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Penton/IPC

Progressive Architecture (ISSN 0033-0752) is published monthly by Reinhold Publishing, A Division of Penton/IPC, P.O. Box 95759, Cleve-land, Ohio: Philip H. Hubbard, Jr., President; Harry I. Martin, Robert J. Osborn, Vice-Presidents; Penton/IPC: Thomas L. Dempsey, Chairman; Sal F. Marino, President; James K. Gillam, N.N. Goodman, Jr., Paul Rolnick, Execu-tive Vice-Presidents. Executive and editorial offices, 600 Summer St., P.O. Box 1361, Stamford, CT 06904 (203-348-7531).

Subscription information: Send all subscription orders, payments, and changes of address to Progressive Architecture, P.O. Box 95759, Cleveland, OH 44101 (216-696 7000). When filing change of address, give former as well as new address and zip codes, and include recent address label if possible. Allow two months for change. Publisher reserves right to refuse un-qualified subscriptions. Professionals include ar-chitectural and architectural-negineering firm personnel and architects, designers, engineers, and draftsmen employed in allied fields. Subscription rates, payable in advance, are:

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\$7 \$8 Single copy: \$ 9 Permission to photocopy is granted for users registered with the Copyright Clearance Center (CCC), provided that the base fee of \$1 per copy of the article, plus \$0.50 per page is paid directly to CCC, 21 Congress St., Salem, Ma 01970. Code number is ISSN 0033-0752/81.

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Inclusivism

While skirmishes of words continue between champions of Post-Modernism and defenders of Modernism, open-minded practitioners are combining ideas from many sources to create some excellent architecture. The verbal people in the world of architecture tend toward extreme positions and overstatement. About ten years ago, there was the spate of books on the failings of Modernism that tried to bury a century of earnest effort in the dust of Pruitt-Igoe: they helped pave the way for architects who portrayed pediments and keystones as essential to the health of our society. The defense of Modernism started later—after the threat to it began to look serious—and this defense continues today.

Critics of stature, such as Wolf Von Eckardt, Bruno Zevi, and James Marston Fitch have reacted to Post-Modern design as if it were some pernicious retrogressive plot. Loyal Modernists seem to believe there is something socially redeeming in blank surfaces. They seem to be guided by a historical imperative: they may love ornamented architecture created up to the year 1890, say, or 1920, but they find ornament produced today morally and socially corrupting. And there's apparently a technological imperative: a society that has learned to make tempered glass of John Hancock dimensions must never indulge a weakness for little panes. Then there is an unwritten set of economic priorities: no matter how much we spend to make the elevator go faster or the temperature more constant, anything we spend for ornament is unconscionable waste.

The standard denunciations of the Post-Modernists accuse them of considering only façades, which are rendered in seductive colors and are always said to bear no relation to what's behind them. Such work is portrayed as impractical and insubstantial and reflecting poorly on architects. In sessions of this year's AIA Convention, where some members were disturbed by this year's AIA Honor Awards, one heard such code phrases as "buildings that won't last," "buildings that don't work," "buildings that undermine the architect's credibility with the public." It seems that architects' credibility could stand some reinforcing, but Post-Modernism need not be made the scapegoat. The public, in fact, seems eager to trade imposed visual austerity for ornament, color, and symbolism. That's why the public rushes to defend every old decorated relic against demolition-fearing a bleak Modern replacement.

Actually, we saw some fairly flimsy efforts in the early days of Post-Modernism. The young and struggling architects involved generally had to make do with gypsum board, stucco, and paint—tricked out with artifacts from the lumberyard or the junkyard. But the charge of façade preoccupation was never valid: architects such as Charles Moore and Robert Venturi have handled space and form masterfully; Michael Graves shows obvious concern for development of plan and section—with elevation—much as the Ecole des Beaux-Arts taught it.

At any rate, the subject here is not the initiators or leaders of Post-Modernism, but the much wider group of practitioners that is assimilating its ideas. The work that we are seeing-in P/A, in other magazines, in awards programs at all levels-shows a growing realization that there is something of value to be learned from architecture of any historical phase-Post-Modern, Late Modern, High Modern, Early Modern, or Pre-Modern. And while there continue to be many awkward Modern-Historical pastiches produced by those who merely want to be trendy, we are seeing increasing evidence of lessons well learned. Many of our best practicing architects today are projecting their inclusive perceptions in work that is not pure anythingor polemic anything

Like the fine buildings in this issue, such architecture is not scaleless, isolated, minimal, or mechanistic; nor is it nostalgic, imitative, arcane, or insubstantial. At its best, it is rich, symbolic, stable, practical, and memorable.

John Maris Difa

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Views

Rational vs. contextual

While I greatly admired the thoughtfulness of Richard Etlin's article on Italian Rationalism [July P/A], I felt that his argument showed signs of strain in a number of instances where he attempted to portray monuments of Italian Rationalism as "superb examples of what today is called 'contextual' architecture."

Contextual buildings often show some evidence of the push and pull of their surroundings; important façades and major interior spaces seem to be pushed out and into contact with the main public elements of a city, while back and service sides of a building seem to merit less attention (and money). To take the most obvious example, few forms are as inwardly-focused as a circle, and yet we are asked to overlook this fact in the case of the perfectly cylindrical Agrigento Post Office in favour of broadly viewing the "resolutely pure geometric composition" as "related to the history of Agrigento." Mr. Etlin describes how the building connects upper and lower levels of the site by means of exterior stairs, but the way in which these stairs are tightly wrapped around the building surely points to the character of the building as a free-standing, inwardlooking object, with the stairs positioned as a secondary, residual element.

as a secondary, residual element. In general, there is little reference made in the article to the widespread, early modern predisposition towards unornamented geometric form. Instead, we are asked to see the rather ordinary, blocky forms of the Trento elementary school as an "analogue of the city walls," and the similarly blocky forms of the Rome post office as somehow related to the neighboring Pyramid of Cestius. The reference of the Littoria post office to the Canadian grain elevators is "not at all gratuitous" in the words of the author as the post office was "destined for an agricultural region." Thus, the pervasive, early modern infatuation with the image of the grain elevator is reinterpreted anew, in the case of Italian Rationalism as . . . a gesture of contextualism!

Where I do think Mr. Etlin's article was right on target was in his discussion of Fascist ideals and their translation into architectural form. In this ideological regard, perhaps we might term these buildings contextual. Otherwise, the forms of such buildings as the Agrigento post office, Rome post office and Mazzoni post office seem to reflect early modern formal predilections much more than any movement towards what today we admire as contextual architecture.

William Bernstein Toronto, Ontario, Canada

Singling out Portland

In discussing Michael Graves' Environmental Education Center (August P/A), Susan Doubilet wrote that, in panic, "the AIA Journal awards issue singled the (Portland) building out for negative criticism." She then likened this and other criticism of the building to "book-burning."

As author of the Portland article, I wish to correct some misconceptions. The special edition cited is not an awards issue, but a yearly review of new U.S. architecture. Far from singling out Graves' building, AIA Journal included it among 15 works of special interest. The critique reflects no institutional policy, nor any position but that of a freelance writer commissioned to analyze the project. My one predisposition was a hope that the final building might live up to its early sketches and models. Since the decision to publish this building predated the AIA award, it was [Views continued on page 12]

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Views continued from page 10

treated in a full article rather than in a section devoted to short descriptions of award winners.

Linking my article to supposed establishment panic and "unreasoning hatred" of Graves' work is highly uninformed and does no credit to a professional magazine. Equating a sober critique with book-burning is shabby journalism at best, and is tantamount to saying that ideas should never be tested. The distinction between reviewing books and burning them is by no means a small one, but it seems to have eluded your writers and copy editors nonethe-John Pastier

Los Angeles, Calif.

[We did not mean to link John Pastier's on the whole sober critique to unreasoned hatred or bookburning. Notwithstanding the behind-the-scenes reasons revealed above, the building was in fact "singled out" for criticism in the May AIA Journal, while the other ten buildings were treated with noncommittal copy, including in all but one case a few words of jury opinion. Another indication of AIA Journal's attitude toward the building is its willingness to publish an offensive picture (June issue, p. 8) showing the structure exploding. -Editors]

Competition effects

Design competitions, particularly charrettes, do not stress "presentation tech-nique over design" (P/A, August 1983, p. 33) as much as they drag architects and drawing boards out of the office and to the site. Watching and listening to a room full of designers from different states and firms trying to solve the same problems and meet a deadline does more for good design than lavish features in P/A or megabuck fees. If technique not design determines a winning entry-fault the jury not the process.

Tye Simpson

Associate Campus Planner University of California Santa Barbara, Calif.

Credit extended

The Stuttgart Museum (P/A, Aug. 1983, pp. 98-99) was the work of James Stirling, Michael Wilford & Associates.

Michael Graves's office would like to credit the following assistants for their work on the Environmental Education Center (P/A, Aug. 1983, p. 88): Ani Roffkam, Natalie Fizer, and Michael Kuhling.

Correction

In the Italian Rationalism article (P/A, July 1983, pp. 86-94), the date of Illus-tration 17 should read 12 B.C., and of Illustration 22, 1931.

Jack Lenor Larsen correction

The second and third portions of a three-part ad for Jack Lenor Larsen, Inc., were inadvertently reversed (P/A, Sept. 1983, p. 41). We regret that the error was not discovered until the issue had been printed.

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Pencil points

Rome Prize

The American Academy in Rome is accepting applications for 1984/85 Rome Prize Fellowships, through Nov. 15. ¶ For details, contact the Academy, 41 E. 65th St., N.Y. 10021.

Steedman Fellowships

Also accepting applications is the Steedman Fellowship in Architecture, administered by the School of Architecture, Washington University, St. Louis, Mo. 63130. ¶ Applicants are screened on the basis of a design competition, to be completed during any two weeks of November. The winner is granted a travel stipend and fellowship in the American Academy in Rome.

New Orleans outcome

Six first phase finalists have been selected in a competition for the expansion of the New Orleans Museum of Art: Emilio Ambasz; Spillis Candela; Cass & Pinnell; W.G. Clark with the Charleston Group; Ralph Lerner/Richard Reid; Barton Myers.

Save the Apollo Tower

The National Trust for Historic Preservation, with the new organization STALT (Save The Apollo Launch Tower), is working to keep the 18-year-old landmark off the scrap heap.

I Pressured by possible litigation and bad press, NASA agreed to store the tower pieces for future reassembly, possibly at Cape Kennedy.
I More next month.

Who is your decorator?

Five years ago, she coauthored High Tech. ¶ Now Joan Kron brings us Home Psych: The Social Psychology of Home and Decoration. Due out from Clarkson Potter this month, the exposé skewers the profession's plastic surgeons—top-drawer designers, decorators, shelter mags, and flower magi—along with their naïve nouveau clients.

Home Sweet Home

The Craft and Folk Art Museum is organizing a series of 15 separate exhibitions at 12 museums and galleries in the Los Angeles area on the American home.

¶ Directed by Charles Moore with Gere Kavanaugh, the shows will run from October 1983 through January 1984. A symposium on the subject is scheduled for November, and a publication is due out October 1.

Energy curriculum awards

Architecture faculty members from the University of Minnesota, Catholic University, and Montana State University took first, second, and third prizes respectively in "Teaching Energy in Design," a DOEsponsored competition conducted by the ACSA to advance the integration of energy content in design curricula.

¶ Honorable mentions were extended to efforts at the University of Nebraska and Kansas State University by a jury that in-[Pencil points continued on page 45]

PA News report



The 2nd Aga Khan Awards: Still an incomplete voyage

When the first Aga Khan Awards for Architecture (P/A, Jan. 1981, p. 29) were issued three years ago, the 1980 Master Jury observed that "Muslim culture is slowly emerging from a long period of subjugation and neglect in which it had virtually lost its identity, its self-confidence, its very language. . . . Thus the projects presented to us represented . . . steps in a process of discovery, still an incomplete voyage toward many promising frontiers . . ."

This year's nine-member Master Jury echoed their predecessors' concerns, while acknowledging the contradictions inherent in the search for a universal Muslim architecture that is also expressive of separate national identities. The awards, which total U.S. \$500,000, were presented on Sept. 4 at Topkapi Pal-ace in Instanbul by H.H. the Aga Khan, spiritual leader of the Ismaili Muslims and the awards' founder, and H.E. Pres-ident Kenen Evren of Turkey. The finalists, selected by confidential nominators and reviewed on site by a technical committee, illustrate the Muslim world's precarious balance between tradition and modernity, between handicraft and machine aesthetics. Of the eleven projects from nine countries on three continents, two for contemporary mosques, completed within seven years



Top: Tomb of Shah Rukn-i-'Alam, Pakistan, restoration, 1977; Above: Sherefudin's Mosque, Yugoslavia, 1980.

of each other on opposite sides of the globe, summarize the cultural conflict: at one extreme stands the Great Mosque of Niono, Mali, a vernacular work executed in mud brick construction; at the other, Sherefudin's White Mosque in Yugoslavia, a latter-day Ronchamps in reinforced concrete.

While many of the selections were clearly based upon conventional criteria for architectural analysis—space, lighting, plan—other projects were singled out for their sociological or cultural import. A public housing project in Tunisia, although seriously flawed, "physically in its detailing and execution, socio-economically in its inability to cater for the needs of lower-income residents of the medina" is nonetheless valued by the jury as a "good opportunity to test the practicality of many theoretical assumptions about urban renewal."

The jury reserved highest praise for those projects that revived or updated traditional, nonindustrial modes of production. Two preservation projects, one a tomb in Pakistan, the other a palace in Syria, were cited not only for the actual restoration of significant cultural and architectural landmarks, but also for the related training of local artisans in glazed tile work, wood carving, and other traditional crafts. A third used the restoration of seven major monuments in the Old City of Cairo to spearhead the revitalization of an entire residential district. Even the Haj Terminal (P/A, Feb. 1982, pp. 116-122), by far the most technically innovative of the finalists, was cited for its translation of the traditional tent structure into modern materials and construction.

Less successful for its more literal im tation of native architecture is the Tanjong Jara Beach Hotel and Rantau Abang Visitors' Centre in Malaysia. The jury qualified its praise for the projects' positive economic impact on both entertainment and building trades with the warning: "architecturally the adaption of traditional forms to new uses raises several technical and ideological problems." It is precisely such problems of style and form that the Aga Khan posed in his 1980 opening salvo: "Will the Islamic environment of tomorrow be identifiably ours?" [DDB]

All projects submitted to the Aga Khan awards program are to be kept on file in a documentation center for the contemporary Muslim world. The complete list of second-cycle finalists follows: • The Great Mosque of Niono, Niono, Mali; Lassiné Minta, planner/builder. Sherefudin's White Mosque, Visoko, Bosnia, Herzegovina, Yugoslavia; Zlatko Ugljen, architect, S. Malkin, engineer; Ismet Imamovic, craftsman. Ramses Wissa Wassef Arts Centre, Giza, Egypt; R.W. Wassef, architect.
Nail Cakirhan Residence, Akyaka, Turkey; Nail Cakirhan, designer; Ali Duru, Cafer Karaca, carpenters.

• Hafsia Quarter, public housing, Medina of Tunis, Tunisia; Wassim bin Mahmoud, Arno Heinz, architects, Jellal Abdelkafi, planner.

• Tanjong Jara Beach Hotel/Rantau Abang Visitors' Centre, Kuala Trengganu, Malaysia; Wimberly, Whinesand, Allison, Tong & Goo, Hawaii, with Akitek Beisekutu Malaysia, architects; Belt, Collins & Associates, Hawaii, landscape architects; Juru Hiasan Consult Sdn. Bhd., Kuala Lumpur, interior designers; Abdul Latif, Nik Raman master craftsmen.





Top: Great Mosque of Niono, Mali, 1973; Above: Tanjong Jara Beach Hotel, Malaysia.

• Residence Andalous, Sousse, Tunisia; Serge Santelli, architect with Cabinet G.E.R.A.U., Mr. Cherif.

• Haj Terminal, King Abdul Aziz International Airport, Jeddah, Saudi Arabia; Skidmore, Owings & Merrill & Partners, architects.

• Restoration, Tomb of Shah Rukn-I-'Alam, Multan, Pakistan; Muhammad Wali Ullah Khan, Director, Auqaf Department Punjab, architect; Auqaf Dept., restoration; T. Hussein, B. Ahmed, Haji R. Bukhsh, A. Wahid, K.A. Divaya, K.N. Hussain, I. Ahmed, master craftsmen. • Restoration, Darb Qirmiz Quarter, Cairo, Egypt; Dr. M. Meinecke, Dr. P. Speiser, project leaders; M.R. Awad, architect; The German Archaeological Institute in Cairo, conservator; S.M. al-Habbal, S.H. Muhammad, I. Add al-Mun'im, master craftsmen.

• Restoration, Azem Palace, Damascus, Syria; Michel Ecochard, Shafiq al-Imam, Zaki al-Amir, designers.

Sir Nikolaus Pevsner: 1902–1983

Historian, editor, educator, and at times reluctant critic, Sir Nikolaus Pevsner was the author of the contemporary classics *Pioneers of Modern Design from William Morris to Walter Gropius* (1936) and *An Outline of European Architecture* (1942). His Penguin *Dictionary of Architecture*, written with John Fleming and Hugh Honour (1966), is also a standard text, as are the many volumes of the Pelican History of Art series, edited by Pevsner from its inception.

Educated in Leipzig, Pevsner fled Nazi Germany in 1933 and settled in England, lecturing on the history of art at the University of London. He edited the Architectural Review in the 1940s and served as Slade professor of fine art at Cambridge from 1949 to 1955. While there, Pevsner began publishing the remarkable Buildings of England series, a gazetteer of Britain's best, compiled over the course of 25 years.

Pevsner's Oxford Slade lectures (1968-69), published as Some Archi-

tectural Writers of the Nineteenth Century (1972), remains chief among the few critical texts on the subject of architectural writing. His BBC lectures, entitled "The Englishness of English Art," were published in 1956, and in 1967 Pevsner was awarded the Royal Gold Medal for Architecture. Knighted in 1969 for his contributions to British culture, Pevsner was the recipient of AIA Institute Honors in 1981.

As recently as 1976, the historian's encyclopedic *History of Building Types* broke new ground, organizing the history of architecture by type and not style or period. As with Pevsner's earlier works, so *Building Types* has become a standard reference in the field and a model for future scholarship. [DDB]

Brown's Beaux-Arts revisited

Sketches for Arthur Brown, Jr.'s mas-terpiece, the San Francisco City Hall, will be exhibited at the Philippe Bonnafont Gallery in San Francisco from Nov. 23 to Dec. 31. Among the pencil and ink drawings are the earliest known sketches for the competition designdrawn on the back of a letter—as well as studies for the dome and for ornamental details. Although the firm of Bakewell & Brown designed other buildings in the Civic Center, including the Opera House and Veteran's Auditorium (with G.A. Lansburgh), completed in 1932, and the Federal Building of 1936, the City Hall is regarded as Brown's most outstanding contribution to Beaux-Arts Classicism in this country. Also on view will be studies of ornamental patterns for the Commerce Building in Washington, D.C., and the Horticulture Building at the 1915 Pan Pacific International Exposition. [Sally Woodbridge]

Arthur Brown, Jr., City Hall corner balustrade, c. 1914.





Out in the country

There it sits, in that ever-so-California setting: the vineyard. Designed by Batey Mack for San Francisco's 1982 Strada Novissima (one of several late additions to the Venice lineup), the façade was subsequently bought by Renee Di Rosa, a San Francisco collector whose Winery Lake Vineyard doubles as an informal outdoor art gallery.

Little work was required to make the façade vineyard-proof: the faux travertine base was stuccoed over; the most startling additions were new props to support the structure. As photographed by Burton Pritzker, the façade is a perfect California folly.

San Francisco's new plan: boon or boondoggle?

On Aug. 25, San Francisco City Planning Director Dean Macris announced a new downtown plan, which the planners claim will significantly slow the highrise boom and force developers to rethink new projects. Further review of the plan suggests that the initial favorable coverage may be misplaced. As one account put it, the Planning Commission's release was worded "to give the perception of teeth to a set of proposals with no bite at all."

The most highly touted features of the plan are those affecting allowable highrise bulk and density. New regulations would cut development in half, or so the headlines said. Yet, the increase in office space projected by the plan amounts to only about 1.5 million square feet less than would be likely under current regulations, in effect since 1980. Stated another way, the plan would permit the construction of 24 million square feet of office space by 2000, producing a downtown with 40 percent more square footage than exists today.



Andrew Batey and Mark Mack, façade from the San Francisco Strada.

In the most dense part of downtown, the FAR would be cut from 14:1 to 10:1. But through a transfer of development rights, a developer with a small site may acquire another lot anywhere in the same zoning district, make it a park or plaza, and transfer its development rights back onto his building site, substantially increasing the allowable bulk of the new building. This possibility calls into question the effectiveness of an-other much praised plan feature, which aims to reduce the apparent bulk of new towers through design controls that will slenderize them and produce tapered and faceted skyscrapers in the fashionable 1920s or 30s image. Cosmetics will go only so far if actual bulk is not decreased.

The plan does reflect a victory for preservation forces. The proposal establishes five conservation districts in which the present allowable heights of up to 700 feet will be reduced to as low as 50. Associated with these districts is the proposed preservation of 266 architecturally significant buildings with incentives for saving an additional 222 secondary structures.

Environmentalists, however, criticize the plan for shifting the density problem to the South-of-Market area, al-News report continued on page 32] 6 Progressive Architecture 10:83

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News report continued from page 29

ready booming, without acknowledging the impact of Southern Pacific's proposal for an enormous mixed-use project at nearby Mission Bay. Furthermore, the plan's recommendation that 1000– 1500 units of housing be produced every year contains no discussion of how housing will be financed. Nor does the emphasis on public transit (increased Muni and even BART service) carry with it any suggestion that developers help to pay the costs of getting an estimated 56,000 new workers downtown to their jobs. The only specific fund to which developers are asked to contribute is one for public art, which will receive one percent of the value of each new project.

Macris has been accused of timing the new plan's release to dampen voter enthusiasm for a separate initiative slated for the Nov. 7 election, one that would regulate growth throughout the whole city. [Sally Woodbridge]

Reviewing the recent past: design since 1945

It is perhaps regrettable that visitors to the "Design Since 1945," a blockbuster show of 450 objects opening Oct. 16 at the Philadelphia Museum of Art (through Jan. 8, 1984) won't see the behind-the-scenes scene. pre-show Packed in the museum's storage tunnels, cheek by jowl with 18th-C. glass and 19th-C. furniture, the now-familiar Eames potato chip chair and the commonplace IBM Selectric appear once again revolutionary, and the radical impact these objects had on domestic and office life in the 20th Century is thrown into high relief. The exhibit, designed by George Nelson and curated by Kathryn Heisinger of the PMA's decorative arts division, suggests a more seamless continuum of post-war consumer design, emphasizing chronological continuity within the period over conflict and controversy at either end.

To architects, in fact, the show may appear an extravagant celebration of familiar "classics," an anthropological feast of everyday objects, many of which now seem as dated as a miniskirt or a bean-bag chair. The absolute optimistic faith in "good design" aesthetics that guided the production of these objects in the 1950s, 60s and even 70s is now

Top to bottom: Jack Lenor Larsen, "Magnum" fabric, 1970; Jack Lenor Larsen, Inc. Achille Castiglioni and Pier Giacomo, Taccia table lamp, 1967; Flos, Brescia, Italy. Charles Eames, chair, 1948; Herman Miller. Toshiyuki Kita, Wink Chair, 1980; AI.









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regarded with the strongest skepticism, although many pieces are currently hot collectors' items.

The show, organized by medium, will open with a splashy light display, then move through furniture, textiles, appliances, ceramics, metalwork, plastics, and glass. Two major themes tie the separate components together: the connection between industrial design and consumer design is conveyed through the juxtaposition of objects: satellite suspended over household appliances, Corvette plastic car body over molded plastic furniture. Theme two spotlights individual creativity or, more specif-ically, the creative individual. Ten designers and their work are profiled in the show, and the catalog includes essays by 18 living designers, including Max Bill, Jack Lenor Larsen, Dieter Rams, and Marco Zanuso.

The catalog itself promises to be a major piece of scholarship that includes a comprehensive bibliography, an annotated index of exhibited items, and a digest of designer biographies. The publication also documents the show's implicit theme: the influence of institutions and specifically museums on the development of design ideals. MoMA's annual "Good Design" shows of the 1950s, timed to coincide with Christmas shopping, exaggerated the importance in America of European ideas. Abroad, such groups as the Design Council of Great Britain or Paris's Centre de Création Industrielle functioned as the art academies had centuries earlier, passing judgment and thereby ensuring consensus.

Interestingly the PMA's charter, apparently modeled after that of the Victoria and Albert Museum, specifically directs the institution to encourage good design and production. Not since its 1932 "design for the machine" show, however, has the PMA lived up to that explicit mandate. Nor does "Design Since 1945" break any really new ground, although Frank Gehry's "Easy Edges" fiberboard rocking chair or Sottsass's "Nefertiti" desk may startle a lay public unfamiliar with recent developments in the decorative arts. But most important, the show is an ar-chaeological exercise, or as Herbert Gans puts it, "a treasure trove of progressive upper-middle culture and a collection of its more typical artifacts." To those who attend: happy hunting. [DDB]

Related events include lectures by NASA astronaut Jim Bagina and by Ralph Nader. Also scheduled, a symposium featuring Tomas Maldonado, former director of the Design School at Ulm, West Germany, Ettore Sottsass, a founder of Memphis, and Victor Papanek, author of "Design for the real world." Speakers for a second symposium on interior design have not yet been confirmed. And the PMA, in conjunction with a Philadelphia art and design school, will offer a fall semester course on design. [News report continued on page 37]

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News report continued from page 32

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(Robins & Reams, architect; KKBNA, engineer); Number 5 Newsprint Ma-chine Building, British Columbia (Swan

Wooster Engineering, designer/en-gineer); St. Bernard Condominiums,

Taos, N.M. (Antoine Predock, architect; Randy Holt, engineer); Lake Washing-

Kirkland, Wash. (Cummings Schlatter,

architect; Andersen Bjornstad Kane Jacobs, engineer); The Westin Hotel,

Copley Place, Boston, Mass. (TAC, architect; Lev Zetlin, engineer); Blue Cross & Blue Shield of Texas, Rich-

ardson, Texas (Omniplan, architect; Datum Structures Engineering, engineer); and Multnomah County Main-tenance/Operations Facility, Portland, Ore. (Zimmer Gunsul Frasca, architect;

Vocational/Technical Institute,



Top: Eric Harvie Pedestrian Bridge; above: Lake Washington Vocational Institute.

Dauphin Island Bridge, Mobile County, Ala. (Figg & Muller, engineer). A special jury award was given to the Woodrow Wilson Memorial Bridge, Washington, D.C. (Greiner Engineering Sciences, engineer).

Furniture by Fuller

Had he lived just a few more months, R. Buckminster Fuller (P/A, Sept. 1983, p. 27) might have presided over the unveiling of his only executed furniture design, the "Hang It All" storage and library unit, which will be introduced by Thonet on Nov. 15 in New York.

The hexagonal, four-tiered unit, which is 53¾ inches high and 24 inches wide, contains 12 shelves and can be either suspended by six tension cables or

Fuller with "Hang It All" Thin Thonet's Chicago showroom, June, 1983.

supported on a 13-inch base. Fabricated of wood composition board, it has a polyurethane, catalyzed ultrasonic chrome finish. The patented design (Fuller's 25th U.S. patent), which was developed in association with Thomas T.K. Zung, partner in the firm of Buckminster Fuller, Sadao, Zung, will be produced in an edition of 500. [PV]

Mock architecture or the putt-putts' revenge

Main Street may be all right, and Las Vegas has its moments; but miniature golf . . .?Surely that bastion of boardwalk entertainment holds no interest for the architect, beyond putting pleasures.

John Margolies, the itinerant photographer of the American Way as witnessed in architecture, thinks otherwise. "Synthetic Links," his show of color photographs on view at P.S.1 in Long Island City through Nov. 20, chronicles how the imitation sport has developed its own imitation architecture, animals, and icons. As Margolies puts it: "In mini golf, nothing is sacred." [DDB]





KPFF, engineer). The winning bridges: Hood Canal Floating Bridge, Jefferson & Kitsap Counties, Wash. (Parsons Brinckerhoff Quade & Douglas and Raymond Technical Facilities, architect/engineer); Linn Cove Viaduct, Linville, N.C. (Figg & Muller, engineer); L-205 Columbia River Bridge between Portland, Ore., and Vancouver, Wash. (Sverdrup & Parcel and T.Y. Lin, engineers); Eric Harvie Pedestrian Bridge, Calgary, Alberta (Simpson Lester Goodrich, en-gineer; Graham McCort, architect); and

Castle Park Golf, Redondo Beach, Calif. [News report continued on page 38]



Progressive Architecture 10:83

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What does Wu mean?

One can well imagine the stir in Princeton University's architectural studios as Venturi, Rauch & Scott Brown's Wu Hall went up, down campus. While Venturi's Complexity and Contradiction in Architecture is required reading at his alma mater, the firm's populist symbology remains suspect in a school long identified with the aesthetic of professor Michael Graves. Wu Hall's significance, however, extends beyond architectural concerns to social ones, for the building is the centerpiece of the school's new residential college system. It is also one of several Princeton projects underway at VRSB; others include a \$30 million molecular biology building (with Payette Associates, Boston) and the renovation of Blair and Little dormitories.

The residential colleges were created by a reorganization, largely on paper, of existing campus dorms and dining halls. Wu Hall is this system's symbolic "social condenser," successor to and replacement for Princeton's traditional eating clubs. It is therefore not surprising that the hall's largest and most significant feature is a dining hall, a modern take on the medievalized Commons in Holder Hall (Day & Klauder, 1910), which Venturi is currently renovating. Holder's dark dining hall is here reinterpreted in light wood and windows;





Venturi, Rauch & Scott Brown, Gordon Wu Hall, Princeton University.

schoolroom chairs recall high-backed Holder models; and the cloistered cafeteria line is an airy version of Holder's twisted passages. Socializing in the hall's comfortable lounges and recreation rooms (the second-floor fireplace alcove is particularly comfy) is extended to a steep flight of stairs just inside the entrance, which will also be the scene of caucuses, study sessions, and college meetings. The program also called for connecting kitchen and service areas to the adjacent Wilcox dining hall, which has undergone minor remodeling.

The hall's brick surfacing, dark brick frieze, and slightly picturesque profile clearly nod to the campus's "Collegiate Gothic" collection and especially to its battlemented Tudor line. (Blair Tower, Cope & Stewardson, 1896, is a prime example.) Enormous bay windows, one a dining alcove and the other a gracious stair, exaggerate a characteristic campus element, and paired stone cannonballs on brick and stone pedestals build a gateway, in obvious reference to the monumental portals and archways of Princeton past. (The large thermal window, on the other hand, is a Venturi trademark.)

But the entrance's ornamental motif, immortalized in the Protetch poster for Venturi's show last fall, is not so easily explicated, nor is the main façade's random rhythm of inset marble panels self-explanatory. Whatever the sources for these intriguing patterns—and there are some very esoteric possibilities ranging from cathedral paving patterns to the silhouette of Tudor towers and spires—it is their size or singularity that says "entrance" and not their specific symbology.

The plaza's "Butler College" stanchion, however, is instantly understood, its tiny 2-D tiger a playful rendition of Princeton's pet pussycat. In contrast to the erudite entrance ornament, this billboard is a jingle rhymed with tongue firmly in cheek. [DDB]

Passive solar's growing pains: the ASES conference

Take a research community feeling the pinch of government cutbacks, an architectural community feeling the need to integrate technical and formal concerns, and an organization feeling the effects of decreased membership, and you have the ingredients of the American Solar Energy Society's 8th Passive Solar Conference, held last month in Santa Fe, N.M.

The gap between architects, who generally think that the relevant passive solar design strategies have been largely explored, and engineers or researchers, who believe that exploration has only just begun, appeared wider than ever at the conference. That split showed the passive solar movement to be at a turning point: Is its charge strictly scientific, or, as Richard Rush of the AIA asked, must it also deal with "the other 50 percent, the art"? While some of passive solar's leading architects-Edward Maz-ria, Harrison Fraker, Douglas Kelbaugh, Peter Calthorpe-confirmed a shift in their work from purely solardeterminant solutions to more complex, formal designs, others returned to the movement's idealist origins, emphasizing its moral duty to correct our society's energy-wasteful ways. As Sarah Hark-ness of TAC pointed out, the passive solar movement and its related goal of fundamental social change has much in common with the early modern movement.

The immediate charge of the American Solar Energy Society, however, is to increase its membership. Ironically, some of the Society's troubles may stem from the passive solar movement's own success. As other organizations—the AIA, ASHRAE, IES—focus on the subject and as passive solar strategies are adopted by the building industry or practiced as a matter of course by architects, the organization's role seems less clearcut. That dilemma, however, makes its survival, and conferences such as the one held in Santa Fe, no less important. [TF]

[News report continued on page 41]

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Perspectives



The D.C. Compound: International Center

Washington residents have not always been happy hosts to the foreign diplomatic community. A 1964 District of Columbia zoning ordinance that severely limited the areas where chanceries and embassies (ambassadors' residences) could be built reflected the opposition of wealthy D.C. residents to the prospect of new foreign ministries in their neighborhoods. The zoning law, however, could not slow the need for new sites, and in 1968, Congress designated the former National Bureau of Standards site in Northwest Washington as the "International Center.'

Twenty-three chanceries will ulti-mately occupy the L-shaped parcel on plush upper Connecticut Avenue. Of these, three have been completed, two more are under construction, and three additional lots have been leased. Prominent Connecticut Avenue frontage is occupied by the as-yet incomplete Intelsat headquarters. (Intelsat provides communication satellite services to its 109 member nations.) In a 1980 invited competition, Australian architect John Andrews won the commission; his octagonal pods, separated by atriums and

Above, top: Kuwait (left) and Bahrain embassies; bottom: Kuwait lobby.

shielded by metal and acrylic sun screens, will be completed in 1984.

The adjacent chancery of Kuwait by Skidmore, Owings & Merrill (New York) is the only chancery at present on the site whose façade, a slick skin of metal and glass, does not evoke Middle Eastern architecture. By contrast, its public interiors have a distinctively Islamic cast, supplied by screens, inscribed fountain, curved turquoise alcove (where the ambassador receives his guests), and tiled, stepped ceiling, cut through by a skylight.

Next to Kuwait sits the tiny chancery of Bahrain by The Architects Collaborative, whose 18,000-square-foot building houses 10 to 20 employees. Its stuccoed walls and layered screens are drawn from Bahrain examples; but the chancery's central atrium is cramped, and the exterior suffers from an excess of arches and canopies.

The five-story (two below ground) Jordanian chancery designed by local architect Leo Daly is a stereotypical interpretation of its country's architecture. It pushes against the site's FAR [News report continued on page 43]

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Progressive Architecture 10:83 41

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18





INTERNATIONAL	CENTER,	WASHING	TON,	D.0
---------------	---------	---------	------	-----

1 Kuwait	6	Israel
2 Bahrain	7	Yemen
3 Jordan	8	Intelsat
4 Qatar	9	Central Park
5 Ghana	10	Buffer Park





Top to bottom: Intelsat; Center site plan; Israeli chancery; Bahrain (foreground) and Jordan (rear) embassies.

ceiling: too much building (46,500 square feet) has been jammed onto too little land.

Separated from the Kuwait and Bahrain chanceries by several undeveloped plots, and politically many miles distant, is the Israeli chancery designed by another local firm Cohen Haft Holtz Kerxton Architects & Planners, with consulting architect Yeshaiahu Mandel. The 1981 structure is clearly more security-conscious than its Arab counterparts. Television monitors scan the premises, and several of the first-floor windows are actually of solid wall faced with opaque glass. Gates, whose fence rods are shaped like the candlesticks lighted on Jewish holidays, remain closed and are frequently patrolled by the U.S. Secret Service.

To date, all construction and leasing (Ghana, Yemen, and Qatar have yet to begin building) has focused on the southern portion of the site. A garden designed by landscape architect James van Sweden occupies the highest elevation of this area, and a 110-foot staircase drops from the park, between the Kuwait and Intelsat sites, to the southern edge of the property. A landscaped buffer zone will separate the chanceries and Intelsat from neighboring residential areas.

The timetable for clearing and leasing the northern half of the site, separated from the more developed southern area by a heavily traveled east-west street, is still unknown. The State Department representative for International Center either has no commitments yet or does not want to risk offending potential lessees and the District government by premature statements. As most foreign missions are now housed in leased or purchased townhouses, more countries can be expected to erect chanceries, new symbols of their nations, at International Center. [William Lebovich]

William Lebovich is an architectural historian with the National Park Service's Historic American Engineering Record. He cu-rated "America's City Halls," now traveling under the auspices of the Smithsonian. [News report continued on page 45]

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vandalism when moveable seating is Anchors and ganging clamps insure configuration integrity and deter grouped in sequence.

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Pencil points continued from page 27

cluded Donlyn Lyndon (UC-Berkeley), William L. Porter (MIT), Robert G. Shibley (SUNY-Buffalo), and Richard E. McCommons (ACSA).

¶ Awards totaling \$18,000 were made to further faculty work in the energy teaching area, and results of the investigations will be published in a casebook by ACSA later in 1983.

ARCC's software exchange

A grant from the National Endowment for the Arts has allowed the Architectural Research Center Consortium to initiate the "Designers Software Exchange."

¶ The exchange will focus on software useful in design, as opposed to business or management applications.

¶ Groups and individuals who submit programs to the exchange will automatically have free access to library programs. Those unable to contribute programs may join for a small fee.

¶ Contact Professor Harvey Bryan at the Laboratory of Architecture and Planning, Room 4-209, MIT, 77 Mass. Ave., Cambridge, Mass. 02139 for more information.

Architecture center opens in Texas The Southwest Center for the Study of American Architecture has opened at the University of Texas at Austin. The Center is associated with the Buell Center for the Study of American Architecture at Columbia University in New York (P/A, March 1983, p. 41) and joins a network of future centers around the country.

¶ Codirectors of the Southwest Center are D. Blake Alexander and Lawrence Speck of the School of Architecture, University of Texas at Austin.

Michigan's architect laureate

Michigan Senate Resolution #117 names Alden B. Dow the first Architect Laureate of Michigan. Son of Herbert H. Dow, the founder of The Dow Chemical Co., Dow was commended for his public works, among them the Midland Hospital Center, Ann Arbor City Hall and Public Library, and Kalamazoo Nature Center.

N.C. fund for architectural excellence

The newly formed Henry & Mabel Kamphoefner Fund for the Recognition of Excellence in Architecture has been established to honor the founder and longtime dean of the School of Design at North Carolina State University, and his wife.

¶ The fund will support competition and travel programs for students and graduates of North Carolinian architectural schools, sponsor a design awards program for N.C. architects, and finance gifts of major architectural portfolios to the architectural libraries of NCSU and UNC.

Lutyens extended

The Johannesburg Art Gallery, designed by Sir Edwin Lutyens in 1911, is being extended by the local firm of Meyer Pienaar & Partners.

[Pencil points continued on page 49]

steel frame specially prepared to accept actually becomes fused to the surface. furniture choose Kroin. After all, can you afford not to? So the next time you specify outdoor joint, drawn steel wire mesh in every That takes reinforced welds at every seat and back, plus a heavy tubular a sintered synthetic coating that Telephone 617 492-4000 Telex 951650 Furniture stand out is the way it stands sound investment and a costly mistake. up: to the elements, abrasion and even they can't match the way it lasts. And Because, while companies may try to could mean the difference between a what makes Kroin Park and Garden imitate the way our furniture looks, Choosing the right outdoor seating 14 Story Street Cambridge, Massachusetts 02138 severest abuse. he

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Shades of St. Bart's

The design for a Denver office high-rise by C.W. Fentress & Associates is an eerie echo of the controversial proposals put forth by the ecclesiastical leadership of St. Bartholomew's Church in New York. Air rights transfers and a 500-year leaseback arrangement, says the archdiocese, will preserve the 1924 Holy Ghost Catholic Church. The 550-foot Fentress tower, propped up on 50-foot columns to provide "dramatic" views of the church and Rockies beyond, reduces its sanctuary to the role of plaza sculpture, mirrored ad infinitum in the faceted facade.

¶ But Holy Ghost is not the first in town to combine real estate with religion; in March of 1982, Trinity United Methodist Church, located two blocks from Holy Ghost, sold its air rights and three lots to a Canadian firm that will build its tower behind the Trinity.

Connoisseur on architecture

With Luis Barragan as September's cover star, Connoisseur launched a new architecture series, or more correctly a series on "great houses of the world." (Also featured in Sept. are Frankfurt am Main and the Aga Khan.)

The Sept. editorial takes time out from the ne plus ultra to lambast "the bumptious school of post-modernism." But the issue's postscript on ATST's Golden Boy sings of the notorious. tower's "Grand postmodernism." "Bumptious," apparently, is in the eye of the beholder.

Other printed words . . .

Meanwhile, Connoisseur's competitor Vanity Fair has inaugurated its own architecture column, edited by Suzanne Stephens.

phens. ¶ And Interview is at it again, this time with a Sept. interview of Helmut Jahn by Sugar Rautbord.

[News report continued on page 54]





How to conquer wind, rain and sun in low-rise office buildings.

Make friends.

Instead of keeping the elements out and using expensive energy to create an indoor climate, why not invite them in?

That's what the architects did with this low-rise Florida office building. For openers, they specified Andersen[®] Perma-Shield[®] casement windows.

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Gainesville Florida Campus Federal Credit Union University of Florida, Gainesville Campus Architect: Bill G. Eppes, A.I.A Gainesville, Florida

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300 Series Unit Lockset.

In progress



Bond Building, Washington, D.C. Architect: Shalom Baranes Associates, Architects, Washington, D.C. The nation's capital has developed its own distinct brand of preservation (P/A, June 1983, p. 41) as this project and the two following confirm. The Bond Building adds to an existing landmark, located on a corner site one block from the White House, to fill out a 1980s zoning envelope. Missing teeth to either side of the 1901 Beaux Arts block are replaced, and four additional floors cantilevered out over the original ones are disguised as a separate mid-block building in modern garb.



Army & Navy Club, Washington, D.C. Architect: Shalom Baranes Associates, Architects, Washington, D.C. While two of the club's ground-floor social rooms are to be dismantled and reconstructed, the remaining interior of this Farragut Square club, designed by Hornblower & Marshall in 1911, will be entirely gutted and the modern alley addition and penthouse demolished and replaced for club and office uses. A span of new windows running above the restored cornice will recreate the original balustraded parapet in glass. Above, truncated corner towers and projected balconies with flagpoles establish a new symmetry played against the old, although a leftover, odd bay at the end of five greenhouse windows could confuse intended rhythmic readings.



The Southern Building, Washington, D.C. Architect: Shalom Baranes Associates, Architects, Washington, D.C. Although financial considerations limited actual construction to nine stories, D.H. Burnham's 1911 Southern Building was designed to take two additional floors. Seventy-two years later, those floors are to be built. Designed in consultation with Graham Anderson Probst & White (Burnham's successor firm) and with architectural historian Betty K. Bird, the addition borrows details and decoration from the original, while allowing its elaborate terra cotta cornice to remain prominent.

[In progress continued on page 58]

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In progress continued from page 54



Opryland Hotel and Convention Center expansion, Nashville, Tenn. Architect: Earl Swensson Associates, Inc., Nashville. The hotel's new centerpiece, a 11/2-acre enclosed garden park, is set between two new guest wings on its west side. The park's artificial stream, waterfall, and skywalk are covered by over an acre of glass roof. The skywalk, in addition to functioning as a lookout, also camouflages parts of the mechanical system and structural supports for the roof. The cupola encloses 15 propeller fans for exhausting or recirculating air and controlling humidity.



United Artists Theater, San Francisco. Architect: Kaplan, McLaughlin, Diaz, San Francisco. This five-theater/commercial complex is located on the corner of Sutter St. and Van Ness Ave., formerly "Automobile Row" and still home to many dramatic 1920s auto showrooms. The architects avoid the typical modern theater solution of a low, scaleless box by means of a 3200-square-foot glass lobby/atrium and three-level 2300-squarefoot commercial space that will activate the theater's otherwise blank and lifeless façades. The atrium is a cascading tower of bundled glass tubes, sandblasted and stained glass, inspired by both the glazed showrooms nearby and the grand movie palaces.

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Central Plaza, San Francisco. Architect: Kaplan, McLaughlin, Diaz, San Francisco. Situated across the street from a major public plaza, this office complex breaks the line of boxy highrises along Market Street by splitting its allowable square-footage into two functionally independent structures, an eight-story building in front of a 23-story office tower. Both buildings are entered from a covered 15-foot-wide by 27-foot-high arcade that provides retail space and pedestrian access through the block. Setbacks on the taller building echo those of the smaller. [News report continued on page 62]

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CURTAIN WALLS BY INRYCO







News report continued from page 58

Calendar

Exhibits

Through Oct. 16. Photography and Architecture: 1839-1939, Cooper-Hewitt Museum, New York. Also, through Oct. 23, A Penny Saved: Architecture in Cast Iron Toy Banks; through Dec. 31. F.L. Wright and the Prairie School; through Jan. 15, exhibition of contemporary pattern design; and Nov. 1-Feb. 5, The Amsterdam School: Dutch Expressionist Architecture, 1915-1930.

Through Nov. 20. Richard Morris Hunt at the Ecole des Beaux-Arts. The Octagon, Washington, D.C.

Through Nov. 24. Taste, an exhibition

about values in design. Boilerhouse Project, Victoria and Albert Museum. London.

Through Nov. 30. Furniture by Peter Korn. Appalachiana, Bethesda, Md.

Through Dec. 4. Gainsborough Drawings. National Gallery of Art, Washington, D.C.

Oct. 21-Jan. 15. LaFayette Square 1953-1983: Historic Preservation and Modern Architecture. Renwick Gallery, Washington, D.C.

Oct. 22-Nov. 15. Follies: Architecture for the Late 20th Century Landscape. Leo Castelli Gallery, New York.

Competitions

Nov. 1. Entry deadline, Concrete Reinforcing Steel Institute's Design Awards VII Program. Contact CRSI, 933 N.



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Nov. 1. Entry deadline, Tucker Architectural Awards Program. Contact Building Stone Institute, 420 Lexington Ave., New York, N.Y. 10170.

Nov. 4. Registration deadline (must be accompanied by 300 Swiss francs), restructuring the Town Centre of the Community of Campione d'Italia. Contact Secretary for the Competition, U.C.A.L. via Brentani, 9, 6900 Lugano, Switzerland (091) 512888.

Nov. 15. Application deadline, Rome Prize Fellowships. Contact American Academy in Rome, 41 E. 65 St., New York, N.Y. 10021.

Jan. 26, 1984. Postmark deadline, P/A's 4th Annual International Furniture Competition. See p. 15 for information and entry form.

Jan. 31. Application deadline, National Institute for Architectural Education Traveling Fellowship in Architecture. Contact NIAE, 30 W. 22 St., New York, N.Y. 10010.

Conferences, seminars, workshops

Oct. 17-18. AIA Committee on Design annual design conference, Houston. Contact AIA, 1735 New York Ave., N.W., Washington, D.C. 20006 (202) 626-7300.

Oct. 26-29. 5th International Conference on Urban Design, Washington, D.C. Call for pre-registration: (800) 323-6556, xA129

Oct. 26-30. 37th National Preservation Conference, San Antonio. Contact the National Trust for Historic Preservation, 1785 Massachusetts Ave., N.W., Washington, D.C. 20036 (202) 673-4130.

Oct. 30-Nov. 2. Chicago83, Industrial Designers Society of America national convention, Hyatt Regency, Chicago. Contact IDSA, 6802 Poplar Place, Suite 303, McLean, Va. 22101.

Nov. 2-6. Society of American Registered Architects convention, New Orleans. Contact G. Robert Johnson, % Hertel, Johnson, Eipper & Stopa, 1920 Waukegan Rd., Glenview, Ill. 60025 (312) 724-8200. Nov. 7-12. 10th World Conference on

Housing, Miami Beach, Fla. Contact Florida International University, Tamiami Campus, Miami, Fla. 33199.

Nov. 9-10. Computer aided space design and management conference, Halloran House Hotel, New York. Contact Gralla Conferences, 1515 Broadway, New York, N.Y. 10036 (800) 869-1300. Nov. 18-19. Superinsulation for the Mid-Atlantic Region, Sheraton Valley Forge, Penn. Contact Irisita Azary, Mid-Altantic Solar Energy Association (215) 545-2150.

Nov. 18-19. Conference on new technology and the future of architecture, Hyatt Regency Hotel, Oakland, Calif. Contact Guidelines, Box 456, Orinda, Calif. 94563 (415) 254-0639, 254-9393. Nov. 29-Dec. 2. Sixth World Engineering Conference, Georgia World Con-gress Center, Atlanta. Contact Association of Energy Engineers, 4025 Pleasantdale Rd., Suite 340, Atlanta, Ga. 30340 (404) 447-5083.

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John Skujins, Architect Minneapolis, Minnesota

Drexel Yaeger Atelier Associates Waterbury, Connecticut

Neil Carter and **David Marienthal** Environmental Ventures, Inc Santa Fe, New Mexico

*Cosponsored by Solar Age Magazine

ull details on the winning entries and features of many others are available in a book of competition highlights. For a copy, send \$2.00

plus \$1.50 (postage and handling) to Dept. 005-Order and Billing, American Gas Association, 1515 Wilson Blvd., Arlington, VA 22209. (Orders must be prepaid.)

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SINGLE-FAMILY HOMES

2ND PRIZE

Robert Chase, John Friedman and Robert Elbogen Robert L. Chase AIA & Associates Woodland Hills, California

HONORABLE MENTIONS Zane Anderson, AIA, Architect Providence, Rhode Island

Charles Woods and Albert Sincavage Natural Architecture Honesdale, Pennsylvania

Robert Chase, John Friedman and Robert Elbogen Robert L. Chase AIA & Associates Woodland Hills, California

William Leddy, Architect San Francisco, California

Michael Cox The Wold Association St. Paul, Minnesota



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Kohn Pedersen Fox

With amazing skill and surefootedness, a young firm has not only survived waves of recession but it also has achieved an enviable international reputation.





Jack Pottle

Nice guys don't always finish last. Far from it, in fact. It would take a book to fully capture the nuances and tales behind what can only be described as the phenomenally successful Kohn Pedersen Fox Associates. The firm dates only to 1976, yet has grown to about 150 people and has work all over the country and projects abroad.

Heading the firm are seven partners: A. Eugene Kohn, William Pedersen, Sheldon Fox, Arthur May, William C. Louie, Robert L. Cioppa, and Patricia Conway. All of them, at one time or another, came from the office of John Carl Warnecke & Associates. Initiated by Gene Kohn in April 1976, the firm grew with the almost immediate addition of Pedersen, Fox, and Conway. May joined them in 1977, as did Cioppa, and both were made partners in 1978. Louie came to the firm in 1978, and became a partner in 1982. Because she is not a registered architect, Conway is not allowed to be a partner in the architectural firm, but wanting to give her her due position, the founding partners established Kohn Pedersen Fox Conway Associates, a wholly owned subsidiary firm for planning, programming, and interiors.

Although the firm was founded recently, the partners were hardly inexperienced, having held responsible positions in several large offices. It was on this past experience that they based their foray into the area of commission-seeking. Kohn did some preliminary homework, calling large investors, having meetings or lunches with them, and asking them what they looked for in an architect. "I wanted to get back to basics," Kohn says. "I didn't ask for jobs; I just wanted to talk to rst thing mentioned was the dertner attention, the second was densciousness, and the third was a deep ect for budgets. These three things, in ny order, have become the foremost rules at Kohn Pedersen Fox.

Confidence in their own ability seemed to pay off with potential clients; within three months, the firm had three jobs in three different states. Timing, the principals admit, was half of the battle in the beginning, along with their conscious decision not to seek work in Iran or Saudi Arabia. Most of the competition was trying to get or do jobs in the Middle East as KPF was starting out.

KPF has either managing partners or design partners; Kohn, Fox, and Cioppa are managing partners. Kohn is the major force in new business development, Fox is more involved in business and financial affairs for the office, and Cioppa handles staffing and employment; all handle major projects along with design partners Pedersen, May, and Louie. As the firm grew, the original partners decided to make new partners in order to maintain the commitment to partner-level involvement in every project. Each project has a team of managing and design partners, sometimes including input from a second managing partner. It is common to assign a senior designer to work with the design partner, and a project manager.

Pat Conway's group, numbering about 45, may enter a job early, to do programming and/or feasibility work; she feels that ideally a project can benefit from input she can provide about interiors decisions throughout the design process as well. Asked about the broad scale shifts in her work, Conway says, "The nature of planning is essentially problem-solving, and if you can plan something at site scale, presumably you can do that at the scale of the floor plate as well." She does most of the firm's zoning work outside of New York City, and handles lease situations, financial projections, real estate opportunities, and interiors/graphics projects.

Philosophy I

Good design is a given at KPF. It's so given, in fact, that unless it is brought up, the firm's partners almost never even talk about it. The quality just is expected. What even the design partners bring up first is service to the client and financial responsibility on each job. As Bill Pedersen sees it, "First and foremost we are in a *service* profession."

In order to begin that service, KPF, like any firm, has to get the job; but unlike any other firm, they have Gene Kohn. Maintaining an impressive, extensive contact list, Kohn goes to great length to be in the right place at the right time. One of his usual activities is to assemble detailed slide shows, assisted by research done by Mark Strauss, depicting some aspect of the community or area around the proposed facility. The client is usually impressed that KPF has taken the time to get to know them so well. Kohn has been known to get jobs away from other big name firms even after the selection process has been completed. On one large job, 27 architects—not including KPF—had been interviewed, and one settled on. Kohn gambled, asking for an interview and telling the potential client he would be sorry if he didn't see KPF, because it was "going to be *the* great firm in America." The client was intrigued, and probably offended, but Kohn got the interview, and the job.

After the initial contact, it is normal for Kohn to set the team, selecting the design partner according to work load or based on his sense of personal chemistry. Sometimes three partners give the first presentation, and at other times still more members of the proposed team attend. In all cases, the design partner and the managing partner stay with the project all the way through.

Philosophy II

At the root of it, though, the design partners do have reasons for how they design. If the term "contextual" has been overapplied in architecture, it is too bad because here is a firm that honestly attempts to design a building by taking cues from its surroundings. The designers at KPF draw strengths from each other in a direction started by Pedersen and enriched by interchanges with May and Louie. But context is paramount to all of them. As Pedersen puts it, "No matter how good a building is as an object, if it makes sense out of its context, there is something wrong. We have developed a strategy of assemblage or collage-pieces, each of which has references to its context; they refer to a past condition, a present condition, or a future condition. You can't refer to any single condition in urban architecture. In assemblage architecture, of course, one still has to pull all those parts together so that they make one thing.'

Coming at it another way, Arthur May says, "I was very influenced by Jane Jacobs' *Life and Death of Great American Cities*, in which she talks about the impact of very large buildings on very small-scale environments. But the buildings that architects have been involved in since the turn of the Century have been progressively bigger and bigger, so we need ways to break the scale."

There are many more facets of KPF that deserve mention here, more personalities, more ideas. The firm has quickly risen to national and then international stature, appearing on elite invitation lists. This is obviously no fluke, but a brilliant combination of design talent, business sense, and dedication.

But the unexpected happens in these offices—they are genuinely nice people, to outsiders, clients, each other, and they like working together. They are diverse in what each is bringing to this mix, and they draw strength from that diversity, that specialization. They also give young people all the responsibility, challenge, and encouragement they can handle. And the admiration and credit that go with it. As we said, nice guys. . . . [Jim Murphy]

Kohn Pedersen Fox Portfolio





Ezra Stoller ©ESTO



AT& T Long Lines Eastern Regional Headquarters, 1980, Oakton, Va. A. Eugene Kohn, partner in charge; William Pedersen, partner in charge, design; Robert Evans, senior designer; Kohn Pedersen Fox Conway, planning, interiors.







SECTION AT LOBBY

8 Penn Center, 1982, Philadelphia. A. Eugene Kohn, partner in charge; Arthur May, partner in charge, design; Robert Evans, senior designer; Robert Cioppa, project manager; Kohn Pedersen Fox Conway, interior design; Reliance Development Company, client. Mirrored glass rounds one curved corner and one right angled one to meet a vertical division, where the material changes to exposed concrete. Horizontal

Photos: Wolfgang Hoyt ©ESTO





TYPICAL FLOOR

slashes at the base and top are intended to bring scale cues from the street. The lobby is split-level entrance; for interiors (KPFC), Patricia Conway was partner in charge; Judy Swanson and Karen Dauler, interior designers.

Amoco Building at Columbia Plaza, 1980, Denver. A. Eugene Kohn, partner in charge; William Louie, design; Laurence Goldberg, project manager; Reliance Development Company, client. 36-floor office building clad in aluminum and gray reflective glass.



Wes Thompso

WABC-TV Studio/Office Building, 1979, New York. Sheldon Fox, partner in charge;

William Pedersen, partner in charge, design; Paul Rosen, senior designer; American Broadcasting Companies, client.





ABC Washington News Bureau, 1981, Washington, D.C. Sheldon Fox, partner in charge; William Pedersen, partner in charge, design; Paul Rosen, project designer; Robert Cioppa, project manager; American Broadcasting Companies, client.

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.corporated, .on, Del.

Buttressing downtown

For a key site at the edge of a downtown core, Kohn Pedersen Fox has designed a corporate office building with a sensible silhouette but unconventional surface treatment that prefigures later projects.

Hercules stands at the edge of the city core, overlooking Brandywine Creek (right). On the city side (photograph opposite page) a granite-faced clock, 18 feet in diameter, hovers above the massive entrance loggia. Exterior of the 14-story block presents various juxtapositions of sleek curtain wall and stripped-down Classical stonework. On first view, the stone-walled front of the Hercules building, with a big clock at its center, suggests a monumental 19th-Century factory—or its engraved image on a wall calendar, expressing the company's civic virtue. But growing out of these stone walls is a glassy, Late Modern volume. The possibility this is a new building piggy-backing on a historical one is soon discounted: certain consistencies in form and detail affirm that this was all conceived at once—and in the 1980s.

The Hercules executives didn't want a conventional corporate tower, and they didn't get one. Twelve large floors give the building a compact, cubic form. A shop-lined public passage through the building links downtown Wilmington to a new park along Brandywine Creek. The seemingly willful manipulations of its exterior have to do with its relationship to this context.

The siting of the Hercules headquarters here did not come about easily. When Hercules decided, in the late 1970s, to consolidate offices then scattered around Wilmington, relocation outside Delaware was seriously considered. Local and state governments made an appeal to keep Hercules home, and Kohn Pedersen Fox played a part. They made a comparative study of local sites and documented their choice of this one with a convincing slide presentation.

At an underdeveloped edge of downtown (then a full-block parking lot), this land abut-

ted a tract along the Brandywine that could be retrieved as a park linking the city to its past and to its green residential hinterland. The building would be guaranteed views over the winding creek and high visibility from major roads that cross it. It would be a symbolic gateway to the city.

Hercules' decision to stay in Wilmington did not lead directly to a design commission for Kohn Pedersen Fox. The company first signed on a construction manager (DiSabatino/CM) and a firm of interior space planners (Interspace). It was soon decided that they did not want a tower, as envisioned in the earlier KPF study, but something lower, with large floors, and accessible to the community. Then the search for architects began, with KPF far down the line, behind well-known firms with many completed office buildings to their credit.

The reason KPF got the job, the partners say, is that the client was assured of their full personal commitment to the job—along with the businesslike performance and distinctive design that other final contenders might have offered. An observer of the interviews places more emphasis on salesmanship: "They convinced us that if we went with another firm, we'd be missing a great opportunity."

The scheme that KPF worked out fits Hercules' objectives superbly: ground-floor retail lines an atrium, around which U-shaped, 45,000-square-foot office areas are wrapped.





2 Progressive Architecture 10:83







On north side of structure (above) brick-paved terrace is linked to new park. Central granite-framed plane closes end of atrium. Two-story spaces ex-tending atrium at the base are for company or community events. A two floor restaurant is to fill one two-floor restaurant is to fill one lower corner. Executive suite is about midway up this front. Blunting of acute corners on glazed upper floors is effective functionally and visually.







Windows in granite walls (drawings below, photo opposite) are set into square openings, with recessed sidelights that express wall thickness on outside. Central lights are set forward for greater sense of space on interior (and greater rentable square footage for tenant floors). Simplified Classical detail recalls urban

vernacular version. 19th-Century Italiana Second Empire styles. Tra sition from continuous glazin. discrete windows on office floors is accepted as pleasing variation, architects report.

The process of making a blocky, 12-story volume into an effective corporate symbol, however, put design partner Arthur May to the test. In his 8 Penn Center office building (p. 71), May had already tried cladding different sides of a homogenous office space with radically different surfaces. Here he was ready to sculpt a few notches and facets into the basic form, then deliberately "draw lines on it" to demarcate different exterior treatments.

To give pedestrians a comfortably scaled street wall at the base, May faced the lower floors in granite punctured by tripartite windows (a step beyond the recessed ones at Penn Center). The top of this wall corresponds to cornice lines of the townhouse area to the west; its stepped profile breaks down the horizontal scale, yielding a façade pattern that recalls the city's 19th-Century commercial rows. The continuity of the stone wall plane is sustained across the entrance recess-and the entry made more monumental-by attaching shieldlike slabs to the structural skeleton; cutting these slabs short at the ends reveals their symbolic purpose. Above, the regular curtain wall is interrupted only by a notch at the roof, corresponding in width to the lobby and atrium, and by a band of double-scaled glazing around the upper floors, inserted for strictly visual reasons.

On the park side, the upper glazed volume is more pointedly manipulated; it is divided into two angled planes-making a kind of welcoming gesture-flanking a central frontispiece that carries the granite all the way to the top, so that both identifying materials are visible in the long view from the valley. Granite-framed panels of curtain wall two stories high are subdivided to suggest Classical windows at colossal scale, yet the window imagery is sharply contradicted by cutting



SECTION LOOKING WEST







- 40'/12m

into some of these rectangles with intersecting building volumes.

Inside the building, a low, understated lobby leads to the 12-story atrium, and one is offered a choice of three paths into it: up escalators to the Hercules offices; around the sides through the retail arcades; and down through the indoor garden to the lower, park-level exit. The layers of rectangular frames that surround the atrium form a permeable boundary that makes it unclear where the glazed office walls actually occur. From the terraced floor, tan paving brick folds up the sides to the lobby level, where a painted steel framework emerges at elaborate, interlocking joints; stuccoed piers behind the steel await ivy that will grow from hovering planters.

Effective as this atrium is, it seems perverse that none of the distinguishing materials or historicist details of the exterior reappear here. "I have used materials here that I would not use on the exterior," says Arthur May, making a simple distinction that might have helped the many brutal atriums of the past. Still, the severe exterior/interior disparity in underlying aesthetic as well as surface details—undermines the building's strong design conviction. The undistinguished atrium landscaping does little to help.

Hercules president and CEO Alexander Giacco is clearly pleased with the individualistic work that the young firm has produced. He expresses particular pleasure in the way the atrium generates a sorely needed sense of community for Hercules; he is also pleased with the public amenities that weave this community into the city. And Giacco takes obvious pleasure in breaking through the prevailing design conservatism of Wilmington, where even the one I.M. Pei office tower looks anonymous. The effort to keep Hercules in Wilmington has yielded more than the intended economic and planning advantages; it has put the little city on the map, architecturally. [John Morris Dixon]









Drawing (left) shows more of atrium than camera can, with stuccoed surfaces (above) ivycovered, as assured by horticulture consultant from nearby Longwood Gardens. Bridges and balconies (far right, above) help to buttress exterior wall. Bridge access to Hercules offices (lower left in drawing) overlooks atrium's terraced gardens (far left, above). Board room (far left) is part of 16,277-square-foot executive area designed by Kohn Pedersen Fox Conway Associates.





Data

Project: Hercules Incorporated, Wilmington, Del. Architect: Kohn Pedersen Fox Associates, New York (Sheldon Fox, partner in charge; A. Eugene Kohn, back-up partner; Arthur May, design partner; Patricia Conway, partner in charge of planning; Mark Strauss, project planner; Robert Evans, senior designer; Demetrios C. Pantazis, project manager; Ken Rose, job captain). Site: 2.7-acre city block at north edge of downtown, dropping about 20 ft toward new riverfront park bordering site. **Program:** 680,000 sq ft, including retail on ground level; offices 90 percent open plan. **Structural system:** caissons and concrete foundation walls; steel stub-girder system. **Major materials:** granite walls; aluminum and tinted glass curtain walls; brick paving (see Building materials, p. 138). **Mechanical system:** variable

Mechanical system: variable volume systems; electrical energy

source; computerized building managing system; heat recovery chillers; thermal storage tanks. Consultants: Sasaki Associates, landscape (Robert Fager, project manager); Interspace Incorporated, interiors (W.G. Krebs, principal in charge; M.A. Byrne, associate), except executive interiors by Kohn Pedersen Fox Conway Associates (Patricia Conway, partner in charge; Judy Swanson, interior design; Randolph Geiner, project manager), Severud-Perrone-Szegezdy-Sturm, structural (William Gerber, associate partner); Joseph R. Loring Associates, mechanical (Jack Beech, vice president; Richard J. Feiner, project manager). General contractor and construction manager: DiSabatino/CM (Eugene DiSabatino, president; Theodore H. Dwyer, operations manager; Robert G. Falls, project manager). Costs: \$88 million (\$130 per sq ft), including landscaping, interiors, fees.

Photography: Norman McGrath, except as noted.

Cornering the Loop

Combining grace and power, Kohn Pedersen Fox creates a striking response to site constraints and to context. Few pieces of architecture can be said to achieve, simultaneously, commanding presence, sleek self-assurance, beauty in form and mass, and rightness. But that, and more, is what 333 Wacker Drive achieves in its Chicago setting. Its program was relatively simple, but its triangular site presented problems. The program was for a speculative commercial office building owned, developed, and partially occupied by Urban Investment & Development Company. Kohn Pedersen Fox designed the shell, the cores, and the lobby, with tenants responsible for their own spaces. Associated architects in Chicago were Perkins & Will.

Facing a prominent bend in the Chicago River, the site forms a key position, or knuckle, between that bend and the demanding grid of the Loop. The building shape that evolved may therefore seem obvious; however, in less skillful hands this expression is one that could have failed miserably, forfeiting a great opportunity. Bill Pedersen and his associates did not miss on any count.

Consistent with KPF philosophy, the overall statement is one of base, middle, and top. Its dominant image from across the river is the taut, elegant curve sweeping around the river bend and capped by a mitered slot and flat diagonal crown. Since the building is at a city edge and is afforded great sky exposure, Pedersen chose not to pick up the Chicago massiveness that is the predominant theme of the Loop. Instead, green reflective glass and horizontal continuous bullnose strips provide the perfect counterpoint to the massive, vertically striated Merchandise Mart majestically commanding the opposite bank. The shade of green, Pedersen observes, might seem an obvious, even cute, choice; but the Chicago River *is* green, and the glass color is astonishingly right in 'context. Seen from across the river, it shouldn't have been anything else. Pedersen sees the direct contrast with the venerable Mart as a comfortable dialogue of opposites: curvilinear versus rectilinear, horizontal versus vertical, reflective versus opaque.

In addition, the designers felt that the green glass became more prismatic, harder and more crystalline as a material as it is wrapped around forms that give it a tautness. Pedersen notes, "With the bowed face and the acute corners, the front looks as if it's stretched. To accentuate that stretching, we developed the horizontal bullnoses at six-foot intervals to give a sense of that horizontal gripping of the building." Despite the seeming fragility glass implies, the form of 333, with its gestures of simple geometry, gives a feeling of permanence, of confidence, and of command over the area.

Also consistent with KPF directions as they have evolved, 333 was seen to have different responsibilities from one side to another. Designed four years ago, it responded to the city side with rectilinear planes to relate it to the Loop's grid. As appropriate as that gesture

Seen across the Chicago River from the Merchandise Mart (right), 333 Wacker changes from its river face to its city side at an acute corner. With its broad sky exposure, reflections in the rounded façade are more descriptive in broadside views (opposite) than they would be if the building were surrounded.





Drive,

was, however, it does not fully satisfy today's Bill Pedersen. Work he and the firm's other designers have done subsequent to 333 makes him less convinced of the rightness of the face it presents to the Loop. In terms both of solar orientation and of the toughness of Chicago architecture, Pedersen feels he might now do some things differently.

He speculates on whether it would have been better to make the city face more solid and of a different character, something the firm's design has increasingly allowed as it has progressed. He also feels the city side top may be a bit "fussy." Still, of the KPF design partners, Pedersen is the first to pick out flaws in his own designs. He points out that 333, with its unique site conditions and constraints, pointed toward an exceptional solution. While that in itself, however, is not his real interest, he achieved it, in the best sense.

But as elegant as the top and middle are, the base is the element that gives credence to principles KPF espouses (it is the one on the city side that Pedersen prefers). The base, a collage of images referring to the past, gently transfers to the present and, perhaps, to the future as the tower rises. That is part of what was attempted; the other major thrust was to





Where the building meets the ground, colonnades of rich materials afford both pleasant sheltered walks and elegant visual and tactile sense. In a study drawing (above, right) the original intent is shown; on these two pages, the result.





Try to the "city side" is someshat grander (below, top), with its concentric stair, while the river façade entrance (bottom) is quieter to blend into the taut curve. In the lobby at the city side, reversely concentric steps echo and reinforce the double-high ceiling cutout (opposite) and the rich base materials take over the interior as well, with the added terrazzo picking up the radiating theme, separated by stainless steel divider strips.



develop a potential for other buildings to develop down Wacker with a sympathetic relationship.

New York Times critic Paul Golderger, in a May 1983 article, noted a discrepancy between the base and what goes on above. In good-natured rebuttal, Pedersen quipped, "If the base matched the shaft, it wouldn't be a base, would it?" This base is a blend of Chicago zoning incentives, benefits of an inexpensive curtain wall above, and an almost uncanny intuitive skill at blending materials and references.

Bonus floor area is available for Chicago buildings with public amenities, such as arcades, and the colonnades at the base of 333 qualified the owner for such bonus area. In addition, the simplicity and relative economy of the upper curtain wall gave KPF more budget freedom to perfect the base, as it relates to human scale. The horizontal bullnose banding was also a result of these economies.

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The bottom line

It is in the treatment of the lower floors, however, that the building pulls together what it promises-and delivers-from a distance. Here the economical (not to say cheaplooking) curtain wall facade is eroded in a supportive way by obviously expensive materials. Gray granite is horizontally banded by green marble, with columns of black granite and green marble. But the stone has been carefully detailed to clearly state its nonloadbearing capacity, its intention obviously to create public scale and richness. Terrazzo floors inside lead to exposed aggregate concrete plaza surfaces outside. The most conspicuously costly details are the spectacular staccato of stainless steel grilles, handrails, and column trim.

Despite Bill Pedersen's disclaimer that he has evolved further in design since 333, the building is very much a feat to be admired and a design level to which others would do well to aspire. It is indeed the bottom line, and it is also a welcome repudiation of the term's normal—read impoverished—meaning. What the well-known drawings and models promise, a building most often fails to produce in full. The accomplishment of 333 Wacker is full delivery, in an urban sense, and at pedestrian level of, if possible, more than it promised. It is a jewel at all levels. [Jim Murphy]

Data

Project: 333 Wacker Drive, Chicago.

Architects: Kohn Pedersen Fox Associates, New York; Perkins & Will Group, Chicago, associated architects. KPF: A. Eugene Kohn, partner in charge; William Pedersen, partner in charge, design; Alexander Ward, senior designer. P&W: James C. Allen, officer in charge; E. Lawrence Kettelson, project manager.

Client: Urban Investment and Development Corporation. Site: a triangular parcel described by Wacker Drive, Lake Street, and Franklin Street, at the bend in the Chicago River. Program: office building including plaza, lobby with retail spaces, and colonnade. Structural system: steel with exterior cross-bracing, on concrete caissons.

Major materials: reflective

glass curtain wall, granite, marble, stainless steel, exterior; granite, marble, stainless steel, and terrazzo, interior.

Mechanical system: all-electric, variable air volume system, with perimeter baseboard heat, direct digital control.

Consultants: structur. Gillum-Colaco; mechanic electrical, Environmental Sy tems Design; window wall, Antoine-Heitmann & Associates. General contractor: Inland Construction. **Cost:** \$57 million; \$54.75 per sq ft (building shell, cores, and lobby). Photography: Barbara Karant, Karant Associates, except as

noted.

Gregory Murphey



dersen Fox .iates

Projects

Bucknell Performing Arts Center Lewisburg, Pa.

The firm's work currently under construction and on the boards shows continued development on the theme of contextual response. Though legendary for its ability to land large commissions before completing any work, KPF will obviously have to depend in the future on its rapidly growing body of completed work. The Hercules and Wacker Drive buildings, on the preceding pages, represent its most ambitious efforts completed by the summer of 1983. One Logan Square, an office and hotel complex, is now reaching completion in Philadelphia.

Of the dozen works shown in this section, some are well along in construction, others in various stages of design; a couple of designs that will never be executed are shown to document the firm's design evolution. Though all of this work is for North America, the architects are in contact with clients in Europe and the Far East, as well. The building types represented here, as on the preceding pages, are largely commercial developments. Recent forays into residential and institutional arenas are illustrated on this page and opposite.

In terms of design approach, the firm's "early" work was hard to distinguish from what the partners produced as members of John Carl Warnecke's New York staff. A conservative design position was deliberately adopted until the firm had proved its dependability. In the early 1980s, however, KPF's work has moved steadily away from minimal Modernism toward more complex forms, collage imagery, and historicist ornament. The two senior design partners, Pedersen and May, seem to move along parallel lines of design evolution, although they neither review nor consult on each other's work. Characteristic design devices from past work are continued and elaborated in the projects shown here-the sharp juxtaposition of masonry and curtainwalls, for instance, and the framing of multistory panels of curtainwall. Mass and ornament have typically been concentrated in the lower stories, with minimal glazed forms against the sky, but some recent work under Pedersen's design direction is capped with projecting ornament.

The directions of Kohn Pedersen Fox's current design do not follow those of any design hero outside their office, but they do reflect ideas currently in the air. As they become better known, the firm's recent buildings and projects are, themselves, contributing to that prevailing atmosphere. [John Morris Dixon]





Representing the firm's work in more varied building types is a mixed-use residential-commercial proposal for Penn's Landing on the Philadelphia riverfront. The one-million-square-foot scheme for Reliance Development Group recently won a developerarchitect competition. Credits: A. Eugene Kohn, partner in charge; Arthur May, partner in charge of design; Geraldine Pontius, senior designer; Mark Strauss, project planner.


Scheme 1 (facing page): The firm's first proposal for the arts center at Bucknell University would have extended the axis of its central Georgian Revival quadrangle with a building complex recessed into the slope below, creating a formal terrace on top of the 1500-seat concert hall and a sunken entrance court between the splayed colonnades of two classroom wings.

Scheme 2 (below): The current scheme for the Bucknell arts center reflects a more modest program than the original (facing page). Square-footage has been reduced from 75,000 to 43,000, concert hall to 1300 seats, and classrooms eliminated. Moved to southwest corner of academic core, a site highly visible from main entry road, the building will form a new quadrangle and define an edge. Angled entrance pavilion responds to geometry of lower area and faces main visitor parking lot, which is aligned with nearby stadium. Lobby, rehearsal hall, and other ancillary spaces will be within rusticated stone base, upper portion of hall itself filling the templelike volum, which will be clad in with limestone trim to, tablished Georgian Reviv, pattern.

Credits: A. Eugene Kohn, partner in charge; William Pedersen, partner in charge of design; David Leventhal, senior designer; William Schweber, project manager; John Lucas and Charles Alexander, design team.









vational Bank Building ville, Tenn.

An architect-developer proposal by The Murphree Company, with Kohn Pedersen Fox, was chosen for a tower to be occupied by the bank and other tenants, on a site adjoining the bank's 1968 headquarters building and facing Strickland's 1851 First Presbyterian Church, a major landmark. The U-shaped plan, adopted partly because construction must begin around one existing building, yields efficient office floors and breaks the bulk of the tower into shafts arranged with Classical stability. A mas-

sive portico at the base refers to the city's Greek Revival heritage and its reputation as the "Athens of the South." Granite will surround sixstory areas of curtain wall on the tower. The building will contain 600,000 square feet, with retail at street level and parking below. **Credits:** A. Eugene Kohn,

Creatis: A. Eugene Konn, partner in charge; Arthur May, partner in charge of design; Dean Chavooshian, senior designer; Laurence Goldberg, project manager; Alan Schwabinland, job captain.



Tampa Financial Center Tampa, Fla.

A 29-story mixed-use structure designed for Doran Jason Company, developers, will contain 517,000 square feet of office space above a 700-car garage, with streetlevel banking and retail space. Made public in 1981, and on hold since, this is one





of the firm's earlier departures from conventional geometry and consistent cladding for a tower. The curved glazed wall of the tower, which faces northeast, takes its shape from garage ramps (see plans); other walls are clad in precast concrete and green granite. Credits: A. Eugene Kohn, partner in charge; Arthur May, partner in charge of design; Megan Walker, senior designer; associated architects: McElvy, Jennewein, Stefany & Howard.

Tabor Center Denver, Colo.

Now under construction several blocks down 17th St. from KPF's Amoco tower (p. 71), the Tabor complex will cover almost two city blocks. Included will be two office towers totaling 1,700,000 square feet, a retail mall, a hotel, and a 2000-car garage, and 20,000-square-foot public plaza. The office towers, whose rectangular bases almost abut, are carved away as they rise to yield two opposing half circles at the top; exposed concrete grid on the flat walls gives way to green glass curtain wall on the curves. The hotel on the south block, with lower profile, defers to the landmark D & F tower at one corner. Urban Associates are associated architects for the hotel.

Credits: A. Eugene Kohn, partner in charge; Anthony Pellecchia, senior designer; Lee Polisano, designer/ project manager.





Park Centre Calgary, Alberta

Responding to a request for developer-architect proposals, this scheme for Cadillac-Fairview was selected by the city of Calgary. Requiring a major parking garage and public open space on 50 percent of the full-block site, the city left the rest of the program to the developer. KPF's design proposes two 50-story towers, totaling 2,596,250 square feet, with a 15-story, 400-room luxury hotel between them, forming one gateway to a formal central plaza (photos below right). Various roof heights relate to phases of Calgary's rapid growth: the 30-foot-high curved arcade to its old commercial fronts; the hotel to its 1950s office buildings; the towers to current proposals. Integral to the design are bridges required by the city's "Plus 15" plan for enclosed, abovethe-street circulation. A. rise from the plaza, build. façades will have progressively less granite and more glass, so that their apparent bulk will be attenuated. **Credits:** A. Eugene Kohn, partner in charge; Arthur May, partner in charge of design; Geraldine Pontius, senior designer; Robert Busler, project designer; Mark Strauss, project planner.







28 Progressive Architecture 10:83

ce Tower ouston, Texas



After 333 Wacker Drive (p. 78), this proposal is next in a series of towers (this page) in which design partner William Pedersen has explored certain design issues: the need for urban buildings to be effective as "façades," not just as objects; the need to give boundaries to the public realm; the need to "gather meaning" from the context. The site of this 80-story tower is the edge of the downtown core (below), directly abutting public park to the north. The prominent north corner (above left) has been shaped into a broad curve of green glass, responding to north orientation and views. The south corner (above right) presents two sides of the square tube behind it, clad in carnelian granite, recalling the

punctured-tube expression of many Houston towers. The city sides fit the street grid, and the park surface acknowledges its interruption. The two floors of public retail facilities at the base open toward the park from a greenhouselike glazed projection that is meant to evoke a garden image and mediate between skyscraper scale and that of small historic structures preserved in the park. Designed for Wortham & Van Liew, developers, the structure would have 2,500,000 square feet of office and retail space plus underground parking. Credits: A. Eugene Kohn, partner in charge; William Pedersen, partner in charge of design; Sudhir Jambhekar, senior designer; Gary Handel, designer.







Bank of the Southwest Houston, Texas







The team responsible for a previous Houston tower design (left) worked on this competition scheme, which lost to one by Murphy/Jahn (P/A, Dec. 1982, p. 24). For a 94-story tower at the center of the city core, the design is omnidirectional, its plan geometry shifting as it rises. The base (bottom photo) has entry pavilions at the corners; the emphatic crown resolves rotation of angles with an octagonal cage.

Credits: A. Eugene Kohn, partner in charge; William Pedersen, partner in charge of design; Sudhir Jambhekar, project designer; Gary Handel, designer.

Office Building Boston, Mass.

The latest urban office structure designed under Pedersen's direction departs further from Modernism than others (left) in its response to context. This new tower is joined to an existing one (left in photos and plans) so that an open U-shaped plaza is left between them, recalling in shape and scale a fragment of the financial district's irregular plan. The main façade of the new tower becomes a magnified version of the area's many curved street fronts. The division of the façade into stone-framed panels of glazing, found on earlier KPF buildings, is here elaborated into a progression of opening sizes. Bands of molding relate to the heights of surrounding structures. The panel pattern and the prominent moldings and cornice recall late 19th-Century landmarks in the district, notably the Ames Building. The big curved front, facing north over an area of low-rise zoning. would be unquestionably the main front, while the similarly detailed south side would be broken by angles into shafts of smaller scale. In the skyline view, the building would present a volume similar to neighboring towers, but a much richer envelope, with references to Boston's past. Now in schematic design stage, the 52-story structure would have about 1,000,000 square feet, including retail space at street level and parking below ground for 400 cars.

Credits: A. Eugene Kohn, partner in charge; William Pedersen, partner in charge of design; Sudhir Jambhekar, project designer.







←N ├───┤ 300'/100m



ABC Phase II New York



The latest of several buildings designed for the American Broadcasting Company since 1976 (other work on page 71), this "Phase II" structure will be on Manhattan's West 66th St., joining at the back the completed "Phase I" on West 67th (photo above). Housing offices, technical facilities, and one newscasting studio, Phase II's 250,000 square feet will be about twice the area of Phase I. Both structures meet zoning requirements with setbacks that relate well to parapets of neighboring side-street buildings, but they represent evolving views of what infill buildings should do. While Phase I is discreet in its simplicity, its neat metaland-glass curtain wall stands out for its cheerful sheen.

Phase II, by contrast, is complex and somewhat monumental in its composition, but its brick and granite surfaces will blend in better with the neighboring buildings-in this case a former armory and an old arena, both used by ABC. The two structures were planned from the outset to form larger, more efficient working floors-and a single through-block truck access-behind their different but related envelopes. Phase II is under construction for completion in 1985. Credits: Sheldon Fox, partner in charge; Arthur May, partner in charge of design; Judith Di Maio, senior designer; Myron Sigal, project manager; James Outen, job captain; Megan Walker, David Diamond, design team.





Nathaniel Lieberman

SECTION LOOKING WEST

11TH FLOOR PLAN N7 H 40'/12m

eral Reinsurance orp. Headquarters Stamford, Conn.



Procter & Gamble World Headquarters Cincinnati, Ohio

The venerable soap company has long occupied a lowprofile structure at edge of the downtown core (left in model photo). The expansion of this headquarters by KPF, now under construction, will give the company a place in the city's skyline. Extending the line of the original building, the new portion will turn to form an L, enclosing a linear park that will form the new entrance to the complex. (The old building was previously entered from the other side, with a portion of the new park as a back garden.) Also extended will be the envelope of limestone with punched windows, this time generously trimmed with gray granite and white marble. Most of the new building's 823,000 square feet will be in its two linear, 6-story wings, but twin 17story towers at the crook of the L will give the building its distinctive profile visible at a leading corner of the downtown core as one ap-



Diminishing in octagonal stages toward pyramidal tops, the towers recall silhouettes of Cincinnati buildings from the Art Deco period. At the base of the towers are two sculptural blocks: an entry pavilion projecting into the park and a cafeteria block on the outer angle of the L. The buildings

Under construction in downtown Stamford, "General Re" will terminate a row of assertive office structures along the Connecticut Turnpike. Like its companion buildings, it will rise from a three-story podium of parking, but in this case a grand stair will carry the public up to its gardened top, which will meet a natural ridge at the north edge of the site. Faced with a turnpike interchange to the south and a railroad yard beyond, the building will turn inward around its raised garden. Executive offices will be in a freestanding octagonal structure at the northwest corner, with a clocktower-capped profile that will terminate vistas along several streets. On the south side, the structure will peel away from the turnpike as if to admit cars from the exit ramp, leaving the portallike façade of Mitchell/Giurgola's 10 Stamford Forum building, to the west, unobstructed. The 566,000 square feet of office space on six floors will accommodate the client plus tenants; circulation cores between segments of the linear structure will ease space allocation. There will be 1800 parking spaces below. Above the granite-clad parking levels, walls will be largely green-tinted glass, crossed by patterns of white and blue mullions. Credits: Sheldon Fox, part-

ner in charge; William Louie, partner in charge of design; Patricia Conway, partner in charge of planning; Ming Wu, senior designer; Creighton Jones, project manager; Deborah Booher, job captain; Kohn Pedersen Fox Conway Associates, planners.















and the open space form a ceremonial terminus for the downtown street grid, which is disrupted beyond this point. The park, laid out as a series of outdoor rooms defined by trellises, is aligned toward Fountain Square at the city's center. Indoors, the circulation system includes tall, second-floor galleries (see plan) running along the park edge, above groundfloor arcades and linked to the old building by a bridge. These passages and the entry pavilion (photos, top right)

will have richly patterned terrazzo floors; metaltrimmed columns will be clad in fabric to a height of 10'-6". As New York Times critic Paul Goldberger has observed, the complex will have the cool control of 1920s Classicism, touched with the verve of Art Deco.

Credits: A. Eugene Kohn, partner in charge; William Pedersen, partner in charge of design; Robert Cioppa, managing partner; Alexander Ward, senior designer; Tim Hartley, project manager.

Note: Coordinator of drawings for Kohn Pedersen Fox Associates is Ilona Rider.

Norks Service r, Evanston, Ill.

Muthesius found

Sisco/Lubotsky Associates and Stuart Cohen, in joint venture with Consoer/ Morgan Architect, have taken special care in the design of a building that houses a town's maintenance department.



Public works buildings, constructed not for the glory of king, god, or culture, have generally taken a secondary place in the history of architecture. But at times it has been a proud and worthy second place. We can recall that during the Roosevelt administration, artists and artisans were hired to direct their idle hands to the creation of public works projects, often with glorious results. Early in this century, utility companies commissioned fine architects to design their facilities, down to transformer stations that dotted the countryside. Even now-forgotten architects employed within public works departments often designed incidental buildings whose sturdy forms and thoughtful details still provide quiet inspiration for architects.

In recent years, however, the "less is more" attitude has scarcely encouraged a caring approach in the unglamorous area of municipal public works. Garbage trucks and repair shops have been accommodated in minimal shelters built with minimum dollars and minimum effort—the less seen the better.

But in the comfortable town of Evanston, just north of Chicago, several factors have led to the creation of an interesting and thoughtful building to house the necessary departments of street, park, and building maintenance, sanitation, and vehicle repair. First, the site, while backing on railroad tracks, fronts on a residential street, and it was important to consider the quality of the neighborhood. Second, the site configuration is awkward, and careful work was required to find an effective layout. Third, Sisco/ Lubotsky architects Robert Lubotsky and Andrew Metter, with associated architect Stuart Cohen, made an effort to create a building that would present a clear narrative of its varied functional contents, convincing the clients to allow a few design "frills" (the building still was completed for less than its budgeted cost). And not least, the architects cared to provide cheerful and comfortable quarters for the workers who, after all, emerge from their own environment to care for the environment of the rest of us.

The Evanston Public Works Service Center, which won a citation in P/A's 1980 awards program (P/A, Jan. 1980, p. 122), consists of three parts-the vehicle repair garage, the two-story warehouse, workshop, and administration section, and the truck garage building with rooftop car parking. The sections of the building form a trucking courtyard between them, entered under a bridge connecting the parking structure to the administrative and work wing. The layout works neatly. Employees park on the garage roof and pass across the bridge (which contains caretaker apartments, so that no entry to the building is unwatched) to the upper level of the main building, where they clock in be-



The face that the public works building presents to the street (below) both adjusts to the residential character of the neighborhood and tells the story of its contents. The gabled bridge over the main entry contains apartments for the caretakers, while the workshops are housed in the more sober block forms. A nearby industrial building (opposite page top) is recalled in the rhythm of the doors, heavy ticulated with precast concres columns and lintels, on the couyard side of the truck storage building (opposite page bottom).



Data

Project: Evanston Public Works Service Center, Evanston, Ill. **Architects:** Sisco/Lubotsky Associates, Ltd., Chicago, Ill. (Robert Lubotsky, project principal, Andrew Metter, project architect). Associated architect: Stuart E. Cohen, Chicago. In joint venture with Consoer/ Morgan Architect, Chicago (Harry Morgan, project principal, Roy Makela, project architect, Richard Lundgoot, job captain). Design team: A. Metter, E. Sisco, R. Makela, R. Lubotsky, S. Cohen.

Client: City of Evanston; Jim Jones, director of Public Works.

Site: trapezoidal 5.86-acre site, backing on a railroad rightof-way and fronting on residential streets.

Program: to house the departments of Parks, Forestry, Building Maintenance, Streets, Sanitation, and Fleet Service. **Structural system:** concrete spread footing foundations. For administrative, warehouse, and shop building: steel frame superstructure with precast concrete plank floor and roof. For vehicle repair and storage buildings: precast concrete columns and beams with double-tee roof deck.

Major materials: exterior—face brick and concrete block masonry [Data continued on page 95]



The courtyard side of the building (above and right) presents a tougher image than the front. Here, face brick gives way to concrete block, and the entry bridge and garage doors are no longer articulated with concrete columns and lintels. Still, the belt course is continued, and the fenestration pattern is carefully considered.





Skylights help illuminate both the vehicle repair building (above middle) and the locker room (above). side the administrative offices and change into their work clothes in the locker area. They proceed downstairs to the work areas, which are carefully organized for the reception and shipment of materials.

As Stuart Cohen explains, a paramount concern was to adjust the appearance of a facility with large, 18-foot-high spaces to harmonize with the houses across the street. This was accomplished by stepping the building in order to break down the mass, and by overscaling the elements: The windows, for example, are big, with few subdivisions. Because of the context, the original idea of utilizing metal industrial building systems was rejected, and the architects turned to Muthesius and turn-of-the-century German factory buildings as a model.

The architectural forms tell the story of each part. The bridge, inspired in part by Michael Graves's Fargo-Moorhead Cultural Center, contains its two apartments under double gables, in keeping with its residential character and that of the neighborhood. The truck entry gates and overhead doors are strongly articulated with rounded precast columns, in scale with the heavy vehicles that pass through them; with the expansive precast lintels that span them, they form a configuration that recalls a nearby industrial building of the 1930s (though the lintels themselves may be faulted for lacking a sufficiently three-dimensional quality to complete the sturdy metaphor of the columns). The brick used on the front of the service center ties in cheerfully with the residential neighborhood, and the concrete block in the rear of the building, facing the truck yards and railway tracks, creates a suitably tough working environment, still carefully detailed, with a precast concrete belt course.

"The early sketches expressed the personality I wanted the building to have," says project architect Andrew Metter, "solid and down-to-earth, like the people who work here. At the same time, we wanted the interiors to be as spacious and bright as possible." The concrete block interiors are, in fact, high, painted in white and a fresh grayish blue, and generously skylighted. The workers are pleased with the facilities and keep them spotless, personalizing their offices neatly. "I have no illusions about changing in any major way the lives of the people who work here," says Metter. "But perhaps we can make their work day a little more pleasant." The architects seem to have succeeded. [Susan Doubilet]





Data continued from page 93 cavity walls with rigid insulation; precast concrete belt course, coping, and base; single-ply membrane EDPM roof with rigid insulation. Architectural precast concrete spandrel beams and columns. Interior—painted concrete block; painted gypsum board; exposed precast concrete roof; suspended acoustical ceiling; sealed concrete floors; vinyl asbestos tile; epoxy industrial flooring (see Building materials, p. 138).

Mechanical system: for vehicle repair and storage garages: forced tempered air ventilation system. For warehouse and shop building: gas-fired boiler, hot water unit heater, and perimeter radiation system. For administrative and employee facilities areas: forced air system for heat and partial air conditioning. **Consultants:** Consoer/Townscend Engineers, structural and mechanical. General contractor: Klein Construction Company, Westmont, Ill.

Costs: \$7,226,000 (\$38.70 per sq ft), including site work, interior finishes, and furnishing and equipment.

Photography: Barbara Karant, Karant & Associates Photography, Inc.

95



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95



Douglas County Administration Building, Castle Rock, Colo.

High style, low style

Hoover Berg Desmond has designed an administration building that combines high style and vernacular with great subtlety.



The building's form and materials relate to nearby stone buildings (left). Yet, the drawn elevation shows the building as more formal and rationalistic in feeling (right). That is enhanced by its placement at the center of its square site (top). The closed blinds on the south elevation (above) suggest glare and heat gain problems. We often think of our culture in opposing terms, as the indigenous culture of the small town or the refined culture of the big city. Most architects, consciously or not, choose sides in that dichotomy. The inspiration for their work usually lies either with the form of popular and vernacular buildings or with the principles and practices of high-style architecture. Few architects manage to integrate both sides as well as Hoover Berg Desmond has in its Douglas County Administration Building in Castle Rock, Colo., winner of a 1983 AIA honor award.

As you turn into Castle Rock's central square, the building, with its broad masonry walls, projecting cornice, and rusticated base, lintel, and beltcourses, looks like some highstyle Renaissance palazzo. That image seems decidedly out of place in this small, western town. Yet, as you look at similar rusticated stone commercial blocks that line the main street, the Douglas County building appears less foreign, much more respectful of its western context. That respect extends even to the natural environment: the building's blocklike mass seems almost an abstraction of the craggy butte that looms over the town of Castle Rock.

Vernacular and high-style motifs confront each other on the building's façade. As you approach the entrance from the main street, the small, square windows, the wide spacing between the first- and second-floor openings, and the broad steps with honorific flag, clock, and lampposts create a refined yet deceiving scale, making the building look larger than it is. As architect George Hoover explains it, "We wanted to give the building a civic character, to make it look larger than life." The railings and entry doors give the scale away, as they so often do in the diminutively scaled false fronts of many 19th-Century western buildings.

The masonry itself has a reddish cast (enhanced by the lawn's complementary green color) that gives the initial impression of its being an expensive, iron-rich granite. Closer inspection shows it to be a material much more common to modern-day Castle Rock: concrete block, mixed with a red aggregate, and ground-faced, split-faced, or coated with a white glaze.

The game of high style/low style continues inside. A central hall loops around a straight-run stair and elevator, separating two groups of fire stairs, vaults, and toilets that serve offices to either side of the core. On the first floor and basement, the central hall is dark, lighted mainly by incandescent downlights and columnar uplights illuminating ceiling-mounted directories, and it is reverberant, because of concrete-edged quarry tile floors, block walls, and gypsum ceilings. Both the low light levels and the reverberancy make the hallways look-and sound-as the architects intended: "like a grand, public lobby." In contrast, the main stairs and second-floor hall have a western, almost Mexican character, with red and green tiles set into the stairs' concrete risers, molded handrails whose concealed fluorescent downlights reflect off white glazed block walls, and a yellow light that suffuses the upper hall from a central skylight. The building's form, mate-



Douglas County Administration Building

The plans (below right) show the building's simple, open office arrangement. The wall section (below), with its block and bar joist construction, shows how the small windows affect the view. The lack of perimeter daylight is somewhat compensated for by the skylighted central stairwell (right and opposite).



rial, and character all manage to be formalistic and contextual at the same time—not an easy task.

The contextualism stems, in part, from the architect's understanding of the community; George Hoover lived in Castle Rock during the building's design. It also stems from the considerable involvement of the community in that design. A nine-member citizens group, appointed by the county commissioners, identified traits that they wanted in the new building-traits that the previous 1890 courthouse had had prior to its burning by arson in 1978: stone construction, punched windows, a bell or clock tower, and a central location on the square. Three schemes were published in the local newspaper, and a telephone vote was taken of county residents, leading to their selection of the lowest cost scheme, lacking stone construction and a clock tower, and roughly like the present design. That process helps explain some of the architects' design decisions, such as placement of the building at the center of the square, and some of the project's idiosyncrasies, such as the reuse of stone from the old courthouse around the new cornerstone.

Public involvement, however, cannot excuse the project's few shortcomings, of which the most significant are the windows. At 32 inches square, with their sills at desk height and their heads just above eye level, the windows offer a scant view outside and little daylight inside. In the basement, where the windows face an angled soffit at the edge of a lower ceiling, the reflected daylight appears more even, but the view is almost completely obscured. Architect George Hoover admits that "had we used strip windows, the public response would have been more positive." He also thinks that the next larger size square window would have been "too big," destroying the building's play of scales. You can't help but wonder, though, as you stand in an office looking at the head of a window, how the building's subtle scale might have been achieved without sacrificing interior comfort. The same question arises, not with the size, but with the placement of the windows. The south elevation has a horizontal spacing of windows twice that, and the north elevation three-quarters that, of the front and rear (east and west) elevations. While that varied treatment appears sensible, it loses something when you consider the glare and heat gain through so much untinted glass on a flush, south elevation in a semiarid climate in a







& Progressive Architecture 10:83



Data

Project: Douglas County Administration Building, Castle Rock, Colo.

Architects: Hoover Berg Desmond, Denver, Colo. (Karl Berg, principal in charge; George Hoover, designer; Eric Bartczak, project architect; Lee Hagen, Ranko Ruzic, Jonathan Saiber, Steven Aldrich, project team). Client: The Board of Commissioners of Douglas County; Dr. W.G. Duncan, Chairman.

Site: flat, 300-ft-square site with several large trees, facing town's main street, and surrounded by one- to three-story commercial buildings.

Program: three-story county administration building with 10,000 sq ft per floor, housing various county departments.

Structural system: load-bearing masonry walls, steel bar joists with concrete floor slabs on metal deck. Major materials: groundfaced, split-faced, and glazed concrete block; aluminum storefront entrances and windows; floors of architectural concrete, quarry tile, ceramic tile, and carpet; ceilings of painted gypsum board and acoustical tile; doors and frames of painted hollow metal (see Building materials, p. 138).

Mechanical system: gas-fired, multizoned rooftop air-handling units ducted to interior. Consultants: KKBNA, structural; Swanson-Rink & Associates, mechanical and electrical. General contractor: Fischer-

White Contractors, Inc. Costs: \$1,418,525 (\$52.80 per sq ft).

Photography: R. Greg Hursley.



Whatever you might think of those priorities, they express a certain optimism about our resources and an equal fascination with formal order that seem not inappropriate in Castle Rock, whose square street grid overlays

a vast, resource-rich landscape. Perhaps that is why the Douglas County Administration Building seems so convincing, if not always functionally ideal. The town of Castle Rock, containing both Denver suburbanites and Colorado ranchers, tied both to the nearby city and to the surrounding plains, is a community that, like its new administration building, is simultaneously high style and low style, cultured and cowboy. [Thomas Fisher]

the effect of enlivening the building's sobering mass.

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Technics: Accommodating new medical technology

The medical machine

Medical technology affects the form of hospitals and the economy of health care. Its accommodation also affects both the architect and user.



The simulator room in the Eastern Maine Medical Center's Edward E. Rosen Cancer Center (above right), designed by Payette Associates, shows how color and lighting can modify the somewhat ominous quality of some medical technology. The waiting area in this underground facility features a landscaped, sunken courtyard and a greenhouselike corridor.

The comment of Heraclitus that "there is nothing permanent except change" would seem to guide the medical profession as much as the Hippocratic oath, especially in that profession's adaptation of new technology for the diagnosis and treatment of disease. One reads of technological explosions and quantum leaps in equipment performance. But the rate of technological change within medicine becomes clearer when one considers the number of new hospitals in which the equipment initially planned for some departments had changed, sometimes radically, by the time the hospital was completed. Even a fasttracked hospital is not fast enough for medical technology.

The accommodation of that technology involves more than health care specialists. Many recent advances in medical technology owe their development to the computer whose impact, of course, reaches far beyond that of medicine. How best to plan for the rapid technological changes wrought by the computer is a question every architect must face; health care architects have simply had to face it early on and, perhaps, in an extreme form.

The rapidity of technological change in medicine also has played a central role in the escalation of health care costs. That escalation, in turn, has prompted a whole series of changes in the delivery of health care in this country, changes affecting the form, size, location, and function of hospitals, and leading

to the growth of private health care corporations and outpatient clinics. The changes going on in medical technology thus affect us all, if not as architects, then as taxpayers and consumers.

Technology trends

The technology itself has the character of science fiction. In the diagnosis of disease, advances have sought more precise and less dangerous imaging of the body. Some imaging techniques depend upon radiation, such as the CT (computed tomography) scanner, which uses a computer to reconstruct x-ray slices through the body, and the PETT (positron emission transaxial tomography) scanner, which detects particles given off by radioactive isotopes introduced into the patient.

Other imaging techniques do not involve radiation exposure. Thermography measures the heat given off by the body, with painful areas showing up as cooler tissue. Ultrasound uses sound waves to examine fetuses, measure blood flow, and detect abnormalities in internal organs. And the NMR (nuclear magnetic resonator) exposes patients to powerful magnetic forces, registers the electromagnetic reaction of various tissue, and uses a computer to turn that data into a very precise image of the body. The NMR's importance rests not only with the clarity of its image, but with its precision in detecting any abnormal



Bobrow/Thomas & Associates' cardiac catheterization facility (left), at <u>Mercy General Hospital</u> in Sacramento, uses modular, ceiling-mounted tracks to ease the movement and replacement of . equipment. Norman Rosenfeld's neonatal unit at <u>Lenox Hill</u> <u>Hospital</u> (below) employs mobile systems furniture and a rated glass wall to give visitors a view of the babies within.

tissue, such as cancer, that behaves differently within a magnetic field.

The treatment of disease has moved away from invasive surgery toward a variety of noninvasive procedures. Those range from the use of lasers to cauterize or destroy tissue with light; the use of ultrasound (in what is called a lithotripter) to break up kidney stones with sound waves; and the use of microwaves at high energy levels to destroy cancer with heat.

Physical accommodation

The physical requirements of this new medical technology vary as much as the equipment itself. Ultrasound and lasers, for example, easily fit within a doctor's office. Indeed, the trend in medical technology has been toward miniaturization; adjusting the size and weight of equipment or its components to fit within normal door frames or typical structural systems. As Rolf Oliver of Ellerbe, Inc., says, "Manufacturers have little choice. If their equipment doesn't fit within existing buildings, it won't sell terribly well."

Yet, the accommodation of much new medical technology does affect the structure that houses it, even if that effect is simply a matter of providing open, flexible loft space. A few hospital architects liken the task to designing a warehouse or stage set. Ideally, according to Joe Russo of Russo and Sonder, the loft space should have large bays, around 30 feet square; floor-to-floor heights of around 13 to 14 feet; interstitial floors, if not throughout the hospital, at least over departments such as surgery or radiology that have large mechanical requirements; flat slab construction; and, if possible, a slight offset in the planning and structural grid to ease future coring through the floors. Flexibility also comes with placing "hard" and "soft" spaces next to each other, according to John Gaunt of Ellerbe. That allows departments, such as radiology and nuclear medicine, which have exacting physical requirements and a fast growth rate (hard spaces), to expand into areas easily moved, such as offices or storage areas (soft spaces).

Often, new technology affects not the structure itself as much as programmatic requirements. Some equipment, for example, may demand a revision in the form and detail of certain departments within the hospital. Richard Croissant has established a company to investigate the use of robotics in medical laboratories. "The manual tasks performed in most labs are repetitive and not difficult. A



machine could do much of the drudgery work in much greater volume, since it would operate 24 hours a day." The robots would have mechanical arms, with about a 3-foot reach, located at the center of circular work stations, with adjacent supply depots and waste receptacles for the disposable lab ware. The future medical lab, according to Croissant, might be a long, well-lighted room with several robotic work stations in a row. The space, though, would have to be as crack-free as possible to discourage bacterial growth that can ruin increasingly sensitive lab techniques.

Other equipment has permitted public access into areas of the hospital hitherto closed. In Lenox Hill Hospital's new neonatal unit designed by Norman Rosenfeld, mobile intensive care units allow parents and relatives to view the premature babies through a rated glass wall in the adjacent corridor. That visibility places increasing demands upon equipment manufacturers, who have shown a growing concern for the appearance of their products, and upon architects, who must visually organize the equipment (at Lenox Hill, equipment sits within a shoulder height shelf and beneath custom-designed cabinets) and pay greater attention to lighting, color, and finish quality. The trend toward greater public access has affected burn units and other isolation wards as well.

Technics: Accommodating new medical technology

Nuclear magnetic resonance

Not every new technology has been so easily accommodated. Take the nuclear magnetic resonator, the NMR. The NMR encompasses the patient within a large, circular magnet that emits a magnetic field anywhere from 3000 to 25,000 times as strong as that surrounding the earth. Those magnetic forces (whose unit measure is called a gauss) emanate in all directions, requiring the shielding of floors and ceilings as well as walls. Ferrous metal, such as the iron and steel in a building's structure; moving metal objects, such as elevators and automobiles; and the radio frequencies of transistor and CB radios can all distort the NMR's image. Where the magnetic forces around the NMR are greater than 3 gauss (which in the largest superconducting magnets is an area about 45 feet in diameter). the floor should be a slab on grade with a minimum of vibration and with fiberglassimpregnated or epoxy concrete capable of supporting the magnet's 16,500-lb load; soil pipes, floor drains, and electrical conduit should be nonferrous; the ceiling should be at least 16 feet high over the magnet, ideally without another floor or mechanical equipment above; and the enclosing structure should be of minimally reinforced concrete, masonry, or wood. Outside radio frequencies can be shielded either through prefabricated RF shielding rooms or through a metal sheet, such as copper, embedded in the walls, floor, and ceiling. Since fluorescent lights also create RF interference that can distort the NMR image, incandescent lighting should be used near the magnet.

A few companies manufacture permanent magnets containing magnetic blocks set within thick steel plates. While those machines have a negligible magnetic field, they weigh 100 tons and are incapable of being turned off in case of an emergency.

The shielding requirements of the NMR make the installation especially of superconducting magnets within an existing building difficult. Thick steel plates embedded in the floor, ceiling, and walls, symmetrically placed around the NMR magnet, can reduce the extent of the magnetic field. Placing the magnet symmetrically within a structural bay and using magnetic coils as shims also can eliminate a steel frame's interference. And locating the equipment far enough from elevators and other moving metal objects can greatly improve the homogeneity of the NMR's magnetic field. Yet, protecting the magnet from its surroundings is only half the battle. The surroundings must also be protected.

Within the 3-gauss field of a superconducting magnet, heart pacemakers can be disrupted, small metal objects can turn into dangerous projectiles, and computer memories can be erased. NMR suites should have metal detectors at their entrance to screen visitors and hospital staff and contain nonferrous carts and stretchers. The magnet itself should stand far enough away from the NMR



CLEVELAND CLINIC NMR FACILITY

The nuclear magnetic resonator emits a spherical magnetic field that, at various distances, can damage electronic devices and, in turn, be distorted by ferrous objects and radio frequencies.

The Cleveland Clinic's NMR facility (left), designed by Dalton, Dalton, Newport, houses a resistive and a superconducting NMR in two domed rooms that are connected to support areas and the rest of the hospital via a





skylighted corridor. Passers-by on the street are protected from the magnets by a brick wall at the I-gauss line. The building has an unreinforced slab on grade, load-bearing brick and block walls, stone lintels outside and laminated wood inside, aluminum window and door frames, and exposed laminated wood beams and deck. All fasteners, plates, and ties are stainless steel or aluminum.

The architects worked with manufacturers to eliminate ferrous metal from products such as the incandescent light fixtures and sprinkler heads. Every element underwent magnetic testing prior to installation, including the subsoil, which was entirely replaced with controlled fill, and the concrete block, of which 70 percent were initially rejected, because of high iron contents.

Continuous 5 to 12 oz copper sheeting in the floor, walls, and ceiling of the exam rooms shields the magnets from radio frequency interference. Double copper screens in bronze frames effect the same protection at windows. The shielding achieves a 90 decibel reduction in frequencies in the 1 to 100 megacycle range. The nonmagnetic ducts, pipes, and conduits that penetrate the NMR enclosures can act as radio antennae without the use of wave guides and electrical filters. Mechanical equipment sits in an adjacent facility rather than on the roof. The Cleveland Clinic's NMR facility, with its exposed wood, brightly painted pipes, concealed RF shielding, and ample windows, addresses the psychological implications of the new technology exceedingly well.

Pacific Medical Center's NMR facility (right) by Kaplan/ McLaughlin/Diaz typifies the problems in siting an NMR. Located in a narrow courtyard, between two steel-frame buildings, above a steel sewer line and underground garage, and adjacent to elevators and a public walkway, the NMR facility places the magnet at the center of the site. That keeps the elevators 50 feet away and allows the centering of the magnet between the adjacent steel-frame buildings to cancel their interference. Steel plates shield the magnet from the below-grade cars, while planting beds keep people at a safe distance in the courtyard.



PACIFIC MEDICAL CENTER NMR FACILITY.





Progressive Architecture 10:83

Technics: Accommodating new medical technology

computers and from public corridors not to threaten either the equipment or passers-by.

Given the number of constraints imposed upon a building by a superconducting NMR, accommodating the machine may seem nearly impossible within a reasonable budget. "Not so," says Norm Perttula of Dalton, Dalton, Newport. Their NMR facility at the Cleveland Clinic had a square-foot cost typical of most hospital construction. Also, "The expense and location of an NMR unit depends upon whether it's to be used for clinical or research purposes," points out Jim Diaz, of Kaplan/McLaughlin/Diaz. "Clinical shielding requirements are just not that difficult."

Radiation therapy

The requirements of radiation shielding differ considerably from the shielding requirements of NMRs, just as the narrow beam of radioactive particles emitted from linear accelerators or neutron generators differs from the three-dimensional magnetic field created by the NMR. Their architectural implications differ accordingly.

Linear accelerators treat cancer through the controlled emission of radioactive particles. The equipment has increased not so much in size as in power, from 5 megavolts to 25 megavolts, allowing the placement of patients further from the machine. The result is a greater scatter of a larger amount of radioactive particles.

The absorption of the radiation depends upon the density and thickness of the surrounding material. Lead, steel, or concrete is commonly used, with borated polyethylene or a borated admixture in concrete working particularly well to absorb neutrons. The larger 15- to 20-megavolt linear accelerators require an "S" shaped corridor or maze into the therapy room to minimize radiation leakage by repeatedly bouncing particles between absorptive surfaces. Laminated lead, steel, and borated polyethylene doors also help in that absorption. At Stanford Medical Center's new linear accelerator, designed by Kaplan/ McLaughlin/Diaz, leakage is 10 millirem per hour as opposed to the state standard of 100 millirem.

Neutron therapy, a new technique for treating cancer, has had its first installation designed by Ewing, Cole, Cherry, Parsky for the Fox Chase Cancer Center. What physically distinguishes neutron therapy from other radiation methods is the spatial requirements of the machine itself. Its large, circular head must rotate completely around a prone patient. That requires either a high ceiling or, as in the underground Fox Chase facility, a pit beneath a movable floor. The movable floor partially returns over the head of the neutron generator, once in the pit, so that the patient does not feel suspended in midair.

Radiation therapy facilities often present code problems (the maze should be wide enough for the quick removal of a gurney,



FOX CHASE CANCER CENTER NEUTRON THERAPY FACILITY



AN Y

- 40'/12m

The linear accelerator and neutron generator emit radioactive particles in fairly narrow beams. The particles are absorbed by dense shielding materials (the absorption of 4 inches of steel plate equals 18 inches of concrete) and by entrance mazes.

The Fox Chase Cancer Center's neutron facility (left), designed by Ewing, Cole, Cherry, Parsky, stands below grade to avoid disrupting the hospital's operations during construction and to utilize the earth itself as shielding. The neutron generator's head requires clearance both above and below the patient. That led to the design of a pit beneath a movable floor. Borated polyethylene absorbs neutrons much better than lead. A boron additive to concrete, however, proved too costly, so the architects lined the neutron facility with borated polyethylene sheets mechanically fastened to the concrete. And since metal located within the neutron beam heats up, only wood or concrete finishes are used within the beam's coverage. A completely independent mechanical system services the facility.

Four generations of linear accelerators at Stanford University Medical Center (right) show how shielding requirements have increased as machines have become more powerful. The enclosure, designed by Kaplan/McLaughlin/Diaz, for a new 15- to 20megavolt linear accelerator has an "S" shaped corridor to scatter radioactive particles; laminated doors of steel, lead, and borated polyethylene; 9-foot-thick walls at areas receiving the greatest radiation; and a ceiling of laminated steel, borated polyethylene, lead, and concrete that is most dense directly over the machine. The 22-inch-thick ceiling will be built on the floor, jacked into place, and plastered to reduce the reflection of particles. Knock-down linear accelerator components fit through the 5'-6"-wide maze. That dimension, in conjunction with a halon sprinkler system, met the fire official's approval.



STANFORD UNIVERSITY MEDICAL CENTER LINEAR ACCELERATOR





Technics: Accommodating new medical technology





Ellerbe's Riley Children's Hospital (top) uses gabled roofs to decrease the scale of the hospital and a playground entrance court to provide a more familiar environment for the patients. Perkins & Wills' critical care units at Gettysburg Hospital (above right) use freestanding columns to organize the equipment and ease bedside access. Bobrow/ Thomas & Associates' lobby for Mercy General Hospital (above) exemplifies the growing trend toward hotellike interiors to increase the comfort of visitors and to better compete for patients.

Further reading

The best sources for information on medical technology are magazines such as Modern Healthcare and RNM Images and major manufacturers such as GE, Siemens, Picker, Technicare, and Diasonics. The best recent book on changes occurring in health care is Paul Starr's The Social Transformation of American Medicine (Basic Books. New York, 1982). One of the most comprehensive books on hospital design is Modern Hospital by Ervin Pütsep (Lloyd-Luke Ltd., London, 1979).

about 5'-6", and have a halon fire extinguishing system to compensate for the excessive dead-end corridors); construction problems (the soil and foundation must be able to support the shielding, and the dust and vibrations that occur during construction must not affect adjacent departments); utility problems (facilities should have their own mechanical and electrical systems); and siting problems (their bulk may demand a location some distance from other radiological functions, making circulation and control difficult).

Humanizing the technology

Physicists normally calculate the type and amount of shielding required for a particular machine. The architect, apart from understanding the function of the shielding and providing enough space and structural support for it, has what in many ways is the more difficult responsibility of accommodating anxious patients and relatives. Humanizing the technology can take many forms. The hospital might use shapes and materials familiar to patients, as Ellerbe did at Riley Children's Hospital, with its low-scale, gable roofs, and domestic imagery. Public areas within hospitals might counteract the anxiety of visitors with hotellike lobbies such as those designed by Bobrow-Thomas at Mercy General Hospital in Sacramento. Even clinical areas can be visually softened. Pavette Associates uses a courtyard, indirect lighting, and muted colors effectively in a below-grade radiation therapy unit at Eastern Maine Medical Center. And Perkins & Will, in their new radial critical care unit for Gettysburg Hospital, emphasize both visual and physical contact between patient and nurse, within an uncluttered space, to help the critically ill. As Dr. Lewis Thomas with the Memorial Sloan-Kettering Cancer Center reminds us in his

recent autobiography, far more healing occurs naturally, within a sympathetic environment, than through the application of sophisticated machinery.

The hospital's future

Predicting what course future medical technology will take is anyone's guess. Some trends suggest themselves, nevertheless. Pharmaceuticals-curing disease with a pill-may well become the dominant medical technology of the future. Doctors might return to carrying all they need in a black bag, and hospitals might find new uses, such as housing for a longer-lived population. A more immediate trend, brought on in part by the proliferation of medical technology, is the control of health care costs by the government, through flat-rate reimbursements, and by insurance carriers, through contract awards to lower rate hospitals. That has already led to more efficient institutional structures: for-profit hospital chains, private outpatient clinics covering everything from obstetrics to minor surgery, and nonprofit hospital consortiums. For the architect, those trends may mean fewer commissions for new hospitals, but more rehabilitation work to cut hospital costs and a greater emphasis on design to attract more discriminating patients.

The future of health care bodes well for architects who can take advantage of those trends. And we haven't much time to wait, for in the medical profession, with its penchant for change, the future may already be here. [Thomas Fisher]

Acknowledgments

We would like to thank the following people for sharing their ideas and contributing to this article: Bobrow/Thomas and Associates: Michael Bobrow, Julia Thomas, Dottie O'Carroll; Cannon Design: Patricia Fitzgerald; Cleveland Clinic: Malcolm Cutting; Richard Croissant; Dalton, Dalton, Newport: Irving Budish, Norman Perttula; Ellerbe Inc.: Joe Huttie, Dennis Countryman, Fred Richter, Wayne Bishop, John Waugh, Rolf Oliver, Jack Hunter, John Gaunt; The Ehrenkrantz Group: Peter Kastl; Ewing, Cole, Cherry, Parsky: Nancy Gussow, Bill Morlok, Barbara Cedrone, Lois Sarafian; Hansen, Lind, Meyer: John Benz, Antonia Hamilton; Kaplan/McLaughlin/Diaz: Gio Morse, Jim Diaz; Keene Corporation: Jim Graham; Levin Porter Inc.: Richard Levin: Robert D. Lvnn Associates: Robert Lvnn, Bill Marston: Herman Miller: Jane Ross; Payette Associates: K.T. O'Connell, Robert DeVries; Perkins & Will: Dan Collins, Jim Sficos, Val Satko, D.J. Schultz, Tony McGuire, Don Richards, Roy Friedberg, Ralph Johnson; Rochlin & Baran Associates: Benjamin Clavan; Rogers, Burgun, Shahine & Dreschler: J. Armand Burgun, Bernard Dreschler, Lee Kennedy, Tom Norton, Michael Azarian; Russo & Sonder: Joe Russo; Martha L. Rothman, Elliot Paul Rothman Inc.: Elliot Rothman; Siemans: Scott Jenkins; Zymark: Janet Strimaitis; Goleman & Rolfe: John Crane.

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Architecturally exposed structural steel

Usually thought of as a utilitarian material, steel is an effective design element when properly detailed and specified. For centuries, primitive smelting and fabrication methods restricted the use of steel to relatively small and simple applications. After award of the patent for Bessemer's blast furnace in 1855, however, the modern steel industry began producing high quality steel in large quantities, and the way was paved for its extensive use in building construction.

In this century, work by Mies van der Rohe and others led to publication in 1960 by the American Institute of Steel Construction of a document titled "Specifications for Architecturally Exposed Structural Steel" (now out of print). In 1976, AISC incorporated those standards into the "Code of Standard Practice for Steel Buildings and Bridges." The AISC code contains the core of reference standards for architecturally exposed structural steel and is now part of the AISC "Manual of Steel Construction," Eighth Edition.

Proper specification of architecturally exposed structural steel focuses on four problem areas: material standards, fabrication methods and tolerances, finishes, and erection requirements.

In blooming mills, the high temperatures involved in hot-rolling steel billets into structural forms cause distortion and dimensional variations. By incorporating ASTM A 6 by reference, the AISC code establishes permissible tolerances for out-of-square or out-ofparallel surfaces, depth, width, and symmetry of rolled shapes. The allowances for architecturally exposed members are the same as for normal structural steel.

When dimensional limitations and appearance are critical, consider using cold-rolled steel. It is more expensive, but the process allows closer tolerances, greater formability, and more uniform surfaces without mill scale. Acceptable standards are found in "Specifications for the Design of Cold Formed Steel Structural Members," published by the American Iron and Steel Institute.

In the AISC code, Section 10 specifically addresses tighter fabrication tolerances for architecturally exposed structural steel. They are critical to ease of assembly, alignment of components, and final appearance. Asfabricated straightness tolerances for rolled shapes and for built-up members are one-half of those stipulated in ASTM A 6. Unless otherwise detailed, assembly joints in surfaces exposed to view are made with uniform ½-inch gaps if shown to be open joints, or in reasonable contact if shown without gap. Other dimensional tolerances for length of members, straightness, camber, and depth are described in Section 6 of the AISC code.

Connections are an important visual component in architecturally exposed steel. The American Welding Society "Structural Welding Code" and AISC standards for structural bolting are a good beginning, but additional specification is needed. The AISC code does not prohibit weld show-through on visible surfaces. It also has no provision for finishing or grinding welds except where necessary for clearances or fit of members and to remove evidence of temporary braces and erection clips. For architectural work, butt and plug welds should be ground smooth and fillet welds ground to radius. Holes should be filled with weld metal or body solder and smoothed by grinding. Bolt types and materials should be specified for exposed locations.

Finishes for architecturally exposed steel, a third concern, range from standard enamels to exotic coatings. Except for weathering steel, which requires only blast cleaning and proper protection during shipment and installation, steel is normally cleaned and coated with an appropriate primer in the shop. The standards in the AISC code are minimal, however. Only hand cleaning of surfaces in accordance with Steel Structures Painting Council SSPC-SP2 is specified. Required paint thickness is only one mil. Type of coating is not even mentioned. Again, the specifier is responsible for more stringent requirements. The coating system manufacturer's recommendations for surface preparation, such as power tool cleaning per SSPC-SP3 or blast cleaning per SSPC-SP6, and primer material should be specified. Indicate areas to receive special primer and coordinate with the finish paints specified under Division 9. When appropriate, specify galvanizing in accordance with ASTM A 325.

Provisions for field erection are also included in the AISC code. It calls for special care in handling to avoid marking, bending, twisting, or otherwise distorting steel members to be exposed. As with fabrication tolerances, erection tolerances for plumbness, level, and alignment are limited to one-half of those specified for normal structural steel. To achieve such tolerances, adjustable connections are normally necessary between the architecturally exposed steel components and their structural supports.

Further references on architecturally exposed structural steel can be found in Technical Aid Series Document 05120 "Structural Steel," which is published by the Construction Specifications Institute. □

William T. Lohmann, AIA, FCSI, is Specifications Manager for Murphy/Jahn, Chicago.

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Liability for construction site injury

Norman Coplan

An architect is generally not subject to liability for injury or death of a workman at a construction site unless he previously knew of a dangerous condition and failed to report it to the owner. In most of the United States, an architect is not subject to liability for injury or death to a workman at a construction site even though it may be claimed that the architect failed in his supervisory capacity to insure a safe place of work. In a few jurisdictions, however, it has been held that there is such liability if it is established that the architect knew or should have known that there were hazardous conditions at the site but took no action to insure the safety of the workmen.

In an effort to avoid liability under the minority rule, the standard form contract of the AIA contains a series of disclaimers as to the responsibility of the architect during construction. For example, the contract provides that the architect's observations at the construction site are primarily for the purpose of determining if the work is progressing in accordance with the contract documents, that the architect will not be responsible for construction means, methods, techniques, procedures, or safety precautions and programs, and will not be responsible for the contractor's failure to carry out the work in accordance with the contract documents.

These and other provisions of the standard contract have been subject to review by various courts in situations where the architect has been charged with negligence or other fault. For example, in Missouri (Brown v. Gamble Constr. Co.), the court considered an injured workman's claim brought against an architect based upon the premise that a design professional has a duty in the administration of the construction contract to insure that precautions are taken to protect workers. The court, in ruling for the architect, held that the contractor expressly assumed the responsibility for safety precautions, whereas the architect, under his contract, explicitly disclaimed responsibility for safety precautions. Accordingly, the architect had no duty to third persons who might be injured at the construction site.

In a more recent case (Welch v. Grant Development Co., Inc., 189 NYLJ, No. 93), a New York court reexamined the provisions of the standard AIA Owner-Architect Contract Form in a suit against an architect by the estate of a workman who had been killed during construction as the result of a fall through an interior stairwell. The court concluded that the standard AIA contract removed all supervisory powers from the architect and thereby released him from any liability resulting from the contractor's activities, including hazardous conditions at the site caused by the contractor. The court said:

"Section 2.23 of the architect's contract with the owner requires the architect to 'visit the site at intervals appropriate to the stage of construction to familiarize himself generally with the progress and quality of the Work and to determine if the Work is progressing in accordance with the Contract Documents.'... Under the contract (the architect) had no duty to supervise the contractor's method of doing the work. In fact, as (an) architect (he) had no power or control over the contractor's method of performing his contract, unless such power was provided for in the specifications. (His) duty to the owner was to see that before final acceptance of the work the plans and specifications had been complied with, that proper materials had been used, and generally that the owner secured the building it contracted for.

"Therefore, in the complete absence of the contractual right to supervise and control the construction work, as well as site safety, the architect cannot be held liable for the death of the plaintiff's decedent. . . . 'To hold otherwise would make the architect the general safety supervisor at the site, a job which would require his continuous presence in disregard of the express language of his contract.'"

The court, in the *Welch* case, pointed out, however, that under the standard AIA contract, the architect is obliged, based upon his on-site observations, to keep the owner informed of the progress of the work and to endeavor to guard the owner against defects and deficiencies in the work of the contractor. If, therefore, the architect had knowledge of an unprotected open stairwell, the contract required, said the court, that he report it to the owner so that the owner could take precautionary action.

If the architect failed in such duty to the owner, then he could be subject to a claim by the owner requiring a contribution on his part to any judgment that was obtained against the owner by the decedent's estate. The principle here involved, stated the court, is that if there is "no actionable duty owed by a third party directly to the injured plaintiff, the third party may nevertheless be held liable for a proportionate share of the damages on the basis of his breach of duty owed to another party (the owner) who must respond directly in damages to the plaintiff."

Norman Coplan, Hon. AIA, is a member of the law firm Bernstein, Weiss, Coplan, Weinstein & Lake, New York.

Charles Grant, Architect Atlanta, Georgia

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Books



"I do not think it possible for domestic architecture to be beautiful, but I am doing my best"

Professor-Architect Otto Friedrich Silenus, a fictional professional from Evelyn Waugh's Decline and Fall, 1928, in an illustration by the author.

The Image of the Architect by Andrew Saint. New Haven and London, Yale University Press, 1983, 180 pp. \$19.95.

Reviewed by Hélène Lipstadt, Cambridge, Mass., a social historian and writer on architecture.

Architecture books are read, often enough, for the images they contain. Let us uphold this tradition. The imagery of The Image of the Architect by Andrew Saint is revealing. From the first illustration to the last, from a movie still of Gary Cooper as Howard Roark, beside a towering model of his office tower, to a publicity photo of John Portman explicating the model of Peachtree Center, this is a book about architects, not architecture. Two buildings alone appear, so to speak, in the flesh, both the work of the teams of foreign architects who-in collaboration-lent their skills to the Soviet Union in the 1930s. Yet no single chapter is dedicated to the image of the typical collaborating architect, be he the anonymous member of the London County Council's office or the trusted and unrecognized pen behind the publicly acclaimed architect-artist. Can one conclude that the collaborating architect [Books continued on page 124]

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Books continued from page 122

who subsumes his artistic identity in a true cooperative effort has no image, and practically no professional identity, but creates the only buildings worth reproducing? In the history of the image of the architect, he would be the invisible man.

Ostensibly an analysis of some of the representations and misrepresentations of the architect made to others, but primarily to himself, Saint's historical account-of Marxist inspiration—cunningly hides a manifesto addressed to the British and American salaried architect. Taking as his raw material the myths, legends, historical fictions, and historian's fictions, caricatures, and marketing inventions that have come to constitute some of the images of the Anglo-American architect, Saint traces the development of the public image of the architect from the early 19th Century to today (from John Nash to John Portman, who share a common image, that of the developer). A filmlike structure meshes the chapters, really separate critical essays on episodes in the history of the profession, which feature cameo performances by some of the most celebrated and the most notorious architects known to literature and history. Goethe's Erwin von Steinbach, Charles Dickens' Mr. Pecksniff, and Ayn Rand's Howard Roark are creatures of imagination who embody the contemporary image of the architect. Each is compared to reality, and one discovers that Dickens' satire is closest to the truth while Goethe's encomium to the creator of Strasbourg cathedral is a misapprehension of enduring consequences for literature, aesthetic theory, and the historiography of the Medieval period. Burnham, Hunt, McKim and White and even Gropius appear, as they rarely do in architectural biography, as the consummate designers of their own image. (So does Wright, but only the most naïve cultists have ignored this aspect of his life.) The Image of the Architect also contains surprise appearances by the infamous-in Britain, at least-J.G.L. Poulson, an architect and arch-corrupter of civil servants, and the less-than-admired Colonel Richard Seifert, responsible for the never leased Centre Point, the office block that demonstrated to London how far one can get running a building on empty.

In his analysis of these different images, from that of the genius to that of the entrepreneur, Saint explains how the image disguises as much as, or even more than, it reveals. It often falls to pieces under his scrutiny, and the shards that he preserves as authentic are often surprising. The type of evidence used is often nothing less than innovative-from Gropius's gaze to the physical organization of the Burnham & Root office. Although the book may seem cavalier and freewheeling as it swings from history to literature, from America to England, from (and this in every case) a materialist interpretation to pithy and revealing details of the practice of architecture, it is precisely this inventive use of documentation and insistence on detail that allows Saint to describe aspects often unmentioned in histories of the profession, and a fortiori, in biographies: intentional disregard of clients' needs and budgets, the ability to inspire and thus to manipulate others, privilege, money, and class. Only that one activity that Philip Johnson recently described as more fun than building goes unmentioned. Nor is there place for its Late 20th-Century equivalent, sexism, or its victims, women architects, certainly the most exploited of the salaried architects.

This is the history of the stars and how they shone; and few, with the exception of Hannes Meyer and Mart Stam, come out untarnished. The most mordant criticism, in the chapter that will certainly be the most read, "The Battle of the Bauhaus," is reserved for the founding father of architectural democracy, Walter Gropius, described as the false messiah of architectural collaboration.

Saint's chronology is selective, and his intention, an "ar-gumentative approach." Some of the crucial events in the history of the British profession, like the 19th-Century debate on Art vs. Profession, are given original and convincing interpretations, but other choices beg the question both of image and of reality. Take the issue of class. Two architect authors are given the responsibility, a heavy one, of exemplifying the image of the British architect as gentleman. [Books continued on page 126]

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Books continued from page 124

As Saint admits, neither is representative of the entire profession, nor of all aspects of the interwar period. However fascinating the dizzying social successes of the social chameleon Clough Williams-Ellis, equally at ease in salons of aristocratic British Fascists or in the Soviet Union-and his contemporaries found them so-and however attractive the parodying architectural novels of H. Bulkeley Creswell, these were, by the mid-1930s, atypical figures, even as gentlemen. The image of the architect then was probably closer to the one imagined by Evelyn Waugh for Decline and Fall, whose professor Otto Silenus, by virtue of his bow tie and name, seems a concatenation of Gropius and Le Corbusier. Reality lay more with the future as envisaged by such gentlemen Modernists as the Harrow-educated Sir John Summerson or as built by the independently wealthy members of Tecton. A Marxian study ought to devote more serious reflection to the issue of class in Britain than this exegesis of the old-fashioned writings of Creswell and Clough.

America poses a particular challenge. Saint cannot rely here on the magisterial accounts of the profession that exist for England, and perhaps as a result he omits any but the most superficial remarks about the image of the Ecole des Beaux-Arts graduate. Yet the debate inspired by the American obsession with the Ecole played as important a role in defining architectural ideology in the United States as the Art vs. Profession debate had done in England. Class, whether in the guise of the old-fashioned term of "connections," or the new one of "networks," or in the form of the more easily documented fact of independent wealth, wants mentioning in America as well.

All this, however, should not obscure the major point of this passionate and argumentative interpretation of architectural ideology. In the historical chapters, Saint's recurring theme is the disparity between myth and reality; his theoretical chapter hones the point finely. The profession does not suffer from mass delusion, but merely subscribes to beliefs which, even when brought to consciousness, reflect forces of material life that are stronger than even the most wily developer-architect. The fault thus does not lie with the myth-makers, a Gropius or a Goethe, but in two "isms": formalism, which reduces architecture to a pure aesthetic art. and capitalism, which ranges from the crudest commercialism to the highest style financial management. Devotion to art and crass commitment to money: these coincide often enough, and even can be made to cooperate, as Saint maintains in his descriptions of practices as different as Burnham's and Louis Kahn's, though ideology would have them opposed. Indeed, a firm belief in the architect as master of his coworkers and architecture as the mistress art lurks in the ideologies of Arts and Craftsmen and Bauhäusler alike. Saint's conclusions are courageously unattractive and unmodish: an improved consciousness, transformed into a reconstructed professional ideology, is prescribed. A commitment to "sound building" should replace style-mongering, inspiring a less vainglorious profession, sobered by the realities of the complex and aggressive market forces which beset even the smallest practice; and consciousness of the increasing fragmentation of the building industry can improve construction through an intelligent use of technology. And if endowed with the force possessed until now by the ideology of art and of profes-sionalism, "sound building" too could inspire imaginative design.

Saint's manifesto was originally delivered to students at the Architectural Association in London who, at last hearing, had not thrown off their illusions. In this country, where Post-Modernism has made many new converts to formalism, it is even more unlikely that Saint can convince young architects to take up the cause of the architect and society again. The doctrine of architecture and building as separate and opposed activities is, as we have maintained elsewhere,* an opposition so fundamental as to be necessary for the practice of architecture. The Image of the Architect will provoke even where it does not convince, and it is promised a considerable success, if a controversial one. \Box

* "L'art de l'ingénieur: nostalgies nouvelles et anciennes": ARCHITHESE, 5-1980, 56-58.

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Products and literature

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Circle 109 on reader service card [Literature continued on page 130]

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Literature continued from page 128

Literature

CT site planning guide lists equipment requirements for control room, computer room, examination room, and transformer vault. It discusses special provisions, access, lighting, and radiation protection. Specifications are provided for power, environment, flooring, fire protection, and rigging. Siemens Medical Systems. *Circle 200 on reader service card*

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'Planning Guide for Hospital Equipment' is a list of washroom accessories suggested for each hospital department. Areas covered include patient rooms and bathrooms, examination/treatment rooms, public and staff toilets, scrub rooms, recovery rooms, and janitor equipment. The six-page folder suggests Bobrick units that meet the requirements. Bobrick Washroom Equipment.

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The Charnley-Howorth Exflow Clean Zone System, manufactured in England by Howorth Air Engineering, provides protection in surgery from air-borne contamination without using sidewalls. Sterile air flows at a rate that prevents contaminated air from reaching the operating area, but slowly enough not to create turbulence that would dry wound tissue. Clean air movement is down and outward in all directions. Technical information about the system is provided in a six-page brochure. Custom Industries, Inc.

Circle 205 on reader service card

NMR site planning guide provides guidelines and floor plans to assist in making site selection and preliminary architectural decisions. The 12-page guide provides tables of typical maximum magnet specifications and expected maximum environmental and power requirements. Plans include a suggested suite that might be integrated into an existing building and another that might be installed in new, separate construction or a new wing. General Electric Company, Medical Systems Operations.

Circle 206 on reader service card

Patient service consoles, suitable for new construction or remodeling, can be flush or surface mounted. Consoles can be supplied up to 10 feet long to accommodate one or two patient beds. Services can include telephone, TV monitor outlet, night lights, and switches. All receptacles and grounding jacks are hospital grade, and medical gas outlets can be factory installed. Equipment, which is shown in a four-color brochure, meets UL requirements and NEC, NFPA, and IEEE codes and guidelines. Isotrol Systems. *Circle 207 on reader service card* [*Literature continued on page 132*]



Progressive Architecture 10:83

130

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DO MORE THAN TAKE THE DARK OUT OF A ROOM.









□ Each lighting design should give you an opportunity to add something beautiful to any interior. That's what Atelier International Lighting is all about.

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Circle No. 306 on Reader Service Card

Literature continued from page 130

Medical Pipeline Systems Monitors provide audible and visual indication of pipeline and vacuum level. The master alarm is located where continuing observation is available, such as at the switchboard or nurses' station; area panels monitor branches of the piping system; gauge panels are located where pipeline pressure and vacuum levels need to be known. The system is described and illustrated in a six-page brochure, which shows typical locations of master panels and includes a typical system for nonflammable gas piping. Puritan-Bennett Corp. *Circle 208 on reader service card*

MGM/TWO[®] Metabolic Gas Monitor

provides accurate, continuous monitoring of oxygen consumption, carbon dioxide production, and respiratory quotient, which are graphically plotted and shown on a liquid crystal display. An aid in critical care diagnosis, the product is described and illustrated in a six-page brochure, which also provides a typical printout and table of specifications. Medicor, Inc.

Circle 209 on reader service card

Laboratory table tops, described in a 14-page brochure, include: Kemresin, of modified epoxy resin, in black only; Kemrock, of resin-impregnated natural sandstone, in gray, green, tan, and black; and Kemshield, of laminated

tempered hardboard with baked on resinous coating, also in gray, green, tan, and black. All are resistant to acids, alkalies, and solvents. The brochure describes features, discusses performance, and lists chemical resistance of each material. Kewaunee Scientific Equipment Corp.

Circle 210 on reader service card

"Where the future of NMR imaging is today" (© 1982, Technicare Corporation) describes the Teslacon[®] nuclear magnetic resonance system and its application to clinical investigation. The type of imaging possible and typical images produced are illustrated. Technicare Corporation.

Circle 211 on reader service card

Therapi 4 Linear Accelerator therapy system is designed for small treatment rooms. Features usually associated with larger equipment include: fully motorized positioning, swivel head with rotating collimator, large field size for full body radiation, 2 mm focal spot size, field defining light system, and optical range finder. A four-page brochure describing the system includes specifications for the equipment and utility requirements. ATC Medical Technology. *Circle 212 on reader service card*

Biophysical Instrumentation catalog provides 28 pages of specifications, descriptions, and illustrations of biophysical instruments. Included are recording and display devices; signal conditioners to amplify biophysical signals; and accessories and supplies for the instruments. Gould, Inc., Recording Systems. *Circle 213 on reader service card*

Unicell[®] modular laboratory furniture includes chemical-resistant work surfaces, storage and supply modules, and space management components to organize clutter. The units offer flexibility of cabinet arrangement and location of interior components to suit changing needs. Of one-piece molded construction, the cabinets are durable and will withstand high-temperature cleaning. They are described and illustrated in full color in a 10-page brochure. American Sterilizer Company. *Circle 214 on reader service card*

Blood bank refrigerator and freezer catalog provides specifications and illustrations for several styles ranging in size from wall-mounted units to walk-in storage. Temperature monitoring systems warn of dangerous temperature conditions, loss of power, and battery failure. The Jewett Refrigeration Company, Inc.

Circle 215 on reader service card

Contempra[®] laboratory furniture catalog shows work stations, storage units, undercounter appliances, fume hoods, isolator cabinets, chairs, and stools. Work station groupings are shown as wall assemblies and island assemblies in several combinations. Descriptions, [Literature continued on page 136]





Old Post Office, St. Louis

Renewal of government buildings will be the main theme of the issue, along with two examples of urban district restoration. The features to be included:

Old Post Office, St. Louis. The subject of a long preservation struggle, this Second Empire monument has been returned to its original ornate splendor.

Chenango County Courthouse, Norwich, N.Y. An exemplary rural courthouse of Greek Revival style has been thoughtfully rehabilitated for its original use.

Florida Historic Capitol, Tallahassee. Once slated for demolition when its recent replacement was completed, this 1902 landmark has regained its dignity and detail.

Conversation Hall, City Hall, Philadelphia. Stately interiors in Philadelphia's opulent 19th-Century landmark have been refurbished after decades in hiding.

Reception Rooms, U.S. State Department. The rooms in Washington where foreign diplomats are received have been rescued from banality with authentic historical design.

La Villita, San Antonio, Texas. An enclave of mid-19th-Century buildings, restored in the 1930s, is restored again—better.

Earthquake-ravaged Italian towns. Reduced to rubble a few years ago, communities in the Friuli district have been rebuilt and modernized with notable sensitivity.

Technics: Cleaning masonry. One of the major steps in many rehabilitation efforts is cleaning of brick or stonework, a step that must be approached knowledgeably.

P/**A** in **December** will present a rich variety of newly completed buildings and a Technics article on what is new with the ancient material: stucco.



Circle No. 360 on Reader Service Card

Literature continued from page 132

specifications, prices, and illustrations are provided in the 20-page catalog. Fisher Scientific Company. Circle 216 on reader service card

The Visualab System performs all standard clinical visual electrodiagnostic tests. Its modular design allows the system to be expanded and updated as required. The equipment meets UL 544 specifications and uses hospital grade plugs. The instruments are described in a four-page folder, which includes an interface chart of visual electro-diagnostic equipment. Life-Tech, Inc. *Circle 217 on reader service card*

Other products



A contemporary onyx lavatory with rounded edges, hand-carved from a solid block of stone, is fitted with a ridged black porcelain basin. The pedestal, which conceals the piping, is curved stainless steel, and the faucet set is of polished chrome. Natural onyx colors are green, white, black, and brown. Sherle Wagner International, Inc. *Circle 110 on reader service card*

Alpha computer/secretarial task chair for electronic offices is available with or without arms. The five-prong base is onepiece cast aluminum with dual wheel casters. The chair has a pneumatic seat-height adjustment and both vertical and horizontal back adjustments. Frames are epoxy-coated in char brown, shell is polypropylene, and fabrics are 100 percent nylon with Scotchgard[®] protection. United Chair. *Circle 111 on reader service card*

LinksGuard 2000 combines aluminum track, channels, and castings with steel chain for a secure closure. The track can turn corners with a radius as small as nine inches, and the chain stores in approximately two inches per foot of opening. Chain pattern measures 45%" x 4%" and is available in several colors. LinksGuard 2000 is suitable for shopping malls and other areas where traffic control with ventilation and visibility is desired. Roll-o-matic, Inc. *Circle 112 on reader service card*



ModuBlock lounge furniture, of rugged design for high-traffic areas, offers exceptional resistance to abuse, says the manufacturer, for institutional, dormitory, hotel, and hospital use. Chair frames and tables are of 2-inch butcher block construction in solid red oak. Leather-grain vinyl of rotationally molded PVC, 20 times thicker than ordinary vinyl upholstery, covers fireretardant polyurethane foam cushions. Upholstery material is available in 12 standard colors and 10 new Modu-Chrome colors. ModuForm, Inc. *Circle 113 on reader service card*

The Conesphere outdoor lighting fixture has a hand-polished copper, gold, or aluminum dome and a copper base. The pole is bronze or black, and lens options are clear, white, bronze, smoke, and frosted acrylic. The light operates with incandescent, mercury vapor, metal halide, high-pressure sodium, or low-pressure sodium lamps and is said to be 82 percent light efficient. TrimbleHouse Corp. *Circle 114 on reader service card*



Hand-crafted berber rugs and carpets in the Desso American Collection are available in several designs, qualities, and colorways up to 13½ feet wide. Made from 100 percent wool, they are offered in whites, beiges, browns, and grays. Ernest Treganowan, Inc. *Circle 115 on reader service card* Luxmaster outdoor luminaire has a die-cast housing in a rectilinear shape, with a bronze finish. The luminaire can accommodate mercury vapor or metal halide lamps up to 400 watts. Computer-designed optics direct illumination to specific areas. ITT Outdoor Lighting.

Circle 116 on reader service card

Micro Series carpets are made from Badishe's Zeftron 500[®] ZX nylon yarns that provide antimicrobial and fluorocarbon protection. The hollow filament fiber hides soil and simplifies cleaning. Designs include: Microcheck (top left) in 8 colors; Microweave (top right) in 13 colors; Micropoint (bottom right) in 10 colors; and Microvel (bottom left) in 13 colors. Gulistan Carpets, J.P. Stevens & Co.

Circle 117 on reader service card



The Custom Vinyl Collection of resilient floorcovering is available in several patterns and designs and a variety of finishes, including lizard, cobble, matte, gloss, and slate. From bold geometrics to florals, the floorcovering is offered in custom colors, design scale, pattern, and size. Stark Concepts, Division of Stark Carpet Corp.

Circle 118 on reader service card

Bali SofTones miniblinds collection with textured look is made up of 19 new designs and coordinating solids. Textures are raw silk, Irish tweed, Japanese grasscloth, suede, and linen in colors that include mauve, seafoam, sand, greige, fawn, and brown. The madeto-order blinds can be tailored to fit a number of window sizes and shapes. Blinds have enclosed top and bottom rails, close-fitting aluminum slats to prevent light leakage, and a cord equalizer for uniform operation. Marathon Carey-McFall Company. *Circle 119 on reader service card*

Windows for new construction or commercial retrofit are manufactured to custom sizes. When made with insulating glass and Heat Mirror[®] heatreflecting film, the window provides a U-value of .23 and R-value of 4.35, about double that of standard doublepane windows. Frame and sash are Bo-[Products continued on page 138]

LAR STORAGE 1.500 gal REFLECTIVE TOP crushed seashell

Solar Vessel: Heated by the sun, warmed by the cedar.



The problem/opportunity: Design a yearround solar-heated beach house.

Facing north.

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In Massachusetts.

Solution by Thomas Larson: "The beach house 'Liteship' is a hybrid passive/active solar vessel and a nautical architectural sculpture.

"The primary structure is a 2-bedroom, 2-bunkroom hexagon with a windshield above the roof deck to block the northerlies.

"It's clad with red cedar shingles because they have ideal weathering characteristics, a feel of warmth, excellent insulative qualities and are indigenous to the surrounding houses."

For our color brochure "27 New Commercial Ideas in Cedar (and a few old ones)," write Suite 275, 515 - 116th Avenue N.E., Bellevue, WA 98004. (In Canada: Suite 1500, 1055 West Hastings Street, Vancouver, B.C. Circle No. 365 V6E 2H1.)



the bandstick of red cedar shingle and shake bundles are your guarantee of



Bureau-graded quality. Insist on them.



Tlingit cedar canoe paddle painted with a blackberry juice and ash mixture. Cedar. To touch the earth.

Red Cedar Shingle & Handsplit Shake Bureau

roduces continued nom page 150

livian mahogany. The windows have a tilt-turn feature that operates with a single handle: tilt for rain-free ventilation; turn for easy cleaning. The windows are weatherstripped with a continuous neoprene perimeter gasket for minimum infiltration. Stang Windows. *Circle 120 on reader service card*

Building materials

Major materials suppliers for buildings that are featured this month as they were furnished to P/A by the architects.

Hercules Incorporated, Wilmington, Del. (p. 72). Architects: Kohn Pedersen Fox. New York. Windows and entrance doors: Anaconda. Skylights: Fisher. Carpet: J&J Industries (Herculon fiber). Carpet tiles: Interface (Herculon fiber). Acoustic ceiling tile: Armstrong. IRMA roofing: Gates. Gypsum board: USG. Movable partitions: Vaughn Wall. Computer room and security equipment: Honeywell. Elevators and moving stairs: Otis. Electrical distribution, poke throughs: Hubbell. Plumbing fixtures: Kohler. Flush valves: Sloan. Water fountains: Elkay. Sprinklers: Pen Del Sprinkler Co. Heat recovery system: Joy Fans, Trane Chillers. Environmental control systems: Honeywell. Furniture: Hiebert, Inc. Upholstery fabrics: Herculon fibers.

L'AUSTOU I UDITE WULKS SELVICE CEITEI. Evanston, Ill. (p. 92). Architects: Sisco/ Lubotsky Associates with Consoer/Morgan Architect, Chicago, Ill. Poured concrete reinforcement: Bethlehem Steel Corporation. Steel frame: Sprague Iron Works (U.S. Steel). Precast concrete frame: Midwest Concrete Products. Precast concrete roof decks: Flexicore. Face brick: Hanley Brick Company. Interior paint: Pratt & Lambert. Aluminum windows and doors: Wausau Window Company. Acrylic doubledome skylights: I.G.S. Steel overhead doors: McKee Door Company. Sealed concrete and industrial epoxy floors: H.B. Fuller Company. Vinyl asbestos tiles: Armstrong Excelon Tile. Ceramic tile: United States Ceramic Tile Company. Single-ply EDPM roofing: Carlyle Company. Waterproofing on parking roof: H. Peterson Company. Insulation: Johns-Manville, Dow Chemical Company. Hardware: Best Hardware Company. Kitchen appliances: General Electric Company. Cabinets: Brammer Manufacturing. Fuel dispensing system: Petro-Vend Company, Kardgard System. Lockers, files, storage racks, metal shelving: Lyons Metal Products. Sign-Spanger Brothers. age: Freight elevator: Dover Elevator Company. Plumbing accessories: Keene Corporation, Benjamin Electric Manufacturing Company, Jay R. Smith Manufacturing Company, Eljer, Aker, Sloan Valve Company, Accurate Precision Company, Bradley Corporation, Broderich Corporation, Elkay. Space heating and

Boiler: H.B. Smith. Radiators: Sterling Radiator Division. Exhaust systems: National System of Garage Ventilation. Work bench: Paxton. Pedestal tables: Kinetrics-Hermanson/Cogne. Stacking chairs: G.F. Business Equipment. Blinds: Levolor Lorentzen. Truck scale: Colts Industries/Fairbanks. Fuel tanks: Owens-Corning. Fuel pumps: Gilbarco. Vehicle lifts: Globe. Salt storage building: Bemis Brothers.

Douglas County Administration Building, Castle Rock, Colo. (p. 96). Architect: Hoover Berg Desmond, Denver, Colo. Portland cement: Martin Marietta. Split and ground face block: Denver Brick and Pipe. Glazed block: Spectra-Glaze. Bar joists: Vulcraft. Metal-deck: Verco. Aluminum doors and windows: Amarlite Anaconda. Skylight: Plasticrafts. Gypsum board: U.S. Gypsum. Quarry Tile: Summitville. Ceramic mosaic tile: American Olean. Glazed ceramic tile: Max Boissaud. PVC roof: Trocal (Dynamit Nobel). Wall insulation: Owens-Corning. Polyisocyanurate roof insulation: R-Max. Water repellent: Chemstop. Locksets: Russwin. Vault doors: Diebold. Signage: ASI Sign Systems. Elevator (hydraulic): Dover. Lighted handrails: Zimmerman Metals. Globe lights: Prescolite. Incandescents: Lightolier. Fluorescents: Columbia. Toilet fixtures: Kohler. Gas-fired rooftop units: Lennox. Electric unit heaters: Federal Pacific. Controls: Barber-Colman. Carpets: Milliken. Blinds: Levolor.



Photographers have been using Zero Halliburton cases to protect their cameras and lenses for over 20 years. In fact, you'll seldom see a professional on location without them.

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Circle No. 315

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Flower Fresh and Mildew Free! THANKS TO NEW SUMMITVILLE GROUT!

Put an end to bathroom scrub drudgery! Summitville S-687 grout stops mold and mildew growth on ceramic wall tile before it starts! Tests show specially formulated S-687 grout resists stains and discoloring, even after years of constant use.

Keep new ceramic wall tile beautiful and carefree from the day it's installed. Specify Summitville S-687 wall grout with built-in protection against ugly mold and mildew growth. For more details and the name of your nearest distributor, refer to Sweet's File 9.18 Sum, or write Summitville Tiles.





Circle No. 370 on Reader Service Card



New York isn't like any other city. Especially when it comes to the interior design industry.

Most other cities have the industry together. Under one roof. Centered in one place. Not New York though. We have it scattered all over.

And consequently, everyone's business suffers. Because architects, designers and their clients are wasting so much time in cabs trying to get from showroom to showroom they give up. And don't go to all the showrooms they'd like to. And should.

But in 1985, New York's design community is finally getting the permanent home it has always deserved. IDCNY. The International Design Center, New York.

IDCNY is designed for designers. By designers. I.M. Pei & Partners have come up with a spectacular master plan. Gwathmey Siegel & Associates Architects are responsible for the beautiful interiors. Vignelli Associates for the innovative graphics.

There'll be amenities as well. Elegant restaurants created by Joseph Baum, creator of The Four Seasons and Windows on the World. Exciting market weeks. Special events.

And it's all happening in the area New York Magazine calls "The Next Hot Neighborhood." Long Island City.

IDCNY is closer to midtown Manhattan than most of Manhattan. A quick trip by train, bus, cab or limo. (And we also have a free transportation service to get you there and back.)

Convenience was one important factor in choosing IDCNY's location. Space was another. For where could the industry enjoy 4½ million square feet of space. 100 acres of showroom space. In buildings converted specifically into showroom space.

But that's not all. Where else could the industry enjoy rents that won't drive the fabric houses, the floor and wall coverings firms, the lighting sources and the furniture showrooms out of the City. Or more important, out of business.

Yes. In 1985, the greatest city in the world will have the greatest design center in the world. IDCNY. Circle No. 347

10 acres of New York City with 100 acres of showroom space.

> It's why New York will remain the design center of the world.

When you have as many so-called design centers as New York does, you really have none.

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4 Architecture: Form, Space and Order

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Architectural Rendering

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4

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10:83



MONTHLY SECTION ON TRAVEL AND PERSONAL INTERESTS



OUTWARD BOUND to your outer limits

BY JAMES E. BRAHAM

appelling. The picture alone is enough to quicken the pulse, dampen the hands, chill the spine. Imagine yourself descending off the edge of a mountain—*backing* off into space!—with only a pair of ropes for support. Slowly you work your way down the sheer and smooth rock, your body practically perpendicular to the cliff. Below—hundreds of feet perhaps—lie tree tops, a river, who knows? Who's brave (or fool) enough to look down now?

Rappelling? Repelling might be more like it. As Bill Coors used to think when he watched people climbing: "Rocks are for mountain goats and idiots."

Well... not to such folks as Arthur Levitt Jr., chairman of the American Stock Exchange; Jess Bell, president of Bonne Bell Inc., Cleveland; Melvyn Klein, president of Altamil Corp., Corpus Christi, Tex.; John C. Whitehead, senior partner in Goldman Sachs, New York ... anyone who ever has participated in an Outward Bound adventure. Even Bill Coors, chairman of Adolph Coors Co., Golden, Colo.

Dr. Roy Yamahiro will never forget his initiation into the

program. "I'm still afraid of heights and the first time I rappelled, it was terrifying. They had to blindfold me and push me over." Now, many rappels later, the 55-year-old vice president for organizational development and training at Federal Express Corp., Memphis, exclaims: "Having accomplished it, it's a tremendous feeling. An unbelievable, euphoric feeling that—son of a gun—I did something that just petrified me!"

And Mr. Coors, 67, now a veteran mountain climber, casually observes: "Rappelling? That's easy. It looks very exciting but it's sheer delight. Most of the time, if you get executives down off that first rappel, the first thing they do is run around and climb up the mountain and go down again. It's fun."

It only looks dangerous. Exciting, exhilarating—fun. And when done properly, the Outward Bound way, safe. "It's not dangerous. It's *perception* of real risk," says Mr. Klein, 41. "The first time you sit on the edge of a promontory and look down and look out, you're apprehensive as hell. But then as you look at it and contemplate it, you kind of develop a sense of tranquillity and peace, come to terms with your fears and anxieties, and basically have confidence that you can do whatever you need to do. And you do it."

"It's not as risky as getting in your car and driving home," Mr. Coors says of Outward Bound's fail-safe system, in which a second or back-up rope is tied to another person in the climbing party, and an experienced instructor is always present who could at any time rescue anyone in trouble. Organization officials claim they have never had a serious injury in rappelling: "That's why it's so great—because because

the perceived risk is so great," says one.

Rock climbing and rappelling are two of the basic activities of Outward Bound Inc., the oldest and largest nonprofit "adventure education" organization in America. In its expeditions—mountain climbing, whitewater rafting, canoeing, sailing, backpacking, bicycling, cross-country skiing—it deliberately places people in "stressful" situations, both physical and mental. It challenges them to overcome obstacles that appear dangerous and perhaps impossible, but actually are safe and highly conquerable.

Begun in Great Britain in 1941, the program has spread around the world. The first American school was founded in 1962, in Colorado. It has since been joined by other schools in Maine, Minnesota, North Carolina, and Oregon. U. S. headquarters is in Greenwich, Conn.

More than 95,000 people have participated in Outward Bound courses in the U. S., and about 8,500 join annually. Although slightly more than half of the students are between the ages of 16 and 21 (and nearly 40% are women), more and more executives are participating.

No age limit. A founding trustee of the Colorado school, Mr. Coors notes that it was formed to develop character and leadership, primarily in young people. "Now I don't think there's any age limit," he says. "What Outward Bound does





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First Class excellence is the hallmark of TWA's Royal Ambassador Service to Europe and the Middle East.

From the very start of your trip, you'll be treated to the highest standards of personalized service.

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Once our transatlantic flights take off each evening, you'll be leisurely wined and dined.

You'll whet your appetite with champagne and caviar. Tempt it with an entree like Chateaubriand. And sate it with a fine ripe cheese or deliciously rich dessert. You'll satisfy your thirst with a vintage wine from France or California. Or with a selection from our cognac and fine liqueurs.

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After dining, you'll be ready to relax in comfort in your First Class Sleeper-Seat.SM Just settle back.

The seat stretches out with you for a restful sleep under the stars all the way across the Atlantic. You'll awake refreshed—ready to face the new day.

So call your travel agent, corporate travel department, or TWA.

And experience for yourself the fivestar quality that gives TWA's Royal Ambassador Service the mark of excellence.

You're going to like us

























Saddlebrook is an ideal meeting facility set in one of Florida's most unique resorts. Just 25 minutes north of Tampa International Airport, Saddlebrook offers 330 acres of seclusion among tall stands of cypress and pine. The pace is leisurely at the very thoughtfully designed Walking Village. Everything is just steps away ... no trams are needed.

Planning was meticulous, with the end result a marvel of convenience ... and

privacy. (In fact, it's not unusual to find a celebrity enjoying the seclusion.) Focal point is a water recreation facility appropriately named the Superpool, which holds more than a half-million gallons of water. A full 270 feet long, it's probably the largest swimming pool in the southeast.

At one end of the Superpool is the Centre Club, where the Cypress Dining Room, Polo Lounge, the Gift Shoppe, the Pegasus Ballroom and the Jockey Club Spa

are all under one roof ... along with conference facilities for up to 700. Built primarily of glass and natural wood, with accents of fine marble and gleaming brass, it overlooks the golf courses and introduces the visitor to some of the most delightful dining on the Gulf Coast.

The Cypress Dining Room is a gracious setting for extraordinary cuisine and a Sunday celebration that has been called "The Quintessential Brunch...Best in the Bay" by Tampa Magazine. Tucked away by itself is an intimate dining retreat called The Gourmet Room where an impressive French "haute cuisine" is served. For drinks, dancing and lively conversation as well as quiet conversation, there is the tri-level Polo Lounge. At the other end of the Superpool is The Little Club, a sophisticated dining room and

lounge with tropical decor and intimate atmosphere.

Saddlebrook has the facilities to accommodate meetings on any scale. The Pegasus Ballroom will entertain large gatherings, or can be quickly divided into as many as ten separate meeting rooms. Four additional breakout rooms facilitate private meetings and dining. Individual suites create the ideal setting for small, self-contained conferences. Terraces and

Association, so the Tennis Complex is just as well planned as the golf courses. Adjacent to The Little Club, it includes eleven Har-Tru courts (five lighted) and four Laykold courts interspersed with awning-covered islands and water fountains.

The Jockey Club Spa offers a complete physical fitness center with separate facilities for men and women: heated whirlpools, saunas, steam rooms, mas-

> sage rooms, private showers and lockers, a barber/beauty salon and the Unicorn Health Bar.

Elegance is the keynote to Saddlebrook accommodations. Guests stay in luxurious one-, two-, or three-bedroom condominium suites, each one privately owned and thoughtfully managed in the owner's absence by a team of professionals. There's a basket of personal toiletries in the bath, and a sampler of coffee and tea in the kitchen, along with every electrical ap-

pliance imaginable, including a blender. Decor and furnishings are lavish, right to the original art and brass accessories. Color-coordinated bed linen is ironed to silky softness, and beds are always triplesheeted. In addition, a terry robe is provided each guest for trips to and from the pool.

Saddlebrook's Walking Village design has produced a meeting resort that is unsurpassed in luxury, unequaled in convenience and is totally unique in professionalism, character and charm.

Write or call toll free for information on a conference, a vacation (package plans available year-round) or a second home.

Condominium suites are available for individual ownership. Call or write C&A Investments, Inc. at Saddlebrook Resorts, Inc. Offer not valid in states where prohibited by law.



patios allow attendees to savor the abundant tropical atmosphere. A special 7200 sq. ft. tent is available for festive outdoor events. Naturally, a complete audiovisual staff is on hand with all state-of-the-art equipment. In all, Saddlebrook is a superior meeting site, with its uniquely convenient Walking Village, top-notch facilities and a thoroughly professional staff to guarantee success.

Rated by readers of Florida Golf Week as among the finest in the state, the 27 holes of Arnold Palmer and Dean Refram designed golf courses will challenge any golfer, regardless of handicap. Spruce up your game at the putting green and driving range or with lessons and clinics.

Saddlebrook is headquarters for the United States Professional Tennis

The Golf and Tennis Resort P.O. Box 7046, Wesley Chapel (Tampa), Florida 34249 800-237-7519 U.S.; in Florida 800-282-4654 or 813-973-1111 25 miles north of Tampa International Airport

Progressive Architecture 10:83 145

For vacationing information, Circle No. 381 For meeting information, Circle No. 382



<u>personal time</u>

is give people a firsthand experience with their outer limits—and they become aware that their outer limits are far beyond expectation, that we are capable of doing things to a greater degree than we think. There's a definite sense of accomplishment. It builds up self-esteem and self-confidence. And it's very, very exciting to find yourself on the top of a mountain that you knew damn well you couldn't climb."

Among the peaks he has conquered are Mt. Kilimanjaro in Africa, in 1974. Five years ago he and Jess Bell were in a group that came within 1,000 ft of the 19,000 ft summit of Ecuador's Cotopaxi volcano before a blinding snowstorm turned them back.

Still, despite half a dozen mountain climbs and innumerable whitewater rafting trips, Mr. Coors maintains, "I never have been what you might call an outdoor person. I just like it out there and I can handle it." It wasn't until he was 52 that he "decided it was about time to get with it" and he donned a backpack for the first time.

The experience has changed his life, says Stuart Dawson, 48, vice president of Sasaki Associates, Watertown, Mass., a large landscape architectural firm. He has gone on three expeditions, all within the last year. The executive management sailing expedition last October— "the most meaningful week I ever spent"—followed by a short refresher course made such an impact that he went off on another five-day sailing trip this July, also through Outward Bound's Hurricane Island school in Maine. Besides the usual rock climbing and rappelling, it also included swimming, running, and the "solo" when one is left alone for a full day and two nights on a small island, to subsist entirely off the land and water.

"I had problems with stress," Mr. Dawson explains. "I had become overweight and my blood pressure was at the borderline and needed medication." Result: he was becoming "cantankerous" at home and in the office. He credits the lessons learned on Outward Bound (along with his own willpower, of course) for turning his life around. He has revised his eating habits, now exercises regularly, and his weight and blood pressure have plunged. "It's been fantastic. My whole relationship with my family and the people in the office in less than a year has changed. What more can you ask?"

Sailing equalizes. An experienced sailor, Mr. Dawson feels that this is an ideal Outward Bound activity. "It's very forgiving but it takes all 12 people to sail," he says of the 30-ft open boat. A week aboard "helps you understand how to get along better in a group. In my office, I'm a partner and sort of always have my way. On the boat you're all equal and it makes a wonderful experience, especially for people who have been corporation presidents and so forth.

The island "solo" is most rewarding, he says. "You make your own tent and you forage; you cook your own food, if you can find it. They leave you with a gallon of water and a dozen matches, a couple of metal buckets, a book on foraging, a little fishing line and hook, and that's it. With the book, you learn to collect sea celery and goosetongue and rose hip, and so forth. You can fish, and I caught a pollack and ate it on a stick. And I steamed some mussels and periwinkle and ate like a king."

Although Outward Bound tends to discourage husbands and wives from going on the same expedition—"one of the two may be inhibited because that's the role he or she plays at home," Mr.

Small Firm's New Golf Ball Draws Hole-in-One Letters from All Over U.S.

Seller Guarantees Ball Will Cut Strokes—or Money Back

Perfect Balance Reduces Hooks, Slices

By MIKE HENSON

NORWALK, CT—A small company in Connecticut is selling what might be the most hook-free, slice-free ball in golf. Independent tests prove its perfect balance is light years ahead of the best balls on the market. Its center of gravity is 97.5% perfect, compared to 58% for Top Flight, 28% for Titleist and worse for Hogan and MaxFli. This huge advantage on balance makes the ball less likely to spin off course, and surely accounts for the best proof a company could ask for: hole-in-one letters from all over the U.S. As you can imagine, these men and women think the ball is the best thing that has happened since they began playing.

The ball also has up to 21% more rebound power than Titleist, Top Flight, MaxFli and Hogan. It comes off the floor like a jack rabbit!

The ball's name is Guidestar and although its sales are small it is drawing letters like this: "Shot my first hole-in-one the first time I used Guidestar on my home course. Great balls!".

There is even a letter from New Zealand where a minister scored a hole-in-one with the ball. In light of independent tests and a file full of hole-in-

In light of independent tests and a file full of hole-inone letters, the company guarantees Guidestar will cut a golfers score dramatically. If it doesn't they will take back the balls and refund their price promptly. They also guarantee Guidestar's patented construction makes it the most durable ball in the world, and to prove it we'll send a buyer *three new ones free* if he ever cuts one. All he has to do is return the damaged ball with 50° for postage.

Guidestar also has an option for golfers with less than perfect vision: Hi-VisionTM yellow. A yellow ball is far easier to spot on the fairway, in tall grass, rough and shallow water. As tennis players learned long ago, it is easier to track in the air and helps you hit an object more squarely by increasing eye/hand coordination. Golfers who have used yellow golf balls report a much faster game, fewer lost balls, even better shots.

If you want to save money on lost and damaged balls and (who knows) watch breathlessly on par 3's as Guidestar's perfect balance carries your tee shot toward the cup!—then try this new, patented ball. White or Hi-Vision[™] yellow you can't lose—a refund is guaranteed if you don't cut strokes.

To order Guidestar send your name and address to the National Golf Center (Dept. G-176), 18 Lois Street, Norwalk, CT 06851. Include \$19.95 (plus \$1.75 shipping) for one dozen; \$18 each for two dozen or more. Six dozen cost only \$99. No shipping on orders of two or more dozen. If you want Hi-Vision[™] yellow, be sure to say so, otherwise they will send you white.

To charge it give them your card's name, account number and expiration date. No P.O. Boxes, please; all shipments are UPS. CT and NY residents add applicable sales tax.

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Away from home, this 43 lb. generator can add the comforts of electrical power to your campsite in the woods or to your family outing by the seashore. It can run your hand power tools in the field or your RV re-

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There are NO belts or pulleys to slip or replace. NO fuses to burn out or replace, thanks to automatic reset that provides overload protection. These are important features when you are many miles away from the nearest stores!

Low noise, spark arrester muffler. USDA approved for use in national parks, so you can take it on camping trips. • Two 115V AC outlets and one 12V DC outlet.

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ERSON

Dawson explains—some couples do go forth together. Michael McTigue, 36, a trader on the Chicago Board of Trade, and his wife, Beverley, went on an Outward Bound bicycling tour through the Highlands of Scotland last summer. They were among a group of 23 persons organized through the Colorado school. In two weeks they cycled some 550 miles and experienced "a terrific trip, a wonderful way to explore, and a great way for me to get away from my business." Also, an ideal way to meet the Scottish locals along the route.

Their Outward Bound experiences frequently so impress corporate leaders that they encourage and arrange for their managers to take the program.

Outward Bound is open to anyone from age 14 up, and you need not be an outdoors person or an athlete. If you're interested, contact the national headquarters: Outward Bound Inc., 384 Field Point Rd., Greenwich, Conn. 06830 (phone toll-free 1-800-243-8520 or 1-203-661-0797); Or contact any of the five independent schools, all specializing in activities related to their location: Colorado Outward Bound School, 945 Pennsylvania St., Denver, Colo. 80203 (1-303-837-0880); Hurricane Island Outward Bound School, P. O. Box 429, Rockland, Maine 04841 (1-207-594-5548); Minnesota Outward Bound School, 308 Walker Ave. So., Wayzata, Minn. 55391 (1-612-473-5476); North Carolina Outward Bound School, P. O. Box 817, Morganton, N. C. 28655 (1-704-437-6112); and Pacific Crest Outward Bound School, 0110 S. W. Bancroft St., Portland, Oreg. 97201 (1-503-243-1993).

The organization now tailors "contract" courses for companies. These generally last four to five days and aren't as physically demanding as the standard courses that last 21 to 26 days and involve extensive backpacking, or the adult male courses that last ten days. Typical costs: \$950 for the standard program, \$600 for the adult male course, \$100 a day for a contract course.

A few executives recently have been quoted as doubting the value of Outward Bound as a corporate tool, but they are in the minority. Federal Express' Dr. Yamahiro, one of the earliest and most enthusiastic corporate boosters, admits that "there are different viewpoints as to the value of it," but he feels that "the payoff has been tremendous. You come back to your job with a much more rejuvenated outlook and perspective; that's where it translates into a benefit for the company."

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