishings and ornament stripped by vandals or even sold at public auction, the interiors were truly a wreck by the time Gund began work. You'd never guess it to see them today. Original plaster moldings, carved woodwork, and paint colors were meticulously researched and restored. The outside of the cupola dome was regilded, and inside it the old clock mechanism was renovated and the 1,000-bell carillon electrified. Everywhere, details and surfaces glow with renewed life. A chronic problem in such restorations is a problem here as well: The decision to restore the ornamental plaster walls and ceilings left little space for necessary mechanical systems, with the consequence that one of Bulfinch Square's drawbacks is the sometimes obtrusive sight



pposite, the north-south axis oday (top photo) and 'before' a bird's-eye view. Right, the ouble-height former courtoom with cast iron balcony ailings, before and after.



Above and right, office space on renovated sec ond floor wing, with graceful arched window. Left, cantilevered stairs bisect arched window.

and sound of local units in the walls. But as the photos show, the price was worth paying for the remarkable beauty of many of the interior rooms, most of which will become elegant lawyers' offices.

The new Multicultural Arts Center, which is subsidized by the Cambridge Arts Council (with the National Endowment for the Arts and others), is an organization that does not promote its own art programs but instead provides space and facilities for use by Cambridge's many existing arts groups. It occupies an 1887 wing of Bulfinch Square and includes studios, galleries, offices, and a theater. The theater is in the biggest and most impressive space in all Bulfinch Square, a double-height former courtroom. Here, however—for once—the use is incompatible with the space. Ornate cast-iron balcony railings have become merely the trellis for a shrubbery of stage lights, and the floor and walls are often hidden by makeshift platforms and black back-curtains.

Economically, things have been cool at Bulfinch Square. Space has been slow to rent. There is still, at this writing, no tenant for a proposed restaurant that will some day spill out in terraces onto the courtyard. Lawyers, who it was hoped would wish to be near the new courthouse, have not flocked to Bulfinch Square. East Cambridge is still in a state of transition. Its manufacturing uses have disappeared, and its elaborate waterfront redevelopment along the Lechmere Canal and Charles River basin is still largely a construction site. Parking, too, remains for the time being a problem. But in any such situation, someone must have the courage to take the first step. It's to the credit of architectdeveloper Gund that he has been willing and able to renovate Bulfinch Square at a level of quality as high as that which he would have aspired to if he had known that high-rent tenants were clamoring for entry. Luckily for Cambridge, he is patient enough to wait for the market.

Charles Bulfinch, incidentally, designed almost nothing that remains of Bulfinch Square. Another architect, Ammi Young, redid everything in 1848, and many further changes were made after that. But stars are stars: Everyone has at least heard of Bulfinch and nobody has heard of Young, although he was a noteworthy architect who designed Boston's Custom House. S Bulfinch Square it is. Just as Mark Twain tends to be credited with everything funny said in the 19th century, and Olmsted with every good piece of landscape, so Bulfinch's oeuvre in Boston tends to grow over time. We forget, too, how easy architecture must once have seemed. Bulfinch's plans and elevations (whic is all that he did) for his courthouse are mere cartoons by today standards. He received only \$100 for the job, less than one-hal of 1 percent of the construction cost-not much of a windfall. but still better than Bulfinch did in an earlier venture in Bostor when he tried to double (like Graham Gund) as developer. That time, Bulfinch went into bankruptcy-and into jail.



### Rich Surfaces on a Sophisticated Barn

Agricultural Arena, Penn State University; Dagit•Saylor. By A.O.D.

Though it is the least complicated of buildings and uses the most ordinary of building materials, the Agricultural Arena at Pennsylvania State University by Dagit-Saylor of Philadelphia embodies the best of mid-1980s architecture. It retains the functionalism, lack of fussiness, and simplicity of modern architecture while incorporating characteristics that have recently enriched and enlivened its appearance while liberating us from its strictures, namely, a more artful and imaginative use of materials and shapes, a heightened regard for a building's surroundings and their history, and the "decriminalization" of ornament.

Dagit-Saylor chose an oversized barn shape for the arena in part because it is in Pennsylvania Dutch country where the landscape is dotted with farms. Also, the building needed to be tall, as are barns, because, as Charles Dagit says, "When you assemble 25 cattle in a space and put people in it, you need good ventilation." The building is used as a permanent exhibition and demonstration hall by agricultural industries and associations, and for meetings, workshops, and celebrations by Penn State's agriculture and other departments.

Since the site is next to the university's football stadium, which attracts large crowds from all over the state, the architects saw the arena as a second gateway to Penn State and wanted it to be prominent from the entrance and photogenic from the Goodyear blimp that would hover over it during football games and bring its image into American homes across the land.

The architects arrived at their colorfully patterned image while













Left, barn-like space is spanned by overhead monitor admittir indirect natural light. Above, view from mezzanine balcony. Righ building's patterned motif was formed by laying concrete bloc diagonally on base to create diamonds and squares, and, abov it, turning siding horizontally to contrast with roof.

searching for a way to make the base of the building attractive yet tough enough to withstand punishment from cattle and horse. At the same time they were researching old Pennsylvania Duto barns adorned with hex signs and other markings. To create a batter-proof yet attractive building base, they laid concrete bloc on the diagonal to form a pattern of diamonds and slightly raise squares, and raised into shallow relief the top layer of blocks beneath a double strip of belt coursing.

Above it, they used metal siding, first turned on the horizon tal to form a broad blue band framed in peach-colored metal molding. Then, giving the appearance of dentil molding is a str of white corrugated steel under a rose-colored gutter topped l a wide white roof, again of corrugated metal. There are also deft touches such as the peach-colored curved pediments again a blue-colored ground that look like windows in the rooftop louvering system. At a distance, the effect is of a skillfully draw and proportioned giant barn. Up close, the resemblance is to patchwork quilt stitched together with industrial materials.

The interior is one large space spanned by an overhead, tran lucent clerestory that admits diffused natural light. Indirect lig was a necessity, especially for horse shows where a sun ray hi ting the eye of a horse or rider can create havoc, especially why jumping hurdles in equestrian events. Integrated with the ove head light monitor are louvers for ventilation that are reminisce of the elaborate shutters on some traditional barns. Service space are tucked under the mezzanine balcony used for viewers, juro and receptions.

The new arena is simple, elegant, and festive looking, as is appropriate for a building that since its completion in 1984 he hosted, among other events, an annual horticultural show and a graduation celebration for over a thousand.  $\Box$ 







### House Plays Against A Rugged Bridge

#### Near Toledo, Ohio; Hugh Newell Jacobsen, FAIA. By A.O.D.

Its forms respond to a gently decaying, abandoned stone railway bridge dating from 1908, whose crumbling joints are filling with tangled growth. Designed by Hugh Jacobsen, FAIA, this house outside Toledo, Ohio, off one of those flat Midwestern roads indistinguishable from countless others, was, until recently, surrounded by farms, which have been replaced by mostly new, mostly expensive suburban houses stamped from similar molds. None is distinguished or really vulgar. Occasionally there is a glimpse of the Maumee River, which parallels the road to the east.

If Jacobsen's house weren't topped by four fat and elongated chimneys poking over its shallow hillock, you'd miss it altogether. As it is, you loop down the drive from which there's still no sign of the bridge. It's been purposely concealed by the architect behind the house itself. Low-lying and seamless-looking, topped by vaulted roofs and those giant chimneys, the entry facade is a wide-angled L, broken only by a row of newly planted young birch trees. Though made of wood, it looks like a concrete building, and appears very white and mute. "I rarely put windows toward the driveway," says Jacobsen. "It makes it easier to find the door. A good house is a drama unfolding from the driveway, here as gravel tinkling on the underbody of your car."



Upon entry the main event is unveiled in dramatic regalia. In the domed portico/atrium with half-moon skylights is a surreallooking view of the romantic-looking, arched bridge. It virtually fills the vaulted window wall of the living room just ahead, looking like a huge apparition from a 17th century French neoclassical landscape painting. As you move down the V-shaped steps into the living room, the bridge fills less of the window, appearing to diminish in size. Jacobsen playfully calls it "the incredible shrinking bridge."

The atrium with its haunting image is the spiritual and physical fulcrum of the house, marking the center of Jacobsen's vaulted cruciform plan. Its long crossbar runs parallel to the river and houses three bedrooms on one side of the atrium; on the other, adjoining the living room, is a kitchen-cum-family-room with casual sofa and armchairs and an eating table for four overlooking a terrace with herb garden enclosed on three sides. One of the ends of the short crossbar containing the living room Top left, aerial view looking toward the river; above, toward the entry; right, from the riverside.

and its window wall is aimed directly at the bridge, the otheralso an arched window—separates the library from its partially enclosed terrace. Beyond it stretches a meadow recently planted with black-eyed Susans.

By tugging his plan off axis, Jacobsen created parallelogram rooms—each less formal than if it were a rectangle—and pervading asymmetries that give spaces more tension and liveliness than if they were symmetrical. Vaulted ceilings, echoing the arches of the bridge, open rooms upward in an embracing gesture. Meanwhile, boundaries between indoors and out are blurred by floor-to-ceiling glazing, outdoor terraces, and walls that are pushed outward by overhead skylight strips where the meet ceilings. They appear to float as planes rather than bein sides of a closed box.





The magician/prankster in Jacobsen has had fun with this house not only by making it appear to open out and look somewhat permeable and applying funhouse principles of perspective to distort the apparent size of the bridge, but in hiding television sets in walls that swing out, by fashioning a living room bar that when unused vanishes into a fold-away wall, and by creating a library that can be converted in seven minutes into a formal dining room. The transformation is achieved by moving the long library table to the center of the room, producing 14 stacked chairs from a concealed closet, and ranging them around the table. The relish with which Jacobsen shows you such tricks is directly related to the pleasure he derives from having successfully spirited into existence this conjury of seamless and graceful-looking oddly angled rooms and nooks.

From the outset, the clients instructed Jacobsen that they didn't want another of his formal-looking, all-white houses. What they got and now love is a comfortably scaled, modern, light-filled house that ingeniously captures both the rising and setting sun, and feels warm and alive. The kitchen, for instance, has—apart from casual sofa, armchairs, comfortable table overlooking a terrace and the bridge—a fireplace. So does the library, in its

Top left, a glassy view through one of the bedrooms. Top, right library table (in foreground) converts into dining table (photo above). Right, from entry to living room to the bridge beyond.

vaulted window wall. Both library and living room are lined with horizontally oriented mirrored shelves that tend to multiply their collection of books and antique decoys. And furnishings designed by the architect in both tend toward the comfortable rather than the sleek.

In the living room, facing sofas, a cocktail table, and two benches float like an island between facing fireplaces flanked by indoor trees with overhead natural light. Jacobsen calls the color scheme Etruscan-terra-cotta pink, faded blue, and tan on a handmade carpet on travertine floors. To further avoid a starchy look, Jacobsen has spaced his furniture according to anthropologist E. T. Hall's findings about the distances at which people feel most comfortable with each other, as published in *The Hidden Dimension*.

It is a title oddly descriptive of this house. As the clients say they are constantly discovering about it something new, a hidden dimension.  $\Box$ 





### The Architectural Panorama

Part of the annual review each year from its inception has been a set of essays on current directions in American architecture, sometimes by architects and sometimes by commentators outside of the profession. This year we turn outside, to a highly diverse but astute and articulate group of non-architects. We have asked them two questions: "What do you like most about American architecture today? What do you dislike most?" They were invited to respond either in terms of general directions or specific works. We are grateful for their responses, which follow. D.C.

#### Gudmund Vigtel: 'Today's architect has taken the romantic part of the artist.'

When the New Haven architect, Ithiel Town, first saw the painting he had commissioned of Thomas Cole in 1840 he rejected it outright, to Cole's great consternation. The large composition, which Cole had named "The Architect's Dream," shows Town dramatically enveloped in a black cloak, resting in deep reverie on top of an immense column with grandiose visionary architectural prototypes fading into a luminous distance. Ithiel Town refused the painting, ostensibly because he had expected landscape to play a much more prominent part in it. It is possible that he was embarrassed by the melodramatic role in which Cole had cast him.

It is worth noting that Cole's interpretation of the eclectic mid-19th-century architect was particularly apt. Town, himself, was noted for his work in both the Greek revival and Gothic styles. Today's postmodernist fits Cole's romantic image of the architect as dreamer, as the artist/ architect even better. What's more, today's architect often deliberately strikes the stance of the artist and dreamer in dress and manner, with no trouble identifying with the Gothic, Roman, Greek, and Egyptian styles as they recede in deep perspective into the past. The fact is that each of the ancient styles shown in Cole's picture is part of a real repertory for today's architects who have only added new forms with the use of industrial materials such as sheet metal, glass, and plastic. One thinks of I. M. Pei's pyramid in the court-

Above, 'The Architect's Dream' of 1840, by American artist Thomas Cole. yard of the Louvre, the current use of Greek and Roman forms in numerous vari eties, and Philip Johnson's Gothic IBM tower in Atlanta, now under construction as examples.

Today's architect as dreamer is, indeec a happy change from the architect as bus nessman of previous postwar decades, when "less is more" degenerated into les style and most cost efficiency. Be that as it may, today's architect has once more laid claim to kinship with the innovators of the past and taken the romantic part of the artist, the individual as creator.

One has to have great respect for arch tects who may not only be inventive artists but who have developed their craft after years of disciplined preparations; who, unlike other artists, also possess extraordinary abilities for methodical organization and formidable skills of communication. To pull together teams of professional designers who develop an arch tectural idea that must be sold to a clien in the face of budgetary obstacles and the resistance of arbitrary opinions, requires a pronounced political sense, not to mention a death-defying obstinacy base on fiercely dedicated egos.

This may account for the frequent con flicts between the client's simple needs and the architectural vision, or the arch tectural monument that fails to serve pra tical purposes. On the opposite end of the scale, where architects seem to play a completely passive part, are those cor structions of no particular intent that dor inate endless stretches of urbanized livir nvironments, or worse still, the gaunt ighrise buildings inflicted on third world ultures by Western architects. It is a woner that decent buildings can come out of such contradictory ingredients. It can lso be fairly said that nowhere is there nore talent spent on the lavish waste of esources with less results than in archiecture, unless it is in television or in warfare.

It is strange that so many architects no onger believe in their work as a powerul sociological factor. To the outsider it would seem that their potential is immense or good and for bad. The idealists among architects in the earlier decades of our century may have been motivated by ocialism, but their work had logic and consistency. Some of it degenerated into otalitarian building design. On the other ide, it developed into the International Style, which in turn dissipated into anonmous blandness.

Postmodernism has the great advantage of turning loose individualism and unfetered imagination. It is unlikely that this ack of restraint, which has created its own brand of academic mannerism, can sustain itself for very long. Freedom is a ough taskmaster. Perhaps its greatest conribution has been to awaken public curiosity, which the International Style, at east in its later manifestations, simply could not arouse. There is a public sense or architecture now that tests it for relaionships with natural factors, such as the elements and the landscape, or the paricular insights into people's needs for a given purpose. We are witnessing a democratic interest in building design that has he opposite effect of the mind-numbing emptiness of self-destructing capitalist architecture and the inhuman scale and self-defeating shoddiness of communist buildings. There is a sense today of archiecture as art, where not long ago it was perceived as a rather barren craft. There s a recognition of the need for architecure that takes the needs of people into serious consideration.

When these needs for spiritual and physcal gratification are met, the response can be dynamic. Nowhere has architecure been analyzed more intensely than n new museum design, and as a result public response has been nowhere more pronounced. A remarkable example of this s the new building for Atlanta's High Museum of Art. The collaboration beween the museum's guiding forces and the architect, Richard Meier, FAIA, in heir programatic development led to a ouilding that serves the museum operations admirably and at the same time provides the visitor with a particularly agreeable and refreshing environment. The new building is perceived as a work of art on he order of the best of what it contains. The public's response has been to double and redouble its support. Could there be a finer conclusion to the architect's dream? Thomas Cole would understand.

#### Robert Coles: 'The sin of pride working itself into designs for buildings.'

Sometimes, as I travel from one American city to another, I lose my bearings, begin to wonder where I am—a confusion not altogether the result, I believe, of an early Alzheimer's disease. So many of the downtown buildings of our cities look alike—big silos, or yet another attempt to suggest a bit of irregular geometry.

The worst predicament of all is to be caught inside one of those new hotels: water everywhere; no clear idea where to check in or go eat; the ride on an elevator amounting to participation in a public spectacle. I used to love to go into an elevator; I could close my eyes and begin to withdraw from the world. Now one is in an amusement park, and an induced excitement, a dreary hype, is one's ticket to psychological normalcy. As for all those semitropical plants, they incite a wistful memory of an old meadow of childhood days, where there were only wild grass and skunk cabbage and a few scrappy bushes: maybe not the right stuff, but the real thing, all right-a place people knew and used and felt to be part of their lives, rather than someone's prettied-up abstraction, set down as an obligingly chic response to what has been called a "trend."

What always pulls me out of my disorientation is whatever landscape has not been touched by renovation and decoration and so-called landscaping-a river, a lake, a mountain, the ocean, a hilly stretch of land that is red, or sandy, or thoroughly black. I can with such help realize that I am out West or down South or in suchand-such city or town. But as I contemplate what has happened to certain riverfronts, and will be happening to others, I begin to realize that soon enough some of the old standby cues will be gone. I'll be staying in hotels where the water outside is as drearily tamed to the tastes of all those planners and builders and designers as the water I see flowing along or pouring down as I try to find my way in and out of someone's late-20th-century idea of a hotel: so-called "exotica" become a mass-produced omnipresence. God save us all, in such hotels, who think of windows as something to be opened and closed, or airconditioning as something one chooses, and heat as a phenomenon one turns on and turns off.

Near one modern architectural miracle, or monstrosity, known as a hotel, I found myself recently in a bookstore, looking at the familiar Edward Hopper

**Mr. Vigtel** is director of the High Museum, Atlanta. **Dr. Coles,** a research psychiatrist at Harvard, is author of such seminal books as *Children in Crisis* and *Still Hungry in America*. paintings so many of us have learned to love. My eyes wouldn't let go of "Early Sunday Morning," a painting he did in 1930: the two-story row of stores (on the first floor) and apartments (on the second floor) with a hydrant and barber's red and white and blue pole the only occupants of the sidewalk-all wonderfully inviting, though my wife warned me that today such a neighborhood would be all too scrubbed down, and full of those plants I've mentioned, and bursting with antiques and plaques commemorating anything and everything that may have happened at some point in our glorious past. As for the barber's pole, if it were sufficiently "old," it would have been spared the dump, and now be inside someone's "town house."

Not that my cranky self is mollified by what I see in our grand suburbs or watering places. I drive past some of those new houses, so full of themselves, and feel embarrassed for us as a people: all the big show we keep wanting to have—the never ending nervousness of those who are afraid that some passerby might not get the point: Here live people who have really made it big.

In this very architectural magazine, and in others, I have seen seaside houses, or exurbanite ones, that might be a bit appealing if they were half as big and not so forcefully assertive. "Remember your manners," Flannery O'Connor once said to a friend who had gotten a bit carried away with himself—and so it goes for all too many of us, including architects and their customers, if not self-important patrons: the sin of pride working itself into designs for buildings, and into what gets called "interior decoration" or "landscaping."

I suppose I am crankily saying that I wish American architecture-the designs for office buildings and hotels and homeswould be less expansive, less at the mercy of certain social and cultural fads or tics. I'm not interested in replacing contemporary slogans ("more is better") with others no less vulnerable to our herdlike instincts ("small is beautiful"). I am simply wishing that a little modesty and selfdeprecating humor would inform our lives-including the lives of our downtown buildings, and the lives of the buildings architects design for our ever so rich enclaves, urban or suburban or seaside or countryside. Is there any room at all for the Bible's Ecclesiastes ("vanity of vanities, saith the preacher, vanity of vanities") in our lives as architectural dreamers, not to mention inhabitants of this or that room or flat or residence? We invest others with our pride, our fierce ambitiousness, our grasping pomposity.

Psychiatrists like me are constantly being "set up" by our patients—flattered, treated like gods: secular experts who know everything, and tell what they know at a (big) price. I rather suspect it goes likewise for architects: the "master builder" who will also (through bricks and mortar, rather than wordy interpretations) offer heaven on earth to a person, a family, a business. Might it not be our challenge—those of us to whom others come with such intense dreams and (at times) sad, if not pitiable needs—to shun the temptation to join one or another secular messianic cause, to suggest (occasionally, at least) the virtues of simplicity, humility, even self-effacement?

Might not students of architecture, and their teachers, profit from a reading of certain novels or short stories or plays wherein the human inclination toward grandiosity or self-importance is given careful study?

#### Stephen Jay Gould: 'Mind has broken the hold of history.'

My interest in architecture has a strictly parochial basis. As an evolutionary biologist, I am fascinated with other systems language and building in particular—that also develop through time under a central tension between two interacting (and often discordant) principles regulating the history of life as well. In evolutionary biology, these principles establish the two utterly different meanings of our common word "similarity."

The first principle, called homology, is similarity by simple historical connection. People and wart hogs both have hair because our common ancestor was a hirsute mammal, not necessarily because hair does either of us any good today. The second, called analogy, is similarity by separate and active evolution for common function (in different lineages). Birds and bats both have wings because you can't fly without them.

In biological systems, homology must dominate as the primary basis of similarity because historical ties cannot be broken and inheritance transmits an elaborate past into any modern creature. Analogies, however striking externally (stick insects are dead ringers for twigs and gain protection from enemies thereby), can only be superficial.

Homology is the mark of history's hold —the sign of quirkiness and oddity. Why should I write this essay, a bat fly, and a horse run with the very same finger bones—unless we all received them by homology from an evolutionary past. Analogy is the rational principle of good design actively acquired. Any engineer can identify similar features of proper aerodynamic construction in the wings of birds, bats, and butterflies.

Mind has broken the hold of history, and the domination of homology, in different evolutionary systems based upon human abilities and institutions. At one extreme, mind might actually fracture homology completely—an inconceivable prospect in biology—and produce historical sequences regulated only by rational design. When I look at buildings by epigones of the International Style from New Paltz to Nairobi, I often get the eerie feeling that history has disappeared—a chilling prospect for any evolutionary biologist. (I make no esthetic judgment from my alien perspective, only an abstract observation.)

But if mind can banish history, mind also soars free to accomplish something truly incredible and forever foreclosed to biology-it can reach into a past lost to the genealogy of objects themselves (and preserved only in repositories of memory and documents), and reconstitute old features in current contexts. Such a retrieval has no name in the lexicon of biological similarity. It is not analogy, for no principle of common function underlies its development in separate lineages. It is not homology, because it lacks unbroken historical connectedness. It is, simply, history reconstituted. Mind has freedom to play with history, to combine and eliminate by rational principles beyond the genealogical constraints of organic continuity.

Thus, although I have seen the clichés (already!) of postmodernism in Dallas and around the Silicon Valley-like Route 128 in Boston, I remain astounded that a broken pediment can bedeck a skyscraper in New York and that a castle in plate glass can rise in downtown Pittsburgh. Life cannot juggle its past, cannot even again use creatively (or badly) what it has lost. Extinction is truly forever.

One final thought from an evolutionist. Variation is the raw material of evolutionary change. Regional diversity is the first level of alteration—and the foundation of more extensive change. Evolutionists tend to conflate the factual with the ethical, and come to love variety, especially variety with a coherent geographic basis, for its own sake. Even if rationally optimal organisms existed, and we could standardize life throughout the world to an array of truly best designs, we would be horrified.

Natural selection and the principle of analogy require that organic structures work well enough, usually very well indeed, but they reach no abstract perfection divorced from context. Quirks and oddities—parochial regionalisms with little logic beyond the paths of history abound to record the primary fact that organisms are tied by genealogy.

Buildings need not imitate life—no reason at all why they should. I have only offered a parochial musing that tries to explain why one biologist loves signs of history and values regional diversity perhaps only because he wishes (quite unfairly) to impose the comfortable views of his own profession upon others operating (quite properly) with different materials and standards. Unless, of course, esthetics has a greater universality after all.

### Herbert M. Franklin: 'Will future generations flock to see the U.S. style?'

The request for my views on American architecture arrived during the afterglow of a recent trip to the hilltowns of Italy and its centers of classical and Renaissance architecture. As a result, my esthetic interests have lately been focused on the past rather than on the present.

I suppose there are few greater contrasts than that between the vernacular patterns of the Italian fortress village and the high-gloss, high-tech style of much contemporary U.S. architecture. Will future generations, I wonder, flock to see the U.S. style as they undoubtedly will continue to marvel at the lively adaptation of centuries-old buildings and neighborhoods in Italy? Probably not, but perhaps tourist appeal is not the standard by which U.S. architecture—and its international inheritance—should be judged.

Nevertheless, a consideration of the fundamental differences between the old that attracts millions and the new—on which the jury is still out—has helped me articulate what I like and dislike about U.S. architecture today. My comments are focused primarily on commercial and civic rather than domestic architecture.

In the Italian hilltowns, buildings reflected the local climate, available materials, and topography. The limitations of technology also dictated a respect for human scale. Because urban change came slowly, incremental additions to the built environment were stylistically consistent without being monotonous, with each new element placed within a well-established context. The element of surprise-the narrow winding street suddenly bursting into the open piazza-is ever present. It would be silly, of course, to criticize current urban design for a failure to charm the pedestrian in such ways. Change is swift and the tight urban fabric was lost or torn long ago in most places. The automobile dominates-even, alas, in Italian towns. But the lessons that can be drawn from those delightful and surprisingly functional towns do suggest some design principles that influence my attitude toward what I see and experience today in this country.

Materials: Our love affair with technology has produced buildings with extraordinary virtuosity in the use of materials, with components that dramatically shine, soar, and sheath. Many of these treatments strike me, however, as the equivalent of the label "New and Improved!" on household detergents. They capture momentary attention but ultimately will bore. On the other hand, materials that may not be so shiny or reflective or malleable—wood, stone, brick—used with sensitive attention to detail will delight the eye and heart for a long time to come. Perhaps it's the difference between atching a fireworks display and taking a arm bath.) Cities like Boston or Washgton that have a texture and hue comosed of natural building materials are omehow violated by large, imposing buildigs primarily of glass or metals. Such laterials in certain contexts are simply ut of place no matter how impressive tey may be in isolation. In Houston or vallas, however, the opposite may be true. The conservative style that seems to be wored in Eastern cities would probably eem downright dowdy in Texas.

I find it interesting that developers and rchitects of new office space in the xploding Washington suburbs seem to e intent on conveying some "futuristic" yle, while many of those in the District ant to give the impression that their new roperties have been around for at least ) years. Traditional materials, of course, annot make up for pedestrian design, ut the more flashy materials often seem o substitute for integrity of form and ppropriate detail.

Human scale: Perhaps U.S. tourists sturning from Europe have finally made heir mark on U.S. developers and archiects, judging from the markets (the "fesval markets" in the parlance of the trade) have become commonplace in many owntown developments. The smaller 10ps and spaces produce a sense of both itimacy and surprise simply because the tire scene cannot be taken in at a glance. le may finally be giving up on trying to iburbanize our downtowns, and that is rogress. Developers and architects have so rediscovered the attraction of smaller cale design features at the street level to umanize buildings that might otherwise itimidate.

Climate: In areas where the climate is ss hospitable than Southern California, evelopers and architects seem to be trying achieve a better relationship between doors and out. The glassed-in atrium lmits natural light into more and more otel and office lobbies. This has become welcome cliché, although when the glass of is 30 stories above ground its effect quite attenuated. Without human scale a the interior, such a roof will provide ght without feeling or sense of space. ven at its worst, however, it beats the d closed box.

Reviving the old: No comment on cur-

Ir. Gould, Harvard University evolution leorist and lecturer, writes a column or *Natural History* magazine. Mr. Frankn is a senior principal of Lane & Edson, C., a law firm specializing in real estate evelopment. He is a founder and vice nairman of the National Building Muum in Washington, D.C. Dr. Morowitz a District of Columbia gastroenterolgist with a strong interest in architecture in the arts. Mr. Cisneros, mayor of San ntonio, will become an honorary member i AIA next month.



New appreciation of our architectural heritage: above, Old Post Office, Washington, D.C., restored and adapted.

rent American architectural trends would be complete without applauding the brilliant and sensitive rehabilitation work that has refurbished and adapted older historic structures. Indeed, no better demonstration of the power of tax incentives can be found, and we are all the beneficiaries of this stimulus to new value in our architectural heritage. In city after city old buildings that a few years ago would have been demolished or left to decay have found new vitality as offices, shops, and housing. With governmental oversight the results have been magnificent and from an economic standpoint will probably prove successful over time. In a way, some of the greatest architectural triumphs in the U.S. today are to be found in this growing specialization of adaptive use.

Pet peeves: It would be unfair to single out specific buildings for brickbats (especially if they are made of glass). But the opportunity to sound off in general is too inviting to resist. Here are a few pet peeves regarding some contemporary American architecture:

• hotel lobbies overwhelmed with the sound of falling water or bad orchestras, making normal conversation difficult or impossible;

• sterile, open plazas that will expose any user to sunburn or windchill even though the spaces look imposing in leasing brochures;

• buildings that turn a blank wall or worse to the urban sidewalk, deadening the

streetscape and inviting graffiti;

suburban automobile-oriented developments that look great in photos but which 98 percent of users approach through a dimly lit, ugly garage with poor signage to direct them to the real entrance;
reflective glass curtain walls used without some energy saving rationale; and
imposing entrances that turn out to be nonfunctional (a peculiarly Washington, D.C., phenomenon).

But the level of achievement is improving. Had I been asked to vent my views on this subject 15 years ago I would have given U.S. architecture a "C." Right now it's a "B+"—a lot higher, I suppose, than architects would give to lawyers!

#### David A. Morowitz: Expanding space.

What I like best about contemporary American architecture is the increasing employment of expanded interior space, particularly the decision to amalgamate rather than subdivide, with the bringing inside of natural light and the wedding of architecture and environment. Its inspiration was Frank Lloyd Wright's Fallingwater, it continues in John Portman's hotels and the residences by Richard Meier and Hugh Newell Jacobsen, and reaches its zenith at the museum designs of Louis Kahn, particularly the Yale Center for British Art, New Haven, and the Kimbell Art Museum, Ft. Worth.

What I like least about American architecture is its tendency to embrace the dotty, another way of saying a building is what it isn't. Pennsylvania Station was not the Baths of Caracalla, the Brown Derby was not a derby, Chicago's Tribune is not a Gothic bell tower, and Philip Johnson's AT&T Building is not a Georgian highboy.

#### Henry G. Cisneros: Preserving our heritage.

To me the most enlightened trend in American architecture today is the care we are taking in preserving our historical architectural heritage.

In San Antonio we are refurbishing two old train stations, the Missouri-Pacific Depot and the St. Joseph's Depot. Both will be used as modern market places but will continue to bear witness to the past, a past when the railroads were the engines that drove our economy.

In residential neighborhoods, such as our King William District, citizens are preserving our cultural past, in this case houses that original German immigrants built around the turn of the century. This movement in American architecture not only is preserving architectural history, but also maintains our cultural heritage as a daily presence in our lives.

### AIA Honor Awards 1986

Seven of the 14 Institute honor award winners for 1986 are residential, an unusually high percentage for a single use, and four are varied buildings for school clients. Of the remaining three, one honors a corporate office building, one the restoration of an important room in a public library, and the third a clinic. Of this year's choices, culled from over 600 entries, jury chairman Michael McKinnell, FAIA, said he and his colleagues "sought the authenticity [of] an architecture that springs from the materials and methods of its making, joined with the effort to dignify the human activities that it serves to accommodate."

The seven residential works range widely in location, size, cost, client, and design esthetic: in the Northeast, a house on a Maine island and a Manhattan tower; in the Middle West, a Chicago steel and glass house; in the South, Charleston's scattered-site infill public housing and a Dallas private residence to also accommodate an art collection; and on the West Coast, a small addition to a Venice, Calif., house and new living quarters inserted in the shell of a 60-year-old fisherman's net-drying shed on Bainbridge Island, Wash.

Two of the works for schools involve adaptive use or restora-

tion, and two are all new: For a preparatory school in Tarrytown N.Y., conversion of a 1900 assembly hall into a library. For Yale University, a restored 1876 chapel. For Loyola University in Lo: Angeles, an urbanistic law school. And for Rice University in Houston, a new graduate school of administration.

A green-field-sited corporate office building for IBM in Purchase, N.Y., restoration of a 1911 exhibition hall in New York City's 42nd Street public library, and a new clinic in Cleveland round out the field of honored buildings.

In addition to McKinnell of Boston, the jury panel consisted of Charles F. Davis, an architecture student, of Seattle; Merrill Lynn Elam, AIA, of Atlanta; landscape architect Dan Kiley of Charlotte, Vt.; William C. Muchow, FAIA, of Denver; John Pastier of Los Angeles, a contributing editor to this magazine; Rober Tremonti, Associate AIA, of Troy, Mich.; William D. Warner, FAIA, of Exeter, R.I., and Frank D. Welch, FAIA, of Dallas.

We lead our presentation with three winners shown and described extensively in previous issues. Considered together, they are remarkable for the varied ways they respond to their very different contexts. ALLEN FREEMAN

ong a staple of the architectural heritage of South Carolina seaport city, the Charleston single house has been ingeniously reconstituted as low-income housing (see July '85, page 44). The local housing authority program encompassed 11 units, the majority located in Charleston's older neighborhood and near the historic district. Bradfield Associates of Atlanta was responsible for roughly half the sites, including the only or actually within the historic district (right). This was chosen as the prototype site because the design would have to meet the approval of several local, state, and national historical review boards. Richard Bradfield, AIA, took cues from the surrounding houses, particularly the porches (known as "piazzas"), railings, shutters, roof pitches, parapet walls. After provisional approval from the local planning board, Bradfield sent two asso ciates from his office to measure the details of the single house around the site. Incorporating the climatic features of the orig inal 18th century single houses, the units are cool, well ventilated, and a perfect fit within Charleston's historic fabric. MICHAEL J. CROSBIE





rith "exaggerated perspectives, colonnades, plazas, oddl blank facades, mysterious towers, and a muted sense o the surreal," Loyola Law School in Los Angeles relates to its complex urban setting in a nonliteral way, wrote Contrib uting Editor John Pastier in last year's annual. The small campus by Frank O. Gehry & Associates with Brooks/Collier is "a distillation of the paradoxical variety" of a city that is "home virtually every style of building," he continued. Located on th fringe of downtown, the school comprises five buildings: faculty, administration, classrooms, and a bookstore in a four-sto block (left in photo); a chapel in polished plywood (left center); and three freestanding lecture halls (one is at right in photc Cost was less than \$5 million. Said the jury: "With a limited budget and unlimited imagination," Gehry created "a unique experience through the placement of buildings, evocative groun forms, stimulating use of color, and the unprecedented use in professional school setting of common, prosaic materials." A





esar Pelli & Associates related their building for the Jesse Jones graduate school of administration to a more conventional academic setting: the ample, treed campus of Rice University in Houston. Herring Hall comprises two offset rectangular forms, one gable-roofed and the other vaulted, connected by glass-enclosed corridors. It is clad in a warm, orange brick with contrasting raspberry glazed brick, laid in horizontal bands on the long sides and making a diamond pattern on the end elevations. "The architect has presented a personal, creative interpretation of the forms and materials of nearby structures, creating a building that achieves solidity without being institutional or monolithic, and that reflects great individual character without losing its sympathetic relationship with the campus fabric," said the honor award jurors. In our coverage last May, Contributing Editor David Dillon wrote that Herring Hall "is not simply an isolated example of enlightened contextualism. It can serve as a paradigm" for development of Rice. A.F.



# Blend of Modernism and Regionalism

House in Dallas; Edward Larrabee Barnes. By David Dillon



#### C Nick Wheeler

Here is an exemplary Texas house designed by a New York architect in a style that evokes Luis Barragán, Le Corbusier, Mykonos, and a 12th-century Cistercian abbey in the south of France. So much for the notion of an unsullied vernacular tradition. If there were such a thing as international regionalism, this would be a superb example.

In its citation, the AIA honor awards jury called this house by Edward Larrabee Barnes Associates and Armand P. Avakian Associates "a thoroughly romantic architectural vision, functioning within the Modernist vocabulary while borrowing significantly from the traditions of Southwestern architecture."

Much of the romance comes from Barnes' imaginative handling of the lush, sloping site, so rare in Dallas that it took the client two years to find it. Along the street the house maintains a cool minimalist presence—two offset white towers, with a low white rectangle between them and a majestic live oak tree to provide a visual center for the entire composition. Its public face is serene and private, in the best Spanish colonial manner. Previous pages, the 'village' of elements that comprise the hou facing southwest over the gently sloping site, a rarity in Dalla. (photo by Timothy Hursley/The Arkansas Office). Above, vie from the southwest of simple forms around a courtyard, penetrat by squarish windows. Far right, above and below, the serence pool looking toward and from covered walkway and bedroom

But the picture changes dramatically in back, where the sit drops off toward woods and Barnes breaks the house down in a romantic tumble of separate elements—towers, terraces, cour yards, and stairways. Some are tucked into the hillside, others are pulled out to create a dynamic interplay of solids and void The austerity of the public facade thus gives way to a subdue exuberance in the private domain.

One obvious source for all of this would be Mykonos or the hilltowns in Spain and Italy, in which the unity between build ing and environment is paramount and where individuality is typically expressed in a context of overriding visual unity. Bu


C Nick Wheeler

qually telling precedents lie closer to home, in Barnes' Hayack School on Deer Isle, Me., and his farm complex in Wayzata, linn. Completed in the early 1960s, both projects are based a the concept of a "village" of clearly discrete buildings tied gether by a central organizing device. At Haystack, that device a cascading wooden stairway that runs from the top of a hill the edge of the water. At right angles to the stairway Barnes ranged some 20 dormitories and studios, like pods on a long em, to create subtle tensions between autonomy and restraint, arts and wholes. The Wayzata farm is a cluster of small white uildings around a central court, all linked by continuous flat tofs and low walls yet maintaining their individuality by virtue i massing and details.

The Dallas house has elements of both, compressed and refined fit different conditions. It is ringed by low white walls like 'ayzata, and it runs downhill like Haystack School. But the crital element is the two-story living and dining room, which locks e individual pieces together while making an elegant transition from the bedroom towers above to the gallery, library, and master bedroom suite in an adjoining wing. This configuration allows owners and guests a maximum degree of privacy and autonomy yet also provides a grand space for parties and family gatherings. And all of this is accomplished internally, almost invisibly, without the aid of the glazed galleries and corridors that disfigure many sprawling Texas houses. The covered verandahs on the outside of the house are picturesque options for visitors, not essential parts of the house's circulation plan.

The original owners collected classical and contemporary art, and insisted on a house that wouldn't upstage their treasures. Among their points of reference was Thoronet Abbey in Provence, an austere and meditative retreat that has been a source of inspiration for many American architects.

As he did at the Scaife Gallery in Pittsburgh and the Dallas Museum of Art—the latter built concurrently with this house— Barnes designed a sequence of clean, uncluttered spaces in which art is allowed to sing. No quirky spaces or idiosyncratic ges-



Timothy Hursley/The Arkansas Office





© Nick Wheeler







Across page, two-story living room with pristine fireplace and skylight; top and above, views of the same space from the curving entrance balcony and the double-height dining room.

tures. The living room, with 17-foot ceilings, can accommodate large contemporary paintings and sculpture. The landing on the grand staircase, paved with the same Indiana limestone as the Dallas Museum staircase and recalling it formally, provides space for viewing smaller paintings and sculpture at close range. The vestibule gallery, a long, narrow room with an eight-foot ceiling, is ideal for displaying classical and Etruscan sculpture, while serving as the link between the living room and a large, secluded library. It is this sensitivity to the presentation of art in a residential context that makes this house special. Even the windows enhance the effect, their crisp edges and symmetrical openings framing dramatic views of the landscape and various sections of the house. The concept of a house for an art collector—a set piece for architecture students for generations—has been carried out here with exceptional refinement.

If one problem of the "house/village" is making individual elements relate to a larger whole, an obvious advantage is making gargantuan houses seem more intimate and humane. The C Nick Wheeler



© Nick Wheeler



Left above, apsidal end of art gallery on lower level with round light to illuminate sculpture; below, library and views from its southeast wall. Right, sitting room's northeast wall.

Dallas house contains over 13,000 square feet, including a majo addition for the new owners by Barnes and Dallas architect Howard Glazbrook III. Nevertheless it remains serene rather than daunting, thanks largely to the variety of the interior spaces, which go from grand to intimate, and the ease of movement between interior and exterior spaces. The three terraces and courtyards are laid out on the same seven-foot module as the rest of the house and function as exterior rooms.

The courtyard off the master bedroom is planted with flowering pear trees, making it a kind of magical garden for reflection. The living room terrace contains a shallow, rectangular pool filled from above by a limestone canale, recalling numerous Barragán designs at El Pedregal in Mexico City. The falling wate animates what is otherwise a formal abstract composition. Also in this case the flow is languid and measured, suggesting the scarcity and preciousness of water in the Southwest. The largest courtyard, adjacent to the master bedroom and one of the guest wings, is dominated a rectangular swimming pool. The pool is part of the architecture of the house—no kitschy kidney shapes here—and together with the white stucco walls and the precisely edged green lawn resembles a gigantic, abstract painting, in the style of Albers, perhaps, or Brice Marden.

The influence of Barragán is clearest in these spaces, where everything is compressed to an intense interplay between wall, light, and openings. Only the brilliant Mexican colors are missing. "Any work of architecture which does not express serenity is a mistake," Barragán once observed, and in these spaces Barnes shows himself a faithful disciple.

The remaining vernacular touches in the house are spare and understated. The verandahs surrounding the pool and connecting the bedroom wings are covered with standing seam metal roofs a familiar Texas touch that is often grossly misused. The expanse of white stucco recall the haciendas along the Rio Grande and throughout Arizona and northern Mexico.

In its essence, however, this is a classic Barnes design, an amplification of the lyrical modernism that has infused his work from the beginning of his career. It is clear, rational, and extremely self-assured, with none of the stylistic ambivalence found in Asia House or the recently completed Equitable Center in Manhattan. Whenever Barnes doffs his cap in the direction of postmodernism the results are usually awkward and mannered, as though his heart just isn't in it. This house derives from deepen and more dependable sources, and together with the Dallas Museum of Art represents the best of his recent work.  $\Box$ 





# Dramatic Elaboration of Miesian Theme

House in Chicago; Krueck & Olsen. By Nora Richter Gre





It seems fitting that the first work of the partnership of Ronald Krueck and Keith Olsen, both of whom graduated from the Illinois Institute of Technology, would follow the tradition of Mies van der Rohe. The borrowed form is the rectangular glass and steel house. But, while many of Mies' basic principles are adhered to — a rhythmic repetition of identical elements, a clear and precise expression of structure, simple volumes, and surfaces—Krueck & Olsen Architects goes beyond that by introducing a highly articulated interplay of geometry, light, and color. What they did, Krueck suggests, was take Mies' "pure, simple sentences" and make "complex sentences and paragraphs."

For the design of this 5,000-square-foot house, Krueck & Olsen was given several preconditions: The house was to be "industrial" in its exterior esthetics, it was to be located on a 67x127-foot lot in Chicago's Lincoln Park area (with the street and alley sides—west and east, respectively—being the 127-foot-long sides), and although located in a dense, residential part of the city, the house was to have the type of privacy and quality and quantity of natural light more easily achieved in suburban buildings.

Krueck & Olsen started with a basic Miesian rectangle and tripled it, twisting two around to be perpendicular to the first. The ultimate form is U-shaped. The back of the U is a twostory, 70x22-foot living room. Its back wall (north side) is windowless and has been pushed back slightly. This allows for a vertical row of square-shaped windows set at each side to light the back wall during the day. The living room's front wall (facing south) is totally sheathed in glass, offering a view out into the central courtyard and letting in an abundance of natural light. Appropriately, the patio's width is the same as the living room's back wall, thus abstractly creating a fourth rectangle.

The east leg of the U contains a housekeeper's bedroom and bathroom, the kitchen, and dining room on the first floor; and on the second floor, a guest bedroom and bathroom and a study/ library that overlooks the living room. The west leg contains the entrance foyer, powder room, and garage on the first floor and the master bedroom suite on the second.

Left, steel frame infilled with opaque, transparent surfaces. Below, glass block stair tower behind wall of steel grating.











Above, a glass block bridge spans the living room. Above the bridge are skylights; below are tube lights. Left, the central courtyard, living room, and west wing as seen from the sun porch.

Throughout, the pure rectangle is broken by assertive forms—a steel and glass block bridge traverses the living room along the glass wall, uniting the second stories of the west and east wings. A steel ladder descends into the living room from the library above. At the entrance foyer, the stairs are hidden from the guest's view by a glass block half cylinder. In each bedroom, the bathroom takes the form of a smaller rectangle. The guest bathroom juts out onto a sun deck and shelters an outdoor shower. The closets add to the geometry, being part of the lacquered cabinets that in most places are freestanding.

The house's configuration, in conjunction with its exterior cladding, meets two of the client's requirements—privacy and light. The living room's back wall, which is side lit by those two rows of square windows, looks toward the north neighbors and is entirely clad in ribbed, metal siding, a skin that is repeated at the ends of the U legs (which face the south neighbors). Other areas have surfaces entirely of glass or a combination of clear glass, opaque glass, or glass block. In general, the owner's bedroom and the living spaces are oriented toward the courtyard. The guest bedroom and housekeeper's quarters are oriented to the rear. The entrance surface is steel grating—meant to be understood as a cage around a faceted jewel, in this case the glass block stair tower.

The house is constructed of fabricated steel angle frames that are bolted together in connection with steel beams that span



Right, the living room as seen from the study, with glass block bridge at left in photo. Above, the entrance foyer with its wall of steel grating and stairwell of glass block.

the second floor and the roof. (Steel bar joists carry floor and roof loads.) These steel frames support a prefinished steel window system that appears like lattice work filled in with different materials. Where the vertical wall sections are parallel to the structural framing, the skin is set flush; where perpendicular, the skin is pushed back as infill. At the south and north elevations, the ribbed metal siding seems pulled tautly across the structure. Overall, an important touch is the red painted, thin metal strips set onto the steel framing, a detail that lends a coherence to the multisurfaced skin by reinforcing the esthetic of the steel frame.

Once inside, that touch of color softly grows into a richly, though subtly, toned interior enlivened further by the use of exotic, sensual materials. The living room colors are toned down—grays, soft purples set against a polished terrazzo floor. The kitchen has green marble counters. The master bedroom has six different tones of lacquered surfaces, with burgundy being the dominant color. The upstairs bathrooms are clad in polished granite. All these colors change, depending on whether the day is clear or cloudy, or if it is dawn, dusk, or late evening.

Perhaps where Krueck & Olsen kept closest to the Mies tradition was in the careful attention to proportions and details. For instance, one might imagine the living room as pretentious, overpowering in its volume, or unfriendly; it is actually elegant and exhilarating and spatially is in perfect harmony with the rest of the house. And, too, throughout, the hard industrial exterior gives way to an interior of softness and delight.  $\Box$ 





### House Built Inside the Shell of a She

On a pier off Bainbridge Island, Wash.; James Cutler Architects. By A



ue west of Seattle across Puget Sound lies Bainbridge Island. s 30 minutes by ferry from the city to the island town of inslow, which nestles in picturesque Eagle Harbor. Across from inslow, where the inlet's southern shoreline is steep and lush, o new construction is allowed at water level. But a determined puple found a way around the prohibition by purchasing a 1920s thermen's net drying shed and agreeing not to build outside a envelope. Considering the protracted approval process of most two years, it seems especially rewarding to all involved at the house James Cutler Architects designed "demonstrates respect for the environment and an appreciation of the unique te," in the opinion of the honor awards jurors.

The two-bedroom house within the shed's shell occupies a bod pier over the water. Because occasional extra-high tides p at the pier's underside, the architects first had the building cked up by its bottom plates and a new floor built underneath, ermanently elevating the structure by two feet. They found the of and 2x4-stud frame to be sound, but replaced a centered ow of interior structural columns with a row six feet from the est wall; they furred the studs with 2x2s and insulated the walls R-19.

The two-story plan is straightforward and open. If the house ere a ship leaving the shore, its glazed, double-height porch ould be the prow, the kitchen would be aft with the guest bedoom above it, and the living-dining room and master suite would e stacked amidship.

The house, garage, and a footbridge connecting the two are ad in red cedar shingles. Interior finishes are also mostly wood. orizontally laid hemlock paneling, lightened with an almost ansparent stain, surfaces the perimeter walls; floors, windows, osts, beams, and stair treds and risers are fir; and the simple,



graceful spindles and rail, designed by Cutler, are maple.

"Here in the Northwest, where there is an emphasis on the use of wood, it is often done with a rustic approach," notes Charles F. Davis, honor awards juror and graduate student in architecture at the University of Washington. "What is nice about this house is that it is so highly refined, integrated, and elegant."

As another juror, William Muchow, FAIA, of Denver, puts it: "The house is designed on a tradition of craftsmanship and knowledge of carpentry and detailing. But unlike many buildings conceived on a tradition—buildings that lack a sense of spontaneity and creativity—this is a very exciting house."

One source of excitement in the house is its sense of procession. As Davis describes it, you "leave the county road and proceed down a driveway to enter a parking area next to the garage and above the house, descend a flight of steps, cross a bridge, and enter the house. You are on the upper level, where in front of you is the formal stairway that widens as you go down to the main part of the house. It seems an easy, flowing progression from the top of the hill. Once on the main floor, you have a complete panorama of Puget Sound and the harbor.

"Houses in the Northwest can feel claustrophobic because of all the trees and shade. But here, right on the water, you have an open feeling. And the changing tides give you a wonderful sense of time passing."

Proximity to the water also illuminates the interior. Especially at dusk, when the orange sunlight filters back inside, the house seems to glow with a rich, amber tone.

Opposite, the amply glazed north front. This end of the house, with a slightly lower roof, was originally unenclosed. Garage sits on higher ground on this axis; its roofline is above house's.





Above, view from the west toward Puget Sound and Seattle, whose skyline is visible on clear days. Right, custom woodwork is evident in first-floor dining area at foot of stairs. Far right, stairs splay from west wall as they descend. Beams, which run in pairs across house, straddle columns; beams and posts connect with Tshaped steel plates concealed so that only bolt heads and nuts are visible.  $\Box$ 









### On Being Hip In Venice with Conviction

Bergren house, Venice Calif.; Mayne & Rotondi (formerly Morphosis). By John Pastier

If architectural regionalism is still possible in our global culture of instant and multiple publication, then the smallest such region probably consists of a few square miles of coastal Los Angeles. There, Frank Gehry, FAIA, and a handful of younger architects have established their offices and built a dozen or so buildings of some stylistic diversity, but rooted in a collage sensibility based on ordinary materials and sharing a heightened selfconsciousness and artistic ambition.

At minimum, these buildings embody a hip, solipsistic imagery that speaks to a dilettante audience. Done well, they can transcend self-referential artiness and demonstrate impressive architectural conviction. (Either way, they offend segments of the local design community with consistency.) Gehry demonstrated the latter course with his own remodeled Santa Monica house (see Mid-May '80, page 168), and continued with other houses and two larger buildings, the Loyola Law School (May '85, page 202) and the Aerospace Museum, that established inland beachheads for the Venice sensibility. And lately, some of his younger colleagues have also produced works of emergent stylistic maturity: Eric Moss in his Petal House (page 80), and Mayne & Rotondi Architects in Venice III.

Here some explanations are in order. Venice III is the Bergren house, the third small back-lot residential addition designed by the partnership of Thom Mayne and Michael Rotondi, formerly called Morphosis, in the Venice section of Los Angeles. Mayne and Rotondi also teach at Sci-Arc, the Southern California Institute of Architecture, a determinedly free-form private school. Teaching there subsidizes younger practitioners such as Mayne and Rotondi, allowing them to take on small commissions that would not be commercially attractive. As a result, these projects are given unusual design attention and often amount to much more, architecturally, than one would expect from their modest programs.

All three of Mayne & Rotondi's Venice projects have been well-published, internationally, yet only this one approaches full residential functions. At 850 square feet, it is the largest of the trio. Designed for UCLA classics professor Anne Bergren and her young son, it is grafted onto a pleasant but unexceptional white-clapboard, 1920s bungalow whose interior had been speculatively remodeled by another young local architect just before she bought it.

Joined to the original house at the kitchen, the new portion was designed to eventually become a separate unit. A small basement study could be fitted out as a kitchen, making the addition into a one-bedroom apartment. Above this study is a notably nonstandard bathroom, with a sculpturally conceived, freestanding sink and medicine cabinet assembly anchored by guy wires, and a glass block window set into one side of the bathtub. Seen from outside, this last detail resembles a built-in aquarium whose occasional occupants are not tropical fish but semitropical humans.

Cantilevered steel-grating steps lead from the living room, past

Amid the clutter of its beach community, Venice III house sits below its twin, pyramidal, canvas-shaded skylights.







the midlevel bathroom, to an unusually light and airy bedroom. The stairs then continue outdoors, forming part of a small roof deck.

The main living space is at grade, down a few steps from the floor of the old house and up a few from the study. It is set askew to the main building and the lot lines, but an attached library alcove aligns with the older geometry. Its wooden bookshelves form a pattern that is repeated in a screen wall separating the living room from the stairs, and are mounted on an exterior wall that seems to float a foot or so above the ground. This effect is accomplished by having the wall bear on a beam that rests on (and cantilevers beyond) a small pyramid set into the ground, and glazing the resulting voids. Another pyramid anchors a steel cable that passes over a pulley to support the external end of a beam that in turn supports the upper stair landing. Atop this wall, cantilevered beams at roof level hold cables that connect to a Rube Goldberg assembly of steel tubes wires, connector joints, metal arms, and counterweights, all pressed into service to hold a pair of pyramidal canvas awning that screen the bedroom skylights during the summer months.

These structural gymnastics are poetic, amusing, and prepose terous, in the order described above, but also tend to stay in the background. What one notices most about the exterior are tough, unsentimental forms carefully composed and clad in exactly the right materials. The main volumes of the addition are sheathed in light and dark gray asphalt shingles edged with metal trim. The prism housing the study and bathroom is covered by galvanized sheet metal with standing seam joints. The rooftop skylight walls are given a similar surface treatment. Cor crete, steel pipe rails, and baluster wire complete this basic pa



eft, view from the south, with original bungalow at far left in hoto. Addition's study/bathroom/roof deck module is metal heathed, while asphalt shingles are rendered as masonry. Above, lockwise from lower right, screened stair offers view of living pace; bathroom is exposed to stair and living area; view to kylit bedroom across stairway from roof deck.

tte of gray and pewter. The only color not integral to the naterials themselves is the black paint on the wooden French oors of the living room and bedroom.

What Mayne & Rotondi produced, after nearly two years of esign and another year of construction, is a highly convincing otality. This is said in full awareness that the design also shows ome of the excesses of youth, teetering at times on the brink f overcomplication, structural excess, and self-contradiction. It stands with one foot in the art scene, and the other in a more pragmatic nautical-industrial world. In many ways it resembles a beached houseboat whose elegance coexists with its proletarian finishes.

The Bergren house recalls Aldo Rossi in its pyramidal rooftop forms and small square windows, Gehry in its plan forms and its use of materials and top lighting, Carlo Scarpa in its lapidarian attitude toward detail, and R. M. Schindler, that rarely recognized spiritual father of so much avant-garde Los Angeles architecture, in some of its fenestration, its intimately scaled differentiation of interior space, its de Stijl library wall, and its sense of hands-on construction involvement. At the same time, these influences have been assimilated so thoroughly, combined so deftly, and expressed so passionately that it seems fair to call this Mayne & Rotondi's most personal and original design to date. Bottom left, library alcove on first floor as it faces living area; below left, view from bedroom area over stairway, with glimpse of roof deck through square window. Across page, south elevation at night. Illuminated skylights reveal elaborate pully system for adjusting canvas shades.  $\Box$ 









#### Triad of 'Temples' in the Woods

Wenglowski house, Deer Isle, Maine; Peter Forbes & Associates. By R. C.

The Wenglowski house, silent and monumental, stands like a cluster of temples on a rocky little acropolis overlooking the ncredibly beautiful, island-studded Penobscot Bay off the coast of Maine. Two of the temples are anchored by overscaled, nearly reestanding granite fireplaces at one end, as if the fireplaces were the surviving ruins of an earlier civilization and the archiect, Peter Forbes & Associates of Boston, had discovered them already here on the site and had merely attached his new tembles to them.

There are three temples in the main complex, two of them glass pavilions, one a wood cottage. The pavilions are a living/ lining room and a master bedroom; the cottage is a children's nouse. All three have similar shapes and gray lead-coated copper hip roofs. Together they triangulate a family courtyard, paved n granite and grass and furnished with slim firs and birches.

This courtyard and the whole complex are hushed and austere. Neither the trees nor the buildings have fussy shapes or ornamental features. There are no other houses within a halfnile on the coast, and the only sounds are the wind in the trees and the slow roll of the ocean against the dark rock and shingle of the beach.

Peter Forbes, FAIA, has designed a number of vacation houses on the New England coast, all in the same uncompromisingly austere design vocabulary. In each house, he has explored some variant of a single continuing theme, that of a long, tall, barnlike or basilica-like volume. His architecture arises out of the disciplined exploration of this formal idea, not merely out of the circumstantial chances of the site or the client. Like the writer of a sonnet or a fugue, he chooses to work within a given formal envelope. At the Wenglowski house, the basilica shape isn't obvious at first because it's been broken into two parts. It includes both of the living pavilions and is bookended by their two fireplaces. A granite flagged path, emerging like an arrow from the children's house, splits the two pavilions and opens a slot of space and a view to the ocean beyond. At the slot, a great deal of energy collects; it is the place at which you find yourself pausing again and again as you explore the house.

Of the three components that make up the house, the children's cottage is the most ordinary. Made of conventional wood framing and siding, it contains two bedrooms and a loft for music, television, and the like. It presents a windowless blank wall to the rest of the complex, preserving the privacy of both generations of the family. The blankness of this facade, together with its symmetry and its placement at the end of the axis that splits the pavilions, give it a surprisingly monumental character.

Much more surprising, however, are the two glass living and bedroom pavilions. Here Forbes has indulged a love of explicitly dramatized structure and of massive piles of masonry, as well as a taste for a monkish gray severity that is the antithesis of the conventional seaside vacation house with its clutter of cheerful porches, awnings, dormers, and flagpoles.

Structurally, each pavilion is a kind of tent. A light, rigid, welded framework of white steel tubes rests, at its corners, on four massive round concrete columns, as if the Wright brothers had landed on Stonehenge. The steel frame in turn supports,

Across page, Wenglowski house as it sits amid trees atop its rocky, Maine coast 'acropolis.' Below, view west between living and bedroom pavilions, toward wood-sided children's cottage.











Across page, living pavilion from northeast with view through the building toward the ocean. Bedroom pavilion is at left in photo. Above, bedroom (at left) and living pavilions from childen's cottage, framing view across site with water beyond.

by means of elegant little steel clips, the rafters and decking of the roof. Every joint in this elaborate system is crisply celebrated, with the kind of joy in exposed construction that has largely bassed out of contemporary architecture. The spans are, of course, enormous for a house, and they give the living pavilion something of the sense of a public hall or meeting room.

Aside from the structure, there is little else to the pavilions except the immense fireplaces, each of which fills an entire end of its pavilion. The walls are sliding glass, opening onto coninuous wood decks that hinge up ingeniously to cover the glass when the owners are away. The floors are granite, without carbets. In the living pavilion a small wood house, reminiscent of he children's cottage, encloses the kitchen, and a half-circle, reestanding wall, reminiscent of the Tugendhat house by Mies, shelters the dining room table.

The pavilions are as exceptional for what they do not conain as for what they do. There are no bookshelves, no places to ang paintings or family photographs, no obvious place for shell collections or stacks of forgotten board games or trunks full of old *Life* magazines to leaf through on rainy days. The house, nstead, demands to be understood as a retreat, a retreat almost n the religious sense, from all such pleasant fripperies of everylay life. It is a place where you come to draw closer to yourelf, to your family, and to nature. Its tentlike forms suggest an







Left top and bottom, interior of living pavilion is populated with simple, white structures that enclose kitchen space and form backdrop for dining room, all beneath a hefty frame. Above, a night enclosure dissolves to render interior dominated by fireplace

impermanence, a sense of camping out in the great natural setting

One of the owners is a painter, and for her a studio, a fourth temple, filled with evenly glowing north light, has been built in the woods at a distance from the others. A fifth, not yet built, will be a garage, blocking the driveway's vista toward the ocean and deflecting visitors into the courtyard, so that their first view of Penobscot Bay will be through the glass pavilions themselves A sixth will be a guest house, two stories high and sited at the



ge of the little acropolis, between the children's cottage and e living pavilion. The guest house will disrupt the axial symetry and uniformity of rooflines that now exist, and will make e family courtyard feel both more enclosed and less formal. Of all the places in this somewhat stern house, the most imprese is the master bedroom pavilion. Here two heavily symbolic ons of domestic life, the bed and the fireplace, confront each ner at surprisingly close quarters. The fireplace is as big as a ve—you can walk into it—and it makes the bed, on its granfloor under its tentlike roof, feel half outdoors, as if it were mped on a granite ledge in front of the cave/fireplace. To her side the walls are all glass, giving a view toward the far rizon of the wilderness bay on one side and toward the enclosed domesticity of the courtyard on the other. There is a primitive power in the elemental simplicity of this space.

In the living pavilion, by contrast, things aren't quite so clear and strong. The kitchen-shed and dining-wall seem unrelated to the larger volume in which they stand, confusing it a little. But the great granite-block fireplace, almost identical with the one in the bedroom and quarried, like all the granite in the house, from a nearby island, has tremendous presence inside the room, as does the view of the bay.

Remarkably original in both concept and execution, the Wenglowski house is austere but not unpleasingly so. It joins a bold, formal concept with a striking natural site and makes, out of the two, one place.  $\Box$ 



Contextual Tower Rises Above a '50s Classic

500 Park Tower, New York City; James Stewart Polshek & Partners. By Cervin Robinson



The renovation and expansion two years ago by James Stewart Polshek & Partners of a building that was originally designed by Gordon Bunshaft, FAIA, of Skidmore, Owings & Merrill for the Pepsi-Cola Co. and constructed in 1958-59, a building that later belonged to Olivetti, has a distinctly historical dimension.

Examples are all about us of the difficulty of renovating and of supplementing the space of historic structures without draining them of much of what made them worth keeping. The practice is routine for such monumental 19th century buildings as libraries and is now being applied to the best mid 20th century museums. One would not have thought the Pepsi building promising grist for this mill. Much urban preservation assumes that a building's exterior and interior are two quite different things, that one is public and subject to preservation and the other private and not subject to it. A glass box can clearly not be so easily split between exterior and interior; its interior space is at least at some times of day very much a part of its exterior. As it has turned out in this instance, the renovation and expansion of one glass box was carried out with skill, tact, and success. This landmark (which cannot be officially so designated until 1990) survives as less the fragile pavilion it once seemed and more a tough, classical monument.

The original plan of the Equitable Life Assurance Society, which owned the building, and of Tishman Speyer, the developer, was simply to renovate the original building. But Polshek was eventually called upon to add space at the rear of the building, an addition that eventually took the form of a 40-story tower of which the lower 12 stories augment the space of the older building and the upper 28 house 56 condominium units.

The new building was designed in some respects to provide a contrasting setting for the old building; in part it also made a point of discreetly reusing the materials of the earlier building. On its south and west sides the new tower was faced, as is the original building, in aluminum and glass, but now in a smallerscaled, tighter-skinned version, its narrower bands of windows marked by thinner, flush mullions and transom trim. The north and east elevations of the new tower that form a backdrop to the old building were faced in a thermal-finish gray-green granite, with squarish windows deeply set, except for an area of the 59th Street facade where an oriel of the new glass and aluminum cladding extrudes from the granite at the height of the principal floors of the old building. Extending from the east face of the tower and cantilevered over the original, a stack of 25 floors of apartment space also was faced in the new aluminum and glass skin. The oriel makes it clear that the lower floors of the tower extend the original office space. The cantilevered aluminum and glass "L" above and a change of fenestration in the granite from square to notched openings indicate the transition from offices below to residential space above. The sense of continuity between the new and the old that the reuse of aluminum and glass provides is further developed by the repaying of the sidewalk plaza below the old building in the same gray-green granite that faces the tower behind it.

In its original incarnation the Bunshaft building was a box of nine floors (plus a penthouse) raised above plaza level on five pairs of columns. It provided the sort of measured but boundless horizontal space that the fluorescent tube had made commercially feasible after World War II. At night the openness of its spaces was attested to by the uninterrupted planes of illuminated ceilings that could be seen from the street. By daylight the ground floor lobby provided a taste of the space above. Described as "for exhibitions," this lobby was characteristically empty except for a desk and, below a Pepsi logo, a Pinkerton guard.

In the renovation the office floors were divided. From the street a new ceiling lighting fixture is visible in each bay of the old building, its purpose being in part to preserve the rhythm of the original fenestration. Generally each of these bays does

Across page, new granite, aluminum, and glass tower rises above SOM's 26-year-old office building at the corner of Park Avenue and 59th Street. Axonometric diagrams how new building meets old.





Above, marble clad elevator lobby on retail level of tower; right, detail of granite-faced north elevation whose restrained fenestration contrasts with liberally glazed south side (across page).

now represent a separate, approximately cubical office, and in practice the lighting fixtures reinforce the bays in such a way as to emphasize the separateness of each sheet of glass and the office behind it. (In the process the mullions come to read almost as classical pilasters.) The recessed ground floor below also was divided to provide commercial spaces, one of them for the Amro Bank, from which the building now takes its name, and spaces for the separate office and residential elevator lobbies. The divisions between these various uses fall either on columns of the old building or on mullions.

The effect of the new cell-like spaces above and of the tactfully handled divisions below are likely to be seen (and ignored) as the minor and mildly regrettable price we pay for the building's continued existence. Alternatively they can be seen as a special sort of enrichment that only time can bring. The Renaissance palazzi that fill the arches of an ancient Roman theater also can be seen as either mildly regrettable or an enrichment. In either case it would seem perverse to overlook the facts of the additions and the effect they have. At 500 Park Avenue the expansion of the original space has been handled with grace and tact, but the special pleasure that the original pavilion now gives comes from a subtle exploitation by Polshek & Partners of the change that almost 30 years have made in our notion of space and the ways in which it seems appropriate to use it.  $\Box$ 

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#### Anchor for a Sprawling Medical Complex

Cleveland Clinic; Cesar Pelli & Associates. By J.P.

Cleveland is one of those older rustbelt cities that, justly or not, has come to symbolize American urban decline. And big-city hospitals are great intractable beasts of buildings that seem as immune to architectural design efforts as a rhinoceros is to a hypodermic needle. Thus, by accepting a commission for a new building in an immense and aging Cleveland medical center, Cesar Pelli & Associates did not enter the easiest of professional situations.

As it turned out, however, Pelli was just what the doctor ordered for the Cleveland Clinic Foundation. His office produced a master plan, a unifying elevated circulatory spine, a grand open space, and a centerpiece building of unusual quality. What was a sprawling and nondescript collection of 15 buildings on a 100-acre site now has the beginnings of a comprehensible overall structure, as well as a rock-solid anchor whose interiors transcend the standard for the building type. Although its name implies outpatient service to the urban worl ing class, the Cleveland Clinic is a blue-chip institution charging full fees and providing complete hospital functions and the most advanced medical technology. Dalton, van Dijk, Johnson & Partners, associated architects on the clinic building, were also architects for a simultaneously built addition to the main hospital building. Here is where the Shah of Iran came for money is-no-object medical treatment after his political demise. This is the second-largest referral center in American medicine, wit over 800 staff physicians, interns, and residents—topped only by the Mayo Clinic.

Pelli's building is a clinic, but the treatment it houses include sophisticated surgery as well as more ordinary ministrations. In complexity can be deduced from a program of 22 separate clin ics, whose space requirements span a 12-to-1 range, plus admin istrative and support functions. All these embrace 3,000 room



pposite, evening view of the Cleveland Clinic's front scade, overlooking 470toot-long mall. Right, northust view of exterior's epped planes of granite and glass. Below right, eighboring church conasts with clinic's symmetcally sculpted mass.





Below, diminishing size of floor areas responds to varying sizes of individual clinics. Top right, main lobby and elevator core. Below right, a nurses' station and examination room corridor. Facing page, three-story main lobby with wood-wrapped columns.







and 620,000 square feet and accommodate 600,000 annual our patient visits. That complexity is not as easily read, however, from the building's regular and symmetrically stepped mass, when the extreme diversity within has been organized to fit into a highly restrained envelope.

Indeed, in its outer appearance, the granite and glass clinic at first seems a bit cold and reticent. If it were a doctor, it migh be said to lack an ingratiating bedside manner. But that first impression gives way upon closer scrutiny to a sense of clarity and imperturbability. Here is a stepped, 14-story mass of gran ite, about 200 feet tall, somewhat similar to a ziggurat or a Maya pyramid. The building skin is horizontally banded, with four divisions to a typical floor. Glazing is nearly continuous and coded according to purpose: Office and examining room wim dows are one band high, corridor windows twice that, and wai ing room fenestration is three bands high. A minor departure from this system occurs in the transition between single- and triple-height glazing.

These windows wrap around a building form made up of 3separate stepped planes. The sides and rear exhibit all of this volumetric complexity, combining steps in plan and section to produce a rich pattern of receding surfaces. (This effect will be multiplied if the building expands, as planned, toward the east.) In contrast to this rhythmic surface articulation, the ma



rest front is a single monumental plane, as though a larger buildng has been sectioned with surgical skill. Here is where the nodulated fenestration best represents the clinic's inner workings.

The grand scale of the clinic's west front is matched by that f the adjoining green, a deceptively simple 470-foot-long mall esigned somewhat in the French landscape tradition and ounded by rows of white oak, arborvitae, liquid amber, and rab apple. These trees, planted in rows of graduated length to reate a perspective illusion of greater depth, exhibit strong seaonal variation. Movable wooden benches set on the lawn comlete the composition.

The south and east sides of the green adjoin two legs of an nclosed T-shaped pedestrian bridge that links the clinic, its arking structure, the hotel, and the old and new hospital wings. ike similar spines that played prominent roles in Pelli's buildigs of a decade or two ago, it functions as a place of social nd professional exchange as well as a means of circulation. .nalogously, it is the public spaces that give the clinic building uch of its architectural distinction. The lobby is a stepped, ree-story volume that recapitulates the overall building mass. enerously proportioned, it weds space and light in a manner iat we have come to associate with the grand hotels of the 9th century, albeit without theatrics or ostentation. In a nice altoesque gesture, the bottom six feet of the tall lobby columns are girded with convex oak slats to express a human height.

Wood trim pervades the clinic's upper lobbies and waiting areas as well. Planters and appointment and reception desks are banded with light oak half-rounds that contrast subtly with their darker fields. This horizontality recalls the exterior window pattern and provides an elegant unifying motif to the public spaces. Waiting rooms are stacked so that they share twostory-high atria that face west for dramatic views of the mall and, three miles beyond, the downtown skyline. Half of these spaces are in effect deep balconies, while the rest have doubleheight portions. Like the various departments they serve, they are further differentiated by individual color schemes and by numerous artworks. And while the examining rooms and offices do not provide the same opportunity for spatial expression, they nevertheless proclaim a humane design sensibility more than an institutional one. Indeed, this is the prime accomplishment of the clinic: While it performs like a hospital, it feels like architecture.

The Cleveland Clinic is a design achievement of remarkable subtlety and maturity. Nothing about it stands out dramatically. It gains its power from a steady accumulation of basic elements and simple details, organized with transparently obvious logic. Pelli makes it all seem so simple and inevitable that you wonder why every hospital isn't this good.  $\Box$ 

# Geometric Plan in a Suburban Setting

IBM building, Westchester Co., N.Y.; I. M. Pei & Partners. By Carleton Knight III








o the chagrin of some property owners, suburban Westchester ounty, N.Y., just outside New York City, has during the past ecade become home to a growing number of major corporaons. Wealthy residents of the once-rural countryside dotted with ast estates now find themselves cheek-by-jowl with office buildigs as well as colleges and suburban housing developments.

In the late 1970s, the expanding Nestlé Co. decided to join this migration, commissioning an I. M. Pei & Partners-designed orporate headquarters amid large houses in Purchase, N.Y. Archict John L. Sullivan III, a Pei firm senior associate, says Nestlé as concerned from the start about community opposition to s plans: "The client did not want a typical office building that bows its way into the community."

The architects took particular care in the design to make the uilding fit; I. M. Pei, FAIA, notes with pleasure, for example, ow an 800-car garage was "tucked into the enormous drop in rade" at the back of the building so that no cars can be seen om the street. Overall, Sullivan describes the design as conextual, comparing it to a large Palladian house with central secon and connecting wings. The shapely scheme allowed the rchitects to utilize a variety of triangles, circles, and rectanes. "The facets and curves play against each other," says Sullivan f the extensively geometric plan.

This effort on the part of the architects to be neighborly by reaking the building down into understandable parts also iminishes concern by employees that the huge, low building

Above, main entry is at left. Left, garage nestles into hill.

would resemble a warehouse. The various components help create an identification and reduce the feeling of being lost in the necessarily large (450,000 square feet) building. The architects designed the building around what they describe as a "main street" linking the various office and service areas with circulation systems and offering glimpses of the exterior. A secondary circulation path ranges along the large curved sections where the secretaries rather than the private offices are placed on the perimeter to take advantage of the views through floor-to-ceiling glass.

All was not well, however, with the client, who began to face economic difficulties after construction had started. Nestlé sold a division that was to move into the new building, and for a time considered renting out one wing. Then the company began to make changes and cut back on finishes, according to the architects. In the end, International Business Machines Corporation bought the half-constructed building, and, according to Pei, "breathed new life into the design." The computer giant restored the original features and finishes, completing the building as designed and in a handsome setting planned by landscape architect Laurie Olin. Some changes in layout were necessary-IBM did not need the large number of test kitchens-and the cafeteria was upgraded substantially. (In a bit of irony, Nestlé now plans to move into a speculative office building of little architectural character under construction next door.)



The stepped-box, rectangular form of the main facade with its long, poured concrete lintel over the entry seems derived from Pei's angular design of the National Gallery of Art's East Building. In this considerably less expensive variation on that theme, travertine has replaced marble. Butt-glazed mirror glass bands are held in polished stainless steel heads and sills.

While the exterior has some interest, it is the building's interior that is a visual spectacle. The travertine-walled main lobby could easily be a museum, although as yet, there is only a small tapestry hanging. The 50-foot-high space needs some color, and IBM is reportedly working on this shortcoming. (Given the building's gestation, the firm might commission Andy Warhol to paint a large Nestlé's Crunch Bar.) A scooped-out section of wall at one end invites visitors into the building proper.

Each of the two quarter-circle wings centers on a three-story skylighted court wrapped on two sides with a poured-in-place concrete frame. This frame with an offsetting pattern of columns appears to be almost freestanding as it is set 12 feet from the interior wall, permitting it to define the space without enclosing it. The columns are canted and sliced off at one side, not unlike the way the architects treated the colonnade at Boston's Christian Science Center. A deep, semicircular recess at the back of each gives the appearance that a round column had been removed. The third side of each court is a zigzag step wall, continuing a theme from the exterior. Overhead, pitched-roof skylights rise from the top of a deep concrete frame, giving a strangely, but charmingly, historic quality to the space.

Since the building is only three floors, plus a level below grade, the architects believed the staff would walk up and down, and thus provided spiraling ramps at the end of each wing. These ramps are indeed widely used, in part because of the views of the surrounds (one can even see the New York City skyline). The central drum of each spiral contains an elevator.  $\Box$ 







Highlights of interior are light-filled courts. Left, travertinewalled main lobby. Far left, one of two matching atria with handsomely detailed concrete screen walls. Plan shows play of angles and curves; 'main street' is outlined in color.



## Exhibition Hall Returned to Its Original Grandeur

#### At Manhattan's main library; Davis, Brody with Giorgio Cavaglieri. By Lynn Nesmith

When Carrère & Hastings' magnificent New York Public Library on Fifth Avenue opened 75 years ago it was heralded as one of the city's great Beaux-Arts treasures, but by 1982 years of neglect and numerous alterations had taken a heavy toll on many of the interior spaces. That year an ambitious multiphase restoration program funded jointly by the city and private sponsors was launched to recapture the library's original glory.

A major component of the first stage of the restoration by Davis, Brody & Associates in collaboration with Giorgio Cavaglieri Architects was the reopening of the first-floor gallery space, which has been renamed the D. Samuel and Jeane H. Gottesman Exhibition Hall.

During World War II the library's exhibition program was discontinued, most of the collection was shipped to upstate New York for secure storage, and the exhibition hall soon became territory for expansion of support facilities. Along the way, the room acquired a hodgepodge of suspended fluorescent lights, dropped and plastered ceilings, partitions, metal desks, and mechanical systems. Partner Lewis Davis, FAIA, said that when he first went into this cluttered office space it reminded him of the Homestead Act. "When anyone had required a work space they were told to go through those two beautiful doors and wherever they found space it was theirs. But they must provide their own lighting, wiring, and furniture," he said.

Located on axis with the restored grand entry foyer, the 6,400-square-foot exhibition hall is entered through a pair of ornate bronze and glass doors. Its far door opens onto the library's 88 miles of book stacks. Once one is inside the room, the opulence of the original materials and craftsmanship is evident in the white Vermont marble walls, the graceful archways, the 24 columns of gray streaked Cipollino marble, and the oak carved ceiling. Four arches flanked by Ionic columns and pilasters divide the hall into six small alcoves best suited for viewing small artworks and books. The grandeur of this space outweighs any constraints the classical articulation places on staging exhibitions.

Right, restrained restoration of the exhibition hall highlights the classical elements. Below, 'before' view of the space.







Davis says the main focus was to restore the exhibition hall to its original design, while program requirements called for upgrading the hall to a "museum quality" space.

Without disturbing the integrity of the original detailing, the architects have successfully integrated mechanical systems and lighting to accommodate changing exhibitions. The geometricpatterned Renaissance-style ceiling by Maurice Grieve was restored and adapted with a flexible lighting system with thin, removable tracks. Screw holes are concealed with plugs when not in use. The six bronze and leaded glass inlay chandeliers are reproductions of an original Carrère & Hastings design, with an added uplight component to illuminate the ceiling.

The restored marble, mosaic-patterned floor recalls the design of the ceiling, and removable marble cover plates bound with bronze provide access to underfloor mechanical systems.

To meet strict temperature and humidity requirements (the building had no airconditioning system), a new ventilation system was installed in the existing ducts that had been used previously for warm air and between the marble walls and shelving. Vents were installed below the original window sills. Permanent translucent screens to reduce ultraviolet light were installed on the exterior of the six windows.

The honor awards jury commented, "The rebirth of the hall has returned not only a great exhibition hall to its former glory, but has satisfied one of the most important functions of architecture—bringing beauty and delight where once it had been snuffed out."  $\Box$ 



Left, ornate entrance door leads from the hall to the restored grand foyer, Aston Hall. Right, Ionic columns flank the room's four grand arches.









## Lining an Auditorium with a Library

At Hackley School, Tarrytown, N.Y.; Keith Kroeger Assoc. By L.N.

The Hackley School is an eclectic hilltop enclave amid a recent ash of ordinary suburban office buildings in rapidly developing Vestchester County. From a busy highway, a winding drive eads to a picturesque, free-form courtyard surrounded by three onnected buildings that range in styles from half-timbered Elizbethan revival, to turreted Tudor revival, to neoclassical. The luster was constructed in stages at the turn of the century.

The neoclassical building, called Goodhue Memorial Hall, was a handsome assembly hall designed by the Boston firm of Wheelwright & Haven in 1900. More recently, when the 750tudent preparatory school started to outgrow its library, the rustees decided to relocate it to Goodhue Hall, in part because he building's location facing the main lawn would underscore he library's importance.

The building had never undergone a najor renovation or "modernization," so nost of the original detailing was intact. At the time of the renovation the open, parrel-vaulted hall was furnished with netal folding chairs that faced a slightly levated wood stage under a three-part tained glass window with coats of arms. On the opposite wall, above the main ntrance, was a large Palladian window, nd along one wall were two tall fireplaces.

Keith Kroeger Associates of Chappaqua, I.Y., was engaged to convert this assemly hall to the new Kaskel Library. "Our oal was to nestle a library of 20,000 volmes within the hall in a way that would nhance the significant features of the xisting room," says Keith Kroeger, AIA. Several different schemes were reiewed, including a "high-tech" plan with double stack of bookshelves in the

eft, large Palladian window above the vain entrance floods the reading room ith natural light; right, before view. bove, neoclassical entry of restored 'oodhue Hall, now the Kaskel Library. middle of the room. But Kroeger, who is a Hackley alumnus, said that this was clearly a case in which he wanted to draw on the past.

To preserve the integrity of the original building and to allow the new library to be seen as a unified whole, the architect created a "room within a room." Although the concept is simple, its execution proved quite complicated, says project architect Leonard Woods. The room was adapted with a structural system to support the new construction that encircles the hall. Resting on new footings under the floor, a steel frame supports the balcony, as well as the double row of cabinetwork fitted with the bookcases and the built-in circulation desk.

Under the balcony extension is a double row of bookcases with framed openings for the main entrance, the doorway to

> the small periodicals reading room, the circulation desk, and the two fireplaces. The aisle between the two shelves creates the illusion of "stacks" that are found in larger libraries, while the fireplace hearths become "friendly sitting areas" nestled among the bookcases.

> Encircling the room is a new balcony with bookshelves along the walls and desks built into the railings that provide students a nice view while studying. The height of the balcony is sympathetic to the barrel-vaulted ceiling, and the detailing and scale recall the original molding and trim.

> A double stairway leads to a landing that is level with the bottom of the restored stained glass window; the balcony level is up an additional four steps.

> Under the stairway, the architects placed shelves for primers and other young children's books. The low ceilings and intimate scale provide a cozy space for the school's smaller students. (Hackley School encompasses kindergarten through 12th grade.)

The jury commented that the "addi-







Above, circulation desk with administrative offices beyond. Right, the stained glass window and cozy alcove under the stairway.

tion of cleverly designed and carefully crafted balconies, bookcases, and reading areas is so harmoniously achieved that it looks as though the building has always been just as it is now."

Both wings were previously hallways that connected Goodhue with adjacent facilities. One wing is now a small reading room; the other houses staff work areas and the librarian's office.

The architect's recommendation to retain the existing chandeliers and to use tables with reading lamps surprised some school officials. The table lamps create a warm background light and provide a human scale to the space. Both the lamps and the tables are custom designs by the architect, while the chairs are a standard design from the company that produced the tables.

Howard Kaskel, the library's benefactor, selected a quotation that is inscribed above the circulation desk: "Live always in the best company when you read." This library is a wonderful place to keep good company.  $\Box$ 









### **Richness of Decoration Restored**

Battell Chapel, Yale University; Herbert S. Newman Associates. By M.J.C.

In 1876, on the dedication day of Yale University's Battell Chapel, designed by Russell Sturgis, the assembled may have had only a glimmer of the beautiful gold leaf and colored stenciling that ined the walls and danced about the ceiling high above their neads. The stained glass windows and gaslight did little, no doubt, to reveal the richness of decoration that has recently been recreated in this AIA honor award-winning restoration by Herbert S. Newman Associates of New Haven.

The chapel did not long remain in its original, pristine conlition. In 1893 the south wall, which faces the Yale quad, was punched through with three squat Gothic arches and a wing idded to accommodate more seating on the main floor and in he balcony. Ten years later the chapel was electrified, shedling some light on an interior that was probably beginning to ade. By the mid-1920s, the interior was the target of some 'updating," which took the form of imitation ashlar applied over he stenciling. Subsequently the organ was removed from behind i large, ornamental screen in the apse, relocated in the north balcony, and a new, modest screen installed. By 1984, the nearly i0-year-old ashlar finish that had covered the stenciling for nore than half the chapel's life was also in bad condition, faintly howing the decoration it once concealed.

Selow, view of apse and north balcony before restoration, showng 1940s altar screen and imitation ashlar. Left, same view howing restored, vibrant decoration and new screen incorpoating old, all framed by arched opening made for 1893 addition. Clues to the chapel's former glory were found in photographs from Yale's archives that were taken shortly after the building's completion. Using this evidence, the walls were first washed and then spectographically analyzed to determine where the major bands and elements of decoration might be. Then long, vertical strips of the ashlar finish were removed to determine the exact location of the decoration and the intensity of its colors, accounting for aging. The diaper pattern on the lower walls, below the sills of the stained glass windows, was discovered beneath a plaque on the east wall that had not been removed when the ashlar finish was applied.

Stenciling was then designed using the uncovered patterns, and paint in 15 colors and gold leaf was applied over a gray coat above the window sills and a red coat below the sills. The meticulous stenciling is the work of John Canning, a Scottish painter and decorator from Southington, Conn., who has done similar work at the Connecticut State Capitol in Hartford. The wooden ceiling, although faded, was simply cleaned and refinished with a nonyellowing acrylic varnish. In the apse, the vaults were discovered to be made of canvas stretched between wooden ribs, decorated with a star pattern on a blue field.

To provide more room in the apse, the 1947 screen displaying the emblems of Yale's colleges was dismantled, pushed back, and incorporated into a new screen designed by the architect based on photographs of the chapel's original screen. The new screen follows the curve of the apse and goes no higher than the diaper pattern, tying it into the east wall and giving the





Right, view from apse, distinguished by new incandescent lights along balcony rails and upper walls, which suggest original gas lights. Apse and altar have new hardwood floor.

organ pipes a solid, new base on which to rest. A new hardwood floor was installed in the apse and the altar area.

The provision of more light for the interior was achieved with a sensitivity to the chapel's original fixtures. The three-pronged gas jets that are barely visible in the 1876 photographs were removed when the chapel was electrified. In the restoration, new fixtures were placed according to the old photos. Although not replicas of the old fixtures, the new lights are incandescent, covered by simple, clear glass globes held in place by three vertical arms that recall the original gas jets. These new fixtures were actually designed by the architect by combining pieces of different fixtures by the same manufacturer.

In the ceiling, new recessed can lights were installed with a minimum of intrusion, while over the south balcony additional can lights were fastened directly onto the ceiling due to the shallow roof structure. Four metal and glass chandeliers in the main chapel space were cleaned, rewired, and lowered to bring them in line with a thick ornamental band that divides the interior at its midsection. In the apse, uplights were installed behind the screen to illuminate the decorative ceiling and stenciling above. A new, sophisticated lighting board at the back of the chapel allows sets of lights to be individually adjusted for intensity with a delayed dimmer that brings the lights up or down slowly and smoothly, giving a hint of what the character of the chapel might have been 110 years ago.

Other improvements to the interior include refinished woodwork, newly installed carpeting, reupholstered seat cushions, an effectively concealed sprinkler system, a retrofitted heating system, brass railings in the balconies, refurbished stained glass windows now protected outside by plexiglass, and access for the disabled.

Below grade, service spaces for the chapel were created by enlarging a crawl space that was previously accessible only through a small hole in the wall of the narthex. Loads of building rubble were removed, and the basement was carefully excavated by shoring up columns and walls to make room for restrooms, easier access to mechanical equipment, and a corridor that runs from the narthex to the apse. This allows the clergy and choir to move to different parts of the chapel without passing through its aisles. On the chapel's exterior, mortar joints were scraped and repointed, and a new slate roof was installed in the original pattern.

Commenting on the quality and scope of the restoration of Battell Chapel, the awards jury wrote: "Through careful research, painstaking craftsmanship, and unobtrusive modernization, the architects have uncovered a treasure and restored it to its proper place as one of the great architectural resources of its historic campus."







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Chicago Chapter. American Academy of Pediatrics Corporate Headquarters, Elk Grove Village, Ill. (above); Hammond Beeby & Babka, Chicago. The sloped subarban site suggested a midlevel entrance hat leads axially through the foyer to an elevator lobby and terminates in a skylit atrium overlooking a lake. Exposed steel prnamental stairways flank both sides of he atrium to provide the main internal circulation of the building. The ground level houses support facilities and a conference center, and the second and third floors contain offices. The exterior is clad in two colors of brick with limestone trim and cornice pieces. Painted steel plate columns and cornices create the east atrium colonnade.

Catholic Order of Foresters, Naperville, Ill. (below); Holabird & Root, Chicago. This U-shaped headquarters for a fraternal insurance organization has a cul-desac entrance with a landscaped courtyard and a fountain. A freestanding brick colonnade serves as a screen to the glass wall beyond to define the entrance. The brick exterior is detailed with bright blue mullions and tinted reflective glass. The lobby is a skylit atrium with segmented stairways to the upper floors.



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North Dakota Chapter. Depot Plaza Gazebo, Fargo, N.D. (top); Clark Holman & Moorhead, Ltd., Fargo. Designed to call attention to the recently revitalized community plaza and Cass Gilbert railroad station, the gazebo has a glass and aluminum cupola above a copper standing seam roof and fascia on a steel frame. Painted bead ceiling board soffits were designed to recall the train station. **Cleveland Chapter.** Union Branch Public Library, Cleveland (above); Collins Rimer & Gordon, Cleveland. As part of a library consolidation program, the branch library was built to replace two smaller libraries while increasing circulation and providing space for community activities. The brick and masonry trim were designed to relate to the adjacent church.

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Architects Society of Ohio. Festival Park/ Portside Festival Marketplace/Trinity Plaza, Toledo, Ohio; The Collaborative, Inc., Toledo. The architect worked with various clients, funding agencies, and citizens' groups to create a cohesive scheme for these three projects that have become the city's focal point of downtown revitalization. The central public space, the three-acre Festival Park, has a stepped terrace that serves as an amphitheater for performances. The large open space provides unobstructed views from Summit Street to the Maumee River. The 12,000-square-foot Trinity Plaza is set atop a parking garage one-half floor above street level and was designed to be used as part of the downtown pedestrian circulation network. The two-level, 80,000square-foot marketplace accommodates 80 to 90 shops or restaurants of varying sizes and functions.



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#### AIA Component Awards





**Gulf States Region.** Johnson Family Home, Madison County, Miss. (above); Samuel Mockbee, Architect, Jackson, Miss. A team of volunteers organized by a Catholic nun built a house for a poor rural family with seven children. The architect placed enclosed rooms off a large central living space and used traditional materials and forms (gable roof and front porch). Volunteer labor and materials totaling \$7,000 resulted in a cost per square foot of \$6.83. The jury said that this house "illustrates the fact that no task is too small or humble to engage the talents of creative people."

Heritage Center West, Little Rock, Ark. (left); Allison Moses Redden, Little Rock. In converting a concrete frame warehouse to speculative offices and retail space the architect replaced one solid brick wall of the original building with a grid of glass and colored frames. The renovated building provides a link between the downtown area and the city's riverfront.



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#### Mississippi Chapter and Gulf States

**Region.** Roosevelt State Park Bathhouse, Morton, Miss. (above); Eley Associates Architects, Jackson, Miss. This wood and brick pavilion-style bathhouse serves as a gateway to the lake and accommodates showers, toilets, ticket booth, and concession area. The building's two wings are connected by a sheltered outdoor porch that has a deep overhang and trelliswork at the rear roof and along the front chase wall.

Florida South Chapter. Clary House, Sanibel, Fla. (below); Andres Duany and Elizabeth Plater-Zyberk Architects, Miami. This vacation house was designed for a married couple with frequent live-in guests. Located on an island in the Gulf of Mexico that is prone to flooding during storms, the house rests on pilings that are screened by wood latticework. "It is excellent and effortless with a great deal of character, a high level of refinement and polish," said the awards jury.





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Florida Association. Florida A&M School of Architecture, Tallahassee, Fla.; Clements Rumel Goodwin Associates, Jacksonville, Fla. The design for this 64,000square-foot facility was chosen through a two-stage competition sponsored by the state and the university. Comprised of four connected wings of varying sizes and configurations, the \$5.3 million facility accommodates 400 students and 35 faculty and staff. A passive energy system uses a solar greenhouse-like collection system to return heat into the air in winter and takes advantage of natural ventilation in summer to supplement cooling requirements.

Photographs by Steven Brooke



Maushop Village, New Seabury, Cape Cod, MA; Architect: Claude Miquelle Associates, Melrose, MA. Cabot's Bleaching Oil on shingles.



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Washington Metropolitan Chapter. Wilmington AMTRAK Station Renovation, Wilmington, Del. (above); Skidmore, Owings & Merrill, Washington, D.C. The renovation of this 1905 Frank Furness railroad station required the reconstruction of the hammered glass and wrought iron canopies and the red clay tile roof. The exposed trough-beam ceiling in the main waiting room was restored, and the elegant wrought iron and brass detailing and railings were re-established. AMTRAK services and concessions were reorganized, and elevators and escalators were added to meet increases in the number of patrons.

Baltimore Chapter. Private Residence, South Miami (below); Aragon Associated Architects, Baltimore. Located on a long shallow site, the house is organized on a linear plan with hallways on either side of the principal interior spaces and has a series of outdoor pavilions with a trellised courtyard. Punched windows in the clerestory provide natural light to the dressing rooms. Exterior walls are concrete block and stucco.



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Tom Crane



Philadelphia Chapter. Renfrew Center, Philadelphia (top); Atkin, Voith & Associates, Inc., Philadelphia. A new 42-bed dormitory and dining facility for a clinic for sufferers of eating disorders was added to complement a 1929 manor house that was converted to house administrative and therapeutic offices. The building has a straightforward corridor plan with a residential scale, and a curved terrace surrounds the dining room and leads to flower and vegetable gardens that will be used in the treatment program. The jury praised the building for its siting, humanism, and lack of institutional character. **Pennsylvania Society.** Provident Mutual Interiors, Philadelphia (bottom); KPA Architects, Philadelphia. The architect's use of natural and artificial light and choice of materials contributed to the success of this carefully detailed office interior and entrance hall.



New Jersey Society of Architects. Mermaid Hill, Block Island, R.I. (above); Herman Hassinger Architects, Moorestown, N.J. The architect, who was formerly a Coast Guard officer, used forms, details, and materials to recall a traditional New England lifesaving station for his own vacation house. The first floor has a large, open living space with separate areas for children and adults and two guest rooms. Three bedrooms are tucked under the eaves on the second story. The observation tower on the north wing is reached by a ship's ladder through a hinged hatch. Exterior cladding is traditional cedar shingles and painted trim. Pittsburgh Chapter. 227 Fort Pitt Boulevard, Pittsburgh (right); L. D. Astorino & Associates, Pittsburgh. In converting an 1880s bank to their own offices the architects added a large, colorful bay window facade based on the nearby historic buildings along the riverfront. Private offices overlook a landscaped interior courtyard with arched skylights. The architects designed built-in work stations, storage units, and a reception desk.



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Michael Forester





Boston Society of Architects. Souweine House, Amherst, Mass. (top left); Williar Rawn Associates, Boston. The construction of this Greek revival-inspired house for a family of four was the subject of the recent best-selling book, *House*, by Tracy Kidder. The owners wanted a "mortraditional" design with defined rooms b also wanted to take advantage of passive solar energy. The front of the house has



n asymmetrical porch and a large circuar window in the gable end, while the outh side has six double-hung windows ith a band of fixed glass panels above nd below.

lew England Regional Council. Summer olo Barns, Greenwich, Conn. (bottom 'ft); Ferris, Franzen & Associates, Southort, Conn. This 4,000-square-foot barn as 14 open-air stalls, a feed room, tack room, and a hay loft. A 10-foot overhang on both sides, which is supported by Doric columns, provides circulation and access to all the stalls. The stable is clad with cedar shingles and clapboard reminiscent of the New England vernacular. The jury said, "It's obvious on this estate you're lucky to be a horse."

Old South Church Restoration, Boston (above); Shepley Bulfinch Richardson &

Abbott, Boston. In renovating the 1874 Venetian Gothic church by Cummings & Sears, the restoration architect repaired the polychromatic masonry exterior and elaborately detailed copper roof, redesigning the interior in the "spirit of the last century." The chancel platform was redesigned to accommodate both religious ceremonies and musical performances, and a new chancel screen was added.



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#### Buildings Were Among His 'Playthings'

Leonardo, Architect. Carlo Pedretti. (Rizzoli, \$75.)

"Leonardo would have greatly profited, if he was not of such a varied and unstable nature, for he began to learn many things and once begun he would abandon them." So wrote Vasari who, like many of Leonardo's contemporaries, could not see the sense in neglecting one's true vocation by playing around with matters remote and strange to the artist's world. I think Vasari was right. Who would not give up all of Leonardo's inventions and writings for a few more paintings such as the Uffizi's "Virgin and Child with St. Ann" or any of his paintings of women with their smiles of "infinite tenderness and sinister threat," as Walter Pater expressed it?

But Leonardo thought of himself as a gentleman, a courtier (he had to live down the fact that he was an illegitimate son). Such a man might paint but, if that was all he did, he was like Michelangelo, hardly more than a glorified workman.

Carlo Pedretti, who probably knows more about Leonardo than any other person, has given us a book that purports to present one facet of the master's genius. He writes: "I approach the subject of Leonardo as architect in the same way I approached the subject of Leonardo as painter ... namely with an almost dogmatic brevity and without footnotes. Almost dogmatic the book is; brief it is not. It surely contains in its more than 500 illustrations every scrap of Leonardo's work that bears on architecture and much that does not, in any but metaphorical definition. There are designs for a loom and textile machine, for ladies' purses and embroidery patterns, for all sorts of hydraulic devices, for anatomical studies, for a "device for opening a prison door from within," as well as many examples of gadgets designed to make mincemeat of the enemy. It seems that anything Leonardo designed of a craft or mechanic nature is subsumed under the rubric of architecture by Pedretti.

I cannot believe that Leonardo did not make some sort of distinction between architecture and technics even though, seeking a job, he wrote, "... and in times of peace I believe I may be most favorably compared to any other in the field of architecture, in the designing of public and private buildings and in the conducting of water from one place to another."

All those Renaissance architects were

polymaths—Brunelleschi, Bramante, Alberti, Michelangelo—but what makes Leonardo so special is not the variety of his skills, but a quality, hard to define, that I consider magical. A look at the brooding, tenebrous landscapes in his paintings—mountains, rocks, and flowers never seen on earth, in colors never seen on earth—suggests what I mean. I think this is a common feeling—anyone who goes to the Louvre will always find a line of people waiting to see the Mona Lisa surely not the Mona Lisa as an art object, but as the personification of some halfremembered dream.

One would presume that a man capable of evoking such feelings would discuss esthetics in his writings. In architecture, for example, the nearest he comes to esthetics is providing dimensions, which though unexplained, supposedly give "proper proportions." What he does advise on are the proper ventilation of privies, the cost of decorating a room, why a wall cracks, or sometimes on a more theoretical level, "what is an arch?" On city planning his interest is in canals, roads, fortifications. The same is true of his writings on painting and sculpture: no "fine art" talk, just a lot of practical recommendations on perspective, shades and shadows, how to "represent a tempest," or "someone speaking to a crowd of people," and "how to paint wind." Is it possi-

Studies of arenas and volumetric analysis of Bramante's St. Peter's, c. 1517-18.



ble that in the fabulous 15th and 16th centuries the feeling for proportion, com position, style, were so pervasive that no more instruction or explanation was needed than is needed to tell the healthy heart how to beat or the lungs how to breathe?

Thumbing through this scholar's book I search for an architectural sketch that even suggests Leonardo's genius. I come up only with what the most banal architect of the period would have drawn; his house plans are ordinary, his churches conventional and similar, and there is no evidence that his lost design for the Milar cathedral lantern had any special merit.

Carlo Pedretti is really too much in love to see that his hero has a weakness. It is apparently with good reason that "no building which can with certainty or even probability be credited to Leonardo exists," according to A. E. Popham, once deputy keeper of prints and drawings at the British Museum. The drawings themselves clearly show the weakness. When the sketch is of machinery, an anatomical detail, a geometrical proposition, or roughly conceptual, the line is vigorous and explicit, but any drawing showing the actuality of a building of his design is fuzzy and uncertain.

History tells us that Leonardo was imaginative, had a seeking mind, was well informed, had an extraordinarily keen eye and unsurpassed manual dexterity. That his devices, machines, and gadgets influenced the development of technology is debatable. What is not debatable, however, is that to us, swamped as we are in technological inventions of the most fabulous and subtle kind, Leonardo's wheels and pinions are little more than quaint when not seen as clumsy or simply absurd

But what is incontrovertible is that his paintings, even the least of them, are as fresh, touching, and remarkable as when they were painted. Do we not agree with Vasari? And in this book does Pedretti not make clear, perhaps inadvertently, that the great man was no architect? Per haps the book should have been entitled Leonardo: His Playthings, bearing in mine what Freud wrote in his study of the master: "... the great Leonardo remained infantile in some ways throughout his life.... As a grownup he still continued playing, which sometimes made him seen strange and incomprehensible to his con temporaries."

-Percival Goodman, FAIA

Mr. Goodman, professor emeritus, graduate school of architecture and planning Columbia University, is an architect, author, and critic.

## BOOKS

. History of Architecture: Settings and ituals. Spiro Kostof. (Oxford University ress, \$45.)

"Ten years in the making. A history of rchitecture that ranges from the first preistoric environments on record to the nost recent examples of architectural and rban design. A landmark work of impresive scope . . . Spiro Kostof has written he book in the conviction that, 'everything uilt is worth studying.'"—From the dust acket.

"Reconcile the traditional canon of monments with a broader more embracing iew of the built environment; no strict istinction between architecture, building, irbanism, high and low culture; an epic tory of humans taking possession of the and and shaping communities through the act of building; not all-inclusive; concerned with the use and structure of urban procses; motivation and ritual sequence; an offering of cultural history. . . . "-From he introduction.

When an author sets himself such an ambitious program, spends 10 years to accomplish it in 788 oversized pages, 800 halftones, and 150 drawings, the reader has a right to expect a consistent architectural statement. If such an organizing principle exists in this book it has escaped this reviewer.

There is a great number of fine drawngs. There are photographs—some good, some excellent, some unusual, and some plurred. Some are familiar redrawings, some from Bannister Fletcher.

There are omissions, but given the author's statement of intent that his book s not all-inclusive, these must be accepted as editorial privilege. However, if a history is to be, and all histories are, even the monumental work of Bannister Fletcher and his successors, only a selection from the complete store of humancind's building, then there must be a uniying idea to give cohesion to the presentation.

We must assume that the subtitle of Kostof's book, "Settings and Rituals," is a statement of the author's organizing prinpiple. Site we understand as place, but ritial is a more complex idea. A ritual (as lefined by Webster, of course) is the solidfication of a cultural event; a prescribed form or manner governing words or actions. It can be a ceremony, a formal act or a series of prescribed acts, or an a cition performed only formally with litle or no significance.

The author's intent cannot be faulted. He states that modest structures in the periphery of monuments are essential to inderstanding the monuments themselves. To ignore context is a misreading of the primary structure. Kostof intends "to put aside the invidious distinction between building, architecture, and engineering, architecture and speculative development, and treat buildings with equal curiosity whether they are religious or intended to be monumental, utilitarian, or residential without discrimination."

This is laudable. We must assume, however, that the unique insight Kostof brings is a revelation of the ritualistic significance of their siting.

Kostof uses the technique of historic vignettes to encapsulate an epoch. This is workable if they do indeed typify, but it can lead to simplifications verging on misrepresentation. For example, we read in chapter 1 that the Alhambra, "plain to any student of its fabric, is shoddily built." Here Kostof makes the point that despite its material failures it was a memorable building. This may or may not be true, but is this an essential observation in five lines describing this building? Certain parts of the building may lack structural validity, and painted plaster and wood decorations have deteriorated. How are these blemishes important in the brilliant execution of an extremely refined design which, incidentally, in later pages he describes poetically?

Just how shoddily built was this building that has survived for over 600 years? The city of Granada, and the Alhambra particularly, withstood a siege of eight months by savage and determined Christian knights before it surrendered to end the glories of seven centuries of Islamic Spain.

Almost everyone, even Bannister Fletcher, agreed that the Alhambra was and is a most extraordinary achievement. The Alhambra was something more than "the gift of making place for some human purpose," as Kostof puts it, despite the failures of some of its decorations. Postmodern philosophies simply do not apply.

In another instance we find that the Maya seem to have suffered from understatement. Kostof says their arches were corbeled. They were not, and this is a significant point. Mayan builders were much too sensible to painfully true six sides of an arch stone, pecking away at it with stone tools, and then bury most of their work in the mass of their structure. They, instead, devised an ingenious system of rubble lime concrete masonry. Their famous "Mayan arches" were not arches at all. They were instead monolithic rubble masonry faced on the exterior with masonry veneer.

Kostof also makes a number of disturbing statements. They may, of course, be incredible insights as new historic perspectives. However they need more documentation to be convincing. If they are insights, the reader is owed more documentation. If they are "off-hand" comments made by a lecturer to enliven his class, they should have been set in script or some other warning device telling the reader to take them with salt.

On page 354 we read, "perhaps twothirds of French and English bastides were never provided with walls." This certainly makes the reader sit up and take notice, for it appears to be an absolute contradiction to the definition of bastide itself, which is a fortified town.

We also read the lively statement on page 349, "there is no such thing as a medieval town." Wow! One would hope Kostof would elaborate on such provocative declarations.

Kostof's contention that the true physical reality of things built lies not in the things themselves but the conditions that caused them to be built appears sound. However, the built object is an unmistakable condition, and to leave it out is to take away the main course and leave us with dessert and seltzer.

Building materials and the techniques by which they are employed are almost genetic in that they carry with them seeds of human culture. The difference in the cultural conditions of stone, copper, or iron societies is a difference in the division of labor, social organization, the power of the village and the tribe. They spell the difference between men's and women's work and the relation to each other. Settings and rituals are shaped by these realities.

A theory of architecture or a story of architecture cannot be successful unless it is based on a theory of man, as Plato, Alexander Pope, and others have been telling us for a long, long time.

Apparently this is what Kostof intended. The book is estimable in intent. Its failure is a concentration on superficial concept. Harvey Wheeler told us 15 years ago that any solution proposed to a problem must be proposed on a scale equal to the problem. Kostof's failure is that sites and rituals are not as large as the vital motivating imperatives of the age that uses them. They are only the outward manifestations of cultural actions and do not substitute for the imperative itself.

Kostof conceived the book well enough in broad terms but chose the least attractive definition of ritual: an action performed only formally with little or no significance. —Forrest WILSON

Dr. Wilson, a former editor of Progressive Architecture, teaches architecture at Catholic University. Clues to American Architecture. Marilyn Klein and David P. Fogle. (Washington, D.C.: Starrhill Press, \$5.95.)

This small book intends to give the everyday American a "basic knowledge of architectural history and styles." Through introductory remarks, line drawings (by Wolcott B. Etienne), and visual "clues"—elements of styles—the authors hope to encourage readers "to look closely at buildings, to appreciate their special qualities and sources of inspiration, and to savor our varied and alive architectural heritage."

Style guidebooks are generally alike. Written from an esthetic point of view, they tend to be a bit precious toward their subject. That's what inspiration and savoring are all about, as if the built world were delectable. This book fits the mold. As for its organization, it owes much to Blumenson's Identifying American Architecture. The contents are arranged chronologically by style beginning with New England colonial-a saltbox whose accompanying style clues are a plan, a "jetty," shingles, casement windows with leaded diamond panes, a board and batten door, and a pendant. The style categories cover the traditional classifications of American architecture, including a few extras such as the mid-20th century "contemporary." The examples are uniformly the same quality with high style design and landmark buildings, many derived from HABS drawings and photographs, as the principal sources.

To be successful, these kinds of books



**The Romance of Architecture.** Roloff Beny. With an introduction by John Julius Norwich and an anthology drawn from architectural writers and travelers from Vitruvius to Sacheverell Sitwell (Harry N. Abrams Inc., \$49.50). The exceedingly handsome architectural photographs in this book are arranged by design elements—walls, columns and colonnades, arches, domes, ceilings, roofs, staircases, floors—and there are photographs as well of aqueducts and bridges and towers, spires, and castles. Preceding each section is a short descriptive paragraph, and there are many appropriate quotes from well-known commentators. The late Roloff Beny's photographs have been called poetic, evocative, and mystical, which they are. Shown above is a view of the Great Mosque, Kairouan, Tunisia.

need to integrate the graphic, written, an historical information at all levels, so that accuracy and appropriateness are maintained. This is no easy assignment when cutting through an entire history of arch tecture. This book succeeds generally, bu there are times when the language or th clues labeling is imprecise or inappropri ate. For example, the pages devoted to the Italianate style illustrate the Bonneville house in Fort Smith, Ark. (1880) as the prime example. Things to look for in the style include a cupola, a cast-iron fron arched and tall windows with hood mold ings, a tall tower (villa form), corner quoins, elaborate entrance, and a commercial row (four buildings). The text refers to the Italianate as "one of the mos common of the picturesque styles." Sinc most American architecture is picturesqu by intention or default, why bother giving the reader this kind of judgment when you really want the reader/viewer to discover the style? The reason the reader is told what to see is that the authors want to communicate a preferred point of view about style. That's what appreciation is about: framing the response within a set of values that represents the authors, rather than representing the architecture

In the clues for the Victorian eclectic style, Romanesque pilasters are labeled without the reader being given a definition of either term or enough picture to determine their use or composition. In the Gothic revival entry, foliated windows are noted without explaining what that means. Some of the ambiguity could have been avoided if labeling arrows had clearly tagged the elements, and if the labels and their clues had been consistently of the same class—descriptions of fact are min gled with design analysis.

On the positive side of things, the assort ment of clues breaks down into classes of elements that, regardless of the style in which they are executed, will teach people about design: Walls and building shape, windows, roof forms, and ornamentation from style to style should teach people to engage and understand design So I suggest that you make note of this book. Slip it into the glove compartmen of your car so the kids can play architect tural detective on those long rides to the mall. — HERBERT GOTTFRIE

Dr. Gottfried is a professor in Iowa State University's college of design.

Diary of the Cavaliere Bernini's Visit to France. Paul Fréart de Chantelou. Edited with an introduction by Anthony Blunt; annotated by George C. Bauer; translate by Margery Corbett. (Princeton University Press, \$49.)

For five months in 1665 the Italian sculp tor and architect Bernini lived in Paris, having been summoned there by Louis XIV to complete the Louvre as a royal residence. The young king appointed Pau *continued on page 20* 



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#### Books from page 264

Fréart de Chantelou, a royal steward, to accompany Bernini and act as his interpreter. Chantelou became Bernini's constant companion—and friend—keeping a day-by-day diary of what took place during the architect's stay.

This first complete English translation of the diary is delightful to read, giving insights into the French king and court and the customs of the 17th century. Chantelou was a faithful diarist, even reporting jokes and other small talk. But the diary, called by scholars one of the most important art documents to come out of the 17th century, gives unique glimpses of Bernini's artistic tastes, opinions, and theories. It also reveals Bernini as a man, showing his arrogance and vanity and also his dedication to duty and generosity toward people he liked.

On another level, today's architects who may not have scholarly pretensions will enjoy the diary for its revelations of how Bernini, considered an artistic dictator in Rome, dealt with a client who was an ambitious king bent on his own dictations; how the architect had to endure the jealousies of Parisian architects, and clashes with the king's chief minister who, after all, was responsible for the funds expended by the king on all these projects.

A postscript says that after 1674 Bernini was not paid the handsome pension he was promised for his designs and for other works, including a baroque bust of Louis XIV. Enemies he made in Paris contrived to have his plans for the Louvre abandoned, and he died in 1680, ending "in sadness and frustration one of the grandest projects of the whole baroque period." Nonetheless, his engravings of the Louvre had wide influence. As the late Anthony Blunt points out, they became a model "of what a royal palace should be," affecting the design of Hampton Court in England, the royal palace in Stockholm, and even Ashton Webb's 1909 facade of Buckingham Palace.

-MARY E. OSMAN, HON. AIA

#### Sun, Wind, and Light: Architectural Design Strategies. G. Z. Brown. (Wiley, \$32.95.)

If the societal concern for energy conservation is to have a true impact upon architectural design, then architects must consciously address the reciprocity between energy and form. Conventional design strategy suggests that energy concerns should be directly utilized to generate form. Other requirements, however, may supersede energy conservation as a design priority. In this case, the consequences of these other design decisions upon energy use must be understood.

G. Z. Brown's intention in writing this book was to provide insights and information to architects concerning the relationship between architectural form and energy use. He wants architects to consider this relationship during schematic design when most of the significant decisions influencing form are made. Therefore, the book format is that of a ready reference guide, to be used at the drafting board. Each technique or strategy is presented in a one- or two-page format with a brief verbal explanation and ample graphic illustration. Precision in quantitative analysis has been sacrificed for ease and speed of use through rules of thumb and quick reference charts. Only those energy issues that have a direct design impact have been included. Thus, the concentration is on passive means of heating, cooling, and lighting because they are more directly related to building form.

The book is organized in three parts, the first of which, on analysis techniques, helps the designer understand the climate as context, how sun, wind, and light relate to program and form. Part two, on design strategies, is organized by scale, building groups, buildings and building parts, and then by architectural element (streets, rooms, windows, walls, etc.) at each scaler level. This is the heart of the book, the part most useful to the architect in schematizing a design. Part three, on strategies for supplementing passive systems, illustrates how some passive design strategies can be successfully integrated with conventional systems. It is both the shortest and weakest part of the book, for the complexity of this kind of integration requires many more examples to demonstrate sufficiently.

The result is an eminently useful book for both professional architects and architectural students alike. Every energy principle or design strategy is stated, explained, and illustrated with clarity and succinctness. Actual completed buildings, many well known, are used as examples. This heightens credibility and makes each lesson easier to remember. The book's organization, cross referencing, and index increase its usefulness as a reference guide. Of particular note are the consistency and quality of the many illustrations done in careful freehand by Virginia Cartwright. The author has done all architectural designers who are not energy experts a great service in producing this book. It should take its place next to Architectural Graphic Standards at every drafting board.-MICHAEL J. BEDNAR, AIA

Mr. Bednar is associate professor of architecture, school of architecture, University of Virginia.

The Late, Great Pennsylvania Station. Lorraine B. Diehl. (American Heritage; trade distribution: Houghton Mifflin, \$19.95.)

A landmark lost has its story to tell and the significance of its destruction.

The story began with the vision of Alexander Cassatt, president of the Pennsylvania Railroad, of a station in New York City itself that would obviate the necessity of his trains stopping on the New Jersey shore of the Hudson River. But before this could be accomplished, there had to be a way of getting the trains across the river. Bridges had been proposed, but the development of electricity as a means of propulsion made tunnels feasible.

The drama and romance of this are all presented in chapters dealing with the vision, the hazards of the tunnel construction, the design of the station itself by Charles Follen McKim, and its construction. The station served its function well, but eventually fell on evil days, with changes that spoiled its character, and led at last to its final destruction, although a station of sorts still exists.

Preservationists will be interested in the efforts made to save the station and the fact that its destruction was instrumental in promoting a landmark law in the city. This readable account is well supplemented with pictorial material. - GEORGE E. PETTENGILL, HON. AIA

Mr. Pettengill, a railroad buff, is AIA's librarian emeritus.

Charles A. Platt: The Artist as Architect. Keith N. Morgan. (Architectural History Foundation and MIT Press, \$35.)

A neoclassicist who sought design sources in Italian Renaissance architecture and its modifications in English and French architecture and adapted them to his own time and place, Charles A. Platt (1861-1933) studied art in Europe, later turning to landscape design, and finally to architecture, a profession he entered without academic training or apprenticeship. He hired assistants, leaving himself free for design concepts and the nurture of wealthy clients. He even beat out Frank Lloyd Wright for the commission of Harold McCormick's mansion in Lake Forest, Ill., having become one of the most prominent designers of houses in the country. When the graduated income tax was introduced in 1913, such clients were harder to come by, and Platt moved on to design public buildings, such as the Freer Gallery in Washington, D.C.

Barrier-Free Exterior Design: Anyone Can Go Anywhere. Edited by Gary O. Robinette. (Van Nostrand Reinhold, \$20.)

Although some buildings may have barrier-free interiors, they are not accessible to many people because of site barriers. An outgrowth of previous research and publications, the book brings helpfu site guidelines together concisely. It considers a host of solutions to a barrier-free environment, from the design of ramps and walkways to outdoor planting, lighting, signage, and site furniture. It shows how to design exteriors that are barrierfree for children, the mentally retarded, pregnant women, and others who are impaired visually, auditorially, or physically. The drawings, which are a decided asset, are by Richard K. Dee and Christopher Nothstine, who, like the editor, are landscape architects.

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#### he Institute from page 56

lking somewhat ethereally about the clinate in Southern California and greenry, initially designed a cruciform-plan, nasonry-walled church with a glass roof. chuller responded negatively, explaining e wanted the congregation to be able to coice in the sun and natural setting. Buree remembers saying to his partner after chuller left, "I think he's talking about n all-glass building."

A short while later the architects sent chuller a six-inch-high Lucite model of the truncated star. "I was turned on immeiately. I knew that was it." The church pened to architectural acclaim, but there was some criticism of the cost. Schuller dmits to being touchy on the issue. He nce asked the architects to tell him how nuch the building weighed. He then ivided that figure into the cost. "It came ut to 49 cents a pound, and that's less han hamburger," he says with a laugh.

-Carleton Knight III

#### DEATHS

- ames Bailey, AIA, Nutley, N.J.
  Iolman Barnes, AIA, Portland, Ore.
  Charles J. Betts, FAIA, La Grande, Ore.
  ohn S. Blair, AIA, Sun City, Ariz.
  C. E. Croom, AIA, Syracuse, N.Y.
  G. M. Drury, AIA, Portland, Ore.
  G. Elliott, AIA, Monroeville, Ala.
  George Farley, AIA, San Francisco
  Richard A. Fisher, AIA, New York City
  V. H. Fowler, AIA, Amarillo, Tex.
  Chos B. Garman, AIA, Pittsburgh
  V. J. Gavin, AIA, Lowell, Mass.
  Donald P. Gustafson, AIA, Trenton, Mich.
- Ralph H. Harman, AIA, Springfield, Ohio
- . R. Holbrook, AIA, Bradenton, Fla.
- G. H. Kanady, AIA, Ponca City, Okla.
- V. Kemp, AIA, Jacksonville, Fla.
- E. G. Kratz, AIA, Kansas City, Mo.
- . F. Lambert, AIA, West Somerville, Mass.
- . A. Lydick, AIA, Omaha
- Albert Mayer, FAIA, New York City Adwin J. Myers, AIA, Cupertino, Calif.
- Iarvin Patterson, AIA, Seattle
- ohn L. Reid, AIA, Red Bluff, Calif.
- ohn Richards, AIA, Tacoma, Wash. arry R. Rowe, AIA, Great Falls, Mont.
- hristine Salmon, FAIA, Stielwater, Okla.
- faurice Salo, AIA, Mineola, N.Y.
- V. R. Shirley, AIA, Millbrook, N.Y.
- ugene R. Smeallie, AIA, Baltimore
- **A. Snipes Jr., AIA**, Atlanta **abor Stone, AIA**, Austin, Tex.
- I. F. Thornton, AIA, Miami
- dward M. Tourtelot, AIA, Chicago
- Jbert Tynan, AIA, Columbus, Ohio C. Van Dyke Jr., AIA, Santa Rosa, Calif.
- seph Vanecko, AIA, Chicago avid Vhay, AIA, Reno
- . B. Wetherell, AIA, Cambridge, Mass.
- . L. Wilson, AIA, Easton, Conn.
- alter D. Wood, AIA, Melbourne, Fla. larion S. Wyeth, FAIA, Palm Beach, Fla.

#### **Design Competition for Master Plan.**

The City of Baltimore is sponsoring a design competition for a master plan for a 300-acre site in the Coldspring New Town area and the adjacent Cylburn Arboretum and Botanical Gardens. The scheme should address the overall site design and placement of residential units and provide for the revitalization of the recreational areas and arboretum. Awards totaling \$50,000 will be presented. An application with a registration fee of \$50 is due by June 2; final submission are July 24. For more information, contact John W. Hill, FAIA, Professional Adviser, Coldspring/Cylburn Design Competition, P.O. Box 23935, Baltimore, Md. 21203.

#### **Rome Prize Fellowship Winners.**

The American Academy in Rome has named seven winners for the 1986-87 Rome Prize Fellowships in architecture, landscape architecture and design. They are: Norman Krumholz, president of the American Planning Association and director of the Cleveland Center for Neighborhood Development; William P. Bruder, president of his own architectural firm; Jeanne Giordano, of the urban division of Rouse and Associates; Julie Riefler, an associate in the graphic design firm of Donovan and Green; Frederick Biehle, an associate with WPG Design Group; Kathryn A. Dean, currently with Kohn Pedersen Fox; and Elizabeth Dean Hermann, landscape architect with Sasaki Associates.

#### Architectural Design Awards Program.

The Interfaith Forum on Religion, Art and Architecture and the Judah L. Magnes Museum of Berkeley, Calif., are sponsoring an awards program for excellence in religious architecture. Awards will be presented in three categories: completed new buildings, completed restorations and renovations; and unbuilt projects. Entries must be received by June 2. For more information, contact Tish Kendig, Executive Director, IFRAA, 1777 Church St. N.W., Washington, D.C. 20036.

#### **Campus Center Honored.**

The Elizabeth van Huysen Mayer Campus at Tufts University by Jung/Brannen Associates of Boston (see Oct. '85, page 42) was honored with the Walter Taylor award for "architectural excellence" by the American Association of School Administrators and AIA.

#### Sullivan Exhibition.

An exhibition of architectural ornamentation designed by Louis H. Sullivan will be exhibited until July 6 at the Octagon Museum in Washington, D.C.

#### **Housing Information.**

The Department of Housing and Urban Development has established the HUD user program to provide current information on housing and urban developments. A monthly newsletter, resource guides, and computer searches are available through the program. For more information, contact Rick Slaten, HUD User, P.O. Box 280, Germantown, Md. 20874 or call toll free (800) 245-2691.

#### **Orin Bullock Honored.**

The AIA presidential citation was presented to Orin M. Bullock Jr., FAIA, of Rising Sun, Md., for his role in the original restoration of Williamsburg, Va., and his book *The Restoration Manual*.

#### **Energy Award Honorees.**

Lawrence Cook, AIA, of Falls Church, Va., and John G. Lewis Jr., AIA, of Richmond were recently awarded the Virginia governor's energy award for their firms' passive solar designs.

#### Wright's Johnson Wax Exhibit.

An exhibition of the Johnson Wax Company's administration building and research tower and Frank Lloyd Wright's sketches from his unpublished Taliesin archives are being exhibited at the Renwick Gallery through Sept. 1. The exhibit was organized by the Herbert F. Johnson Museum of Art at Cornell University.

#### Georgia Tech Prize Winners.

Three students were awarded prizes in the 1985-86 Southern GF Company competition, sponsored in collaboration with the Georgia Tech college of architecture and the AIA/Atlanta Chapter. Bruce Fabrick of Atlanta was first place winner; Melissa Wauford of Atlanta was second place winner; and Bradley Davidson of Roswell, Ga., was third place winner. Awards totaling \$10,000 were presented, and the first place winner was also awarded a sculpture by Arnoldo Pomodoro.

#### NEA '87 Grants Program.

The 1987 theme for the Design Arts Program of the National Endowment for the Arts will be the design of cities. Grant amounts will range from \$5,000 to \$40,000 for design advancement projects, and matching grants to \$100,000 are also available for national design competitions. A program guideline with information about grant categories and qualifications for funding is available from the Design Arts Program, NEA, 1100 Pennsylvania Ave. N.W., Washington, D.C. 20506.

#### Architecture of the Future Competition.

The Los Angeles Chapter/AIA is sponsoring an international competition and exhibition to recognize innovative works that deal with specific architectural concerns of international importance. The competition theme is "Visions of Architecture in the Year 2010." Winner of the competition will be awarded \$10,000 and a bronze trophy by sculptor David

continued on page 272

#### Briefs from page 271

DeMars. The entry fee is \$30, and must be received by July 15 at the LA/AIA, 8687 Melrose Ave., Suite M-72, Los Angeles, Calif., 90069.

#### **AIA Archivist Honored.**

Tony Wrenn, Institute archivist, was awarded the Lower Cape Fear Historical Society's first society cup for his book, *Wilmington*, *N.C.: An Architectural and Historical Portrait.* 

#### Hardware Handbook.

"Basic Architectural Hardware" handbook, published by the Door and Hardware Institute, is available for \$7.50 per copy. The handbook describes hardware products and includes a detailed glossary of terms. To obtain a copy, write to DHI, 7711 Old Springhouse Road, McLean, Va. 22102-3474.

#### Pfister Wins Interiors Award.

Charles Pfister was named designer of the year by *Interiors* magazine for his "phenomenal rise to success as president of his own firm started five years following his 15-year career at Skidmore, Owings & Merrill."

#### Architecture Study Tour.

International Design Seminars is sponsoring a 15-day tour, Aug. 12-26, which will focus on baroque and Bauhaus architecture, interior design, landscape design, and art. The tour will visit Helsinki, Stuttgart, Munich, Potsdam, Dresden, Dessau, and Berlin. For more information, contact Kennie Lupton, IDS, 4206 38th St. N.W., Washington, D.C. 20016.

#### **Student Planning Report Cited.**

A planning report by students of the community and regional planning program of the school of architecture at the University of Texas at Austin won the American Institute of Certified Planners' 1986 student project award for the application of a planning process. The report will be used as a model for future economic development evaluations in Austin. The winning student team was comprised of Paul Andrew Cauduro, Barbara Jean Grace, Rolf Joseph Pendall, Suzanne Rossel-Haas, Barbara Ann Stocklin, and Frederick Joshua Wells.

#### **Measured Drawings Contest.**

The Landmarks Preservation Council of Illinois and the Historic American Buildings Survey are sponsoring a competition for measured drawings of any previously unrecorded historic site in Illinois. The competition is open to both students and practicing architects interested in historic preservation; four cash prizes will be awarded to the best set of drawings. The entry deadline is Aug. 31. For more information, contact Sean P. Murphy, Landmarks Preservation Council of Illinois, 407 South Dearborn St., Chicago, Ill. 60605.

#### Architectural Competition.

The Brooklyn Museum is sponsoring an international, single-stage, invitational architectural competition for the design of a master plan to guide the institution's growth into the 21st century. For more information, contact the Brooklyn Museum, Public Affairs, 200 Eastern Parkway, Brooklyn, N.Y. 11238.

#### **CRSI** Award Winners.

The Concrete Reinforcing Steel Institute has cited seven buildings in its eighth biennial design awards program that recognizes "outstanding examples of the best cast-in-place, reinforced concrete design." The winners are Kagan-Rudy Chapel in Houston by Clovis Heimsath Associates; Tabor Center in Denver by Kohn Pedersen Fox Associates; 320 N. Michigan Ave. in Chicago by Booth/ Hansen & Associates; Lawson Residence in Alta, Utah, by Margaretta L. Woolley, AIA; Teleglobe Canada Communications Cable Station in Honolulu by Johnson Reese Luersen Lowery Architects; InterFirst Tower in Fort Worth by Geren Associates and Sikes Jennings Kelly; and Huntington Station of the Washington Metropolitan Area Transit Authority by Harry Weese & Associates.

#### 'Places As Art'.

The National Endowment for the Arts Design Arts Program has published the 96-page book, *Places As Art*, as part of its design of cities theme. Copies may be obtained for \$14.50 from the Publishing Center for Cultural Resources, 625 Broadway, New York, N.Y. 10012.

#### CREDITS

H.E. Butt Grocery Company Headquarters, San Antonio, Tex. (page 118). Architect: Hartman-Cox, Washington, D.C., with Chumney Urrutia, San Antonio. General contractor: Bartlett Cocke Jr. Ceiling surfacing system: Armstrong World Industries. Entrance and interior doors: Bristow Manufacturing, Overhead Door, Roddis Lumber, Tex-Steel. Elevators: Dover. Environmental control systems: Johnson Controls, Trane, Sellers. Interior and exterior floors: Harbinger Cpts., Design-weave, Kentile, Interface Cpts. Int/1, Azrock, Alamo City Masonry. Foundation: N.W.B. Foundation. Exterior and interior lighting: National Lighting Corp., Welsbach Lighting, Lightolier, Prescolite. Roofing: Samuel Dean Co. Waterproofing and sealants: Rufus A. Walker. Plumbing: Sloane, Chicago Faucet, Kohler. Sprinklers: Fire Check. Toilet stalls: Mission City Specialties. Tubs and lavatories: Kohler. Washroom and bathroom accessories: Rheem. Water closets: Kohler. Water fountains: Haws. Communication/intercom: Westinghouse. Kitchen: Arnold Refrigeration. Lockers: Mission City Specialties. Public address: The Video Store.

Security and fire detection: Firecheck. Signage: B.F.G. Industries. Stairs and treads: American Stair. Exterior and interior wall surfacing: Ollie Tope & Sons, Texas Precast Stone, Allied Interiors, Prassel. Windows: A&S Window Assembly, Tom Sisk & Sons, Universal Glazing Manufacturing. Hardware: Rixon-Firemark, L.C.N., Hager, Arrow, Von Duprin, Quality. Exterior and interior paint: Themic Paint Co., Negley Paint.

#### Seeley G. Mudd Chemistry Building,

Vassar College, Poughkeepsie, N.Y. (page 134). Architect: Perry, Dean, Rogers & Partners, Boston. Windows: Hope's Windows. Glass block: Pittsburgh Corning. Custom steel frames: Poughkeepsie Iron & Metal. Precast concrete: Steindl. Roofing: Carlisle. Paints: Tnemec. Sealants: Tremco, Pecora. Hardware: Stanley, Rixon, Von Duprin, Schlage. Flooring: Azrock. Lab casework: Hamilton Industries. Carpet: Stratton. Lab trim fittings: T&S Brass & Bronze. Doors: Johnson Metal Products. Light fixtures: Lightron Stools: Adjusto. Signage: Karman. Furniture: Kinetics, Krueger, Nemschoff. Library shelving: Andrew Wilson Metal Products. Lounge chairs: Thayer Coggin Sunar. Mobile files: Storwall.

**Recreational Sports Facility, University** of California, Berkeley (page 140). Arch tect: ELS Design Group, Berkeley. Stucco exterior: Standard Portland Cement. Metal-framed windows and doors: Carmel Steel. Grilles: Cookson. Bituminous roofing: Johns-Manville. Paving: Muller Interlocking Pavers. Railings: Bostrom Bergen Metal Products. Paints: Kelley Moore. Acrylic window wall: Swedflow. Gym floor: Terstep (Junkers). Long span joists: Fabricated by McLean Steel Co. Air diffusers: Carnes. Laminate surfacing Wilsonart. Recessed downlights: Marco. Low seating units: By owner. Duston col ored concrete flooring: Conrad Sovig. Elevator: Diablo. Skylight blinds: Levolor Automatic sprinkler system: Zurn. Inter com: Rauland-Bourg.

#### Bulfinch Square, East Cambridge, Mass

(page 152). Architect: Graham Gund Asso ciates, Inc., Boston. Brownstone: Kempste Associates. Brick: Glen-Gery, Belden, Dennis. Granite: Moliterno. Plaster/ gypsum wallboard: USG. Ceramic tile: Dal Tile. Wood windows: J&B Sash. Skylights: Lynbrook. Wood doors: Jules Goudeau. Carpet: Stevens. Acoustical ceilings: Armstrong. Membrane roofing Carlisle. Waterproofing: Pecora. Fiberglas insulation: Manville. Partitions: USG Paint: Pratt & Lambert, Benjamin Moor Sherwin-Williams. Hardware butts: Hage Spring hinges: Bommer. Locksets: Schlag Closers: Norton. Panic devices: Von Duprin. Stops/flush bolts: Ives. Pulls/ plates: Rockwood. Auto flush bolts: Rixson-Firemark. Weatherstrips/ continued on page 2

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#### Credits from page 272

thresholds: Pemko. Fire detection system: Firelite. Theater seating: GF Furniture. Signage: Visual Systems. Elevators: Beckwith. Wheelchair lift: Garaventa. Steel pan stairs: Abco Steel. Brass handrails: Brassworks. Steel handrails: DeAngelis Ironworks. Exterior lighting: Infranor. Interior lighting: Lam, Kurt/Versen, Keystone, Custom Metalcraft. Lavatories and water closets: American Standard. Plumbing fittings: Speakman. Flush valves: Sloan. Toilet stalls: Metpar. Washroom accessories: Bobrick. Water fountains: Filtrine. Sprinklers: Viking. Gas-fired boiler: H.B. Smith. Heat pumps: Command Air. Electric convectors: Chromalux. Cooling towers: Frick. Controls: Honeywell. Cut pile carpets: Stevens. Open office furniture: Herman Miller. Theater drapery: Adrians. Theater equipment: Soundolier, Electro Controls.

#### Penn State Agricultural Arena, University

Park, Pa. (page 158). Architect: Dagit · Saylor, Philadelphia. Entrance doors: Steelcraft. Interior floor surfacing: Armstrong World. Foundation: Center Concrete Co. Handrails: Frey Brothers, Sender Ornamental Iron Works. Roofing: H.H. Robertson. Flush valves: Josam. Toilet stalls, tubs, and lavatories: American Standard. Washroom and bathroom accessories: Charles Parker, Inc. Interior wall surfacing: Kawneer. Hardware: H. Soss & Co., Best, Sargent. Paint and stain: Finneran & Haley. Public seating: Intern. Security and fire detection: Larsen. Signage: Mason-Noton. Stairs and treads: Pirelli. Exterior wall surfacing: H.H. Robertson, E. DeVecchis & Sons. Interior wall surfacing: Celotex. Windows: Kawneer.

Bridge House on the Maumee River, Ohio (page 162). Architect: Hugh Newell Jacobsen, Washington, D.C. Ceiling surfacing system: U.S. Gypsum. Entrance and interior doors: Thermatra, Kawneer. Environmental control systems: Honeywell, Carrier. Exterior lighting: Lightolier, Edison Price. Roofing: Goodyear, Volclay Panels. Plumbing: DuPont. Plumbing fittings and showerheads: Speakman. Whirlpool baths: Viking, Jacuzzi. Tubs and lavatories: American Standard, DuPont, Hallmack, Baldwin. Water closets: American Standard. Interior wall surfacing: Nantucket Looms. Skylights: Kawneer. Hardware: Stanley Hardware, Baldwin. Exterior and interior paint: Sherwin-Williams.

Scattered Site Housing, Charleston, S.C. (page 172). Architect: Bradfield Associates, Inc., Atlanta. Structural engineer: Bennett & Pless. Mechanical engineer: William L. Baker Jr. Electrical engineer: James W. Phillips & Associates. Landscape architect: William C. Byrd & Associates. Owner: The Housing Authority of the City of Charleston, S.C. Entrance and interior doors: General Proc ucts, Drtec, Slimfold Manufacturing. Inte rior floor surfacing: Armstrong, Florida Tile. Interior lighting: Moe, Progress, Lithonia. Roofing: G.A.F. Waterproofing and sealants: Superior Sealant. Plumbin fittings and showerheads: American Stand ard. Tubs and lavatories: American Standard. Washroom and bathroom accessories Miami-Carey. Water closets: American Standard. Kitchen: Evans Cabinet. Laur dry: Guy Gray. Security and fire detection Norelco. Stairs and treads: Red Oak. Wal surfacing: Gold Bond, Georgia Pacific. Hardware: Falcon Lock, Ives. Paint: Cameo.

#### Loyola Law School, Los Angeles, Calif.

(page 173). Architect: Frank O. Gehry & Associates, Venice, Calif. Structural engi neer: Erkel/Greenfield. Mechanical eng. neer: D. F. Dickerson. Electrical engineer: Athans Associates. Landscape architect: Land Images. General contract tor: CMC & Miano Constructors. Owner Loyola Marymount University. Concrete filled metal decking: Robertson. Finland plywood: North American Plywood. Dry wall: U.S. Gypsum. Glulam beams: Roderston. Ventilators: Wincor Ventilator Co. Windows: Torrance Windows. Skylights: Aluminite Skylight and Alumi nex Inc., Metcoe Metal Products, Krieger continued on page 27





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#### lerring Hall, Rice University, Houston

bage 174). Architect: Cesar Pelli & ssociates, New Haven, Conn. Partners: esar Pelli, FAIA; Frederick Clarke; Diana Balmori. Design team leader: Kevin lart. Job captain: Howard R. Howes. Designer: William Butler. Landscape and nteriors: Cesar Pelli & Associates. Strucural engineer: Walter P. Moore & Assoiates. Mechanical and electrical engieer: Burns, DeLatte & McCoy. Lighting: ules Fisher and Paul Marantz. Acoustical: lark Roos. Construction manager: Mayan

Construction Company. Ceiling surfacing system: U.S. Gypsum, Georgia Pacific, Armstrong Cork. Entrance doors: Amarlite. Interior doors: Eggers Industries. Elevators: Dover. Environmental control systems: Johnson Control. Interior floors: Buchtal Tile. Exterior paving: Summitville Spilt Pavers. Foundation: COD Concrete. Handrails: Safety Steel. Lighting: Raak, Rambush, Lightolier. Roofing: Ludowici-Celadon. Waterproofing and sealants: Tremco. Plumbing: Sloan. Toilet stalls: Accurate Partitions. Tubs and lavoratories: American Standard. Washroom and bathroom accessories: Bobrick. Water fountains: Elec. Drinking Fountain. Lockers: Republic Steel. Signage: Karman Ltd. Stairs and treads: Buchtal. Wall surfacing: St. Joe Brick Works, Architectural Stone Sales, Gail Tile, Hanley Brick. Windows: Amarlite. Door closers: LCN. Hinges: McKinney Manufacturing. Locksets: Yale. Panic exit: Von Duprin. Paint: PPG.

Private Residence, Dallas (page 176). Architect: Edward Larrabee Barnes Associates, New York City. Structural engineer: Severud, Perrone, Szegezdy, Sturm. Mechanical and electrical engineer: Joseph R. Loring & Associates. Landscape architect: Boyd & Heiderich. General contractor: Gene Campbell Inc. Thermal insulation: Dow, Manville. Water seal: Thompson Co. Waterproofing: Gates Engineering. Sealants: G.E. Roofing:

Carlisle Tire & Rubber. Skylights: Super-Sky, Naturalite. Doors: Arcadia, Overhead Door. Windows: Arcadia. Glass: PPG, Globe Amerada, Mann Glass. Hardware: Baldwin, Stanley, Arcadia, Grant. Ceilings: U.S. Gypsum. Interior partitions: U.S. Gypsum. Cabinet work: AWI. Kitchen cabinets: Allmilmo. Tile: American Olean, Pirelli Rubber Flooring, Indiana Limestone. Bathroom and washroom accessories: Kroin. Fireplace: Majestic. Swimming pool and saunas: Jacuzzi, Helo.

Steel & Glass House, Chicago (page 184). Architect: Krueck & Olsen Architects, Chicago. Structural engineer: Gullaksen, Getty & White. Mechanical and electrical engineer: J. P. Bazzoni & Associates. Ceiling surfacing system: U.S. Gypsum. Environmental control systems: Carrier. Interior and exterior floor surfacing: V'Soske, Edward Fields. Exterior and interior lighting: Kim, Lightolier. Plumbing: Sloan. Plumbing fittings and showerheads: Bathwares. Tubs and lavatories: Kohler. Washroom and bathroom accessories: Toobs. Water closets: Kohler. Communication and intercom: Nutone. Kitchen: Sub-Zero, Chambers, Roper, Kitchenaid. Laundry: Maytag. Security and fire detection: ADT. Interior and exterior wall surfacing: Thoro, U.S. Gypsum. Windows: Hopes, Wasco. Hardware: Stanley, Sargent. Paint and stain: Degraco, Pratt & Lambert.

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Parker Residence, Bainbridge Island, Wash. (page 190). Architect: James Cutler Architects, Winslow, Wash. Owner: James and Lucille Parker. General contractor: Colgrove Brothers Construction. Ceiling surfacing system: Gypsum Wall Board. Entrance doors: Nicolai Door Company. Flooring surfacing: Karastan Monitor Carpeting. Exterior and interior lighting: Hubbell, Capri, Lightolier. Plumbing fittings and showerheads: Chicago. Tubs and lavatories: Kohler. Washroom and bathroom accessories: Kohler. Water closets: American Standard. Countertops: Corian. Kitchen: Sub-Zero, D.E., Kitchenaid. Laundry: Frigidaire. Wall surfacing: Red Cedar Shingle & Handsplit Shake Bureau. Windows: M.C. Wood Products. Locksets: Schlage. Paint and stain: Cabots, Dalys, Olympic, Kelly-Moore. Handrails: Custom built.

#### Bergren Residence (Venice III House),

Venice, Calif. (page 194). Architect: Mayne & Rotondi Architects, Los Angeles (formerly Morphosis). Structural engineer: Gordon Polon. General contractor: Morphosis. Owner: Ann Bergren. Environmental control systems: Forced Air. Exterior and interior lighting: Stonco, Halo. Roofing: Merkote. Water closets: American Standard. Wall surfacing: Aluminum Industrial. Hardware: McKinney, Schlage. Interior paint: Sinclair. Wenglowski House, Deer Isle, Me. (page 200). Architect: Peter Forbes & Associates, Boston. Structural engineer: Zaldastani Associates. Mechanical and electrical engineer: Goldman Associates. General contractor: Prin A. Allen & Sons. Owner: Mr. & Mrs. Gary Wenglowski. Doors: Arcadia, Brosco. Exterior and interior lighting: Lightolier, Edison Price. Plumbing fittings and showerheads: Kroin. Saunas and whirlpool baths: Jacuzzi. Water closets: Kohler. Washroom and bathroom accessories: Kroin. Windows: Marvin Windows. Hardware: Stanley, Modric Handles & Locks. Kitchen: Kroin.

500 Park Tower, New York City (page 206). Architect: James Stewart Polshek & Partners, New York City. Associate architect: Schuman, Lichtenstein, Claman & Efron. Developer: Trishman Speyer Development Corporation. Structural engineer: Office of Irwin G. Cantor. Mechanical and electrical engineer: Cosentini Associates. Construction manager: Turner Construction Inc. and Lehrer/McGovern Inc. Owner: Equitable Life Assurance Society of the United States. Ceiling surfacing system: A&M Wallboard. Doors: Heritage Architectural, Flexwood. Elevators: Otis, National Elevator, Edelman Leather. Environmental control systems: Afgo Engineering. Floor surfacing: LaCroix et Fils, Stone Erectors, Penwood. Handrails: Heritage Architectural. Lighting: Lighting Horizons. Roofing: Walkow Braker. Waterproofing and sealants: Brisk. Flush valves: Kohler Plumbing fittings and showerheads: Alumni Plumbing. Sprinklers: Merit Sprir klers. Tubs and lavatories: Kohler. Washroom and bathroom accessories: Keyston Marchand. Water closets and fountains: Kohler. Communication and intercom: F. Garafalo. Computer: F. Garafalo. Kitchen Styleline, Sub-zero, Caloric. Furniture: Knoll. Carpet: Edward Fields. Security and fire detection: Casey Sound System Signage: Charles Maier Sign. Wall surface ing: LeCroix et Fils, Flour City, Stone Erectors. Curtainwall: Flour City. Punched windows: NJ Window. Fabric partitions: Perimeter Closures. Window work: Spider Staging.

Cleveland Clinic Foundation, Clinic Build ing, Cleveland, Ohio (page 210). Architect Cesar Pelli & Associates, New Haven, Conn. Structural engineer: Robert Rosenwasser Associates. Mechanical and electrical engineer: Cosentini Associates General contractor: Gilbane Building Co Owner: Cleveland Clinic Foundation. Sitework: Richard Goettle Inc. Concrete: Vinylex Corp., W. R. Meadows, Bethlehem Steel, Potain, Euclid Chemical, Symons. Masonry: New England Stone, Hohman & Barnard, Cold Springs Granite. Metals: Ornamental Iron Work, Stand continued on page 28



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ard Wire and Steel Works. Wood: Nagele. Moisture protection: American Colloid, W. R. Meadows, Tremco, U.S. Gypsum, Owens Corning, Reynolds Metals, Dur-Red Products, E.P.I. Doors and windows: Wausau Metals, Russwin, American Steel, Sterling Plate Glass, Eggers, Kinnear, Horton Automatics, Invironmental Glass, Fenestra, Panelfold, Boico. Finishes: Gold Bond, Owens Corning, Armstrong, Donn, Ohio Sealant, Dex-O-Tex. Specialties: Construction Specialties, Wilkenson Chutes, Ruskin, Sanymetal, Ampat, Standard Wire & Steel, Larsen, Architrac, Eseco, Vogel-Peterson, General Cubicle, Pedigrid, Educational Equipment Company, Kelly. Equipment: LSI, Hamilton, Coe Laboratories, Southern Equipment, Gaylord, Kreonite/Hamilton. Special construction: Industrial Acoustics, Castle/Sybron. Conveying systems: Mosler, Westinghouse. Mechanical: J. R. Smith, Barber Coleman, Mack Industries, Jenkins, American Standard, Weil, Air Enterprises, York, Patterson Kelly, Grinnell, Trane, Nash, Bells Gossett, Peerless, Marley Cooling Tower, Ruskin, Elkhart, Fairbanks Morse, Johnson Controls, Ohio Medical Products, Mitco, Puritan-Bennett, Kohler, H.L.T., X-Tru Coat, Greenheck. Electrical: B-Line, G.E., O.Z./Gedney, Crouse-Hinds, Day Brite, Simplex, Soundcom, Cumings Ohio, Franklite/Daybrite, Emerson, Wiremold, Executone.

IBM/Purchase Corporate Office Building, Purchase, N.Y. (page 214). Architect: I. M. Pei & Partners, New York City. Partner in charge: I. M. Pei, FAIA. Administrative partner: Eason H. Leonard, FAIA, Leonard Jacobson, FAIA. Architect in charge: John L. Sullivan III, AIA. Project manager: Richard Diamond. Design team: Michael Fynn, Fritz Sulzer, Kyle Johnson, Winslow Kozier, Jacqueline Thompson, August T. Nakagawa, Raymond Searby. Administration: Walter Patton. Interior designer: Stephanie Mallis. Structural engineers: Weiskopf & Pickworth. Mechanical and electrical engineers: Segner & Dalton. Landscape architect: Hanna/Olin, Ltd. General contractor: William L. Crow Construction Co. Ceiling surfacing system: Armstrong, Simplex. Doors: International Steel, Ampat Eastern Corp. Elevators: Dover. Environmental control systems: Johnson Controls. Floor surfacing: Titan Marble and Stone, Milliken, Hastings. Handrails: Zephyr Metal Craft. Lighting: Lightolier, **Kim**, Edison Price. Roofing: Tremco Proglaze, GE Silpruf, Pecora Dynatrol. Nall surfacing: Titan Marble & Stone. Nindows: Ampat Eastern Corp., Fisher skylights. Door closers: Rixson, Dorma Reading. Hinges: Stanley, Rixson. Lockets: Yale. Special hardware: Pstrander & Eshleman. Paint: Monsey Products Co., PG, Glidden. Partitions: Industrial Acoustics. Plumbing fittings: Speakman. prinklers: Reliable. Lavatories: Kohler,

American Standard. Washroom and bathroom accessories: Accessory Specialties, Bobrick. Water closets: Kohler, American Standard. Water fountains: Halsey-Taylor. Computer room: Tate. Kitchen: Ruslander & Sons, St. Charles. Lockers: Republic Steel. Signage: Patrick Signs, Dura Engraving, The Other Sign Co.

D. Samuel and Jeane H. Gottesman Exhibition Hall, New York City (page 218). Architect: Davis, Brody & Associates and Giorgio Cavaglieri Architects, New York City. Structural engineer: Wiesenfeld & Leon. Mechanical engineer: John L. Altieri. Lighting engineer: Jules Fisher/ Paul Marantz, Inc. Design team: Lewis Davis, FAIA; Alan Schwartzman, FAIA; Elin Avery; Giorgio Cavaglieri, FAIA; Ann Falutico, AIA. Construction manager: Integral Construction Co. Owner: New York Public Library. Lighting fixtures: Edison Price. HVAC: A.D. Winston Corp. Electrical: George Kleinknecht, Inc. Marble: Terranova. Chandeliers: Metalmen Co. Shades: American Abalene. Metal cleaning: Remco. Ceiling restoration: Newport Decorating. Sign plaque: Walters Sign. Signage: Rudolph de Harak & Associates. Windows, floor plates, register grilles: Arrow Glass.

Kaskel Library, Hackley School, Tarrytown, N.Y. (page 222). Architect: Keith Kroeger Associates, Chappaqua, N.Y. Project architect: Leonard Woods. Structural engineer: Andrew Elliott & Associates. Mechanical engineer: Frank Scandale. Lighting consultant: Francesca Bettridge, Cline Bettridge Bernstein. General contractor: Frank Proft. Owner: Hackley School. Interior floors surfacing: Harmony Carpet. Handrails: Westchester Iron. Lighting: Edison Price. Roofing: Wainlands. Hardware: Stanley. Interior paint: Benjamin Moore. Signage: J. P. McWalters. Tables and chairs: F. W. Lombard. Shelving units: All Steel Canada. Card catalogs: Brodart.

**Battell Chapel**, Yale University, New Haven, Conn. (page 226). Architect: Herbert S. Newman Associates, New Haven. Architect in charge: Herbert S. Newman, FAIA. Project manager: Don Cosham, AIA. Project architect: Peter W. Clement, AIA. Staff: Kevin Smith. Structural engineer: Martin-Horton Associates. Mechanical and electrical engineer: Luchini & Milfort Engineering. Lighting consultant: Donald L. Bliss. General contractor: Edwin Moss & Son Inc. Owner: Yale University. Interior and exterior floor surfacing: Bigelow, American Olean. Handrails: Custom. Interior lighting: Robert Long, Rambusch. Toilet stalls: Knickerbocker. Tubs and lavatories: American Standard. Water closets: American Standard. Public address: Altec. Interior wall surfacing: John Canning, Torrington Millwork. Hardware: Sargent. Interior paint: Custom.



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