

JUNE 1990 ■ SIX DOLLARS

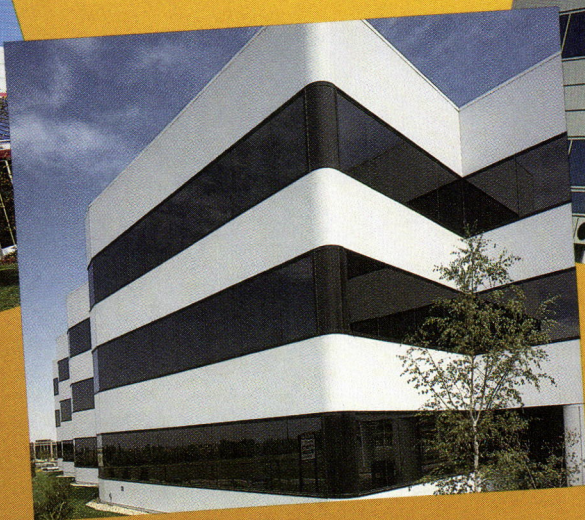
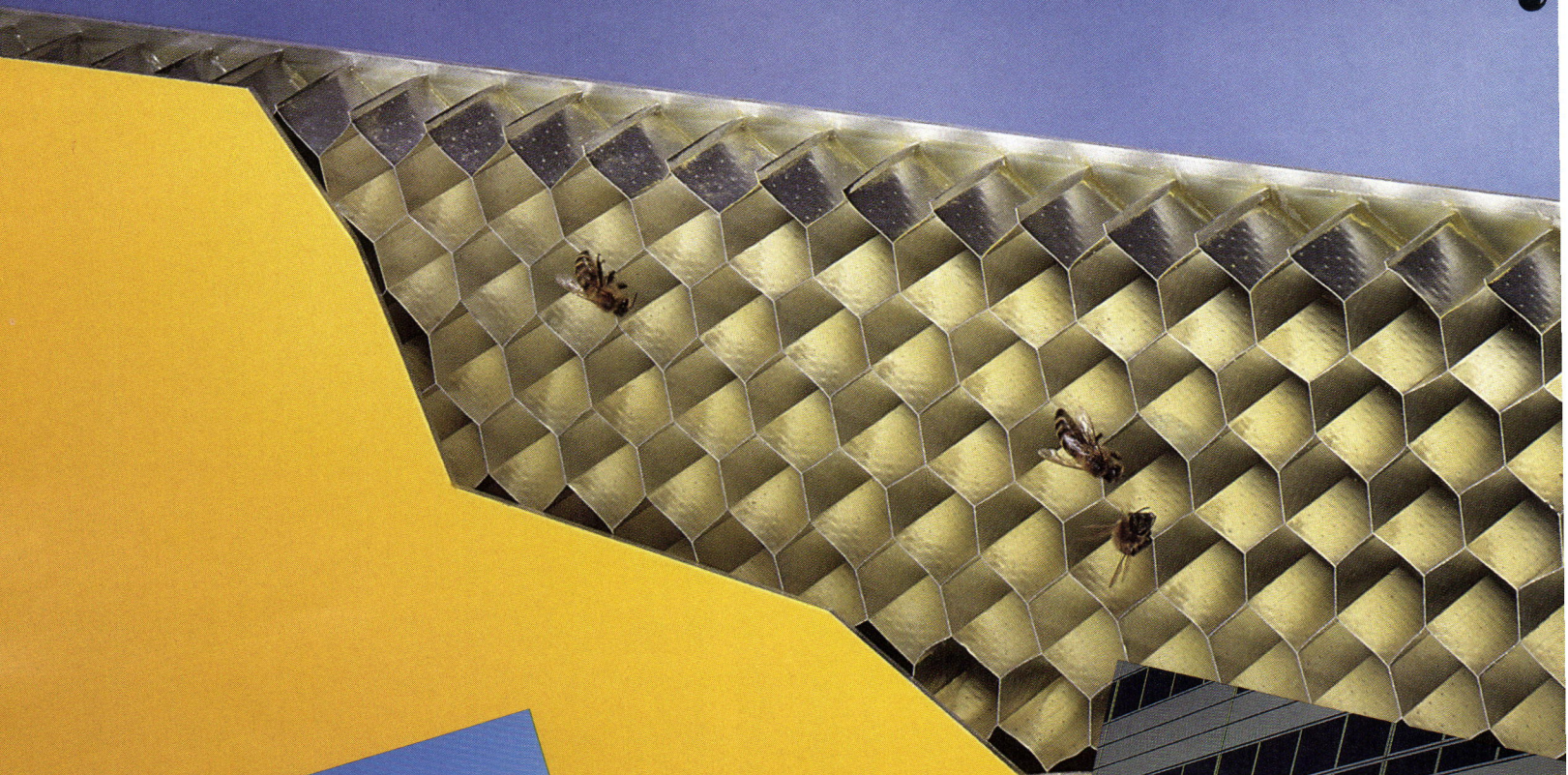
ARCHITECTURE

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from some very**



EDITOR'S PAGE

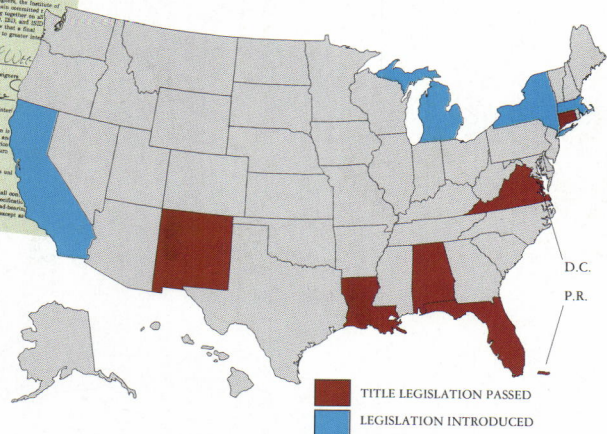
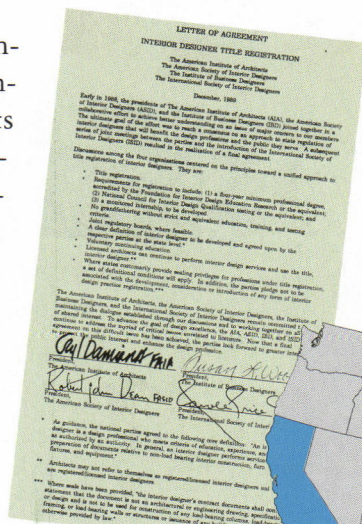
REACHING A CONSENSUS

LAST DECEMBER, THE AMERICAN INSTITUTE OF Architects, American Society of Interior Designers, Institute of Business Designers, and International Society of Interior Designers signed a letter of agreement on title registration of interior designers. The accord represents nearly two years of discussions between the organizations as to how states should regulate the interior design profession. In agreeing to title registration of interior designers, the four groups outlined a framework upon which a responsible course of legislative action should be pursued. The principles include: minimum requirements for registration; grandfathering according to strict education, training, and testing criteria; joint regulatory boards where feasible; voluntary continuing education; and a clear definition of the title "interior designer" to be developed and agreed upon by each state.

The accord stipulates that "an interior designer performs services including preparation of documents relative to non-load bearing interior construction, furnishings, fixtures, and equipment," a suggested definition for states that has sparked controversy among architects, who feel they provide the same services under the definition. According to the agreement, licensed architects can continue to perform interior design services and use the title interior designer, but may not refer to themselves as registered/ licensed interior designers unless they have met the criteria for that status as established by the interior design profession. Additionally, the AIA and the three interior design organizations pledge not to be associated with the development, consideration, or introduction of any form of interior design practice registration.

Six states, the District of Columbia, and Puerto Rico have already passed title registration (map below) and legislation is still pending in at least four other states. Only Virginia has passed a title registration act that fully meets the terms of the national accord. And despite the consensus between the AIA and the design organizations, heated debate continues in some states over the responsibilities of interior designers. Many interior designers oppose starting new and lengthy legislation procedures all over again in order to meet the terms of the December 1989 accord. As a legislative blueprint, however, the national agreement is firm in its mandate for title, not practice, registration. Local interior design organizations pushing for licensure clearly violate the accord and stand to lose legislative battles as architects continue to oppose provisions beyond title registration. Certainly, design professionals face far more critical issues, such as housing and environmental conservation, than registration acts. It's time architects and interior designers really reach a consensus and forge a meaningful alliance for the future. ■

—DEBORAH K. DIETSCH



Prior to the agreement on title registration, many states already passed or introduced legislative action (map above).



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LETTERS & EVENTS

Poor judgment

In reviewing the Honor Awards (March 1990), I was completely dismayed by the awards issued for residential architecture. The examples may be something, but in my opinion they certainly are not good architecture. To illustrate these specimens of residences immediately following the fine work of Fay Jones is almost sacrilegious.

My residence is one block away from the Observatory House. The residential character of the neighborhood was completely disregarded. As for the Schnabel House, it deserves an award for the best assemblage of "crate boxes," but surely cannot be judged an Honor Award for good architecture.

The jury should be strongly criticized for its demonstration of poor judgment.

*C. J. Paderewski, FAIA, OPR
San Diego, California*

Psychiatric disservice

I can't help but comment on the incongruity between the title of your cover story, "A Village of Healing," (March 1990) and the photographs of the cold, institutional-looking new facility for the Yale Psychiatric Institute. Chain link fencing and industrial materials may represent a current wave of sophisticated style-making, but how are they to be interpreted by the severely depressed and acutely confused adolescents who will be living there?

As an individual who has devoted my career to understand and help define the "therapeutic environment," I feel that your article does psychiatric architecture a disservice. The prestige of your journal, coupled with the reputations of Yale University and Frank Gehry, may provide sanction for an architectural solution which is contrary to the concepts and goals of the numerous mental health professionals with whom I've worked.

Instead of asking his psychiatrist friends "which of his projects might provide the starting point" for this project, I think Mr. Gehry should have asked: "What are the emotional and aesthetic needs of the patients?" In my opinion, the answers would have resulted in a warmer, more understandable, and less repressive resolution.

*Gary Graham, AIA
Graham/Meus Inc.
Boston, Massachusetts*

Kudos to decoders

The comprehensive article on New York City electrical codes, "Big Apple Barriers" (March 1990), provided much helpful information. Similar detailed assessments involving other local code constraints should be reviewed in future articles. Continued success to you and your contributors, Peter Barna and Justin Henderson, for covering those areas of most concern to architects.

*Martin Zelnik, AIA
Panero Zelnik Associates
New York, New York*

Plastic's future

"Plastic for the People" (March 1990) demonstrates again that General Electric is always at the forefront of research. However, the efficient component parts are for a self-contained system, which suggests they will not be compatible with products or materials currently in use.

The American public, typically eager to own the latest of anything, also cares about cost-competitiveness and availability. It is up to G.E. to see that their components become prototypes for the industry so they can be widely built and, therefore, widely used.

*David W. Zeunert, AIA
A&E Associates
Chicago, Illinois*

Private/public precedent

The article covering the Harvard colloquium on private/public partnership in the development of government buildings (April 1990) is most interesting to our firm. Because we have been involved in such a project, we take issue with the statement that "the first example of this new private-public initiative" will be the Federal judicial office building in Washington, D.C.

This is not the case. At least one major building has already been developed in this way: a 27-story, 800,000-square-foot federal office building for the General Services Administration under construction in Chicago. Stein & Company is developing the building on a 30-year, lease-to-ownership agreement, and Fujikawa Johnson and Associates is the architect. Clearly, ground has already been broken in this domain.

*Deborah Rashman
Fujikawa Johnson and Associates
Chicago, Illinois*

June 12-15: Neocon, at the Merchandise Mart in Chicago, Illinois. Contact: Mary C. Tasch, Communications Coordinator, at (312) 527-7552.

June 21-22: "Neotraditional Town Planning," offered by the Planners Training Service of the American Institute of Certified Planners, to be held in Orlando, Florida. The course will be repeated July 19-20 in San Francisco, and September 13-14 in Washington, DC. Contact: LaWanda Tucker, AICP, (312) 955-9100.

Through July 1: "Emilio Ambasz: Architecture, Exhibition, Industrial, and Graphic Design," at The Art Institute of Chicago. Contact: The Art Institute of Chicago, Michigan Avenue at Adams Street, Chicago, Illinois, 60603.

July 2: Deadline for entries for the U. S. Postal Service National Honor Awards. Sponsored by the U. S. Postal Service in cooperation with the Design Arts Program of the National Endowment for the Arts, the awards are intended to reflect outstanding achievement in the design, construction, renovation, or preservation of Postal Service facilities. Contact: National Honor Awards at (202) 268-3899.

Through July 14: "Spiritual Search in a New Land: 19th Century Churches of the Northwest," at the Oregon Historical Society. Barry Peril's photographs highlight buildings of worship in the Northwest. Contact: The Oregon Historical Society, (503) 222-1741.

July 31: Deadline to enter the 1991 Southern Home Awards program, which includes three new categories based on square footage, remodelings, preservation or restoration, and new residential developments. Contact: The Southern Home Awards, (800) 366-4712.

Through September 2: "New York Architecture: 1990 NYC/AIA Design Awards," at the National Academy of Design. Exhibited in collaboration with the New York Chapter of the AIA, the exhibition features the winners of its annual awards programs. Contact: The National Academy of Design, 1083 Fifth Avenue, New York, New York, 10128. (212) 369-4880.

NEWS

SOVIET ARCHITECTURE • COLUMBIA EXHIBITION • AIA COMMITTEE ACTIVITIES

Design Community Takes Environmental Action

RESPONDING TO GROWING PUBLIC CONCERN OVER THE environment, the AIA announced plans in April to publish an environmental resource guide for architects. The publication will

provide the latest scientific research on the environmental safety of various building products, grouped according to CSI divisions. The first phase of the ongoing project is scheduled to be published in November, coinciding with a conference on the environment now being planned by the AIA. The initial guide will start with CSI code nine, detailing information on paint finishes, flooring, carpet, ceilings, and related products. The AIA will not conduct any independent research, but will rely on information supplied by the Environmental Protection Agency, manufacturers, and other conservation organizations.

Explaining the decision to publish a resource guide, Gregg Ward, AIA group vice president, explains: "We wanted to create a tool for architects that would enable them to have the most current environmental data at their fingertips. We have no intention of getting into the labeling business, but if there's a viable substitute for cherrywood, we want architects to know about it."

One design leader already at the forefront of environmental conservation is Herman Miller, Inc. The furniture manufacturer issued a statement in March announcing that woods obtained from endangered tropical rain forests are being eliminated from its standard product line. One of the first designs to be affected by this policy will be the Eames lounge chair and ottoman, clad in

rosewood obtained from South American sources. When the company's existing supply of rosewood is depleted, the chair and ottoman will be available only in alternative veneers. Herman Miller's design and development group has identified the sources of woods used by the company and its subsidiaries since 1988. To reach its goal, Herman Miller is working with environmental and industry organizations, and members of Congress shaping legislation proposed to regulate imported timber.

One such resolution now pending in eleven different subcommittees in Congress is HR 1078 "Global Warming Prevention Act of 1989," introduced last February by Representative Claudine Schneider (R-R.I.). The bill calls for evaluation of world forest reserves and recommendations for forest planning, and it would offer financial assistance from the U.S. to developing countries showing progress in meeting reforestation plans. Under the resolution, imports labeled with country of origin and wood types would be required within one year of approved legislation; within two years a five-percent tax would be imposed on the value of tropical wood products imported into the U.S.; and after four years, countries not meeting reforestation goals outlined in the resolution would be prohibited from importing wood products into the U.S.

—AMY GRAY LIGHT

AIA BRIEFS

Two architects recently named to key positions are encouraging the AIA to be more responsive to the practical needs of professionals around the country. **Richard W. Hobbs, FAIA**, appointed group vice president for professional excellence, is currently expanding the AIA's offerings of advanced workshops on design, practice, management, marketing, and computer applications. Under his direction, the AIA has pinpointed nearly 50 firms with strong professional programs already in place, with the intention of using these firms as a means of delivering the new AIA services, in addition to committees and local chapters. Hobbs was formerly principal of the Seattle firm Hobbs Architecture, and is a former AIA vice president and board member.

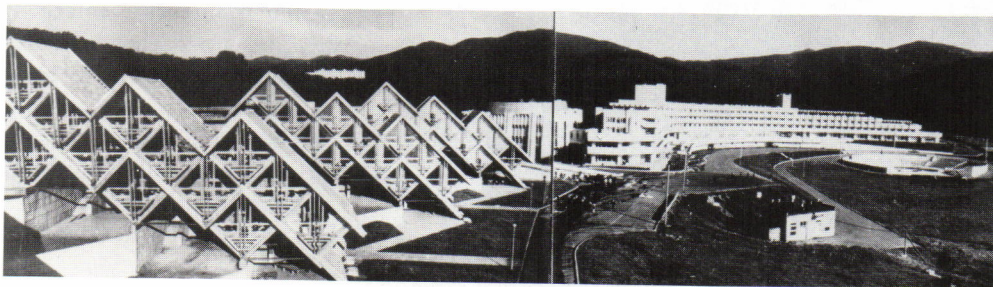
The other new architect at AIA is **Virgil R. Carter, FAIA**, group vice president for membership. Formerly head of Oklahoma State University's school of architecture since 1986, Carter headed his own firm in Palo Alto, California, and served as California Council/AIA President.

Harry G. Robinson III, AIA, received this year's AIA Whitney M. Young Jr. Citation. The honor is bestowed upon an architect or architecturally-oriented organization that has made a significant contribution toward furthering contemporary social issues.

Kansas architect **Henry W. Schirmer, FAIA**, was named the 1990 recipient of the Edward C. Kemper Award, the AIA's highest service award.

The Kansas City/AIA Chapter led an effort on Earth Day 1990 to plant a 1,000-square-foot forest at the Kansas City International Airport, symbolizing the city as the "heart" of America.

Recent USC design graduates **Douglas Sung** and **Anthony Cheung** won the LA/AIA Chapter's 1990 Real Problems competition to develop a design plan for reuse of the fire-ravaged Pan Pacific Auditorium.



"The Socially Responsible Environment USA/USSR, 1980-1990," comparing recent Soviet and American approaches to the design of housing, workplaces, and public spaces, opened in New York City prior to touring major cities in both countries (see page 32).

DETAILS

Dr. Richard L. Schaffer was appointed **Chairman of the New York City Planning Commission** and **Director of the Department of City Planning** by Mayor **David N. Dinkins** in April. Prior to the appointment, Schaffer was **Dean and Professor of Urban Policy at the Graduate School of Management and Urban Policy at the New School for Social Research** in New York.

Los Angeles-based Johnson Fain and Pereira Associates was selected as architect for the **23.5-acre Ambassador Hotel site** in the mid-Wilshire district of the city. The mixed-use project is being developed by **Trump Wilshire Associates**, and reportedly is the largest site owned by a single entity on the West Coast.

Richard Meier has been retained by **Fox Inc.** to design and expand the company's studio facilities in Los Angeles. The proposed **\$200-million project** is currently in the planning stage.

CHCG Architects of Los Angeles won the design competition for the **\$20-million, west side Culver City city hall**. The new building, described by jurors as sympathetic to local **Mission-style architecture**, will preserve the facade of the old city hall as a freestanding, three-story gateway.

Ricardo Bofill has been selected as architect for the **Prime Group's 1.1 million-square-foot office building** underway in **Chicago's North Loop redevelopment project**. Associate architect is **DeStafano & Goettsch Ltd.** of Chicago.

Richard G. Stein, FAIA, an architect and author whose ideas on energy conservation influenced the design of buildings for two decades, died in May. Stein, 73 years old, was chairman of the **Croton Planning Board** for two years, and president of the **New York City chapter/AIA** in 1975 and 1976.

The **Maryland Institute College of Art** has established the **Center for Architecture and Interior Design**, a non-degree, non-accredited program offered through the College's **Office of Continuing Studies** that will serve as a professional development resource for architecture and design communities.

Americans and Soviets Collaborate on Exhibition

TRYING TO DEFINE "SOCIALY RESPONSIBLE" architecture is not easy, as "The Socially Responsible Environment USA/USSR, 1980-1990," a photographic exhibition of American and Soviet architectural projects that premiered in Manhattan last month, made clear. No matter how noble its intentions, the exhibit inadvertently underscored just how slippery defining "socially responsible" architecture can be.

Organized jointly by representatives from the Architects Designers Planners for Social Responsibility (ADPSR) and the USSR Union of Architects, the exhibit will travel first within the United States and then to cities in the Soviet Union, showcasing 60 projects (30 from each country) drawn equally from three typological categories: housing, institutions and public spaces, and workplaces.

The range of work mirrored the myriad ways in which "socially responsible" architecture can be interpreted. The Soviets tended to submit monumental public works: hydroelectrical stadiums and collective sports arenas. The Americans, on the other hand, tended to submit individual buildings—museums, schools, or low-rise housing, most privately financed. In this exhibit, the High Museum of Art by Richard Meier rubbed shoulders with the monolithic Modern "Young Pioneer Camp" in Vladivostok, Siberia, by architects I. Malkov and G. Gusarov. The variety of projects on view

made clear that the concept of "socially responsible" architecture embraces many different kinds of work.

Part of the reason for the vast panoply lies in the show's elaborate selection process. The 100 American entries and 100 Soviet

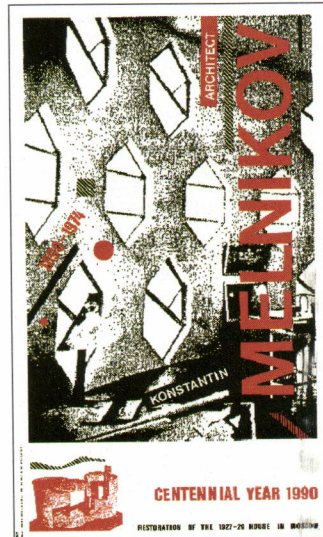
Saving a Constructivist Landmark

An international fund, initiated jointly by American and Soviet architects, is seeking contributions to help restore the house of the Russian Constructivist architect Konstantin

Melnikov. A landmark of Modern architecture, the Moscow house was built between 1927-1929 and presently is in need of extensive repairs.

Individuals contributing \$25 or more will receive the poster shown at right. For more information, contact the

Meknikov House Fund, School of Architecture, University of Tennessee, 1715 Volunteer Boulevard, Knoxville, TN, 37996.



entries were pre-selected by respective curatorial committees and presented to a joint American and Soviet jury in Moscow. In the final selection process, jurors chose projects that spoke to their own country's ambitions. For example, the Soviets favored the inclusion of a housing project in San Francisco, not because of the merits of its "socially responsible" design, but because they felt the Soviet citizenry, accustomed to seeing only high-rise housing in their cities, should be exposed to low-rise urban housing.

Given the scope of the show's ambition, it's not surprising that no single strategy nor coherent definition of socially responsible architecture emerged.

What did surface, however, was evidence of a cross-cultural dialogue in process—a praiseworthy step that, in itself, signals a socially conscious approach in the making.

—VICTORIA GEIBEL

Soviet work included an administrative building (left) by G. Chakhava and A. Dzalaganian in Tbilisi, Georgia.



Columbia University Salutes Paul Nelson

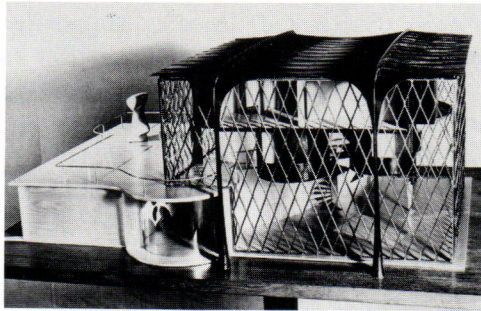
FOR THOSE LOOKING FOR A BAROMETER by which to measure the current climate at Columbia University's graduate school of architecture, a good place to start is the new Arthur Ross Gallery in the school's recently-renovated Buell Hall. From April 4th until May 11th, the hall played host to "The Filter of Reason," an inaugural exhibition dedicated to the work of Paul Nelson, an American architect and expatriate who died in 1979 at the age of 84. Nelson lived in Paris during the heady 1920s and '30s, befriended Buckminster Fuller, Frederick Kiesler, and Le Corbusier, and developed a practice, until now largely overlooked, specializing in technologically-inspired, functionally-driven designs of hospitals, exhibition halls, and the occasional Hollywood stage set.

The exhibition, curated by Terence Riley, Joseph Abram, and Kenneth Frampton, does much to resuscitate the reputation of a man who designed such prescient, provocative structures as the *Maison Suspendu*, a theoretical residential design of 1936-38. But the show's importance does not rest solely in a reassessment of Nelson's work. It also succeeds in rehabilitating functionalism for which Nelson proves an able advocate. Avowedly supporting program over composition, Nelson argued for an architecture that would resist codification, and would thrive on technology. "Nelson's work was very concerned with invention rather than convention," explains Riley, a practicing architect with the Manhattan firm of Keenen/Riley. "He believed that Modernism should not be reduced to a formal canon of compositional rules."

Nelson's legacy was not left to the show alone; a two-day symposium sponsored by Columbia not only evaluated the man and his work, but also enlisted him as a springboard to initiate discussion of topics under debate in contemporary architectural history and theory.

Divided into a neat two-day split between history and theory, the symposium succeeded in tackling a cross-section of theoretical issues. During the first day's session, "Inhabiting the Machine" moderated by Kenneth Frampton, lecturers delivered straightforward recitations of Nelson's varied accomplishments. Among the speakers were Los Angeles architect Christian Hubert, who compared the architect's work to that of Frederick Kiesler, and film historian/curator

Donald Albrecht, who analyzed Nelson's streamlined stage sets in the context of Hollywood's brief infatuation with Modernism. On the second day, during "The Caged Body," a session moderated by Jeffrey Kipnis, an architect who teaches at Ohio State University, talk of Nelson was quickly sub-



The functional elements of the *Maison Suspendu* (1936-38) by Paul Nelson (left) are concentrated in a central core suspended from a frame that is encased within a glass and metal cage (above).

sumed by various polemics, all loosely tied together by a common sympathy for Nelson's interest in the psychological and physiological links between people and the architecture they inhabit. Among the speakers on the second day were psychoanalyst Felix Guattari, who read a paper on the relationship between the human body and architecture; architect Robin Evans, who discussed how society polices itself, using prison architecture as his platform; and Jennifer Bloomer, a teacher at the University of Florida, who directed attention to architecture's political and social implications through her dissection of family structures.

Such dialogue has been a trademark of Columbia's architecture school since Bernard Tschumi became dean two years ago. Acutely aware of the connections between building and image, architecture and its representation, Tschumi has launched an impressive campaign to recast Columbia as a forum for impassioned debate; a center for New York's architectural community capable of attracting international attention. And a recent flurry of school-sponsored publications, symposiums, and lecture series points to his success. As the focus of belated attention, Nelson is an unwitting participant to this process, another architect enlisted in Columbia's functionalist cause.

—VICTORIA GEIBEL

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INTO THE PRESENT

Designers Examine Savannah's Streets and Squares

THE APRIL CONFERENCE HELD BY THE AIA COMMITTEE ON Design in Savannah on "Streets and Squares" could have been renamed "Grids and Curves" or "Urbanism and Suburbanism." That's the direction a lively panel discussion took from Miami-based architect Andres Duany, AIA; Atlanta landscape architect Douglas C. Allen; London-based Classicist Demetri Porphyrios; and San Francisco landscape architect Barbara Stauffacher Solomon.

"Architects must open up to understand what the public wants—their traditions and cultural values—in order to regain prestige and recapture power [from professionals in other disciplines] so we won't waste our professional lives," asserted Duany in his provocative presentation. He suggested that architects can help correct the "ecological ills of society" by creating affordable housing and traditional neighborhoods in suburbia, where the power base is now located, rather than fix up inner-city neighborhoods. Responding to the apparent decline of downtown Savannah, Allen maintained that "until the U.S. solves the problems of racism and education, our downtowns will continue to die." The reason most downtowns are dead has nothing to do with physical layout, observed Duany, but rather with administration and marketing. "Main streets must be administered like shopping centers," he maintained.

In his keynote address on lessons learned from the traditional city, Porphyrios observed that architects have learned from their

mistakes "without realizing anything for our future....For architects to fashion their own criteria for cities is as absurd as musicians making their own instruments and then playing them." He believes that the principles of traditional urbanism—urban blocks, civic buildings, and streets and squares—provide a framework to determine the nature of buildings and cities today. The relevance of measure and grid in the traditional city was underscored by Allen in his presentation on the development of Savannah's streets and squares. He pointed out that James Oglethorpe's 1733 plan for Georgia's oldest city—originally conceived as four wards and squares—has endured because of its flexibility.

In California, the grid has turned to gridlock...and "park" has a new meaning—i.e., garage, said Solomon in her poetic Earth Day slide presentation on "green architecture." She identified three ways of looking at the landscape—agrarian, picturesque, and formal. During the conference, the AIA presented a presidential citation to the city of Savannah's park and tree department for innovative projects to improve its historic squares and trees. More than 80 architects converged on the city for the three-day meeting led by committee chairman Harold Roth, FAIA, New Haven, Connecticut.

—PETE MCCALL

Pete McCall is editor of AIA Memo.



Baron Von Riechoven's bank to the right turned out to be the long way around...

Interiors Committee Update

SINCE DEVELOPING THE INTERIOR DESIGNER TITLE registration accord, the AIA Interiors Committee, now numbering roughly 400 members, looks forward to more outreach activities in the 1990s. Discussing the recent accord between the AIA and interior design organizations over the issue of title registration, Carl H. Lewis, AIA, current chairman of the interiors committee, feels the agreement "sets the tone for the decade, providing a framework upon which to move forward. This is a tremendous first step." Lewis said the agreement, along with the Vision 2000 plan implemented by the AIA two years ago, sets the stage for participation by other interiors-oriented organizations, such as American Society of Interior Designers (ASID) and the Institute of Business Designers (IBD), within the committee.

Currently, the committee is organizing activities such as interior design charrettes to reach out to communities around the country. This year, a design charrette was held from March 22-24 in New Orleans to present design solutions for decaying historic structures bordering the French Quarter of the city. Next year, a similar design

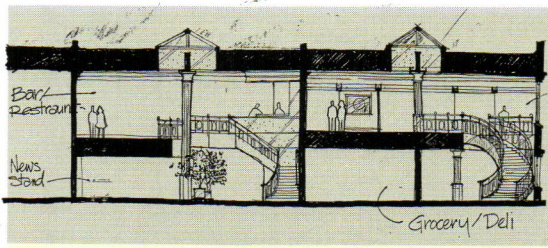
charrette in Miami will explore historic preservation and examine how Spanish-speaking cultures are affecting the rebirth of the city.

Other events planned for this year are a conference in Aspen from July 20-21 on interior design theory, focused on unbuilt works, and a symposium to be held in London from October 3-8. Lewis said the London conference will focus on American firms that practice outside the U.S. or have foreign clients in the U.S., but the committee also hopes to attract an international group of attendees.

Vice chairman William Sansone, AIA, slated to head the committee in 1991, maintains: "In the future, the committee will explore more political, business, and practice issues." Some of the proposed activities for 1991 will examine how recent

mergers and acquisitions within the furniture industry may affect design professionals in specifying products, since such mergers may limit competition within the industry. Plans also are underway to discuss such environmentally and socially conscious issues as sick building syndrome and incorporating health and child-care facilities within office buildings.

—A.G.L.



The New Orleans design charrette in March studied the rehabilitation of historic buildings (above) in the city's French Quarter.

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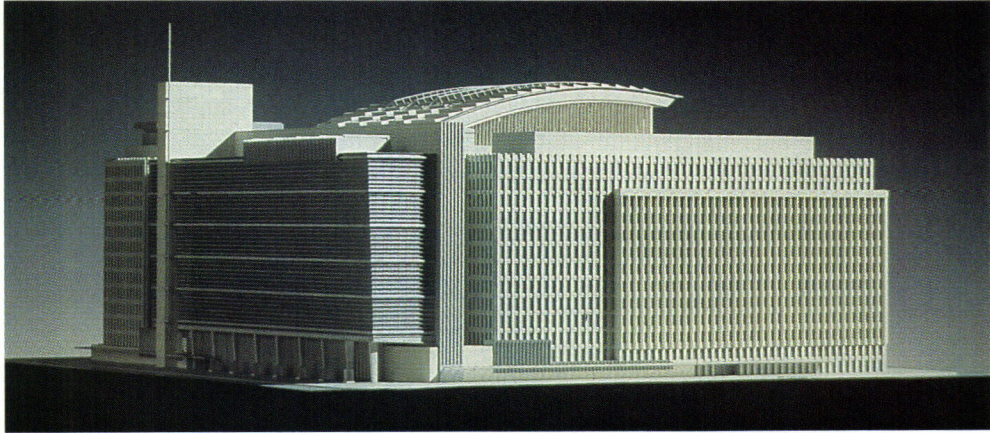
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ON THE BOARDS



Kohn Pedersen Fox Associates of New York City won an international competition to design the World Bank's main complex of buildings in Washington, D.C. Kohn Pedersen Fox Conway will provide interior design services. The project will replace four of the six buildings that comprise the complex on Pennsylvania Avenue, and the other structures will be retrofitted and incorporated into the new design. The new complex will provide more staff offices and space for technical and communications equipment, and will total over 2 million square feet. Construction is scheduled to begin late this summer.

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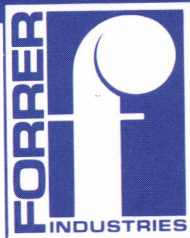


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JOSH MCCLURE

New York City's Grand Central Terminal will undergo a major restoration and renovation by the New York firm Beyer Blinder Belle upon approval by the Metropolitan Transit Authority Board. The \$400-million, one-million-square-foot project is expected to take from five to ten years to complete, including restoration of waiting rooms (above) and passageways (below). The building's commercial potential will be developed while preserving its original Beaux-Arts splendor.



JOSH MCCLURE

BOOKS

PAVILION LIVING

Hugh Newell Jacobsen, Architect

Edited by Massimo Vignelli; introduction by Vincent Scully. (American Institute of Architects Press, \$50.)

HUGH NEWELL JACOBSEN, ARCHITECT, the first monograph by the AIA Press, is a

polite book about very polite architecture. We are led to believe that this will be a comprehensive review of Mr. Jacobsen's substantial and immaculately executed body of work presented within the context of his 30-year-

long relationship with the photographer, Robert Lautman. Indeed, having read the lead-in copy on the dust jacket, I settled in with eager anticipation of learning more about this architect, whom I had greatly admired since my own first introduction to the real world of architecture some twenty years ago. I also looked forward to the added dimension of the architect's working dynamic with his colleague, the equally esteemed Mr. Lautman. If and when you should decide to spend an afternoon browsing through this volume, let me spare you similar anticipation. While you will see many, if not all, of Jacobsen's projects in one form or another, you will complete your tour of *Hugh Newell Jacobsen, Architect* without knowing one bloody thing more about the man, his practice, or his working relationship with Lautman than you probably have already assimilated if you have followed his work through professional and trade journals over the years.

If the intent of the AIA Press was to produce an acceptably attractive catalog of Jacobsen's work using a selection of Lautman's photographs wrapped in the clothing of the predictable and comfortable Modernist graphics of Massimo Vignelli, then let us all stand and applaud their success. For, indeed, a handsome catalog this is. There are far

more than enough chronologically arranged and carefully cropped examples of Lautman's beautiful photographs to make us want to visit a complete exhibit of Jacobsen's work and design process so that we might learn more about the man and his architecture.

The foreword by Vignelli and the introduction by Vincent Scully include tantalizing tidbits of information about Jacobsen's education, influences, and accomplishments. We learn that Jacobsen studied under and was greatly influenced by Louis Kahn, and that his first employer after graduation from Yale was Philip Johnson. Scully sees an overriding "tone" of Philip Johnson in all of Jacobsen's work. The influences of Kahn and Johnson, according to Scully, are colored

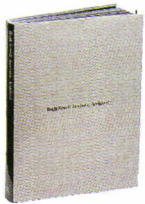
the most influential of his fellow professionals over the decades, absorbing their influence and reflecting them in an abstracted, clean, International Style of his own, exhibiting a "reticent economy of detail" in each of his buildings.

With a few notable exceptions, such as "A Brick-Pavilioned House" in Washington, D.C., the Hotel Tallyrand in Paris, Voorhees House on Nantucket Island, and more recent projects such as Kahn House in Ohio and Bryan House in Maryland, Jacobsen's work reflects the restrained, fashionably correct and, to cite the text, "polite" Modernist architecture of the mid-20th century. The majority of Jacobsen's projects are designed, detailed, and executed with a restrained correctness that, when viewed within the context of the equally restrained presentation format of this monograph, screens us from the exuberance, passion, and flourish of creating these buildings. Likewise, the book spares us any of the joy of seeing the architect's sketches, conceptual scribbles, study models, or any other examples of less than neatly packaged images. The plans that accompany the photographs included in this volume are frequently of poor quality. There are no orienting graphics, such as north arrows, and either the drawings themselves or the printing is so poor that one frequently cannot locate the entrances to the buildings or understand the usage of certain spaces without some study. In

many instances, plans of floors other than the entrance level of the projects are not included, leaving the whole of the buildings to our imagination. The photographs are certainly technically sound and well composed, but the rigidity of their presentation within the graphic format of the book is such that one feels even more removed from the reality of their subjects than is commonly associated with architectural photography of this sort.

The book has no guts. I do not find it to

Continued on page 46



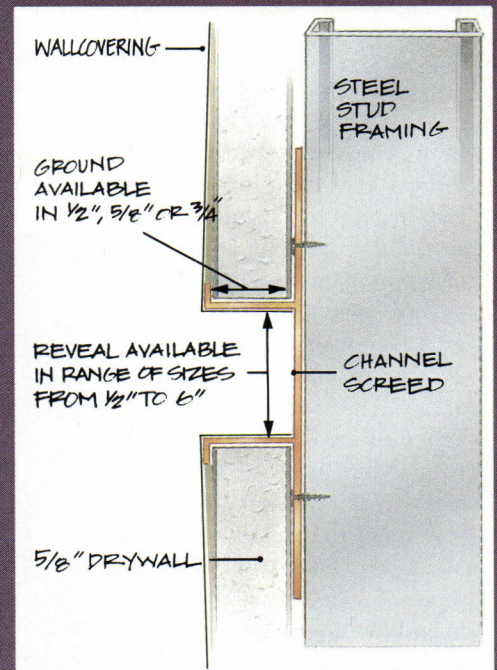
Relying on Robert Lautman's photography of such projects as the University of Michigan Alumni Center (above), the Jacobsen monograph avoids substantive discussions on the architect's career.

from time to time by other architectural contemporaries of Jacobsen over the course of his career. Responses to Le Corbusier, James Stirling, Paul Rudolph, Robert Venturi, Aldo Rossi, and Leon Krier are referenced, among others. Jacobsen's interest in historic preservation and contextualism within an abstracted vernacular are duly noted. Scully refers to Jacobsen as a "highly successful architect" and a "very fashionable one." He paints Jacobsen as an architect whose projects have played off the designs of

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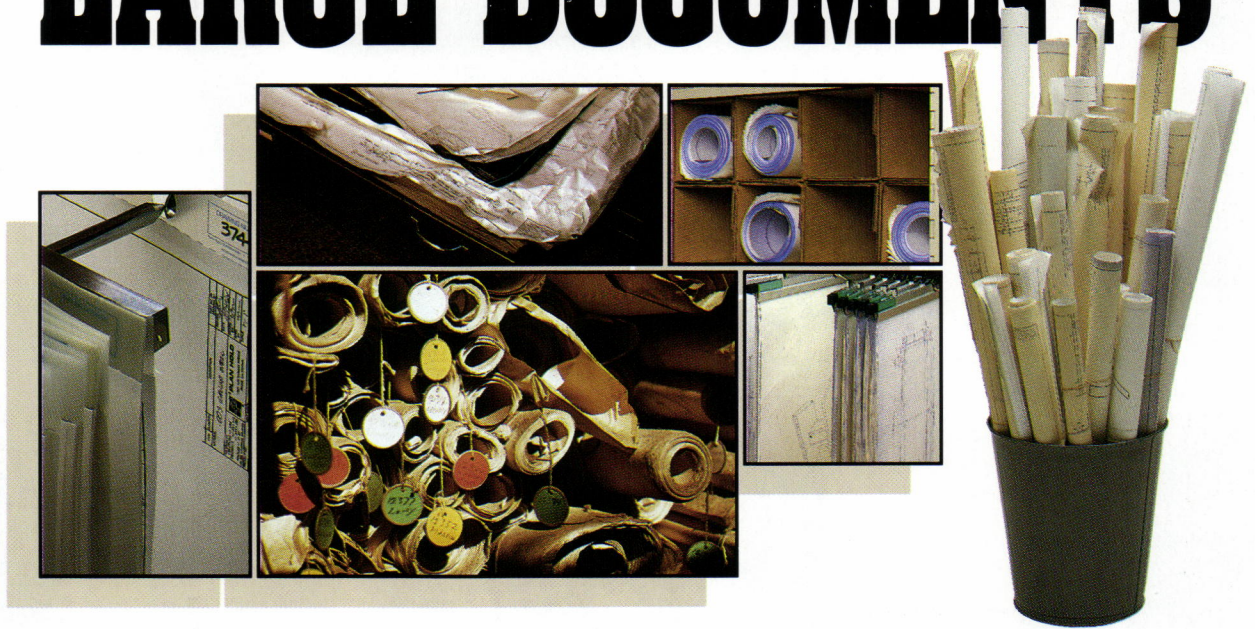


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Books from page 43

inspire the excitement that I would have expected from Jacobsen's work. It is as if the manuscript has been reduced in detail and content to the point that its restraint crosses into boredom.

Jacobsen, however, is undoubtedly an architect of substance and accomplishment justifying great respect. The numbers of clients who have retained him as their architect and chosen to live within his creations speak highly of his position within the profession. His architecture is very clearly and immediately recognizable as his own, regardless of his influences. And while I would not presume to judge Jacobsen's place in history, surveying his work brings some issues sharply into focus.

The very fact that there are many variations in three-dimensional form in Jacobsen's houses confounds the equal reality that almost all of his residential structures are variations of placing a collage of pavilions on a podium. (An alternate title for the book could have been *Pavilion Living*.) Recurring elements, such as built-in book cases, sliding glass doors, and circular staircases are common to most of Jacobsen's houses. The absence of visual richness in the detailing of

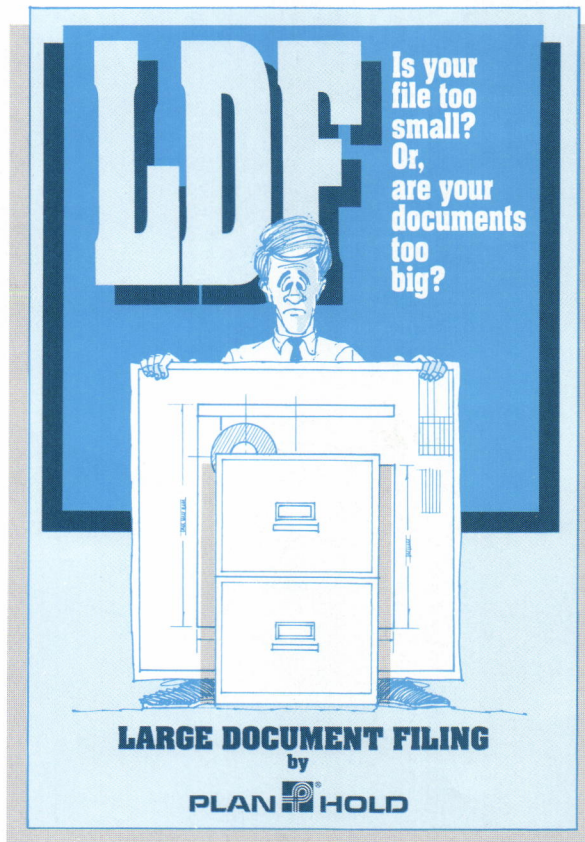
these buildings is exactly as one would have had them designed within the context of Modernist architecture, but I find myself wondering how will these sparse spaces fare over the long run? I was surprised at my own reaction to their austerity. The combination of minimalist detailing, although wonderfully executed, with the predominantly commercial character of finishes and furnishings common to these structures, leaves me with a sense of immaculately conceived stage sets that are frequently pleasing to the eye, welcoming to the camera, but less than hospitable machines for living. I was amused by references to how several of the houses took advantage of their rapidly sloping sites through the introduction of podiums upon which they rest. I felt perplexed by the logic of entering a basement space in "Three Linked Pavilions," in Washington, D.C., either from outside the house and below its deck (podium) or through a counterweighted trap door located in the living room floor! Ah, but these are obviously not issues of substance when considered against the big picture of Jacobsen's work. After all, his clients must have agreed to these flights of fancy.

Examples of Jacobsen's forays into historic

adaptation and restoration such as the Renwick Gallery in Washington, D.C., and the Hotel Tallyrand in Paris provide us with further insight into the architect's interests and commissions. However, we are not given enough information to really understand the extent of his work on these structures. The University of Michigan alumni center and the Gettysburg College library stand in stark contrast to the American College of Greece gymnasium and library and the library for the American University in Cairo as examples of institutional architecture by Jacobsen. The heavy, brooding character of the two overseas projects versus the more playful and, we are told, contextual, domestic examples provide opportunities for comparative discussion and philosophical examination which do not materialize within the text.

Hugh Newell Jacobsen, *Architect* traces 30 years of projects by one of our most successful architects. We see his work grow in sophistication and diversity over the course of his career. More recent projects such as Bryan House in Maryland assume a greater richness and complexity of plan leading us to look forward to the next decade of the architect's work. The same may be said for several recent projects included in drawing form,

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since they were yet to be completed at the time of publication.

This monograph catalogs the architect's pursuit of some basic precepts about design through many different clients, geographic locations, and a variety of building types. While the AIA Press is to be commended for publishing this volume dealing with Jacobsen's projects, let us hope that yet another work will be published that will reveal more about the man, his practice, process, and philosophy. We deserve it and so does he.

—SANFORD M. NELSON

Problem Buildings: Building-Associated Illness and the Sick Building Syndrome

In *Occupational Medicine: State of the Art Reviews* (Volume 4, Number 4)

Edited by James E. Cone, MD, MPH and Michael J. Hodgson, MD, MPH (Hanley & Belfus, Inc., Philadelphia, Pennsylvania, \$32.)

ARCHITECTS HAVE ALWAYS NEEDED TO be jacks-of-all-trades, incorporating a knowledge of art, psychology, history, law, and many other fields into the design of buildings. Now, it seems, they also need to dabble in medicine to confront the growing

problem known as the "sick-building syndrome" (SBS). Some experts estimate that 20 to 30 percent of U.S. office buildings may be affected, with a potentially devastating effect on the health and productivity of workers.

In *Problem Buildings*, 18 doctors, public health researchers, architects, and engineers collaborate in showing how designers can shoulder a greater responsibility for curing sick buildings. Though published in the medical journal *Occupational Medicine*, this issue is a readable and informative introduction for architects to building-associated medical problems. It contains a wealth of information about how to diagnose and cure a sick building and how to design a healthy one. The editors have narrowed the complex topic to concentrate on indoor air quality in office buildings. Therefore, they do not consider the long-term effects of radon, or the negative health effects of video display terminals, lighting, and other hazardous industrial environments.

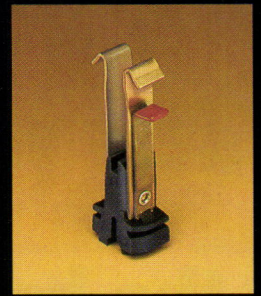
The authors debunk a few myths. Originally known as the "tight building syndrome," SBS was once thought to be "caused" by conservation measures. Modern researchers advocate vigorous ventilation

rates but are careful not to imply that a return to energy-wasteful, leaky buildings can solve this health problem. They are also very careful not to "blame the victim" by attributing occupant complaints to mass hysteria. Because clerical workers suffer more than managers do, it was once common for managers to ignore building-related health complaints, believing that workers who feel stressed and unable to control their social and physical environments are more susceptible to health problems.

The two chapters written by architects are particularly useful because they discuss design considerations and explain the inevitable tradeoffs that conscientious designers must face. Architects Vivian Loftness and Volker Hartkop, for example, suggest a "total building performance" approach to the problem. They discuss the relationships between indoor air quality and spatial, thermal, visual, and acoustic qualities. In addition to the better-known culprits of faulty HVAC systems and allergenic finish materials, these authors alert architects to the potential dangers in envelope and structural systems. They accuse architects of having abdicated responsibility for indoor air quality

Continued on page 139

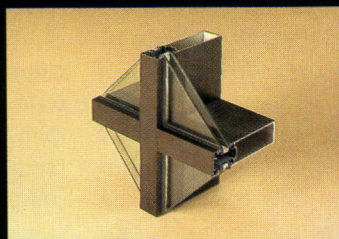
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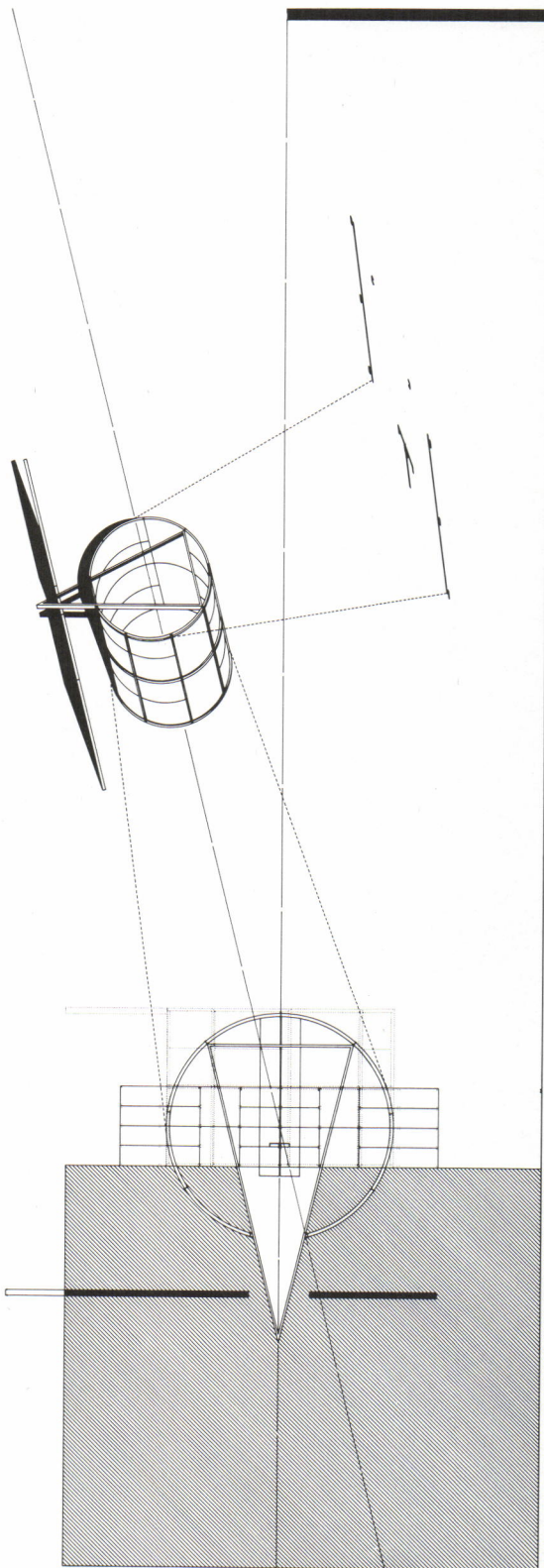
ABOUT THIS ISSUE

RISKY BUSINESS

SMALLER IN SCALE, LESS COSTLY, AND LESS PERMANENT than buildings, interiors frequently provide young architects with their first design opportunities and give seasoned practitioners a chance to take risks. As a result, they serve as a compass for new directions in architecture.

The offices, apartments, school, gallery, and indoor memorials in this issue are no exception. Combining first steps by young designers with experimental projects by older architects, our design section points to new directions in the use of materials and details. The studio of San Francisco architect Jim Jennings, which begins our coverage (left and below), transforms mundane materials into an elegant essay on abstraction. Similarly, our cover story on Smith-Miller + Hawkinson examines how basic elements, such as doors and ceilings, are detailed to convey a sense of movement. The projects in this issue also take risks in grappling with the energy of the cities they inhabit. While Hariri & Hariri's coolly precise apartment symbolically distills Manhattan's freneticism, the loft owned and designed by Andrea Landsman and Malcolm Holzman literally incorporates city artifacts. Other interiors featured in this issue imaginatively respond to the limitations of constricted, urban sites. Hartman-Cox's Neoclassical gallery for Dumbarton Oaks, for example, seamlessly blends into a former mansion in Washington, D.C. Moore Ruble Yudell's arts center for a private school, wedged between a busy street and a parking lot, creates a new student hangout through means of an interior plaza and street.

In our technology & practice section, we address other issues related to interior design: a detailed look at the design and construction of a pair of staircases, and a discussion of indoor air pollution. Architects may continue to take risks in designing interiors, but as the public becomes more concerned with environmental safety, practitioners will be increasingly responsible for ensuring that their risks are purely esthetic. ■



Jim Jennings' studio in a San Francisco warehouse (above) exemplifies the issue's attention to details.

Jim Jennings Studio
San Francisco, California
Jim Jennings Arkhitekture

FASCINATED WITH THE USE OF COMMON MATERIALS IN UNCOMMON ways, architect Jim Jennings combined glass, aluminum, and off-the-shelf pieces of structural steel to construct an elegant studio space within a masonry warehouse in San Francisco's scruffy South-of-Market district. The precision with which materials are joined and expressed reflects Jennings' early training as an engineer—a study he abandoned for architecture.

Although he sees architecture as a rational exploration of abstract ideas, Jennings tempers reason with intuition. "I don't think everything has to be relentlessly designed," he says. "If the fundamental concept is done right, serendipitous things occur that enhance design quality." The entrance to Jennings' studio, for example, is a study in how pragmatic design can be elevated into the realm of art. To secure the studio at night, Jennings employed a galvanized, 1/8-inch steel plate shutter that slides into place across an entry door of 1/4-inch tempered glass, sandblasted for privacy. Pinholes, originally drilled into the shutter to allow dots of light to escape from the building at night, created an unexpected effect. When the shutters are closed during the day, they operate like a *camera obscura*. Natural light projects through the pinholes onto the sandblasted glass, which acts as a screen to reflect inverted images of the neighborhood.

The focal point of the architect's office is a circular conference room loosely based on a "kiva," a cylindrical room built by the Anasazi Indians as a social club and spiritual center. This aluminum kiva serves a similar function as a gathering place within the studio. The compact, 12-foot diameter room is constructed from standard



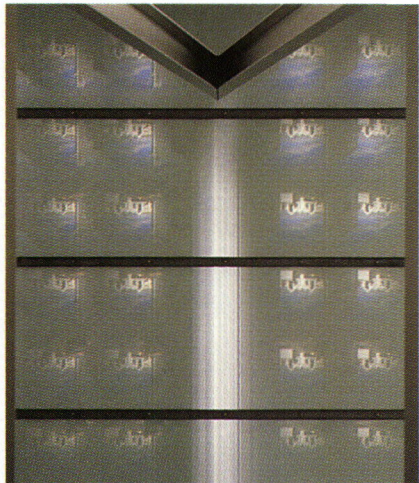
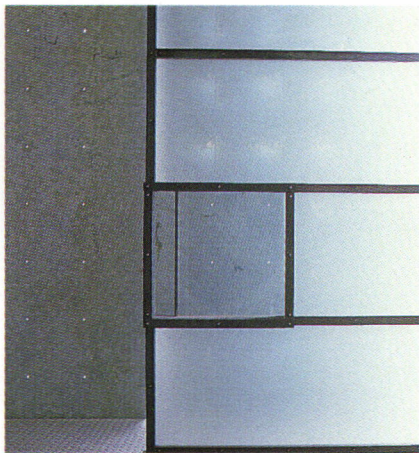
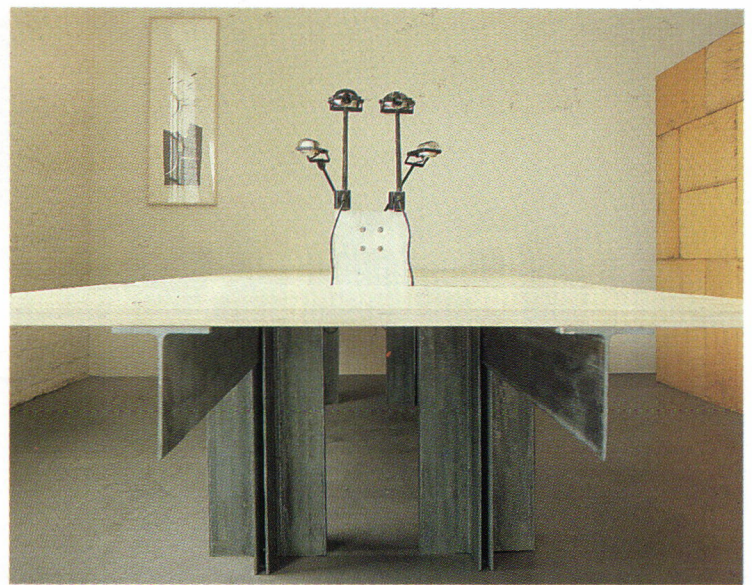
CRAFTED

A San Francisco architect assembles common materials into uncommon forms.

PRECISION



The sliding entry door (this page), constructed with 1/4-inch tempered glass sandblasted to provide privacy, is set into a layered framework of steel channels and flatbars. A contrasting panel of clear glass incorporates the door handle. The door hangs from a continuous track that runs the length of the studio (facing page). Brackets attached to the track stabilize hot water radiators, manufactured in Switzerland, that flank the entrance. Water pipes in the ceiling (above) feed the radiators.



Birch plywood tables designed by Jennings rest on cruciform steel columns (top right) and an undercarriage crafted from a split I-beam. Drafting hardware is mounted on boards grooved to fit onto steel bars (top left). Drilled pinholes in the entrance shutter (above center) act as a camera obscura (above).

sheets of aluminum, shear cut, and curved into modular panels. Anodized with a clear alloy used to strengthen sailboat masts, the wall panels are attached to a structural framework of rolled aluminum flatbars with machine screws. The room can be easily disassembled, and has been moved three times since it was built.

Indirect lighting from a recessed ceiling groove above the conference room highlights the aluminum, resulting in a warm glow that softens the perception of a material often dismissed as too cold and common. Jennings' thoughtful, highly crafted expression of materials counters conventional prejudice with a serendipitous melding of art and technology.

—JANICE FILLIP

Janice Phillip is the architecture critic of the Sacramento Union.

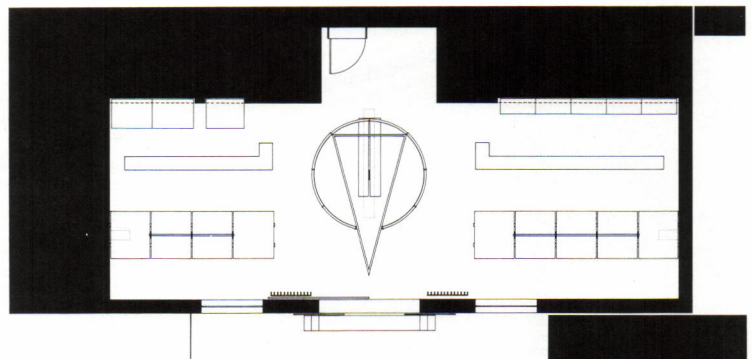
JIM JENNINGS STUDIO
SAN FRANCISCO, CALIFORNIA

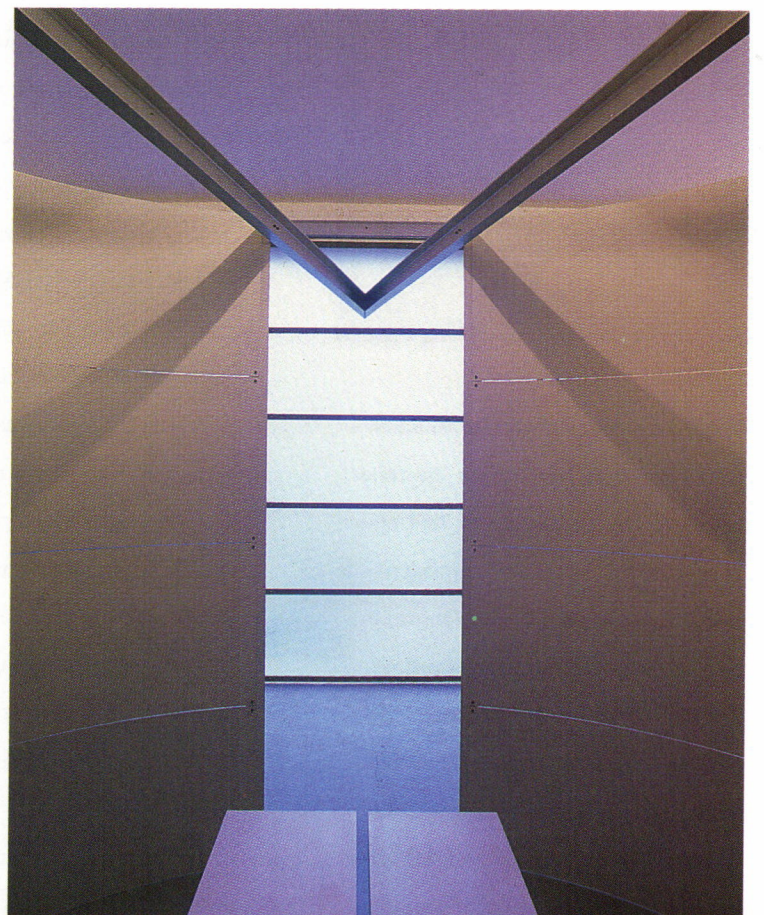
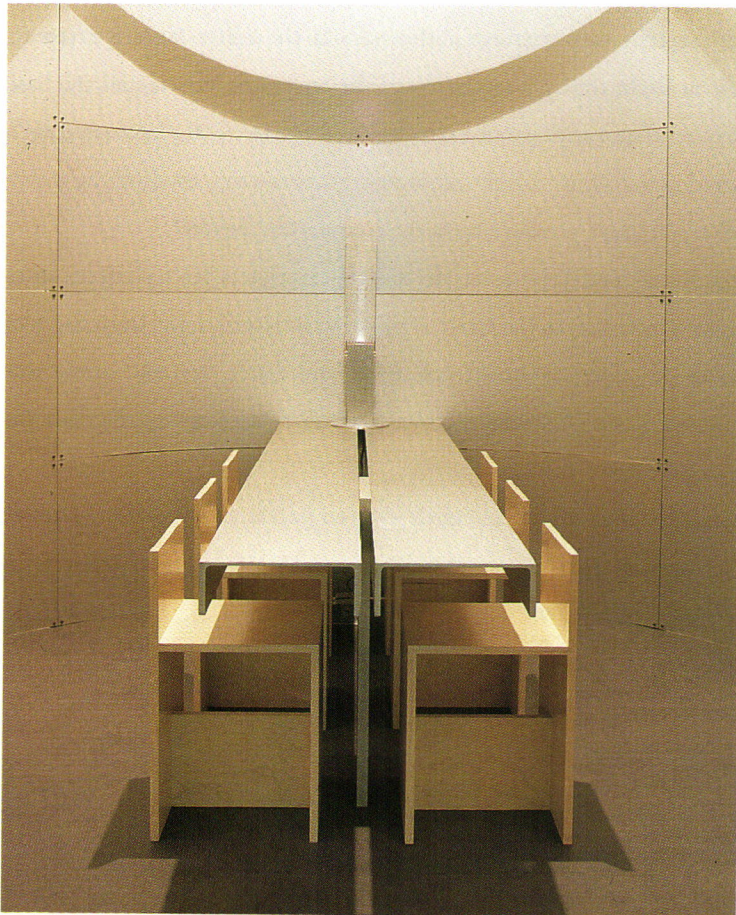
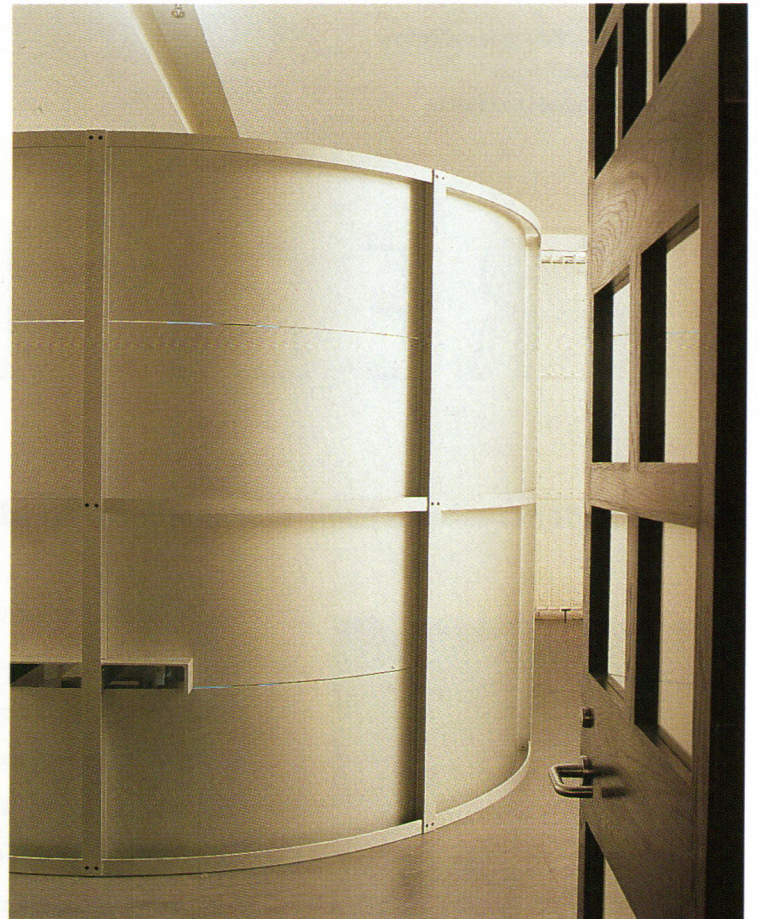
ARCHITECT: Jim Jennings Arkhitecture, San Francisco, California—Jim Jennings (principal-in-charge); John Holmes (project architect); Cheri Fraser (presentation drawings)

ENGINEER: Avery Miller (structural)

CONTRACTOR: Oliver and Company

PHOTOGRAPHER: Alan Weintraub





Rolled aluminum flatbars form the conference room skeleton (top right), to which curved aluminum wall panels are attached with machine screws threaded directly into the metal (above left). A table fashioned from two 12-inch aluminum channels, and maple plywood

chairs designed by Jennings (above left), complete the room's sparse furnishings. A low-voltage lamp (top left) reflects patterned light onto the ceiling and walls. Overhead, a wedge-shaped aluminum panel (above right) supports the conference room structure.

STREET LIFE

An arts center creates a lively crossing for a decidedly urban campus.



The light monitor of the Boxenbaum Art Centre (top) rises above the renovated warehouse structures that house Crossroads School. Fronting the public street, the simple exterior (above) is detailed with bands of warm yellows and ochres with deeper tones highlighting the recessed entryway. The main atrium features a complex exposed ceiling truss system and layering of spaces (section) with changing washes of sunlight (facing page). The abstracted pilaster capitals are actually reflective wall sconces constructed of perforated metal.

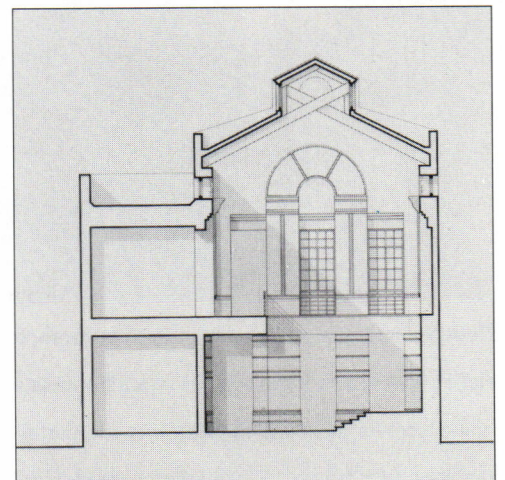
CROSSROADS SCHOOL, A PROGRESSIVE SECONDARY SCHOOL FOUNDED IN 1971, HAS the quintessential Southern California urban campus. No tranquil campus green here; the hub of student gathering is a private alley that doubles as a parking lot. "Within this tough context," says architect Buzz Yudell, "the school has turned that informality and urban quality into part of the excitement of the campus, creating a wonderfully inventive environment for 630 students." A recent contributor to the school's ongoing creativity is the Peter Boxenbaum Arts Education Centre, designed by Moore Ruble Yudell.

Wedged between a public street and the campus alley, the 15,000-square-foot building is set within a row of former warehouse structures and overlooks the Santa Monica Freeway. Without designating front or back, the architect recessed the entrances, articulated the base and cornice line of the boxy structure with precast concrete and plaster, and punctuated each facade with elegantly crafted metal signs. A light monitor crowns the top, establishing a verticality that strengthens the building's presence from the campus and beyond.

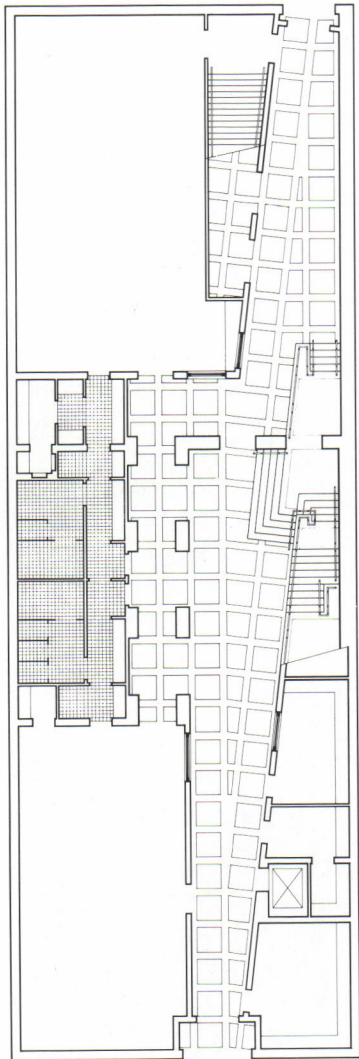
Like many other Moore Ruble Yudell projects, the simple exterior belies a complex interior. There are few apparent windows, yet the space is filled with natural light from the roof monitor. Housing classrooms, a gallery, performance space, and dance, art, and music studios, the building was conceived as an "internal plaza and street that celebrate the daily interaction of the students and the arts," explains Yudell.

The "street" runs through the building on a slightly skewed path and is paved in concrete with a gridded pattern. This main space is animated by a grand stairway, interrupted with small landings that form eddies in the flow of traffic and serves as impromptu gathering spots for conversation or lunch. Although not specifically designed for performances or events, this double-height atrium serves these functions with surprisingly good acoustics, according to the school's administrator, Michele Hickey.

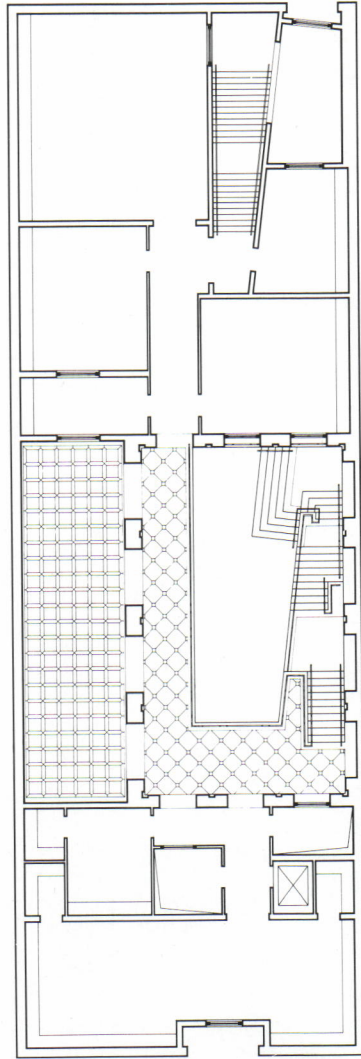
Throughout the facility, every space is connected with windows or doors oriented to the main circulation path, creating an







FIRST FLOOR



SECOND FLOOR

openness that defies the music conservatory stereotype as a maze of tiny rooms. The second-floor gallery can be opened onto the plaza, allowing a larger unified area for art exhibitions, or can be closed off for smaller shows. In addition, each of the music practice rooms is daylighted and comprises a slightly different configuration, and the dance studios have large windows to encourage a visual interaction between more private spaces and the building's internal street.

Within a straightforward envelope, Moore Ruble Yudell has carved a complex interior, filled with elements of surprise, invention, and discovery.

—LYNN NESMITH

**PETER BOXENBAUM ARTS EDUCATION CENTRE
CROSSROADS SCHOOL
SANTA MONICA, CALIFORNIA**

ARCHITECT: Moore Ruble Yudell, Santa Monica, California—Buzz Yudell (principal-in-charge); John Ruble (principal); Leon Glodt (project manager); Dan Garness, Miguel Escobar (design team)

ENGINEERS: Robert Englekirk Consulting Engineers (structural); P.A.C. Mechanical Engineers (mechanical)

CONSULTANTS: Tina Beebe (colors); Stephen Sidelinger, Regina Pizzinini (artwork); Marshall Long (acoustics); Richard C. Peters (lighting)

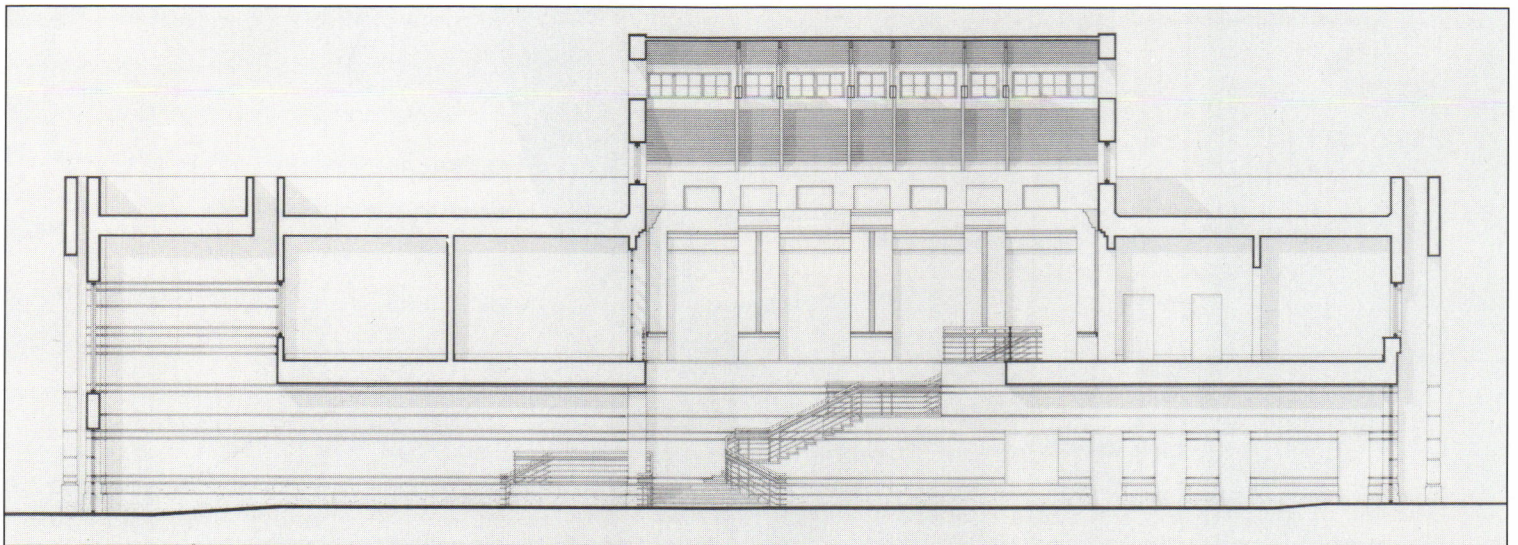
GENERAL CONTRACTOR: Krismar Construction

COST: \$1.5 million—\$100/square foot

PHOTOGRAPHER: Timothy Hursley/The Arkansas Office



The anodized steel stair railing (left) appears to change colors as one moves up and around the central atrium, like a racing stripe that gives the space an accent of color. The floor plans (facing page) illustrate the skewed, gridded circulation path, paved with two tones of concrete, as it runs through the Centre's first floor (facing page, left). The angled back stairway (facing page, right and top of plans) is accented with a series of openings providing views down to the central space and into the larger of the two ground-floor dance studios. Classrooms, art studios, film screening areas, and music practice rooms are clustered on either end of the building flanking the atrium (section below). A long, narrow gallery (facing page, left in second floor plan) opens onto the double-height atrium below.





and sinuous. "We tried to emphasize the corners, the meeting of materials," says Gisue. Indeed, every juncture, every end or beginning of an element is meticulously considered. One stucco wall turns into a compelling geometric composition by the insertion of quartzite counters, streaked green, gray, and chalk blue. Above the fireplace, a stainless steel mantelpiece swoops to a giant swirling curve that appears to scoop up the firewood it embraces. In the kitchen, the prow-shaped sides of a stainless steel lighting fixture imbedded in a stainless steel beam (facing page) appear stretched and taut, as though eager to escape containment. In gestures such as these, the two designers endow their materials with a sense of movement, forever suspended in time.



However, the Hariris are reluctant to isolate the importance of materials, preferring to view them as partners in an overall process. "Our aim is not only to find new materials, but also to understand their nature." Nowhere is this approach more apparent than in the master bathroom, where four stainless steel box-shaped units swing out from the wall to provide storage—discreet yet dramatic. Both

bath tub and toilet form part of a tableau, each arranged on a stepped slate platform (left). These varied textures establish a mix of hard and soft surfaces, contours, and curves—a visual rhythm whose effect is not lost on the apartment's clients: a music company executive and his wife, who appreciate the urban pulse and respond to the forms. In fact, the couple made few special requests, except to ask for plenty of closets. "They felt our work was inventive, yet not intimidating," Mojgan recalls. "She liked all the metal work and he liked the strength and elegance of stone."

In this apartment, boldness of conception is matched by the restraint of execution. "In our work, the manipulation of form takes on a very particular and precise function. On the other hand, we feel intuition does have its place. We often feel our work is approaching a kind of quietness," says Gisue, musing for a moment. "It may look a little empty, but it is full of purpose." ■

—VICTORIA GEIBEL

Victoria Geibel is the former executive editor of Metropolis.

A hallmark of the Hariris' work is an inventive manipulation of materials, as evidenced by a steel-framed, oval cabinet (facing page, top right) and light-embedded counter top (facing page, top left) in the master bathroom (facing page, center). Suspended fixtures glow in the corners of the apartment (right) and a lozenge-shaped, steel projection (below), embedded in a steel-covered beam, illuminates the counter between kitchen and dining area.



**MANHATTAN APARTMENT
NEW YORK CITY**

DESIGNERS: Hariri & Hariri—Kazem Naderi, Andre Bideau, Yves Habegger (design team)
ASSOCIATE ENGINEER: Lawrence P. Cesca, P.E.
METALWORK: Scott Madison, Mark Gibian, Dan George, Long Island Metal Forms
STONEWORK: Manhattan Marble Company
TILEWORK: Amadeus Construction
CONTRACTOR: Scott Webb
PHOTOGRAPHER: Paul Warchol

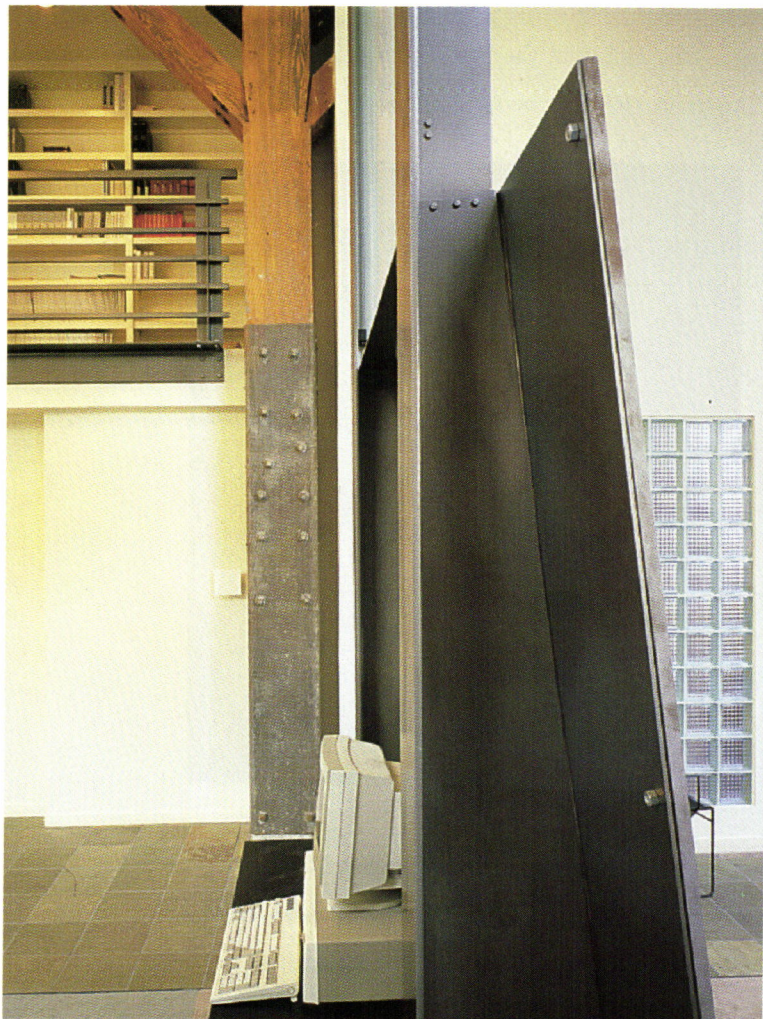


Advent Software
San Francisco, California
MacCracken Architects

INDUSTRIAL STRENGTH

A former warehouse is empowered by vigorous details.

Custom metal desks and translucent fiberglass screens contrast with original industrial finishes (above). Granite-faced partition (facing page, top) screens reception area from computer work stations (facing page, bottom).



NO LONGER A DOWN-AT-THE-HEELS NEIGHBORHOOD, San Francisco's South-of-Market has become a desirable address for start-up commercial enterprises. Advent Software, a young progressive company that developed and now markets a software program for stock portfolio management, is one such newcomer. Its 4,000-square-foot office, designed by MacCracken Architects, is located in a 1907 former industrial warehouse.

After organizing the office functions in a straightforward arrangement, architect Stephen MacCracken exposed the building's original finishes of brick, wood, and steel, and added new industrial elements including fiberglass partitions, steel rails, and metal work stations. The resulting interior is Spartan in its design intentions, while splendid in its finely tuned details and materials. Original heavy timber columns march down the space, partially delineating two levels of private offices set along the interior wall, which are screened by movable, translucent wall panels. The reception area is defined by a giant easel fashioned of a granite panel held in a steel frame, and custom-designed, pendant lighting fixtures in the main space reduce the apparent scale of the cavernous, double-height space.

Stephen MacCracken, who founded his firm in 1985, prides himself on a collaborative approach in which the client, builder, and architect are integral contributors from the inception of a project. In proving the success of his approach, MacCracken now shares office space with Advent on the building's third floor. ■

—LYNN NESMITH

ARCHITECT: MacCracken Architects, San Francisco, California—Stephen MacCracken (principal); Hermine Tessard, Peter Mielke (design assistants)

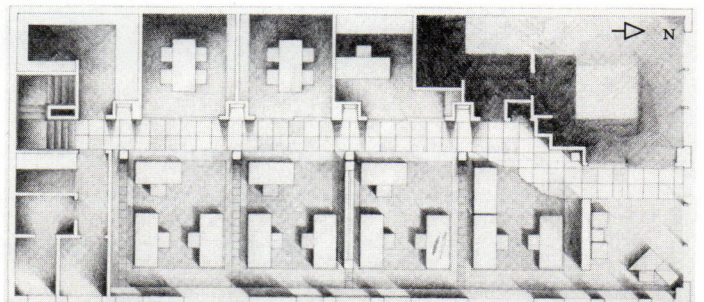
STRUCTURAL ENGINEER: Alex Ott & Associates

CONSULTANT: Olle Lundberg (reception desk)

GENERAL CONTRACTOR: Praxis Construction, Tim McDonald

COST: \$160,000—\$40/square foot

PHOTOGRAPHER: Richard Barnes



HISTORY AND VERSE

An architect's poetic inspiration is translated by students into built form.

*When I entered the first meditation,
I escaped the gravity of the object,
I experienced the emptiness,
And I have been dead a long time.*

*When I had a voice you could call a voice,
My mother wept to me:
My son, my beloved son,
I never thought this possible,*

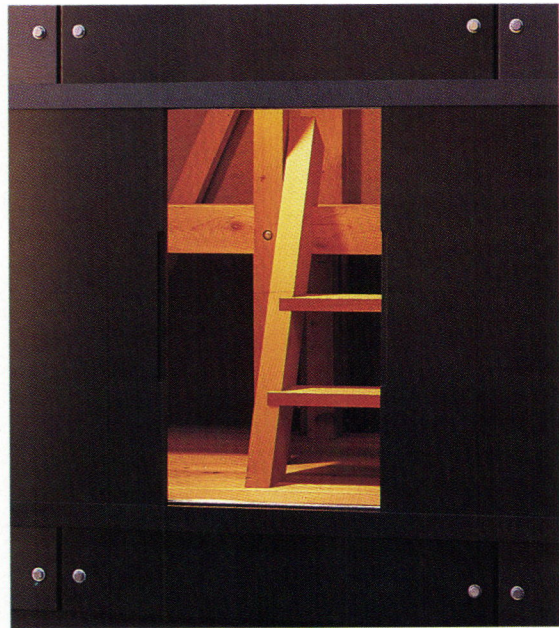
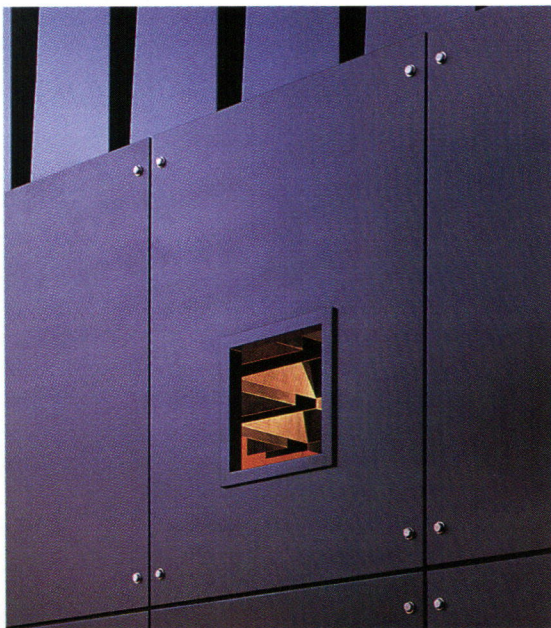
*I'll follow you on foot.
Halfway in mud and slush the microphones picked up.
It was raining on the houses;
It was snowing on the police-cars.*

*The astronauts were weeping,
Going neither up nor out.
And my own mother was brave enough she looked
And it was all right I was dead.*

—THE FUNERAL OF JAN PALACH
by David Shapiro

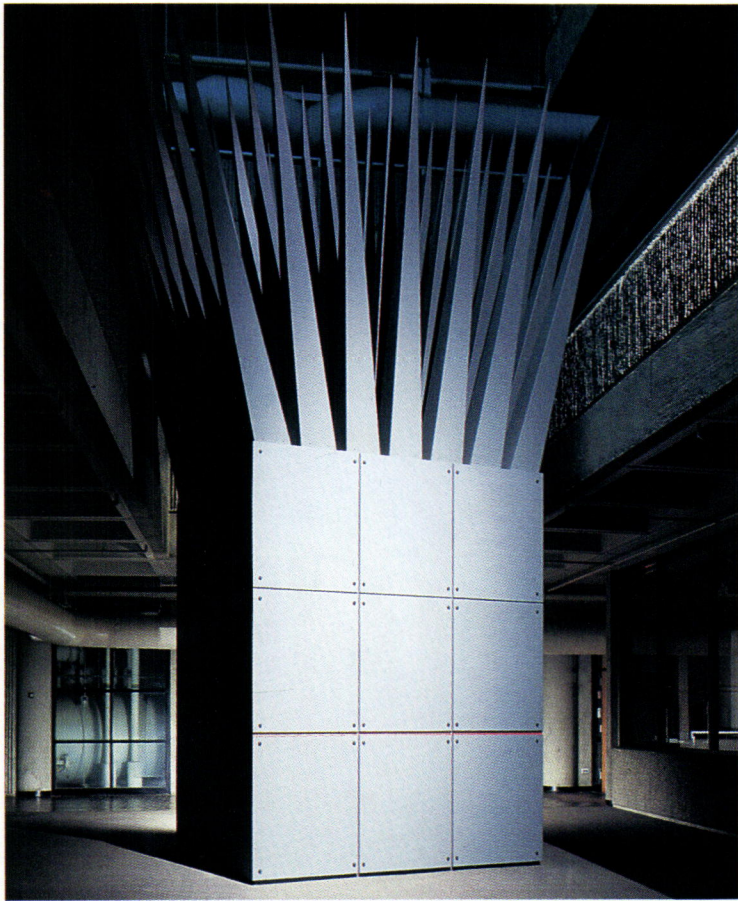
LOUIS KAHN ONCE DESCRIBED GREAT ARCHITECTURE as starting with the immeasurable, proceeding through the measurable, and returning to the immeasurable. He was describing a process by which the spark of genius in a sketch is carried through investigation, drawing, and construction into a finished work. The two projects presented here, designed by John Hejduk and built by architecture students at Georgia Institute of Technology, came about in just that way.

"The House of the Suicide," a project that appears in Hejduk's book, *Mask of the Medusa*, was



"Mother" (above and facing page, right) features cabinet-grade composite board panels painted black and bolted into place. The interior of the construction is accessible through a small door at the base (above right). A platform inside offers views of the companion "Suicide" piece from an eye-level opening.





inspired first by Cezanne's painting of the same name. David Shapiro's poem, "The Funeral of Jan Palach," about the young student in Prague whose public self-cremation galvanized dissent against the 1968 Soviet invasion, provided a new context for Hejduk to design a companion piece, "The House of the Mother of the Suicide." In 1986, architecture students at Georgia Institute of Technology, led by studio critic James Williamson, began collaborating with Hejduk on construction of the works. The process took four years; work started and stopped, students came and went, and money was raised and spent. A core group of about a dozen students stayed with the project, with Williamson providing intellectual, technical, and moral support.

The students explored Hejduk's concept in drawings, models, and full-scale mock-ups. Periodically, Williamson would consult Hejduk on design details, material selections, color, and siting of the two objects within the Brutalist space of Tech's architecture building. The construction details were

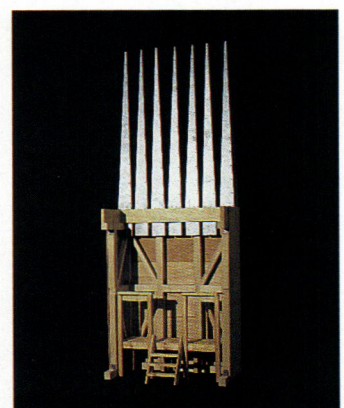
divined by the students, who referred to the body of Hejduk's work in determining how a joint should come together, the design of a steel angle, the heft of timber framing, or the fabrication of slender, steel spikes.

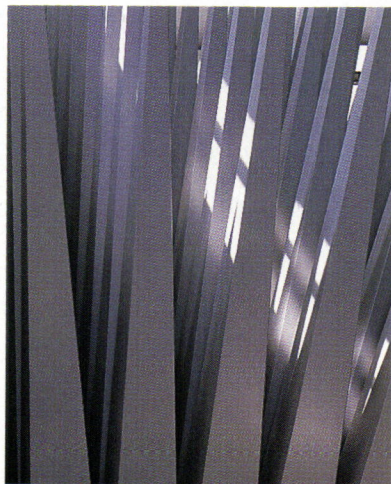
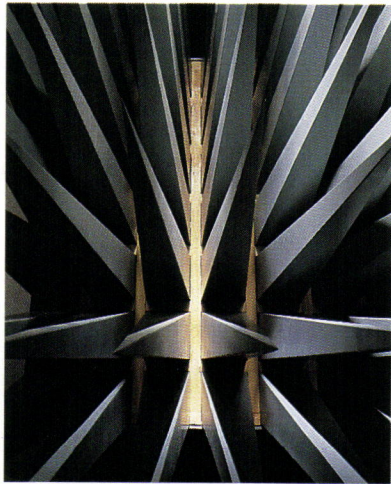
As the projects neared completion in Atlanta, history moved in a way that seemed to vindicate the protest of Jan Palach. Events unimaginable four years ago won freedom for Czechoslovakia and delivered a poet playwright to the Czech presidency. Hejduk, whose ancestry is Czech, finds the confluence of history and architecture "very mysterious—four years ago the projects started, and somehow, they had to wait." The community aspect of the projects also intrigues the architect, who has undertaken a string of works in Berlin, Milan, Boston, Oslo, Philadelphia, and London, completed in a similarly collaborative way. "In each place, construction became a mysterious ritual, and people became politically and socially connected."

What will become of the project at Georgia Tech? Atlanta's High Museum has expressed interest in including the sculptures in a collection. Hejduk has met with Czech officials, who visited him at Cooper Union during president Vaclav Havel's visit to New York, and the architect has offered the pieces to the new Czech government. Eventually, Hejduk would like to see mother and son return to Prague's Wenceslas Square, where flame separated them years ago.

—MICHAEL J. CROSBIE

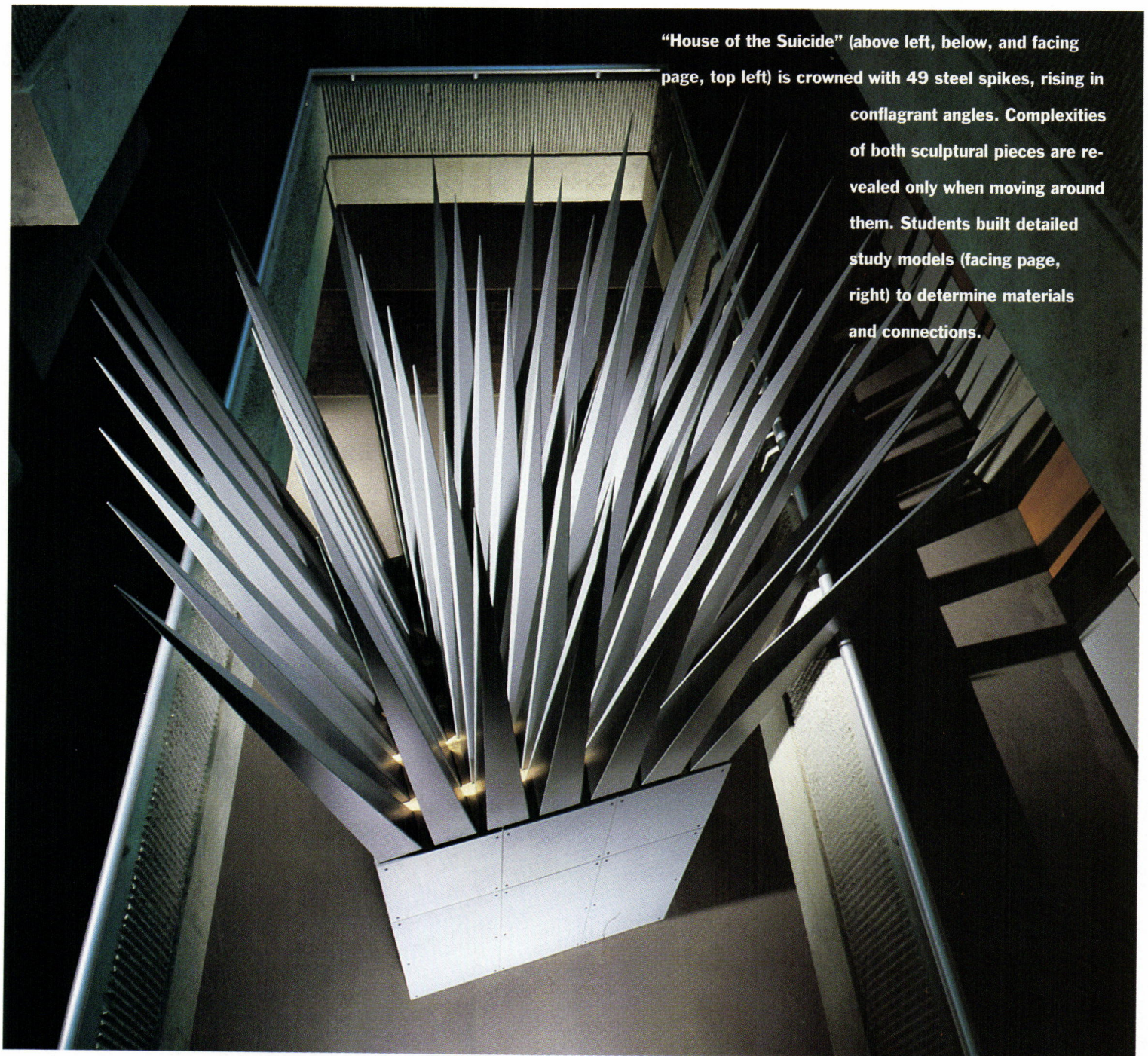
KEVIN HYDE





HOUSE OF THE SUICIDE
HOUSE OF THE MOTHER OF THE SUICIDE
GEORGIA INSTITUTE OF TECHNOLOGY
ATLANTA, GEORGIA

ARCHITECT: John Hejduk, New York, New York—John Hejduk (architect); Jim Williamson (project coordinator); Jack Ames, Paul Bauer, Rick Blanchard, Nancy Caster, Paige Cosby, Jeff Cramer, Jorge De La Cova, Lyle Green, Marshall Levy, Kirk Marchisen, Frank Pollacia, David Shonk (project team)
PHOTOGRAPHY: Jeff Goldberg/ESTO, except as noted

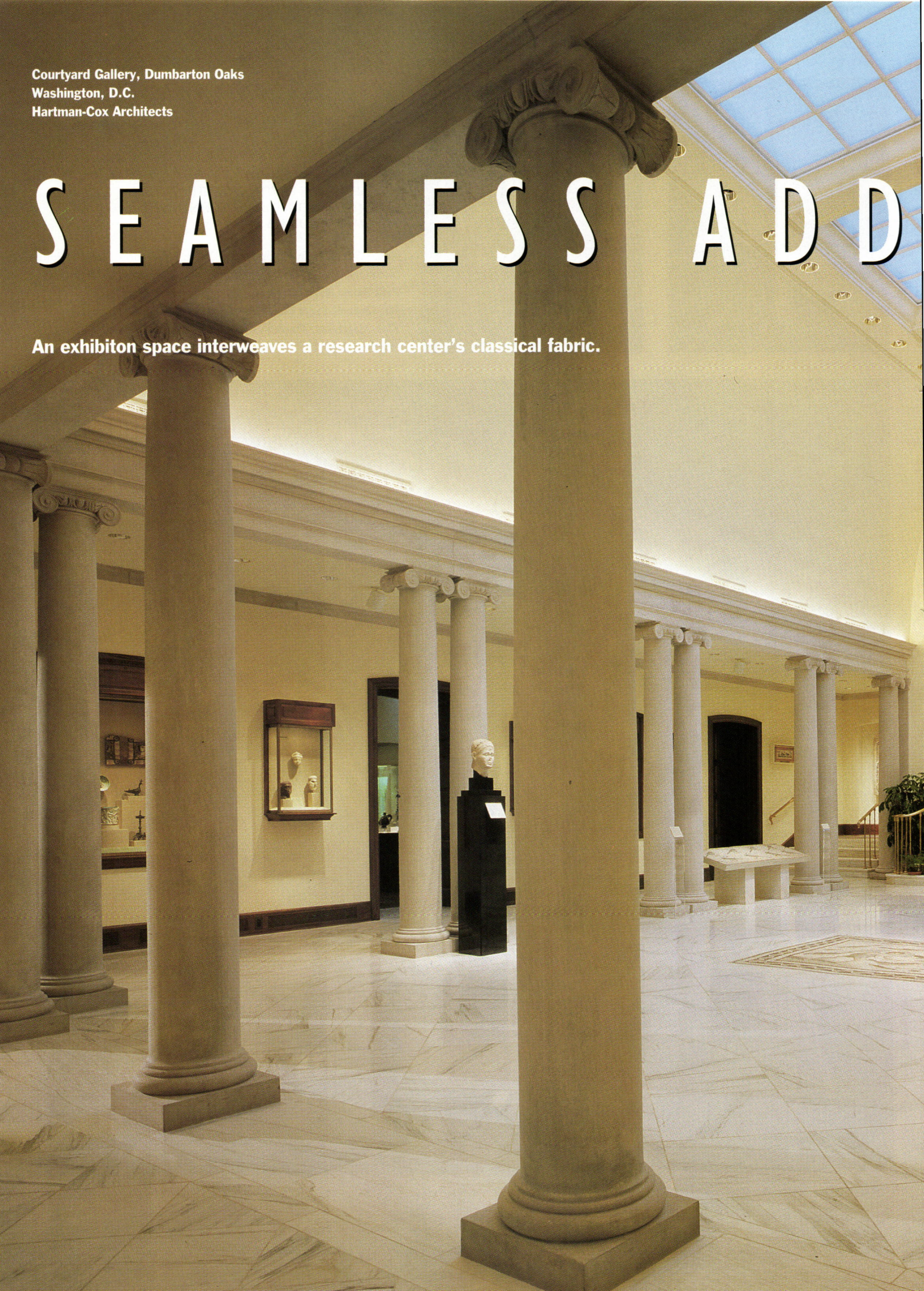


"House of the Suicide" (above left, below, and facing page, top left) is crowned with 49 steel spikes, rising in conflagrant angles. Complexities of both sculptural pieces are revealed only when moving around them. Students built detailed study models (facing page, right) to determine materials and connections.

Courtyard Gallery, Dumbarton Oaks
Washington, D.C.
Hartman-Cox Architects

SEAMLESS ADD

An exhibiton space interweaves a research center's classical fabric.



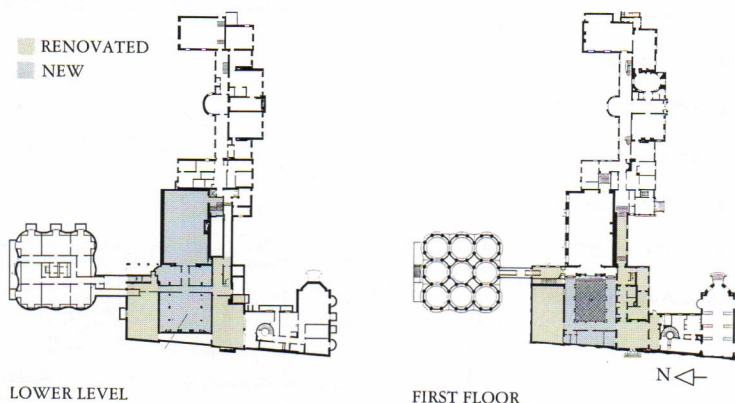
ITION



The 8,815-square-foot gallery was inserted into a former courtyard (plans and photo, right). Its vaulted central space and ambulatories (these pages) echo the volumes and grand Palladian entryway of the adjacent 1929 music room by McKim, Mead & White (behind window in photo above).

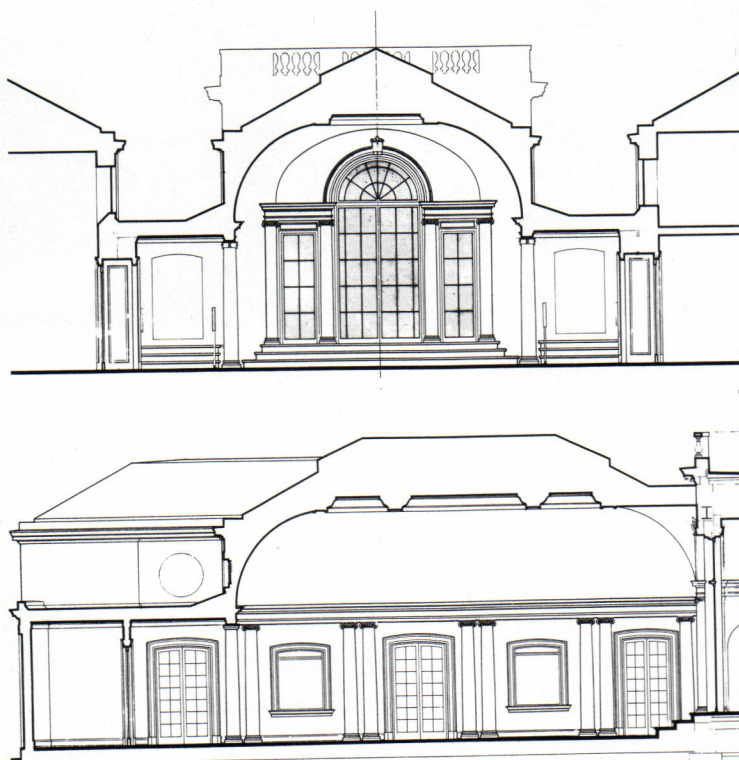
HARTMAN-COX ARCHITECTS' NEW ART GALLERY FORMS A serene center for the urban oasis that is Dumbarton Oaks, a former estate incorporating one of the most spectacular formal gardens in the United States. The gallery grew from a perfect fit between architect and project. Hartman-Cox has recently helped breathe life into downtown Washington by building upon the capital's cherished architectural traditions. This approach was precisely right for Dumbarton Oaks, which began life in 1801 as a Federalist-style farmhouse, was Victorianized in the 19th century, and repeatedly refurbished and expanded in the 20th century. Diplomat and art collector Robert Woods Bliss and his wife bought Dumbarton Oaks in 1920 and sold it in 1940 to Harvard University, which now operates it as a research center, primarily for Byzantine studies. Dumbarton Oaks's 20th-century additions include a 1929 music room designed by McKim, Mead & White, a 1940 Byzantine gallery and entryway by Thomas Waterman, and Philip Johnson's 1963 Pre-Columbian pavilion.

In its prior life, Hartman-Cox's splendid, one-room gallery was an inaccessible outdoor courtyard bordered by hallways on the west and south, the renowned music room on the east, and an overstuffed Byzantine gallery on the north (plans below). The main reason for adding new exhibition space was to expand the existing gallery and





The ceiling heights of the new gallery's flat-roofed ambulatories were scaled to slip beneath clerestories in the adjoining Byzantine gallery (sections, right). A vaulted ceiling, topped by a rectangular skylight, complements the proportions of the 1929 music room (above).

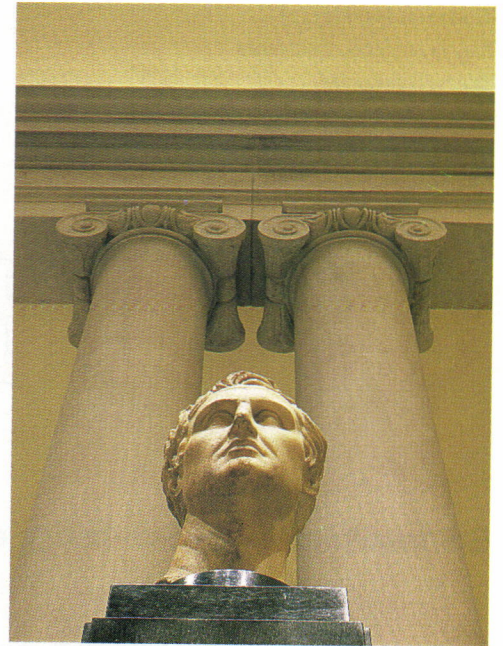


provide display areas for work long hidden in storage. Not incidentally, the new gallery improves security at Dumbarton Oaks by separating research and staff areas from public spaces, and by replacing the circuitous public circulation with a more direct route. By excavating beneath the new gallery and music room without altering Dumbarton Oaks's exterior appearance, Hartman-Cox created new mechanical rooms, storage, and library stacks.

The gallery takes its cues from the Palladian window of McKim, Mead & White's music room (left), which forms the focus of the east wall. It consists of a central space surrounded on three sides by colonnaded ambulatories defined by pairs of Ionic limestone columns—14 are replicas of the six that stood in the previous outdoor courtyard. The resulting scale of the gallery is appropriately intimate for viewing small objects, and surpasses its quasi-residential setting to reach museum status through a classical vocabulary, symmetry, and formal materials. A skylight bathes the space in sparkling, evenly distributed sunlight, which is the gallery's most distinguished feature and characteristic of most Hartman-Cox interiors. The architects devised a complex system of illumination that includes incandescent uplights in the column cornices and recessed fixtures in vitrines and ceiling.

Nearly flawless detailing hides mechanical systems within thick walls into which mahogany doors slide and disappear. Detailing and finishes around openings and display cases take their cues from adjoining spaces. In recalling an amalgam of architectural elements that make up Dumbarton Oaks, Hartman-Cox's gallery has pulled together the old mansion's disparate elements and forged for them a new heart. ■

—ANDREA OPPENHEIMER DEAN



The paired limestone Ionic columns (above), and meticulously detailed mahogany vitrines (above left) and door frames (above center) reflect Dumbarton's existing finishes and perfectly complement the gallery's small, ancient objects. The architects expanded and reconfigured the collection's original entrance and vestibule (left), and rerouted circulation.

**COURTYARD GALLERY OF THE
BYZANTINE COLLECTION AT
DUMBARTON OAKS
WASHINGTON, D.C.**

ARCHITECT: Hartman-Cox Architects, Washington, D.C.—George Hartman (partner-in-charge); Robert Shutler (project architect); James Stokoe, John Dale, Peter Grina (design team)

ENGINEERS: James Madison Cutts Structural Engineers, Glen Ross (project manager); Henry Adams Consulting Engineers, Charles Henck (project manager)

OWNER'S REPRESENTATIVE: Harvard Planning Group, Didier Thomas (associate director, project planning)

LIGHTING CONSULTANTS: Claude Engle Lighting Consultants, John Wood (project manager)

EXHIBIT DESIGNER: Stephen Siatis

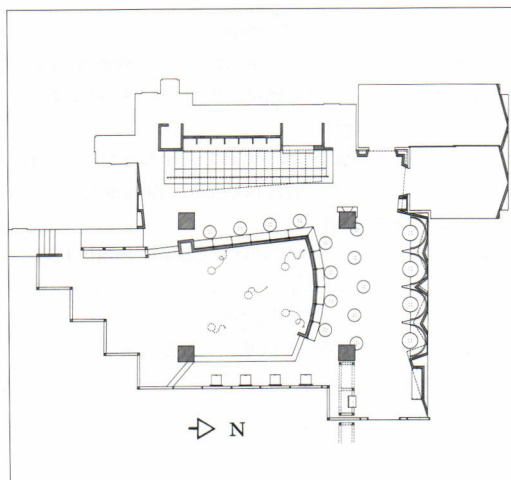
GENERAL CONTRACTOR: E.A. Baker, Joe Arena (project manager)

COST: \$3 million

PHOTOGRAPHER: Peter Aaron/ESTO, except as noted

GOLDEN GATEWAY

Bold sculptural elements bridge a public plaza to give a restaurant new presence.



The timber signpost announcing the entrance (top left) is extended inside by similarly detailed elements in the bar (above), which accentuate movement through the restaurant. An existing mural was framed to define a dining platform (center left, and lower left in plan). Rounded booths are set within an angled, rose-colored stucco wall (facing page).



A MODEST BUDGET PERMITTED ONLY A selective renovation, yet Mark Mack successfully transformed a traditional Chinese eatery into a structured and personalized dining environment. To announce the restaurant's relatively obscure location within Opera Plaza, a dull 1970s mixed-use project, Mack projected a large sculptural canopy outside the front door, creating, in his words, "a sign that doesn't look like a sign." Crafted of polished yellow-stained fir, the architectural icon is accompanied by a series of bright red columns and cross beams screening the expanse of windows like a continuous, abstracted Shinto gate.

Inside, a low partition with a bench snakes through the restaurant defining a bustling bar and a more formal, elevated dining space. To accent the existing booths in the bar area, Mack stepped colored stucco wall at their backs. Above the bar, a ceiling-mounted, angled variation of the wooden exterior structure recalls a ship's hull, or maybe the proverbial slow boat to China.

Through a skillful manipulation of materials, colors, textures, and a few deftly chosen motifs, Mack has created a dramatic setting for dining and established a public stance for a restaurant that was previously overshadowed by its ponderous office building location. ■

—LYNN NESMITH

ARCHITECT: Mack Architects, San Francisco, California—Mark Mack (principal); Mark Jensen (project architect)

CONSULTANTS: Pacassa Studios (millwork); Jim Frey (stucco); Patrick Fitzgerald (aluminum work)

GENERAL CONTRACTOR: Walter Wong

COST: \$120,000—\$40/square foot

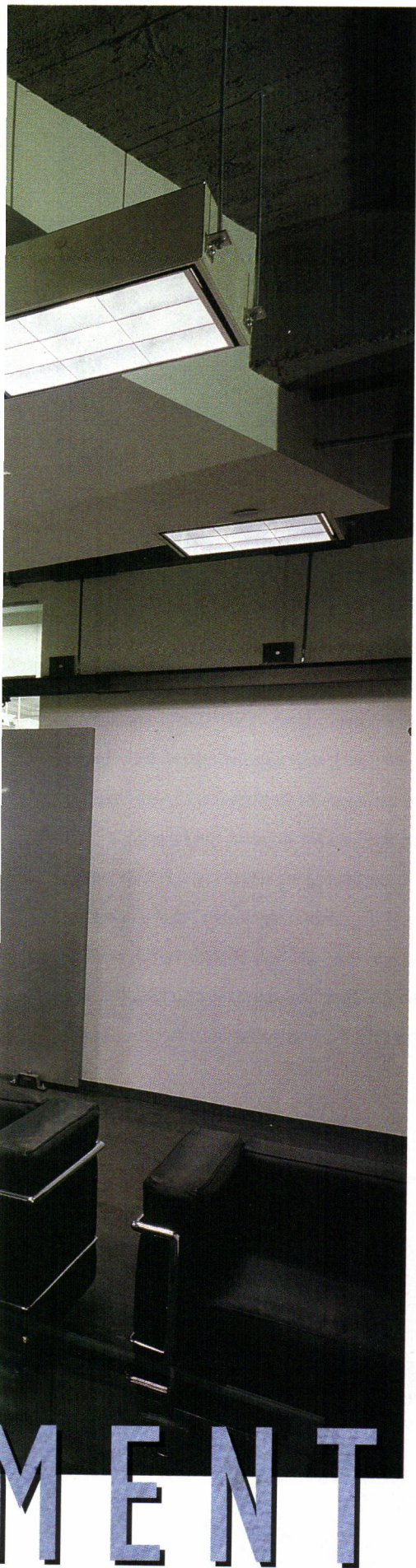
PHOTOGRAPHER: Richard Barnes

ARDT-L Offices
Moss/Getchel Loft
New York City
Smith-Miller + Hawkinson



IMPLIED MOVE

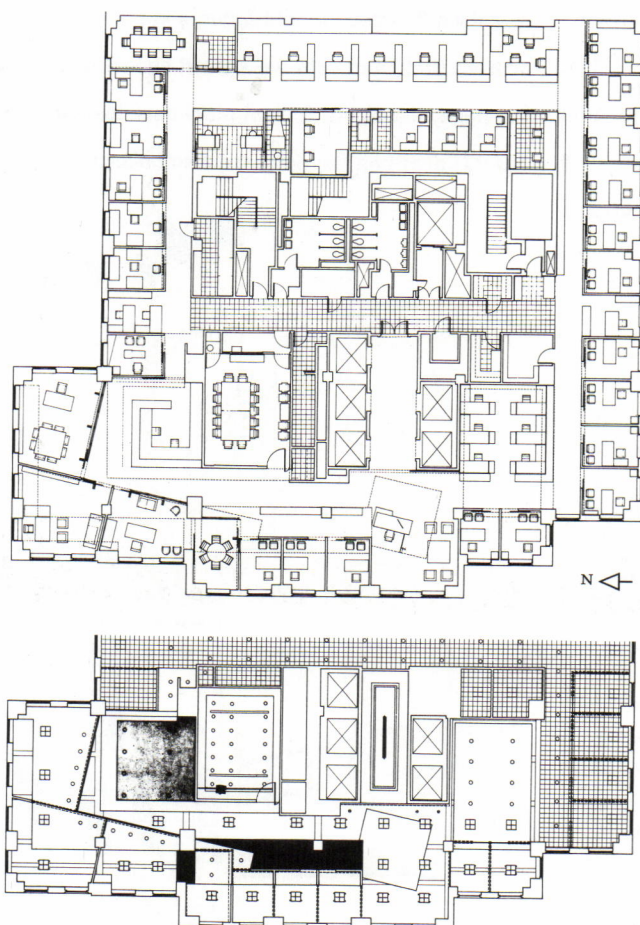
Henry Smith-Miller and Laurie Hawkinson stress program and suggest motion in a pair of interiors.



MENT



To Laurie Hawkinson and Henry Smith-Miller, the angled ceiling above the reception area in the ARDT-L advertising agency (left and reflected ceiling plan, bottom) is "less a new ceiling and more representative of the original slab that's usually concealed." The section also delineates a path of progression, establishing a diagonal route back into the interior (above).



AS THE ARCHITECTURAL PRACTICE OF Henry Smith-Miller and Laurie Hawkinson has evolved since 1983 to encompass apartments and office spaces, art parks, and free-standing houses, one concern has remained constant: the partners' commitment to program as the wellspring of design. In each project, no matter what the budget or scope, Smith-Miller and Hawkinson have sought to satisfy programmatic needs with plans so particular they could exist nowhere else.

Over time, this programmatic approach has been coupled with a growing interest in how architecture can register movement, how built forms can somehow comment on their own maturation through time. The results of this investigation can be seen in the architects' various designs for art institutions. For example, in their proposed renovation for Philadelphia's Institute of Contemporary Art, Smith-Miller and Hawkinson designed a movable steel plate held by cable on the facade to announce the

rotating nature of the exhibitions within. In their competition entry for an East Village art gallery, they created a storefront with a movable steel plane balanced on a steel bar and a furniture wedge that would move on tracks on the gallery floor. In a recent competition entry for the L.A. Arts Park, designed in collaboration with artist Barbara Kruger and landscape architect Nicholas Quennell, they proposed a movable sidewalk that would transport visitors across the vast site.

Smith-Miller's and Hawkinson's interest in generating architectural expressions of movement is also apparent in their

residential and office commissions. In a recent Manhattan loft renovation (cover and pages 84-85), motion is imbedded in the design; two giant steel doors frame and inscribe the space they inhabit, with the path of the pivoting door marked by an arc of steel imbedded into the wooden floor. In the recent renovation of the offices for the 14,454-square-foot Midtown Manhattan advertising agency (right), that movement is implied by angled ceiling sections, and steel and glass partitions that deflect from the straightforward orthogonal floor plan (bottom right).

In addition to their Manhattan projects, the architects have just completed the offices for New Line Cinema, a Los Angeles film distribution company. A park for the North Carolina Museum of Art, for which the firm designed the master plan in collaboration with Kruger and Quennell, is now in its first phase of construction.

"We look at the generative pressures at the cultural level in whatever institutions we are making space," Smith-Miller says. "Then we try to interpret those pressures, and transform them into architecture." ■

—VICTORIA GEIBEL

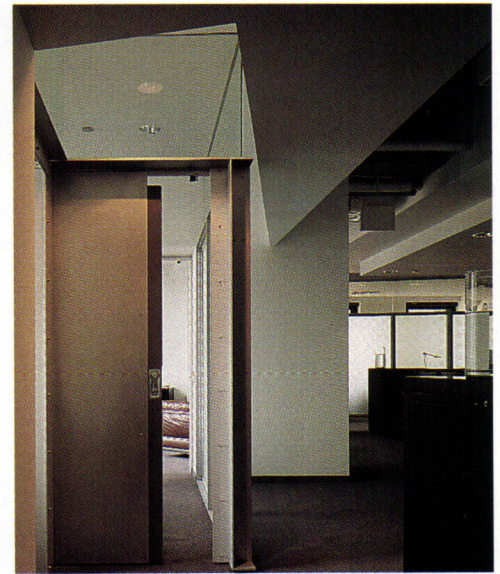
Altschiller Reitzfeld Davis Tracy-Locke

Advertising Agency

New York City

For their design of the new Manhattan corporate headquarters of ARDT-L advertising agency, Hawkinson and Smith-Miller adopted an approach that mirrors many of advertising's own attitudes about reality—perceived and manufactured. "We wanted to initiate a visual discussion between real and artificial building, where forms and objects appear to slip and slide through each other," Smith-Miller explains.

That sense of visual disjunction is established upon entering the reception area. Overhead, a cranked, square section of ceiling intersects and collides with an exposed concrete slab, a reminder of the building's original rough envelope. Due to its prominent size, the angled ceiling element appears to drop or be out of plumb. To stabilize the visual distortion, the architects suspended standard fluorescent light fixtures in a grid pattern that intersects the shifted square (facing page, top right). A giant steel door (pages 80-81) guarding the entrance also balances



the ceiling square's forceful presence.

This collision between overlapping visual systems also occurs in the partners' offices (facing page bottom, left and right), where scalloped glass partitions and sliding steel doors secure privacy. The spaces are shifted on a diagonal, echoing the cranked ceiling, to allow for views of Central Park. Arranged along the interior edge of the building's perimeter are other offices, each with walls topped by glass clerestories (above and facing page, top left) that stretch to the ceiling, a gesture that assures privacy while still permitting daylight to penetrate the office core.

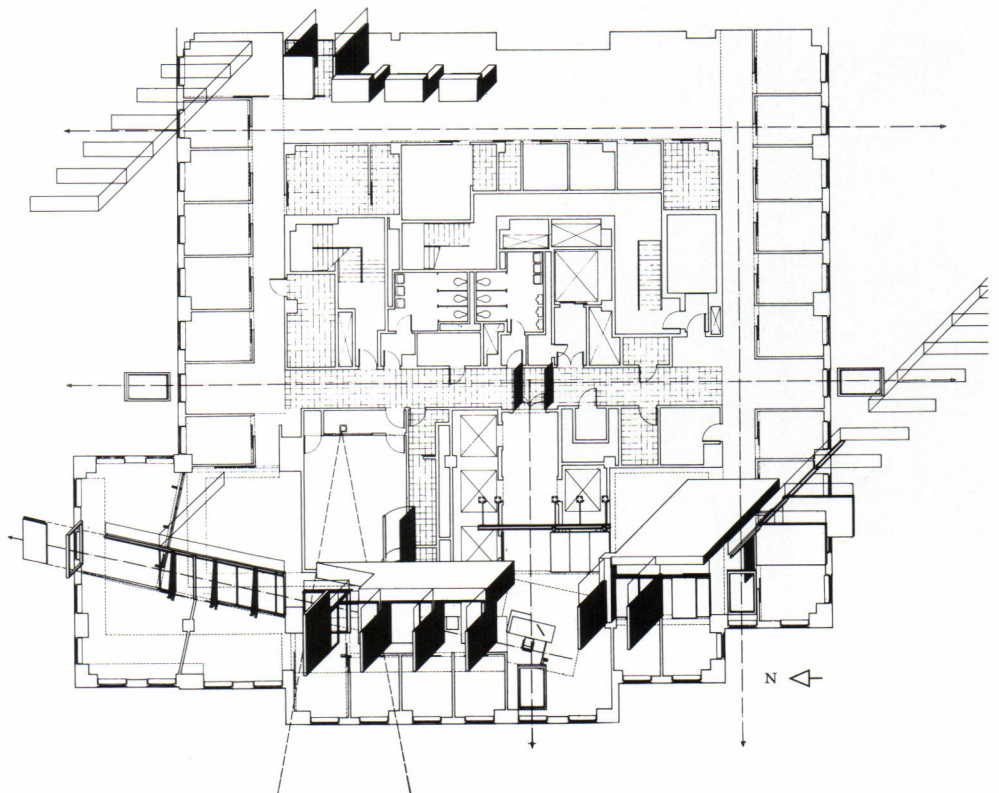
**ARDT-L OFFICES AND MOSS/GETCHEL LOFT
NEW YORK CITY**

ARCHITECT: Smith-Miller + Hawkinson, New York, New York—Henry Smith-Miller (partner in charge); Knut Hansen (project architect/loft); John Conaty, Annette Fierro, Knut Hansen, Alexis Kraft, Charles Renfro, Jennifer Stearns, Kit Yan (design team/ARDT-L); George Gomez, Annette Fierro, Timothy McNicholas, Peter Morgan, Ruri Yampolsky, Kit Yan (design team/loft)

CONSULTANTS: Severud Associates (structural); Carlo Marzot and Associates (HVAC); Richard Eisenberg and Associates (electrical/ARDT-L); Edward Cortez and Associates (electrical/loft); Andy Szwczuk and Associates (sanitary)

CONTRACTOR: Nico Construction (ARDT-L); AJ Contracting (loft)

PHOTOGRAPHY: Paul Warchol





a sense of kinetic energy. Together, the

planes, ever shifting in degree and diameter.

Landsman/Holzman Loft
New York City
Andrea Landsman/
Malcolm Holzman,
Architects

URBAN REALISM



“For our loft, Andy and I do what my clients won’t let me.”—Malcolm Holzman



TODAY'S CITY DWELLERS INHABIT A world packed with buildings, signs, quick messages, and mass-produced images of all kinds that lack singularity, are only briefly in fashion, and disposable. Most who can, decorate their homes as a refuge from this urban maelstrom, evoking a rural way of life by means of traditional, country kitchens crammed with handicrafts, and living rooms decked in chintz and wicker.

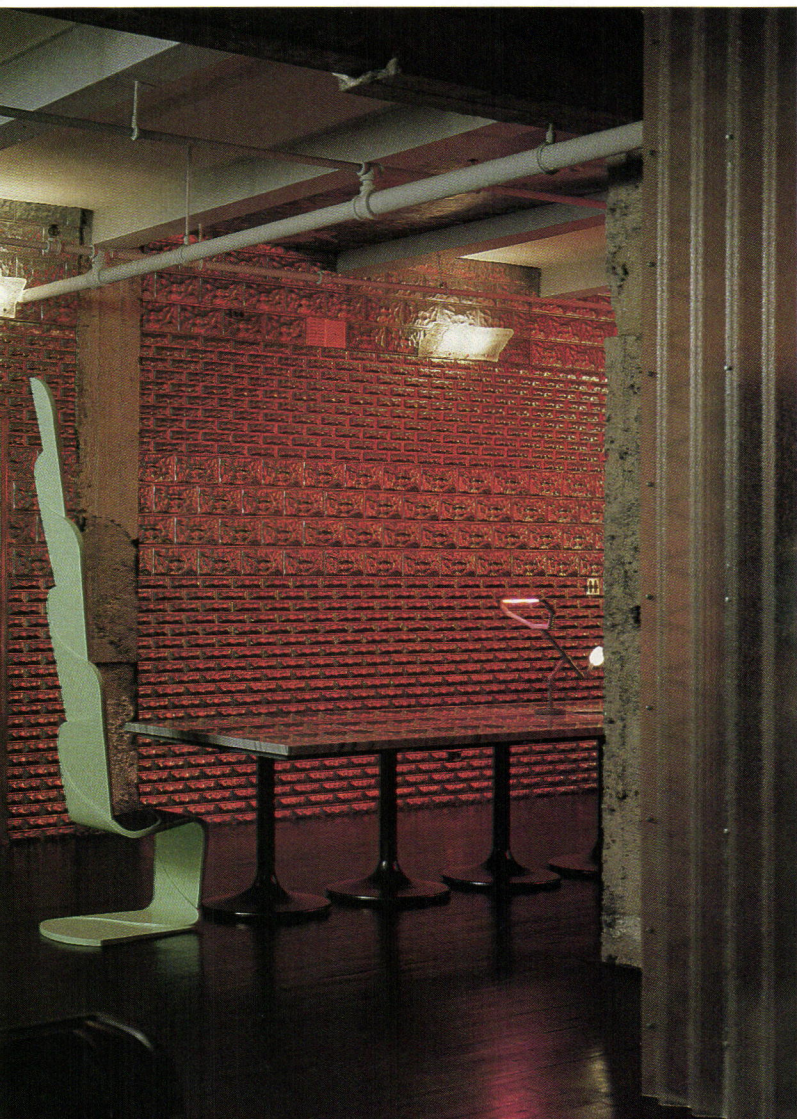
Not so for Malcolm Holzman and his wife Andrea Landsman. For their Manhattan loft, these designers joyfully acquire whatever they fancy from the world's detritus, referring to their possessions fondly as "junk." Only the couple's distinguished collection of American realist paintings, and contemporary sculptures that double as chairs, escape their playful derogation.

Holzman, a partner of the New York firm Hardy Holzman Pfeiffer Associates, began to collect realist paintings at least a decade ago, back when most critics and collectors, entranced by abstract art and Pop, considered it hopelessly *retardataire*. He owns, for example, several works by Philip Pearlstein, a painter who depicts the female nude with a directness, bluntness, and a deliberate stylelessness derived from unblinking analysis of his subject's flesh, muscles, and bones. Such art embodies the same stylistic transcendence, toughness of thought, and attention to materiality to be found in Holzman's architecture.

For the loft, the architect applied his usual intense scrutiny to the selection of interior finishes. His decision to cover some walls with galvanized steel stamped in alternating brick and stone patterns seems hardly meant to soothe, but rather to intrigue by nuance. Holzman acknowledges that the use of this material, commonly applied to dolled-up gas stations,



The living room (facing page, top) includes a painting by Sidney Goodman, two chairs by Alan Siegel, and a Hoffman bentwood chair purchased for seven dollars at an auction. The rug was derived from a screen by realist painter Jack Beal. The corrugated fiberglass wall (facing page, bottom) shimmers when lit from within. The street scene painting is by Wayne Thiebaud. At the opposite end of the living room (top left), a Motorola radio frames a wedding picture. The woven Napoleon is of unknown provenance. The self portrait is by Dana van Horn. The Chinese rugs (center left) were bought at a local carpet store, the painting is by Cham Hendon. Displayed in the foyer (bottom left) are a painting of the Flatiron Building by Daniel Morper, a sculpture, "Broken Stream," by John Okulick, a doctor's chair, and on the far wall, a painting by Roger Brown over a Philadelphia Empire sofa.



highway strip buildings, and industrial shacks the second time around, might be perceived as a singular transgression against everything an interior wall should be. “Because the combination of windows and pilasters left little space for our big pictures,” he explains, “it was necessary to construct an uninterrupted space from window to window. I didn’t want sheet rock. It’s more fun to see art on a background that isn’t scaleless and flat. And it’s nice to have metal around.”

Other wall surfaces include flakeboard stained green and corrugated fiberglass, a translucent material which, notes Landsman, “lights up and glows—sometimes blue,



sometimes red.” Adds her husband: “We left the beams and ceilings in their beat-up condition—a touch of archaeology. Everywhere you see beige you are looking at an original wall.

Holzman confesses that the loft is a continuing chance to try out ideas for which the clients of his firm may not be ready. But

the interior is also much more than that. Holzman and Landsman have welcomed into their nest the kind of gritty urban memorabilia, like a Blatz Beer sign, that most people would rather keep at bay. Yet it all seems rather pleasantly domestic, a self-made art gallery that surprisingly feels like home. Holzman’s architecture has always been full of contradictions. His loft turns out to be no exception. ■

—MILDRED F. SCHMERTZ

Mildred F. Schmertz, former editor-in-chief of Architectural Record, is a New York-based writer and member of the New York City Landmarks Preservation Commission.



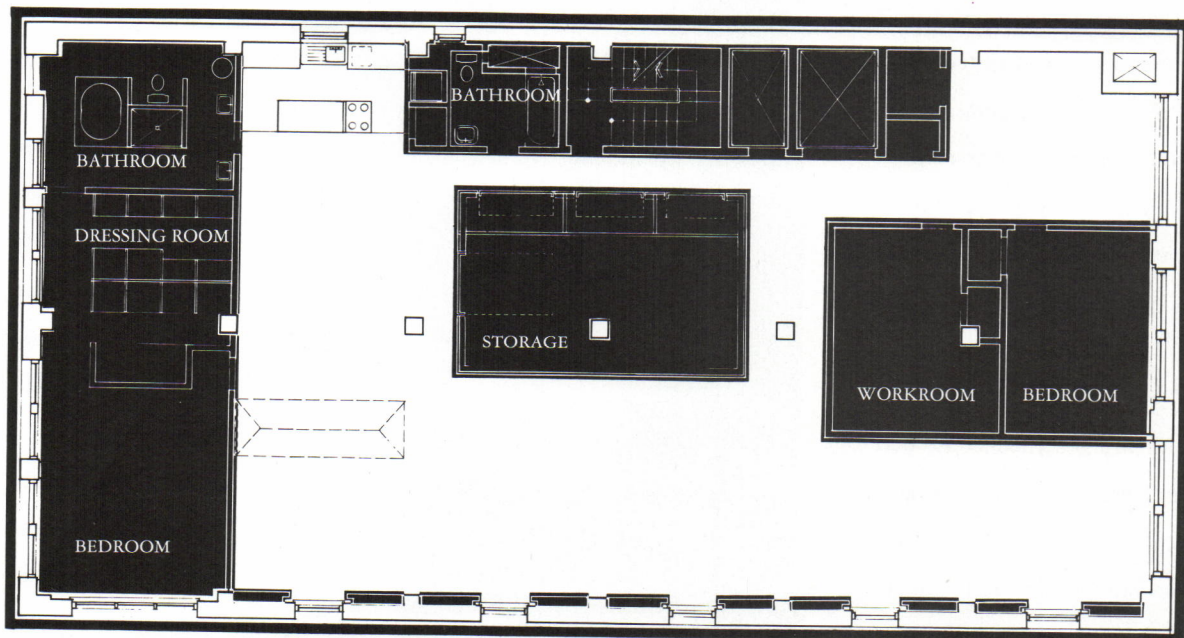
The bedroom (facing page, top) includes a work space. An Alan Siegel chair dominates the dining area (facing page, bottom). A bathroom (facing page, center) is faced with tile samples and a Blatz Beer sign ornaments the kitchen (above). The plates are gifts from friends and are accepted by the Holzmans only if they cost less than a dollar.

LANDSMAN/HOLZMAN LOFT
NEW YORK CITY

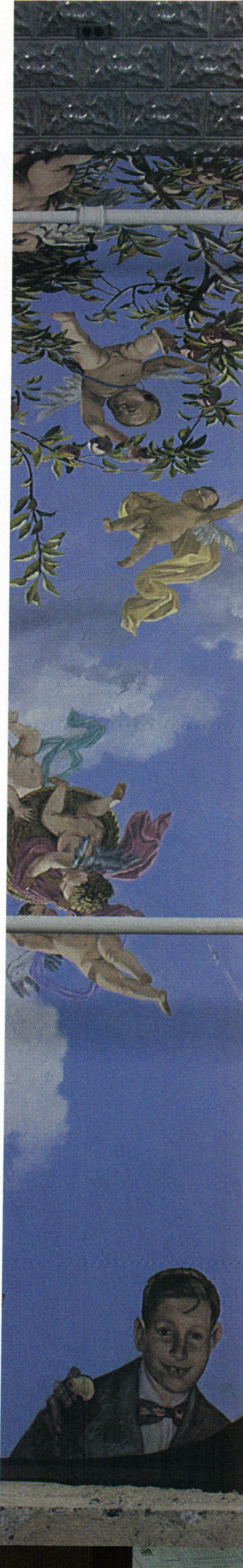
OWNERS/ARCHITECTS: Andrea Landsman/
Malcolm Holzman

CONTRACTOR: Ben Caldwell

PHOTOGRAPHER: Norman McGrath



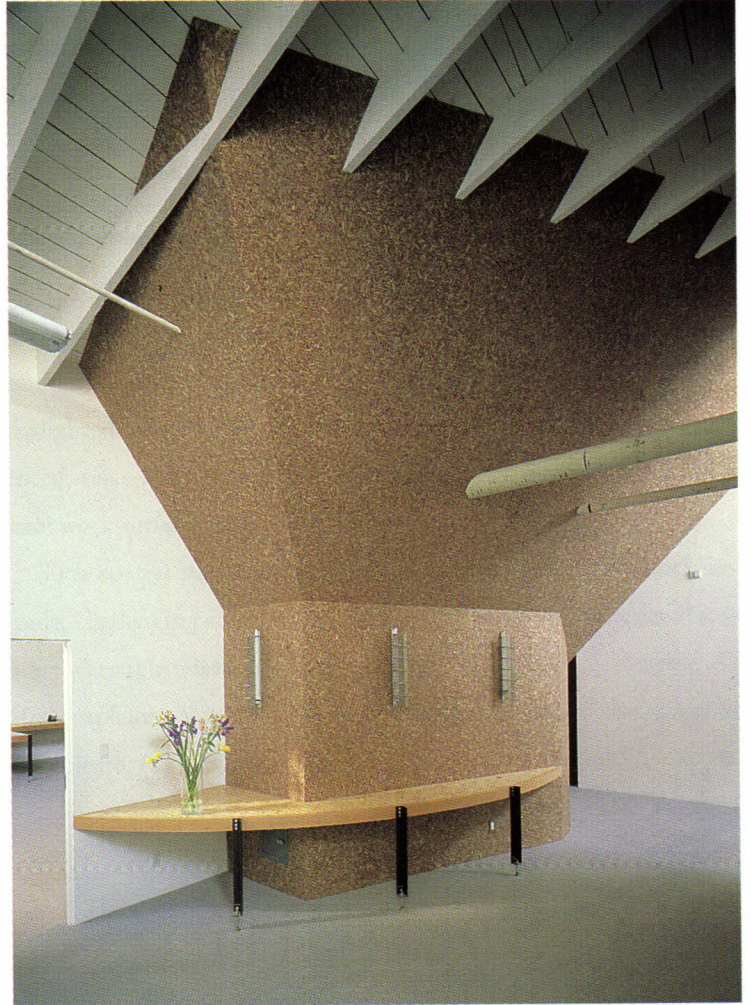
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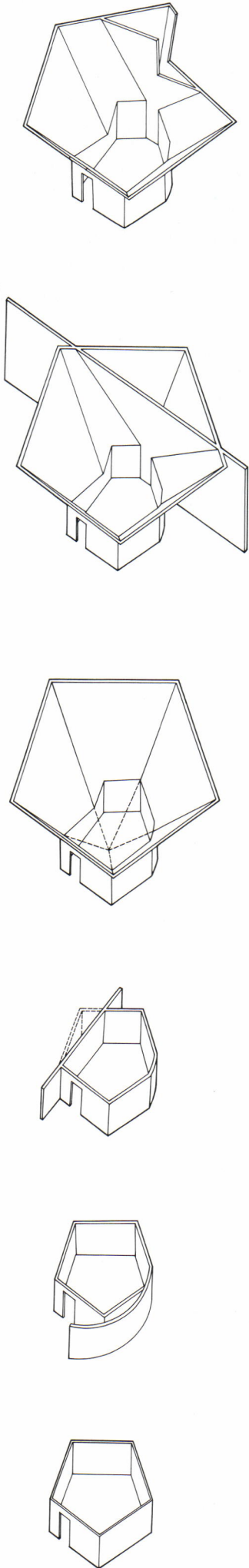


Tables (above) are designed by Messer.

proach For Hybrid Arts, a manufacturer of audio recording software

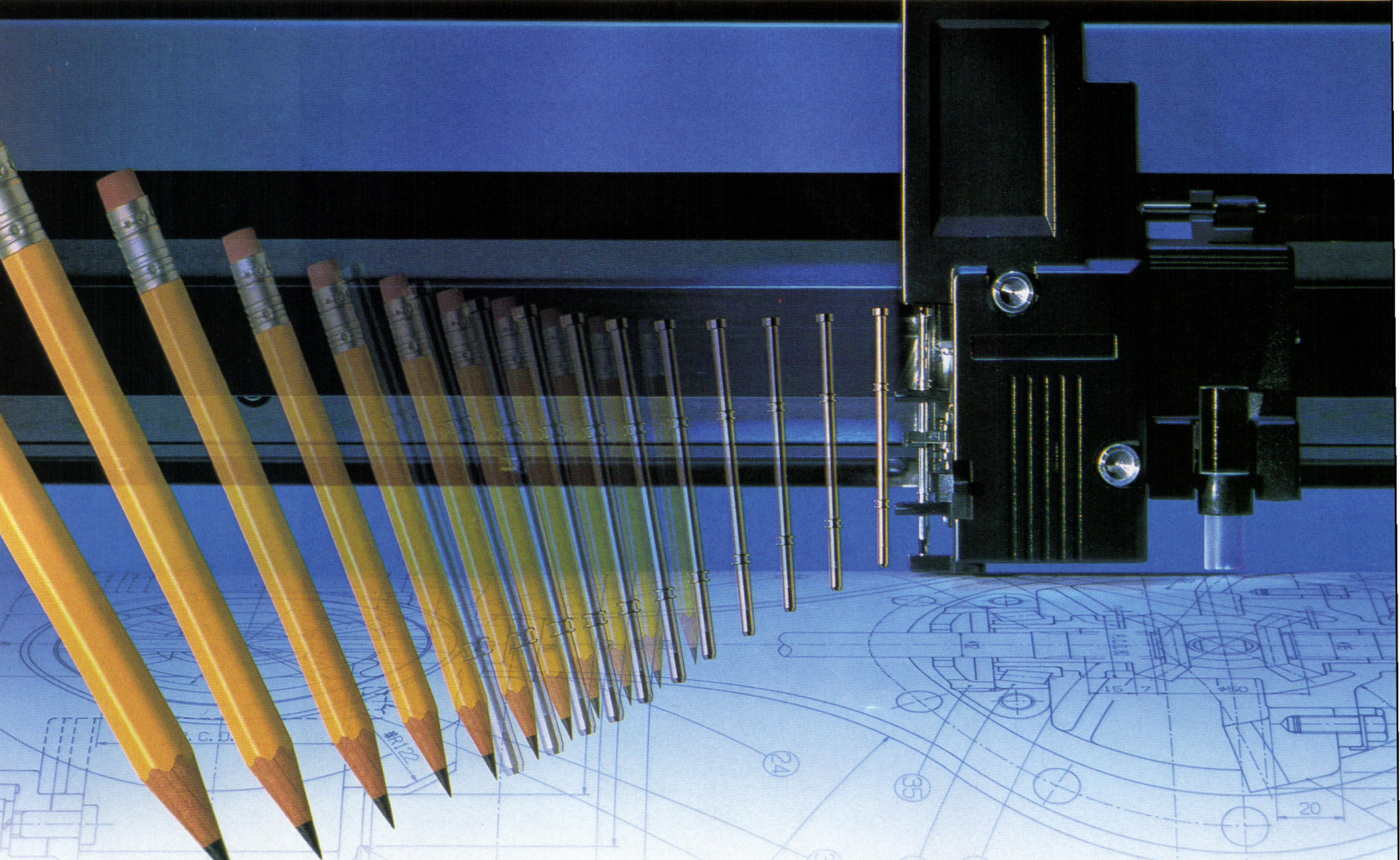
form with partitions and extending splayed projections from its base



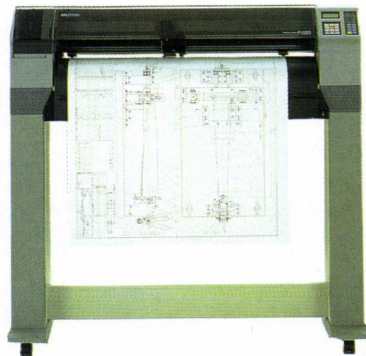


In designing QRC's library, Moss began with a pentagon that he metamorphosed to meet site conditions and programmatic requirements (drawings, bottom to top). Partially visible throughout the offices, the cedar strandboard-covered room dominates the front office (facing

page, top right and bottom left), but is less prominent in a staff room (facing page, bottom right). Entered from the back office (facing page, top left), the library reveals its faceted whole from the inside (above), furnished with a column-supported steel table and wall shelves.

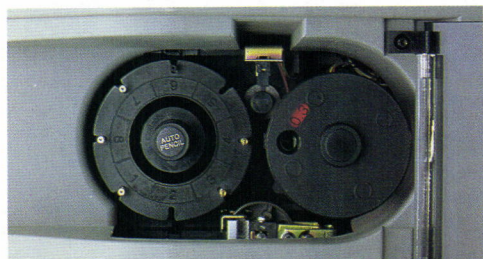


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Circle 80 on information card

Flights of Fancy

Details elevate staircases to new artistic heights.

FOR THOUSANDS OF YEARS, THE COMPONENTS HAVE REMAINED the same—treads, risers, and runs—but few architectural elements have hosted such design invention as stairs. “It’s a rich vein, almost as rich as a chair,” says Tom Luckey, a designer based in Branford, Connecticut, who has designed many sculptural, wooden flights. “Moving from upstairs to downstairs can be a celebration.”

The ground rules for designing staircases are tied to the human gait. The average stride is 26 inches, so two risers plus a tread should total no more than this dimension for comfortable negotiation, according to authors Cleo Baldon and Ib Melchior in the new book *Steps & Stairways* (Rizzoli), a historical look at the subject. The space allowed for stairs is sometimes restrained, so treads and risers often are arranged into scissors, L-shapes, winders, and spiral configurations to maneuver around oblique angles or minimize a staircase’s volume.

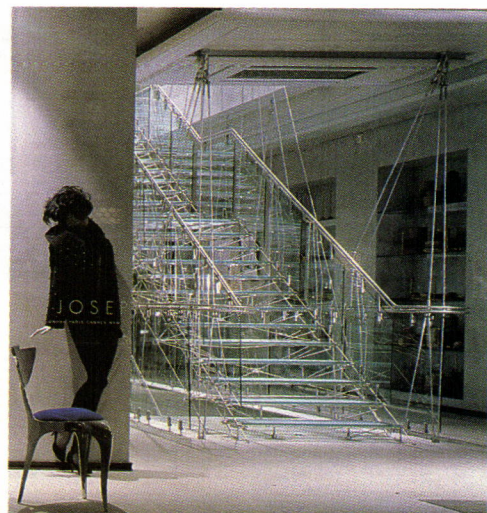
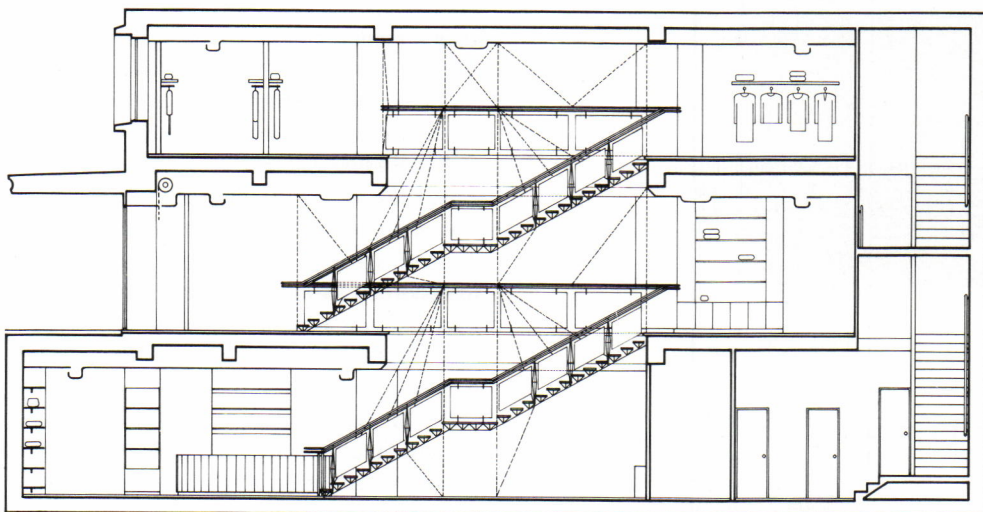
Since the parts are always the same, creativity in stair design often lies in details—special materials, methods of connection, elaborate treads, minimal or nonexistent risers, elegant railings. On these pages, we present two very different stairs whose details, if Mies was right, must surely abet their rise toward heaven.

—MICHAEL J. CROSBIE

Tom Luckey’s curvaceous stair (below) excludes the warmth of wood, while the spidery steel construction designed by Jiricna Associates hangs like a sculpture (bottom) at the center of a London shop (section).



WALTER SMALLING JR.



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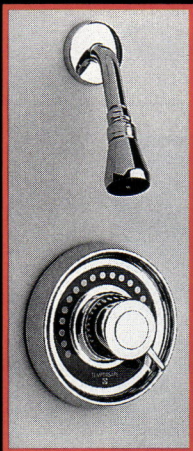
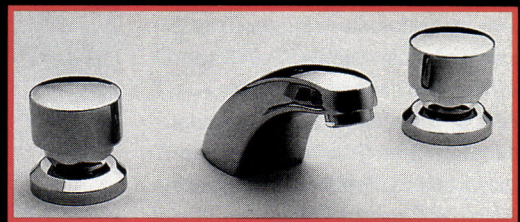
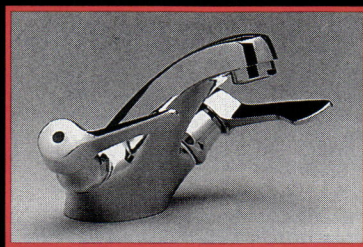
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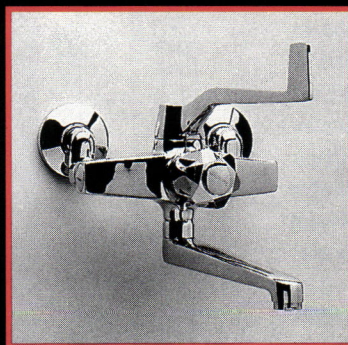
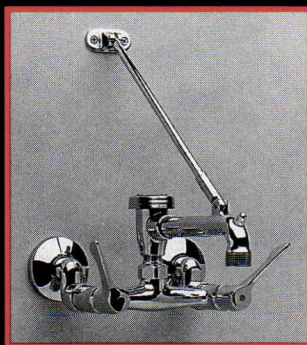
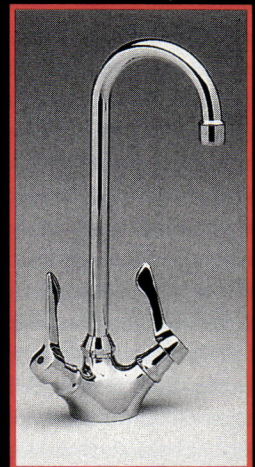
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Indoor Ecology

Air pollution in offices and homes forces architects to design safety into interiors.

IN JANUARY, THE ENVIRONMENTAL PROTECTION AGENCY'S Seattle office sponsored a two-day seminar on indoor air quality. Seminar coordinator Laura Lonowski expected 100 people, but nearly 400 registrations flooded her office. Despite a frantic reservation for a ballroom at the Washington Athletic Club, the EPA turned dozens of people away because of the overwhelming response from public health professionals, attorneys, builders, and architects.

During the past two years, indoor air quality has moved beyond theoretical discussions to become a key design issue for architects. The EPA estimates that indoor air pollution—also known as sick building syndrome—may cost U.S. business as much as \$1 billion a year in medical costs, lost productivity, and damage to interior fittings. The problem reaches into homes too, where hazards ranging from radon to sensitivity to emissions of volatile organic chemicals (VOCs) from pressed-wood products, carpeting, and paints can lead to a variety of physical maladies.

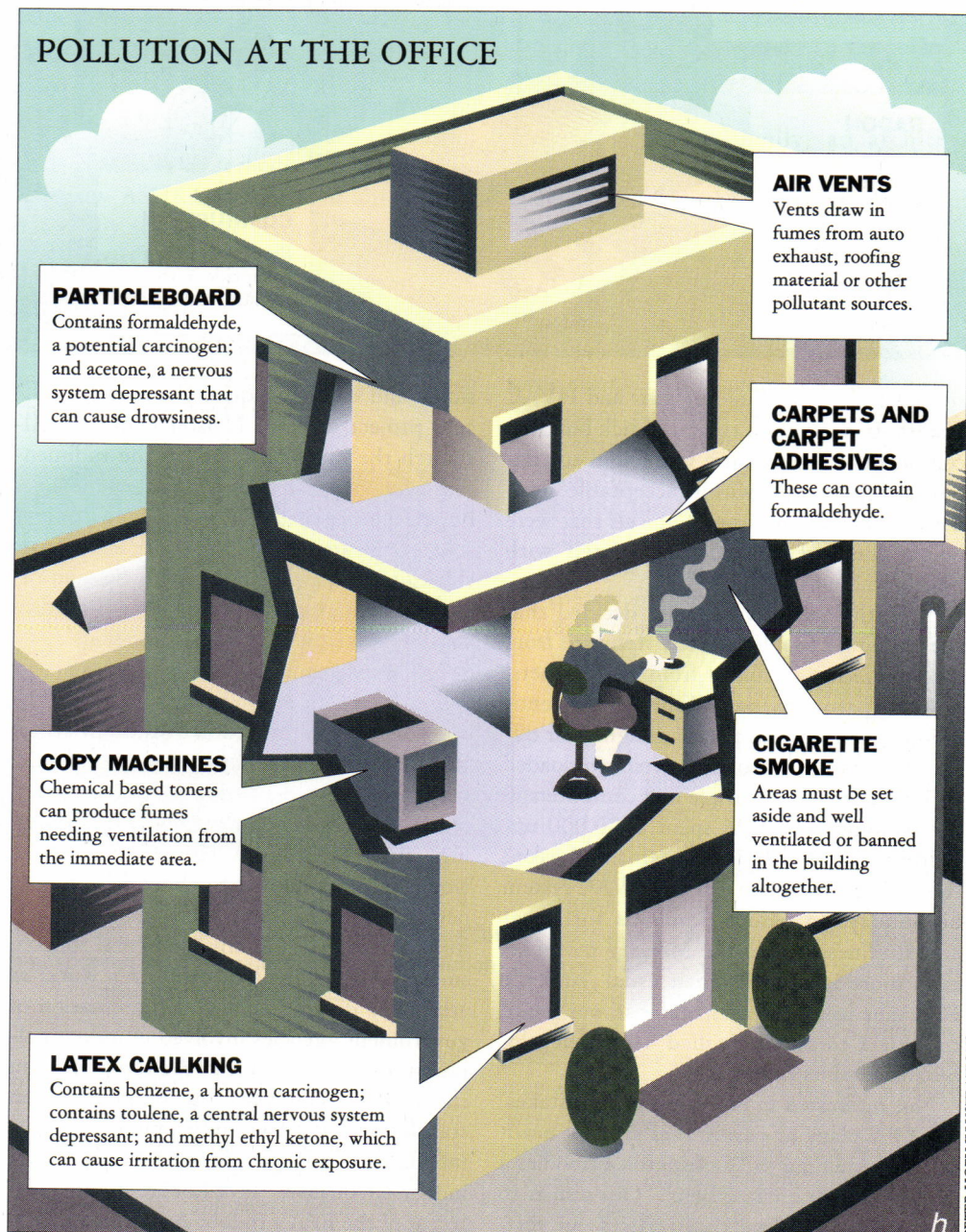
But indoor air pollution is a subject many architects would rather not face. "The problem is a complex one—and most architects have an oversimplified notion as to what the issues are," says Hal Levin, a Santa Cruz, California-based research architect and editor of the *Indoor Air Quality Update*. "To really understand the issue requires an architect to focus on it in a way that very few have been able to do." Focus they must, however, if the experience of Skidmore, Owings & Merrill's Chicago office is any indication. "Two or three years ago, only our most enlightened clients were asking about indoor air quality," says Roy J. Clark, partner with the firm. "Today virtually all of them do."

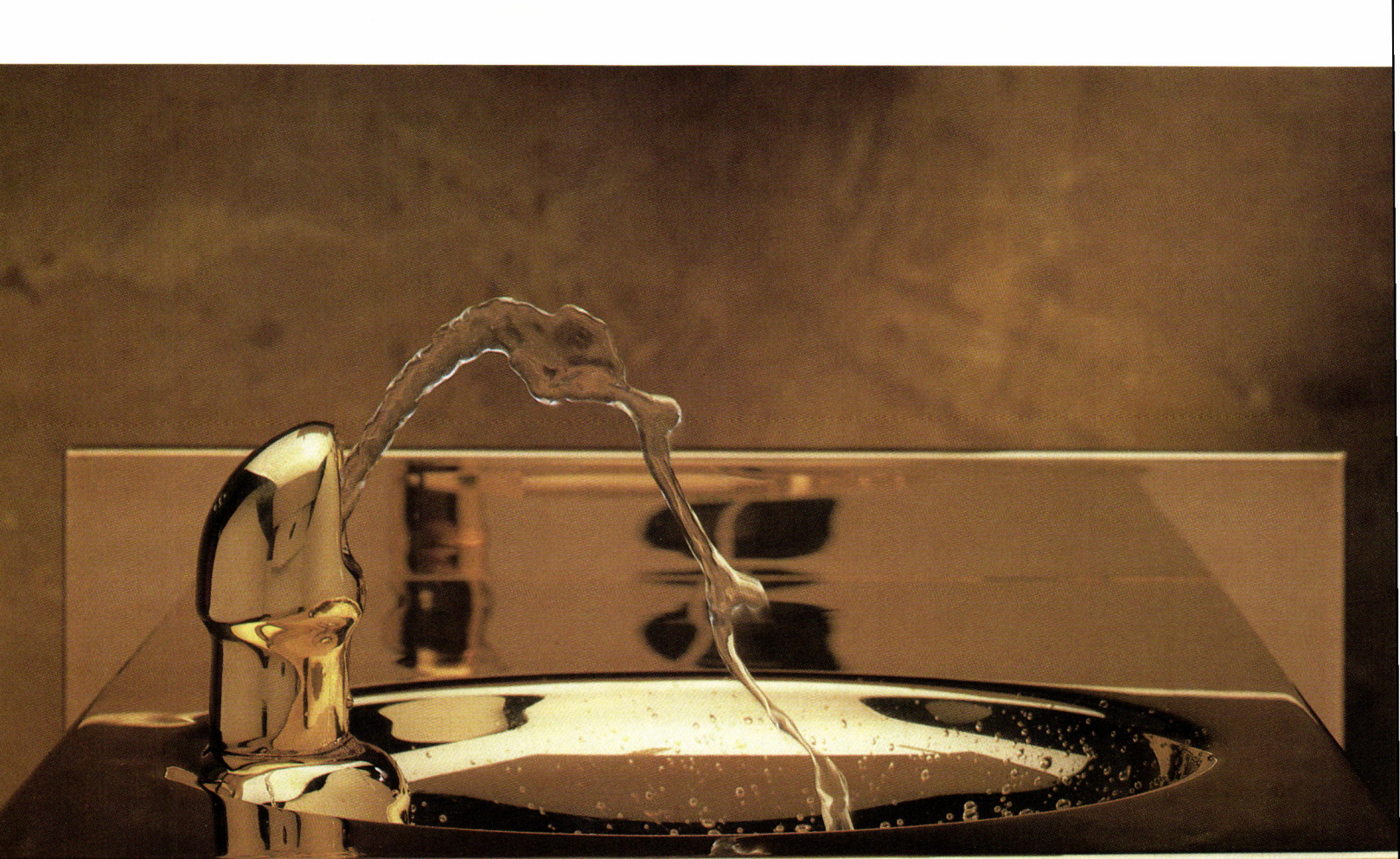
Indoor air pollution comprises a Medusa-like array of problems that defies easy description. Tobacco smoke, emissions from carpets, paints or wood products, and exhaust fumes from nearby street traffic can all foul indoor air. The proliferation of fax machines, laser printers, and copy machines, with their accompanying chemical developers and toner particles, is another source of pollution. Even a building's own HVAC equipment can contribute to the problem if it's not functioning properly or if it draws

outside air from a polluted source, such as a heavily trafficked loading dock. In fact, it is often impossible to isolate a single culprit within a sick building, and efforts to fix one complaint can create other problems. The classic example of the complexity of indoor

pollution lies at the root of many interior air quality problems—tighter sealing of buildings to increase energy efficiency.

Ironically, the EPA itself was hit with sick building syndrome at its Waterside Mall complex in Washington, D.C., renovated in 1988. Dozens of employees complained of health problems from working in the building, with six told by their doctors to steer clear of the structure. With a test case literally in its lap, the EPA conducted an exhaus-





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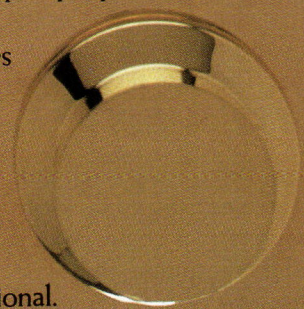
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Deciphering the Code

A Washington, D.C., firm translates building codes into convenient reports.

IN 1985, ARCHITECT DENNIS B. BROWN DECIDED THERE HAD TO be a better way. Since founding his Washington, D.C., firm Komatsu/Brown Architects in 1978 (now Geier Brown Renfrew Architects), Brown observed that an inordinate amount of his time and energy was devoted to researching building codes. He appreciated the importance of building code compliance, and that code searches were integral steps in three major phases of a design project. In the schematic design phase, codes influence cost and construction class decisions: building materials, height and ground area, street frontage, and site orientation. In the design and development phase, locally-enforced codes can affect design factors from glazing to handicapped accessibility, while a complete review of all code requirements is necessary for construction documents. Brown's problem with codes was not their existence, but that keeping abreast of them was such a big job in itself.

Brown believed that in the age of personal computers, a market existed among design professionals for an accessible, comprehensive database supplying code information—similar to the LEXIS information retrieval system developed by Mead Data Central to serve the needs of the legal profession.

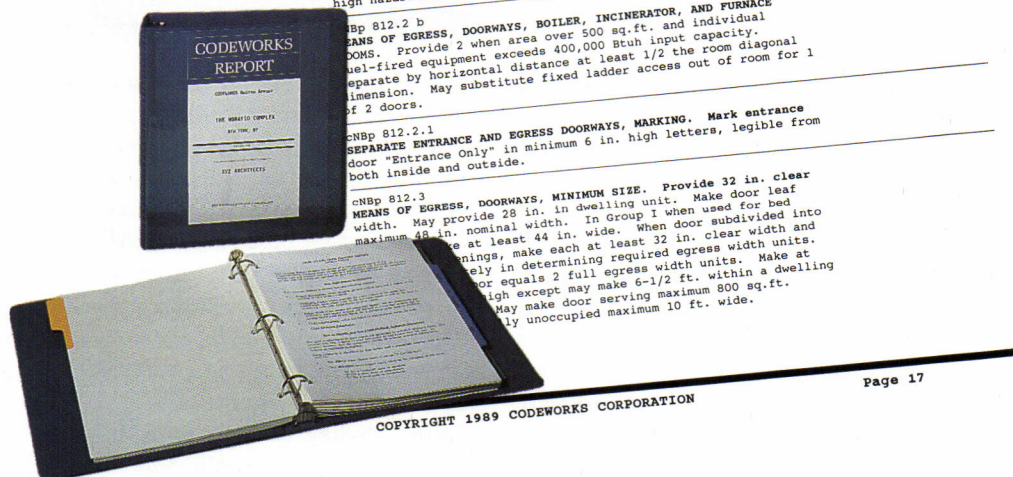
A formidable task

WITH MORE THAN 44,000 FEDERAL, state, and local government bodies that develop, impose, and enforce building codes, Brown realized harnessing such a mammoth bank of information would not be easy. In fact, his initial research revealed that others

had attempted similar enterprises, only to abandon them when the extent of the database became apparent.

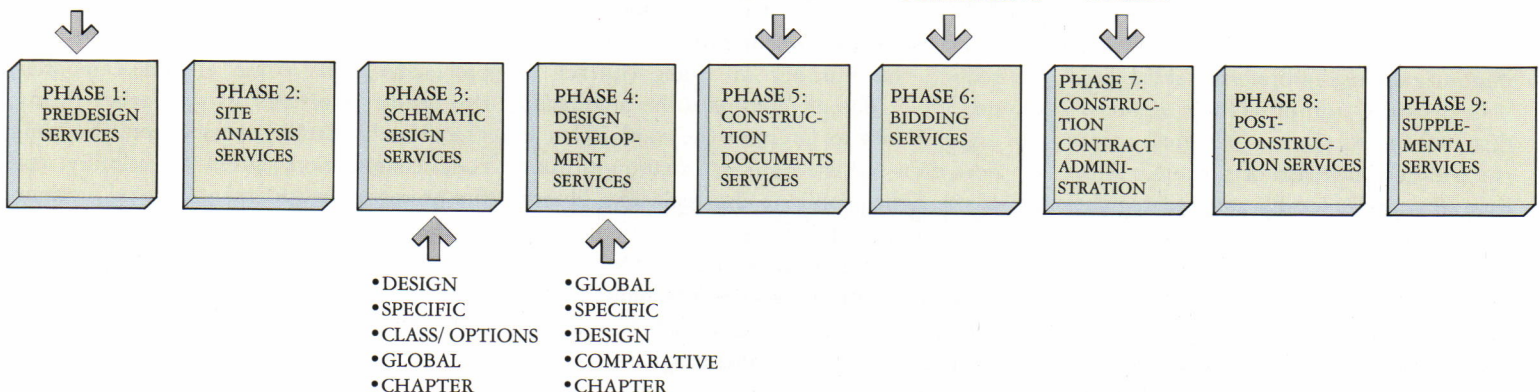
Brown called on Marshall Graham, an information systems specialist who had served as president of Source Telecomputing and had held executive positions at IBM and Xerox. In 1986, after confirming the project's viability, Brown and Graham formed Codeworks in Washington, D.C.

Codeworks issues reports in ring binders (below left) with pages divided into subtopics referencing original code paragraphs (below). The diagram (bottom) shows different types of Codeworks reports appropriate for various stages of design.



- ADMINISTRATIVE
- LOCAL AMENDMENTS
- CLASS/ OPTIONS

- COMPARATIVE
- GLOBAL
- SPECIFIC
- CHAPTER
- SPECIFIC
- COMPARATIVE
- SPECIFIC



In establishing Codeworks Corporation, Brown and Graham faced the formidable task of dealing with the three entities that provide the basic framework for building codes adopted in the U.S.: *The Building Officials' & Code Administrators' Basic/National Codes*, used in the East and Midwest; the *Standard Building Code* published by The Southern Building Code Congress, which governs the South; and the International Conference of Building Officials' *Uniform Building Code* which prevails in the West. To complicate matters, these models are almost always modified by local code officials. Keeping track of the code amendments falls in the purview of the National Conference of States of Building Codes and Standards (NCSBCS) located near Washington in Herndon, Virginia.

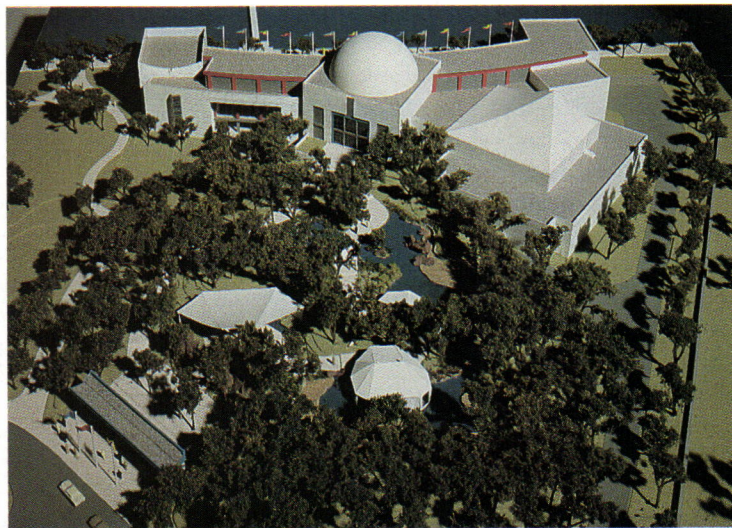
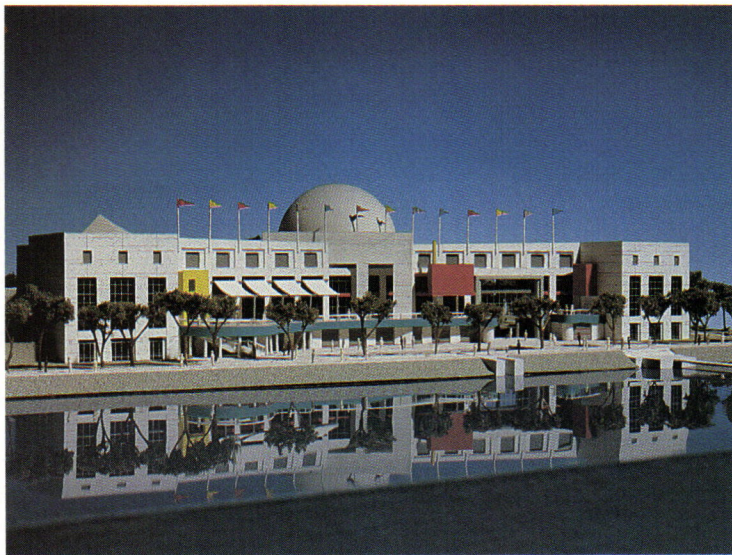
In September, 1987, knowing that NCSBCS held the key to month-to-month changes in building codes nationwide, Codeworks entered into an exclusive agreement whereby NCSBCS collects, abstracts, and inputs local jurisdictional code regulations into Codeworks' database. The database comprises seven major code areas: building, mechanical, plumbing, energy, handicapped accessibility, fire prevention, and life safety. In 1989, a similar long-term agreement with the National Fire Protection Agency, publisher of *National Fire Codes*, greatly enhanced Codeworks' database.

In late 1987, after installing a database onto a mainframe, developing software, testing the market, and establishing an advisory board, Codeworks was ready to do business. From a marketing standpoint, the corporation was well positioned: few electronic code information systems existed, and none offered such a comprehensive database or included amendments for local jurisdictions. The initial service was marketed in metropolitan areas located in the South and East. Codeworks' primary product—computer-generated reports—were transmitted in two formats: traditional paperwork or on-line retrieval via modem hook-up.

Tools for Designers

CODEWORKS' GOAL HAS NEVER BEEN to usurp design functions, but to expedite them. The company's stated mission is to provide "analytical tools and quality assurance systems that increase productivity and minimize the risk of professional liability."

Codeworks' administrative report is the first tool in this process. It's most useful for the pre-design phase of a project, since it lists all current, locally adopted regulations for the seven major code areas, as well as the enforcing official's title, address, and telephone number. An "additional notes" section alerts the user to other general enforcement information, and Codeworks can



New Jersey State Aquarium Camden, New Jersey The Hillier Group

The proposed New Jersey State Aquarium (left) is planned as a public marine-life/visual arts facility that is scheduled to open in September 1991. Its projected attendance of over one million visitors a year posed perplexing code issues such as ingress, egress, and circulation; the amorphous shapes of the spaces made it difficult to calculate the numbers of visitors that could be accommodated at any one time. Project architect J. Leonard Groom, AIA, found Codeworks' paragraph summaries especially valuable, expediting ongoing research as design changes were made.

provide the full text of local amendments. "We have a standing policy to use Codeworks as the basis for all projects whose size and jurisdictional complications warrant it," says Robert Adams, a project architect with The Architects Collaborative (TAC) in Cambridge, Massachusetts. "From a corporate standpoint, we're emphasizing the importance of code research, for the design professional is ultimately responsible for seeing that regulations are satisfied."

But avoiding the cost of errors or omissions isn't the only benefit Adams cites. "An enormous expense is involved in maintaining a code library, not to mention the manhours involved in correspondence with code officials." Lance Josal of the Dallas office of RTKL Associates concurs: "It doesn't preclude contact with code officials, but it can reduce the number of times contact is needed. It doesn't eliminate the architect's responsibility to interpret the code. What it does do is put the right information in front of the right people. It also replaces a library that stores outdated code information with a continuously updated resource." The administrative report can also reduce hidden costs associated with traditional code research, such as travel and telephone expenses.

Valuable for the construction and documents phase of a project, Codeworks' global report serves as a quality control checklist. The categories within the seven major code areas are organized in index form by topic, and cross-referenced. "Its big advantage is that it allows us to do our job more thoroughly," says Wagdy Anis, a project architect at Shepley Bulfinch Richardson & Abbott in Boston, "because code issues are grouped together by topic in the index, it saves time. You know exactly where to look." Codeworks' global comprehensive report, for example, references as many as 40 code citations under the topic "egress capacity" alone. The user searching only for information on mezzanines can ignore the referenced amendments concerning passageways and ramps that follow. While the comprehensive global covers all code categories, the report is offered in two other forms: global architecture covers general building code, construction, egress, accessibility, and fire protection requirements; global mechanical/plumbing covers plumbing, HVAC, and related energy issues. RTKL's Josal points out: "It's cut-and-dried, cost-effective, and reduces the need for appeals or variances. It's also invaluable for the contractor, who can

use it as a tool to verify or back-check code compliance."

Other reports are useful for schematics. The design report provides a tabulated overview of critical requirements affecting basic design and layout—floor-by-floor interrelationships of such elements as exits, maximum travel distances, stairways, restrooms, and hourly fire ratings for walls. "Codeworks' design reports are really great on mixed-use structures," observes Adams of TAC. "They allow you to take a building apart layer by layer and compare relationships between occupancy, specific uses, and cost." Calculations are referenced to the original code document.

"Class and option reports are very useful when design relationships are considered," notes Jim LeBlanc, vice president of Hellmuth, Obata and Kassabaum's Dallas office. Codeworks' class report helps an architect determine the least restrictive construction type and use-group classification after desired options are specified. It supplies calculations for evaluating trade-offs among site dimensions, maximum street frontage, building area, number of stories, story

heights, sprinklering, and attendant costs. The option report is the reverse of the class report: the designer specifies construction class, and Codeworks generates the various options.

The comparative report complements an existing global report when design alternatives are considered. "What if" scenarios dictated by cost factors can be tested against regulations. Codeworks' specific reports reveal the ramifications of one design change—adding a circular staircase, glass elevator, or atrium—as to compliance with regulations from each of the seven major code areas. Chapter reports document all the code requirements in a given jurisdiction affecting a major building issue, such as handicapped accessibility or forced-air systems.

Codeworks' reports also can be used as marketing tools. "Global and administrative reports provide a tool we can show a client," says Herman Wolfe, principal of Askew Nixon Ferguson Wolfe in Memphis. "They are a tangible demonstration of the firm's commitment to quality control." At the proposal/bidding stage, reports serve as factual records of billing determinations.

To market, to market

IN 1989, PARTLY AS A RESULT OF CLIENT suggestions, Codeworks reassessed its marketing and service strategies. Initially, the company's reports were divided into two product lines: CodeControl and CodeAnalyst. The subscription fee for each was \$295. Currently, all reports are available to subscribers in a combined product line. The total first-year subscription fee has been reduced to \$195, with a yearly renewal fee of \$100. The individual reports continue to range from \$35 to \$475.

Use of information retrieval through personal computers, which required modem hook-up for an additional charge, has been suspended. "The questionnaire format on paper is one that everyone is familiar and comfortable with," says Codeworks president and CEO Marshall Graham. "We listen to our customers. We learned how to organize and deliver information in the form consumers want to use. We made the assumption that everyone in the field wanted an automated product and wanted to access and retrieve data using their own personal computers."

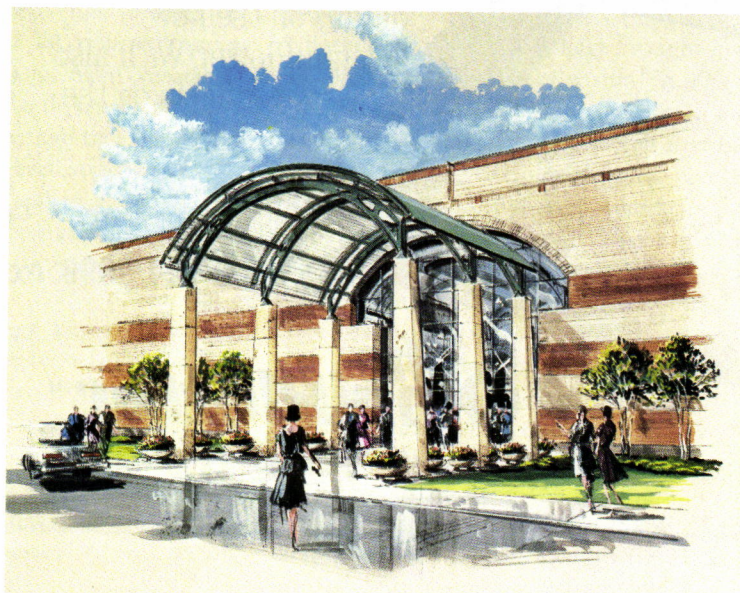
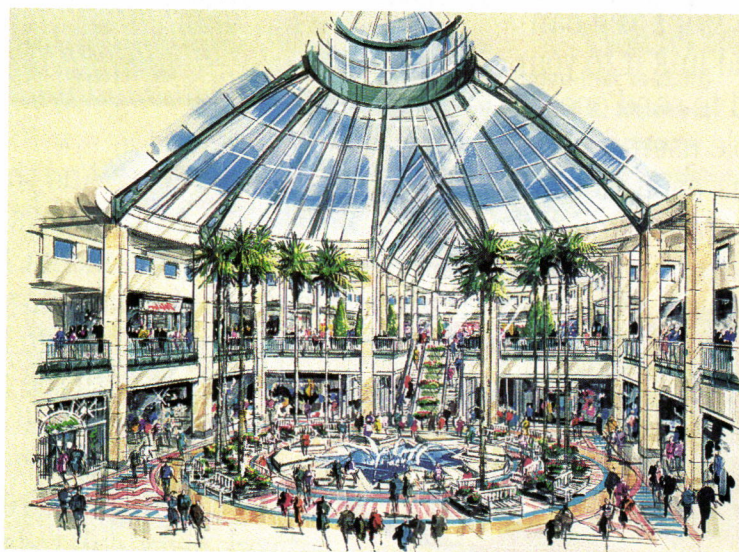
Graham adds: "Many firms don't yet have PCs, and for those that do, access to them may not be convenient for principals. And a project architect may become involved in the code research cycle only once or twice a year. It's not surprising that users would forget how to use the program. Relearning that procedure defeated a major strength of our products—saving time." That's not to say that Codeworks won't consider an automated information service some time in the future. "We will continue to be responsive to the demands of our market, however they develop," says Graham.

With more than 400 firms accessing code data pertinent to 900 municipalities in 84 metropolitan areas, Codeworks is steadily attaining its goal, in Graham's words, "to continue our geographic march across the country, adding jurisdictions and providing complete, in-depth answers to code questions." The subscription service includes a toll-free customer service line and a monthly newsletter that alerts users to new jurisdictions added to the database, and to those with pending code changes. Marketing manager Brenda Wheeler adds: "Users have also suggested that we extend our database to foreign markets where business is growing at a phenomenal rate, and that service may develop into a long-term goal. Our present priority is making the U.S. database even more complete, by adding code data that relates to specialty building types, like detention facilities."

In addition to being open to suggestions, states Wheeler, another important aspect of

Continued on page 138

Lakeline Mall Austin, Texas RTKL Associates Inc.



The Dallas office of RTKL Associates first used the research services of Codeworks for the 385,000-square-foot Lakeline Mall (top right). The regional mall includes five department stores and a 650-seat food court (bottom right), expected to be completed in the fall of 1992. The Codeworks report provided project manager Candace Sheeley with analysis of codes particular to shopping malls—egress capacity, mix of uses, and the relationships between those different uses—in a single reference book. "I could look up all the issues in one source," she says, which saved at least two weeks of research time.

limitation had to do with our use of non-standard size sheets. We often use unorthodox media in nonstandard sizes, and prefer not to trim a sheet after plotting. This made loading paper in the DL difficult. We were unable to load some sheets that had been cut from a roll and were not exactly square.

—CATHERINE LEE, AIA

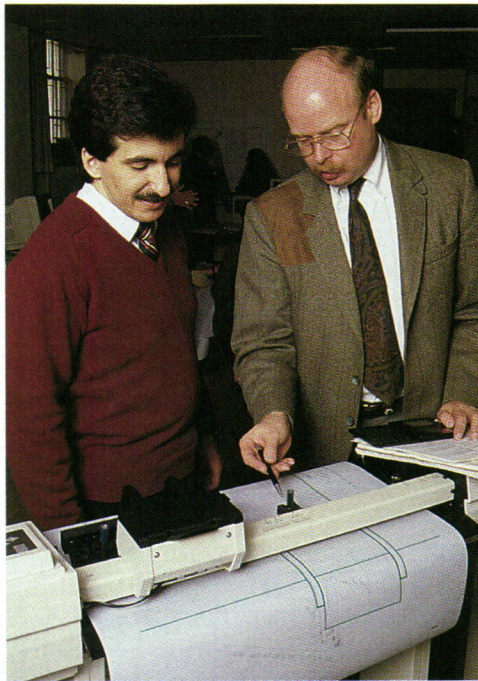
LP3500 IOLINE

THE LP3500 IS THE LEAST EXPENSIVE plotter included in this evaluation. With one pen and no control panel, it is priced at \$3,170 including a roll feeder.

Ioline's marketing strategy for the LP3500 is a blend of rear-garde and avant-garde notions. The plotter is set up with software, available from Ioline for both Macintosh and DOS-based computers. The only control on the machine is a single button with a tiny red light. This stands in marked contrast to the industry trend toward more complicated button pads and on-board plotter programming.

Its ultra-heavy gauge metal parts, held in place by perfectly countersunk machine screws, would be at home mounted on brackets in the back of a forestry service van, connected to a laptop computer. Actually, it is so sturdy that you could just let it bounce around on the cargo deck.

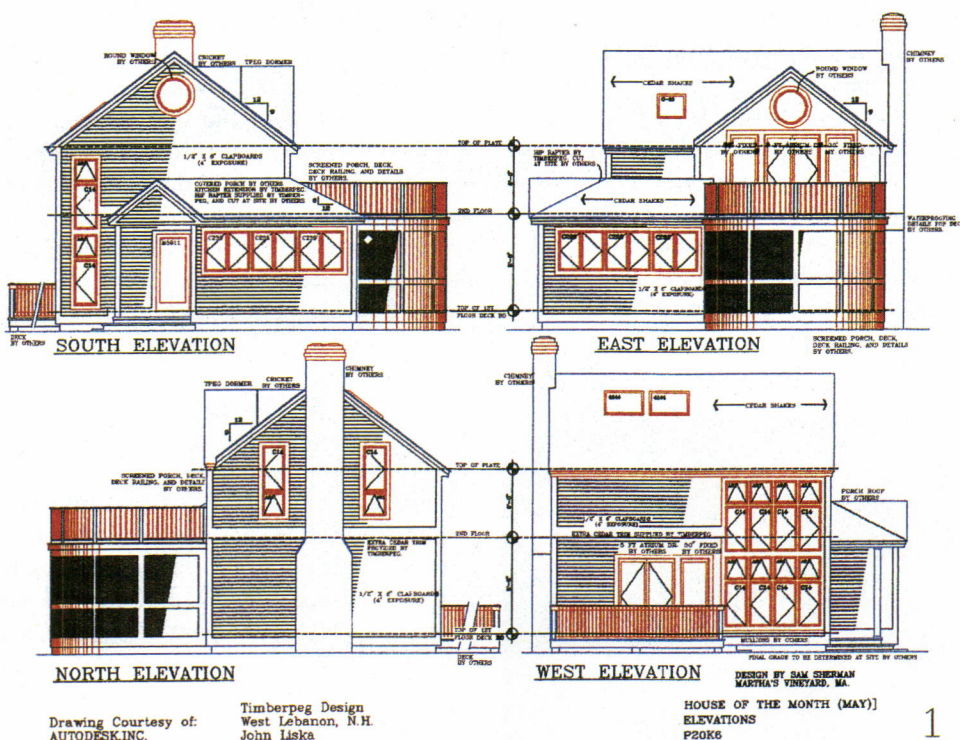
When mounted on its attractive natural oak roll-feed stand, however, the ensemble makes a fashion statement that would fit perfectly in a recently sand-blasted fern bar, or the professional equivalent. The LP3500



Reviewers Michael Tzanetis (left) and John C. Voosen (right).

is the ideal machine for use with entry-level employees, who can be expected to stand around watching the plot appear at 10 inches per second. They'll be ready and waiting to change pens when the machine stops and blinks at them, and it will take with impunity whatever else they can dish out.

I had the LP3500 plotting perfectly with Archicad and Claris CAD on a Macintosh IICI with its 68030 processor. But getting the plotter to establish relations with the 68020 Macintosh SE used at the evaluation meeting was impossible.



Drawing Courtesy of:
AUTODESK, INC.

Timberpeg Design
West Lebanon, N.H.
John Liska

DESIGN BY SAM CHERMAN
MARTHA'S VINEYARD, MA
HOUSE OF THE MONTH (MAY)
ELEVATIONS
P20K6

1

JDL's color dot matrix OmniPlotter produced elevations (above), drawn by John Liska, West Lebanon, New Hampshire.

To see if the plotter had somehow been damaged in transit, Mac-format HPGL plot-files were translated onto DOS disks. They plotted perfectly with Ioline's proprietary Host and Send-IT programs on an IBM AT, but another quirk was discovered. Rather than letting you configure a port and simply copy a file to the plotter from the DOS prompt—one of the only delights left in the DOS universe—Ioline makes you use its proprietary software, just like it does on the Mac.

This approach makes some sense in that it lowers manufacturing costs and allows the controls to be continuously updated after you buy the plotter. It also makes some sense in a rough service environment, where this machine will be most at home.

—ANDERS J. NEREIM, AIA

OMNI PLOTTER JDL

JDL WAS ONE OF THE FIRST VENDORS to offer a dot-matrix printer that understands the vector graphics output of CADD programs and draws like a plotter.

The newest version, the OmniPlotter, increases the plot size to 24 by 36 inches. Resolution also has been enhanced, up to 360 by 360 dpi. For quick check plots, the user can select 180 by 180, or 180 by 360 dpi.

With a four-color ribbon, the machine thinks it has 15 pens to produce 20 colors. All standard media types except mylar are supported. For high-volume offices, the OmniPlotter is network-compatible with a built-in roll feeder and a 2-megabyte buffer, expandable to 6 megabytes for unattended plotting of multiple files. An optional SCSI port accepts files from Macintosh and workstation computers.

When our first plot started rolling out of the machine, people came from all over our floor to watch the giant, Epson-like device print, plot, and make noise. The OmniPlotter requires a room of its own to preserve the sanity of our staff.

Beyond the noise, we discovered some very nice color plots that were sharp regardless of the resolution we selected. Its menu system, displayed on an LCD control panel, is small but adequate and uncomplicated. Its speed was good.

I was most intrigued by what we didn't see the plotter do: giant spreadsheets showing the elevations of a zoning envelope and financial feasibility; a complete MasterSpec for an institutional building; and full color, photo quality, D-size images developed with imaging software. JDL assured us that all are possible, but we never saw them. Those features would make the OmniPlotter's \$6,690 list price acceptable. Without them, it's a heavy, noisy, expensive plotter.

—JOHN C. VOOSSEN



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**F910A
MUTOH AMERICA**

MUTOH WAS ONE OF THE FIRST VENDORS in this country to offer a plotter that could draw with pencils as well as with pens. We think this idea has considerable merit. Pen plotters must be slowed down to plot accurately and dependably without skipping, particularly on mylar. The F910A plots in pencil at full speed with amazing clarity and almost absolute dependability.

For our office, the F910A was the best plotter reviewed. Most often, we will have a CADD operator enter general information for a drawing and plot that information as part of a base sheet. Other designers will work manually on these drawings and then ask for CADD assistance to add edited schedules, notes, etc. But I wish the F910A had a roll feeder and cutter like the Oce G1845-AC.

Mutoh's documentation could use some help. It is very difficult to find instructions for the most common applications. A one-hour call to technical support was futile. Fortunately, the plotter is easy to install.

—CHARLES R. NEWMAN, AIA

**G1845-AC
OCE GRAPHICS**

THE G1845-AC IS DESIGNED FOR FIRMS that anticipate a heavy plotting load. There are days when our six-year-old Hewlett-Packard is plotting all day, so we were intrigued by the Oce design. Like six of the other plotters we reviewed, the G1845-AC feeds from rolled media. Less common is Oce's cut and stack feature. We liken the paper-cutting feature to a facsimile machine: Would you buy one without an automatic paper cutter?

The biggest bottleneck with our CADD system is the plotter. Our Hewlett-Packard had been extremely reliable and accurate, if slow. The Oce can be configured with a buffer of up to four megabytes to allow for off-line plotting. The G1845-AC also comes with built-in pen optimizers and curve optimizers. Automatic pen recognition is also built in, meaning that the plotter will pick out the correct pen regardless of where it has been placed in the carousel holder. It is shipped with an ADI driver, for still more speed, and a "soft landing" feature of the pen holder virtually eliminates pen slips.

The Oce appeared to be the quietest of the pen plotters. This is commendable, but we did miss the solid sound that our HP makes when it picks up a pen. Features still missing include the multiple outlet and built-in network manager of the DraftMaster MX.

Oce's manuals are overly complete and include excellent graphics. In fact, the as-



Weihe Partnership, Washington, D.C., superimposed a model of 810 Seventh Street onto actual site conditions (above). The ColorStation D image was originally 22 by 34 inches.

sembly instructions are entirely graphic. Technical support is free and provided in English, rather than computerese.

—WALTER J. HAINSFURTH, AIA

**COLORSTATION D
RASTER GRAPHICS**

AT THE TIME THIS EVALUATION BEGAN, we were interested in improving our CADD output capabilities for both production and presentation graphics. We've tried outside plotting services, but we prefer in-house plotting.



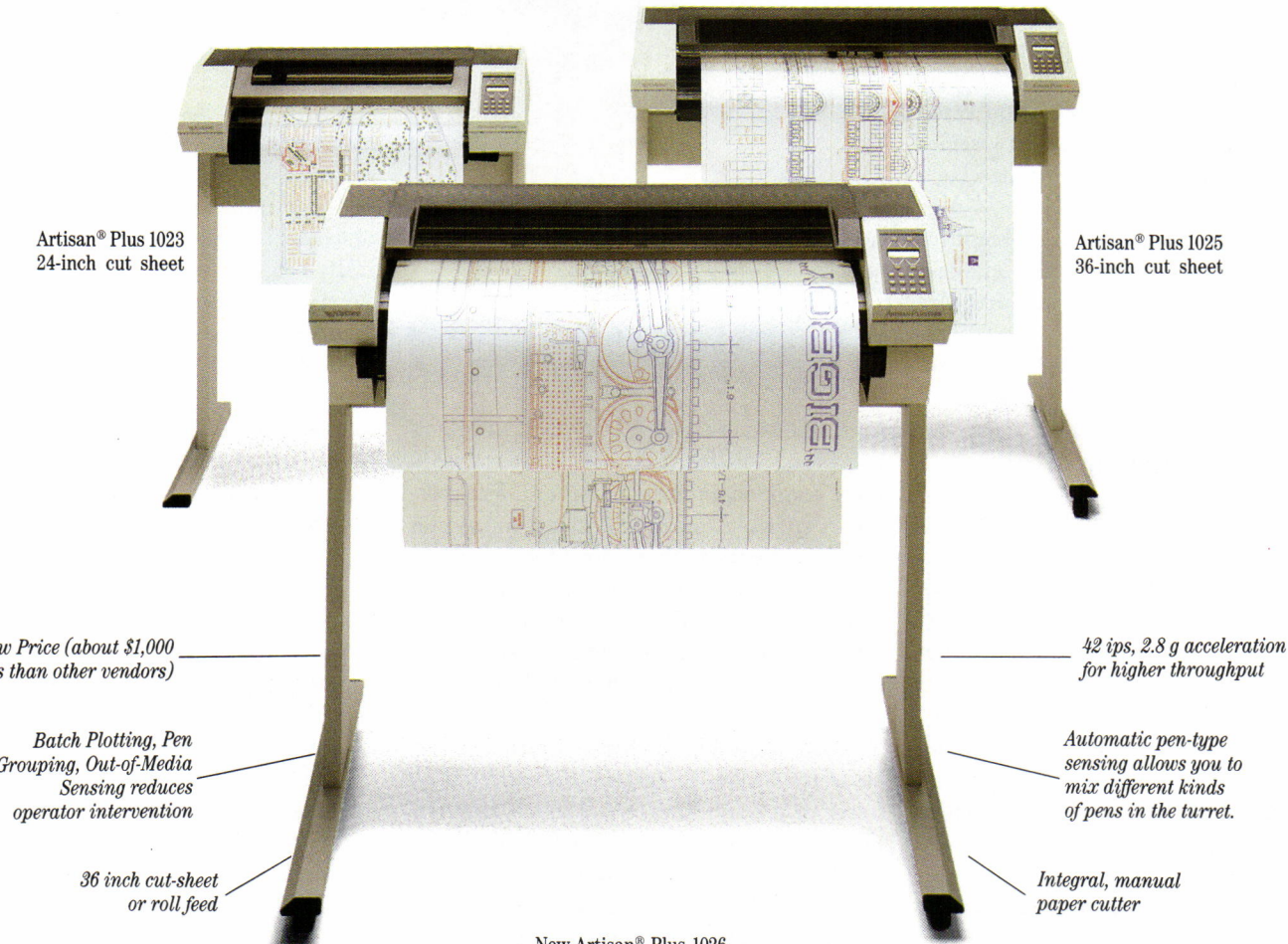
Reviewers Walter J. Hainsfurther, AIA (left) and Edward W. Wenzler, AIA (right).

Our short list included a faster and quieter pen plotter with pencil capabilities plus a small-format color printer for solids and painting presentation, or the JDL Omni-Plotter because of its screen-capture capability for solids and paintings.

Never had we even considered electrostatic plotters, believing them to be too large, too complicated, and certainly too expensive. All these misconceptions were refuted by the ColorStation D.

The ability to reproduce full-color, rendered drawings sets the ColorStation D apart from other plotters. The color picking, blending, and balancing for painting is a bit tricky, requiring some experimentation and practice, but the output is truly remarkable. The resolution (400 dpi), registration, and accuracy are very satisfactory. Time required to produce a rendered and filled painting averages between 10 and 20 minutes. It produces construction drawings at 400 dpi in a quarter to a third the time required by our Hewlett-Packard 7580A plotter.

The paper-handling system is especially good. It is completely internal until the finished plot emerges and drops into a semi-enclosed tray. The bond paper comes on 500-foot rolls and is automatically loaded, cut, and then printed with no waste. Most other roll-fed plotters lose paper between plots. A translucent, vellum-like bond and a mylar film are under development. Multiple plot files can be sent for unattended plotting, with up to 20 drawings collected in the output tray. Quietness is another very appealing feature of this plotter. It is among the quietest of the 11 we evaluated.



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Circle 100 on information card

Although the cost of the ColorStation D (\$18,500) is the highest of the 11 plotters in this evaluation, it is about equal, allowing for inflation, to what we paid for our HP plotter several years ago. The cost is more than the options in our pre-evaluation short list, but the improved production performance and enhanced presentation capability of the ColorStation D easily justifies the difference. Perhaps the only drawback of the ColorStation D is the 22- by 34-inch size of its output. While not a problem for our firm, 24 by 36 inches is the smallest standard sheet used by most architecture firms.

—JOHN H. HANSON, AIA

CADMATE VERSATEC

VERSATEC BRINGS THE ELECTROSTATIC plotter to an affordable level for many architecture firms. Its E-size Cadmate lists for \$13,900, only \$1,905 more than Hewlett-Packard's Draftmaster MX pen plotter. Yet the speed of the electrostatic plotter is four to eight times faster than most pen plotters, although not as quick as CalComp's direct thermal plotter. One reason the price has been reduced is because all rasterization of the drawing is done with the computer's processor. Hard disk space required for this process can be substantial; an E-size drawing requires 17 megabytes.

Installation is very easy: install an adapter card in one slot of your computer, run the automatically installing software, load toner and paper, and then just press one button for a test plot.

Two plotting formats are supported: ADI for Autocad, and HPGL. The ADI driver is about twice as fast as the HPGL driver.

Controls are much simpler than pen plotters. Since the plots are created in the computer and only the final image is sent to the plotter, the controls consist of a test-plot button, local/remote switch, paper/mylar switch, error light, and contrast control. The Cadmate can plot on bond, vellum, or mylar, all supplied by Versatec. Output requires special material that can hold a charge. Both the toner and paper are oppositely charged.

Resolution of the Cadmate is 300 dpi, which gives excellent line quality on straight lines and fills, but isn't so good on 45-degree lines or curves. CalComp's direct thermal plotter is much better at curves and angled lines.

One drawback for our office was the need to cut the sheets by hand and then post punch them for our consultants. The plotter can only be used on one machine, unless a network is installed.

—DAVID J. ENGELKE, AIA



Arvie R. Martin of Versatec (left) and reviewer John H. Hanson, AIA (right).

GENERAL COMMENTS

THE DMP-61 BY HOUSTON INSTRUMENT is a basic, full-featured pen plotter with a more reasonable price than other E-size plotters. I've had a Housgon Instrument plotter for three years with no problems. Enter's SP1800 is a good little plotter for a reasonable price, but its D-size is not large enough for our office. Working with the single pen of the Ioline LP3500 is like working in the Stone Age.

JDL's OmniPlotter permits different levels of resolution, so check plots can be done faster than finish drawings. Even at high resolution (360 by 360 dpi), it is still significantly faster than pen plotters.

For an electrostatic plotter, the price of Versatec's Cadmate is approaching a reasonable level. It can handle batch processing, it does shading for 3D image plotting, and it produces a full E-size plot.

The ColorStation D plotter from Raster Graphics costs more but it produces some very slick color images. Since we draw in a true 3D mode and do all architectural design on CADD in our office, we will need this level of output when price and performance improve. But I can't understand why they didn't make this plotter just a little bigger.

—MARSHALL F. HJERTSTEDT, AIA



Bruce K. Bachman of Mutoh (left) and reviewer Catherine Lee, AIA (right).

THE RASTER GRAPHICS COLORSTATION D offers a serious alternative to pen plotters for medium-size firms that need quality presentation drawings. However one problem is the machine's odd sheet size. Another is that random lines showed up when the HPGL plotfile I created in Versacad Macintosh was output to any electrostatic plotter. The pen plotters and the JDL plotted the same file perfectly.

I was rather disappointed by the pencil plotters. I found them overpriced and not really offering much of an advantage over electrostatic models.

Also impressive were the Houston Instrument DMP-61 DL with an optional roll feeder and the JDL OmniPlotter, which comes with a roll feeder and a big buffer. I'd be willing to lose some line quality for the added benefit of 20 colors and bitmapped textures.

—MICHAEL TZANETIS

OF THE PEN PLOTTERS, THE ENTER, Houston Instrument, and American Graph- tec models stood out for curve resolution and diagonal fill. The Enter plotter was also extremely quiet.

The American Graph- tec plotter had the advantage of being able to mix pens, pencils, and felt-tips within one plot. This provides the advantage—say for space plans—of being able to hard-line the base building and leave the plan easily changeable.

Curves and diagonal lines created with the raster plotters tended to have jagged lines. The CalComp has a maximum resolution of 200 by 400 dpi, which is unacceptable if you are used to 300 dpi. Further, it requires special CalComp paper and this, in addition to its cost, renders it unacceptable for our office.

Since we are most interested in presentation work, the JDL and Raster Graphics full-color plotters were the most exciting, even though the CalComp and Versatec were both much faster.

The JDL at maximum resolution was no faster than a typical pen plotter and, being a dot-matrix, was unacceptably loud. However, the fill was good and solid and the jaggies were no worse than some of the pen plotters we tested.

Most impressive was the color electrostatic plotter by Raster Graphics. It used a four-color process to create up to 256 colors by dithering, and had a resolution of 400 dpi. Both the Raster Graphics and the JDL had the advantage of being able to render drawings made with Auto Shade, or other similar paint-type programs, and I think this type of

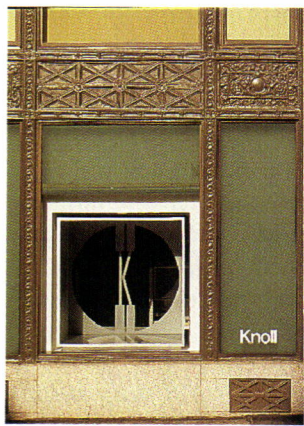
Continued on page 134

PRODUCTS

BOSTON AND BEYOND

Knoll International gears up for the 1990s.

WITH A NEW, ENERGETIC PRESIDENT, PETER J. COHEN, WORKING under the direction of chairman Marshall S. Cogan, Knoll International is undergoing a major revitalization to secure its leadership position in the 1990s and beyond. This month, major product introductions will make the company's showroom the talk of Neocon.



According to Cogan: "The entire showroom will be given over to our new products. I have personally made an investment of \$50 million to make this company one of the ten great names in America today."

Earlier this year, Knoll launched the largest single upholstery collection ever introduced at one time in contract industry history. Designed by Hazel Siegel, managing director of design for Knoll Textiles worldwide, the collection consists of 38 patterns in 430 different colors. At the same

time, the company opened its brand-new showroom in Boston on the first floor of a classical revival building constructed in 1923 (above left). Located in the heart of the city's downtown, the new showroom supersedes the previous Back Bay rowhouse designed by Gwathmey Siegel in the 1980s, offering a hefty 10,800 square feet of space. Kenji Ito, creative director of interior design at Knoll, collabo-



STEVE ROSENTHAL PHOTOS



From the street, the Knoll window display sets up an enticing invitation (top left). From the building's travertine and brass detailed lobby, the Knoll showroom is entered through a 12-foot anodized aluminum satin-finished tunnel, split with hairline detailing of cold cathode lighting (above). The transition from dark to light is achieved with a snowy white reception area (left), with marble tiled floor and white envelope, illuminated with an abundance of recessed incandescent lighting and backlit niches showing the company's accessories. Knoll International. Circle 412 on information card.



The new Hazel Siegel textile collection is displayed both in draped swags and in display pockets (above), including samples of fabrics translated from four paintings by Paul Klee (above, foreground). Shown in backlit niches (right) are items from the KnollExtra line of office accessories. The Mandarin chairs from the KnollStudio Collection (right) are designed by Ettore Sottsass. The Pascal conference table (facing page, top) is veneered in bird's-eye maple and surrounded with Sapper seating, upholstered in KnollTextiles' Luna designed by Jhane Barnes. The Knoll office systems (facing page, bottom) show the advances made in the Morrison System, and the introduction of the Morrison Window. The new option increases light and visual contact while preserving speech privacy in an open plan environment. The Morrison Window, fully unitized and field-mountable, can be installed as an individual window, in a high/low configuration, or as clerestory. Its 22-inch-high frame fits atop any 42-inch-high Morrison vertical panel, to create a 64-inch-high window panel. The product is available in clear, smoked, or translucent acrylic, in widths of 6-inch increments, between 18 and 48 inches. The company will supply tempered glass upon request. Knoll International. Circle 413 on information card.

rated with Skyline Architects of New York City on the project, which was in turn supervised by Albert Pfeiffer, managing director of Knoll International Holdings, Inc. Ito's academic training as a stage designer at the Masachino Art University in Tokyo provided an excellent background for his current position as in-house designer at Knoll. He firmly believes: "Interior architecture for product showroom design should be a backdrop, a stage. It must be understated and simple. The products are the performers."

Passing through the building lobby's travertine and brass foyer, with its original detailing intact, the visitor enters the showroom through a twelve-foot tunnel (page xx, top right). According to Ito, the anodized aluminum, satin-finished tunnel with its slate floor serves as the practical and emotional transition from the outside world into the Knoll environment. The vista upon arriving within is of a dazzling, snowy white space, which is planned with care to ensure that each of the five Knoll market segments—Knoll systems and furniture; KnollWall, a movable wall system; KnollStudio, a high-end line of furniture; KnollTextiles; and KnollExtra, accessories and systems furniture—are displayed to the best advantage. The discretely hidden conference room, for example (facing page, top), is partitioned with Knoll Wall translucent and smoked glass panels for privacy.

Back offices for sales personnel are partitioned with the KnollWall system; textiles are shown both draped and in sample pockets; accessories are poised elegantly in backlit niches; the status furniture upon which the company has built its reputation is grouped into seating areas; and the systems upon which the company has made its profits over the past 10 years is arranged in orderly fashion to show off the various lines. With overhead sparkle from MR16 lamps, the result is a breathtaking organization of masterful display.

—BEVERLY RUSSELL





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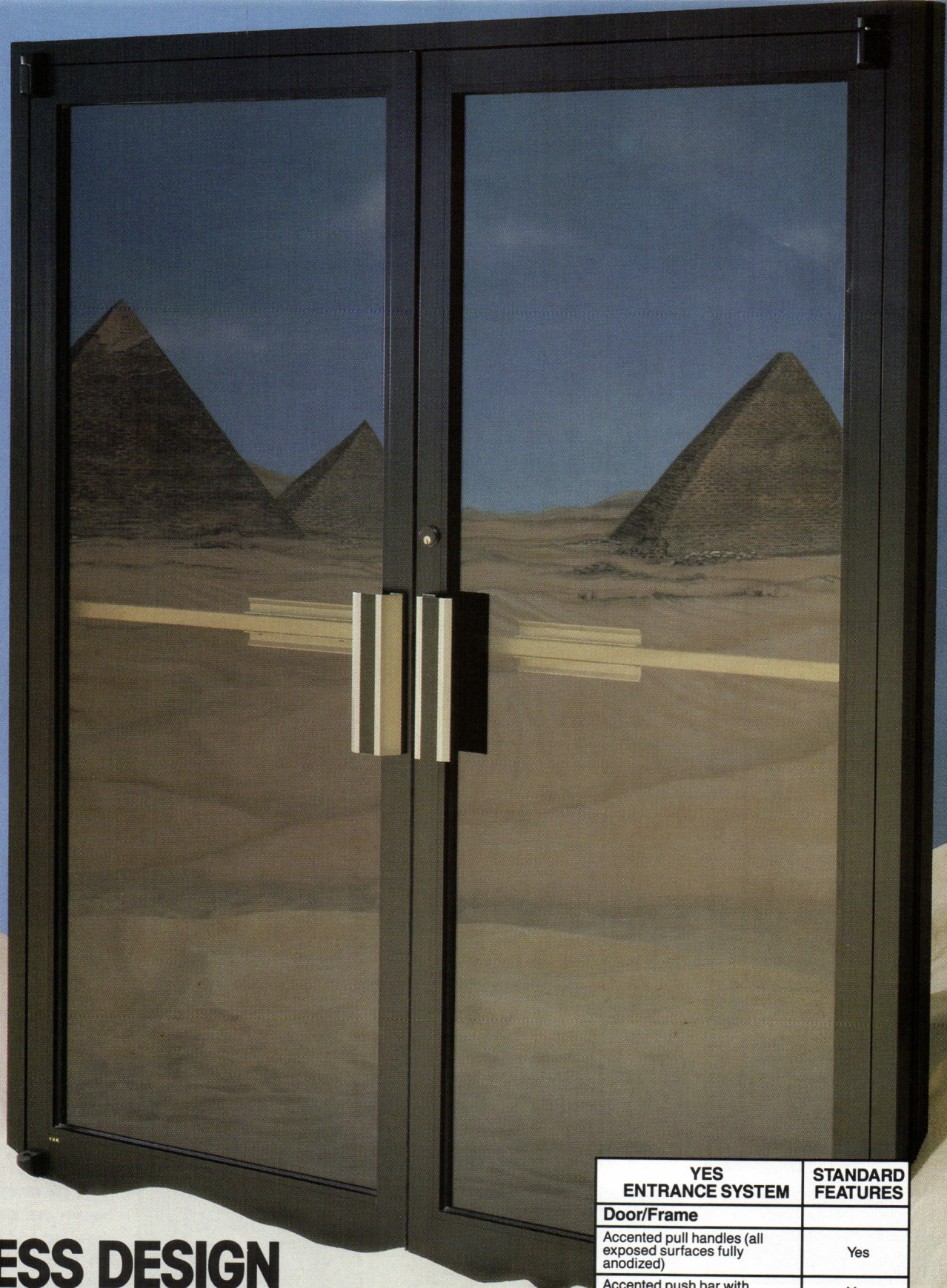
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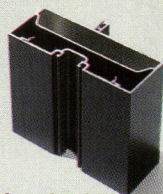
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JOINING THE SYSTEM

Integrating work stations with interior architecture.

GREENWELL GOETZ ARCHITECTS, A TOP RANKED INTERIOR design firm in the nation and currently listed as the leading interiors firm in Washington, D.C., by the *Washington Business Journal*, recently completed the headquarters of the Walker & Dunlop real estate and mortgage banking company. Well educated in the design process from experience in leasing, Walker & Dunlop had definite esthetic preferences in mind for its 25,000-square-foot office. This enabled the project team to meet the compressed time schedule desired—portions of the design process occurred simultaneously, and construction that began last September was substantially completed by December.

The client requested its existing Herman Miller furniture be supplemented with the manufacturer's newer lines. The result is a comfortable work environment highlighted by custom mahogany woodwork and glass paneling. Millwork was primarily applied in the public spaces, casegoods in the open areas, and a combination of the two in the executive quarters, creating a transition between different office functions. The gridded furniture and Glass E-walls lining the length of the executive corridor create an integrated banding that blends the furniture with the architecture. The palette for the new space is neutral with a beige carpet and light-colored walls. Black is used as an accent color to create a powerful, graphic image.

—AMY GRAY LIGHT



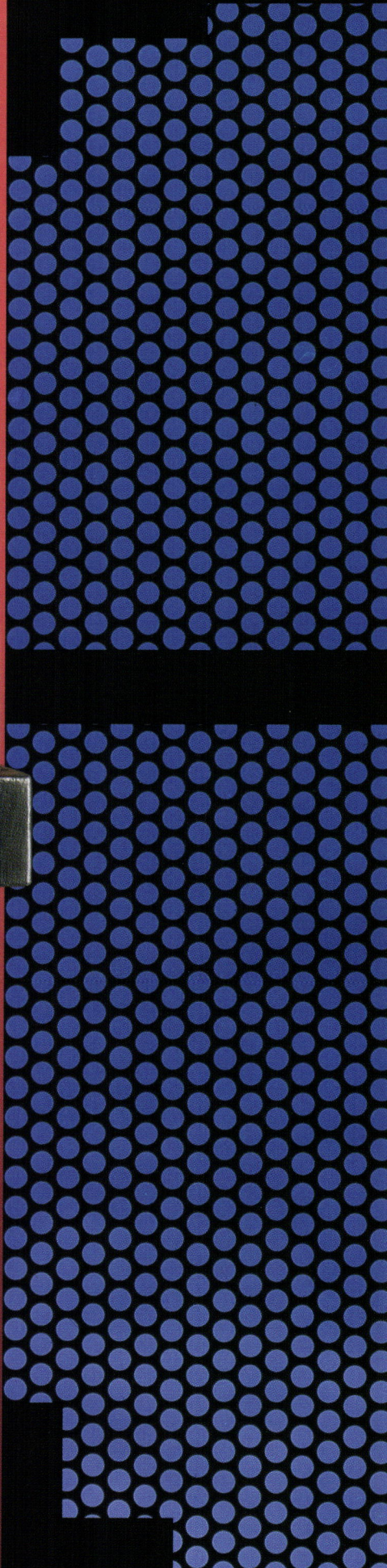
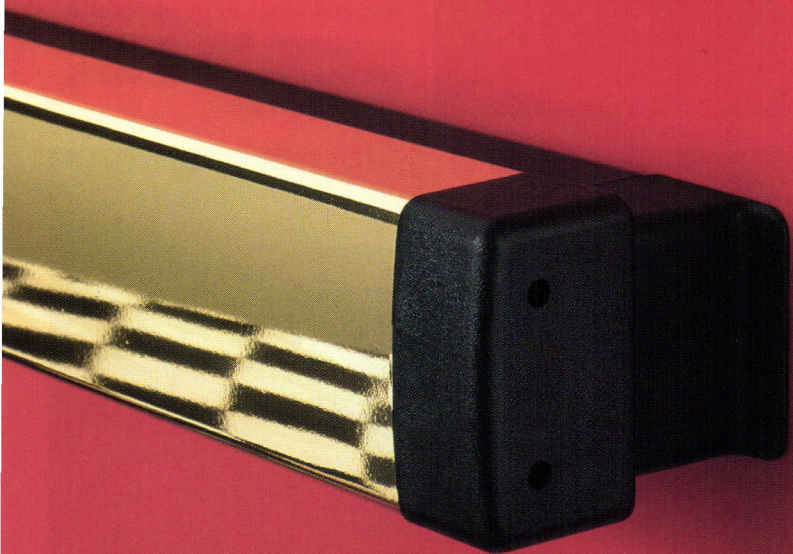
1. Existing Herman Miller work stations were retrofitted, and 80 percent of Herman Miller's new furniture and chair lines were specified for Walker & Dunlop's Washington headquarters. The headquarters is one of the first on the East Coast to be installed with Herman Miller's Ethospace Support Cabinetry. The main conference room (above) is divided from the reception area by a glass panel.

2. At the end of the executive corridor and in private offices, furniture blends with architecture. Sidelights designed to accent the similar grid-like rhythm of the furniture admit sunlight into the space.

3. Greenwell Goetz introduced sunlight in the core of the office by designing work stations with window tiles and panels of stepped heights.



4. In the reception area, mahogany and glass millwork in a repeated grid pattern enhances the entry behind a granite threshold. A glass panel also frames the entrance from the reception area to the main conference room. The mahogany reception desk, with its black transaction ledge, is from Herman Miller's Ethospace line; the mahogany boat-shaped conference table is from Mueller, and conference room chairs are by Mueller, upholstered with Jack Lenor Larson fabric. Herman Miller Inc. Circle 401 on information card.



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Circle 118 on information card

PRODUCTS



1. The 8900 Series wire management desk system contains a grommet system package, internal and external troughs, and retractable power center that pulls out from the worksurface. Allsteel. Circle 402 on information card.

2. Cetra executive casegoods incorporate design options, colors, and styles to fit any level of management. Artec, div. of Kimball International. Circle 403 on information card.

DESK SET

Executive furniture for private and open offices.

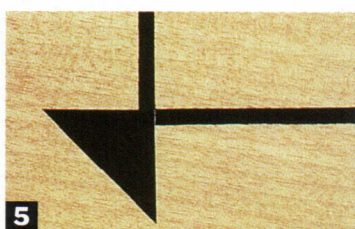
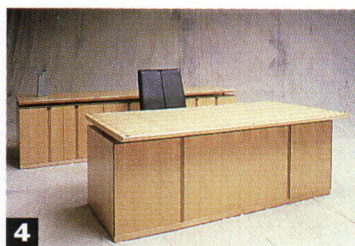
MANY CORPORATIONS HAVE SWITCHED THEIR MANAGERS from enclosed offices to less formal spaces with partitions and glass-paneled systems, resulting in a wide range of furniture designs now available on the contract furniture market. Executives, however, still want desks and office systems that convey their standing within the company, and help them organize and manage their computer equipment, paperwork, and storage more effectively.

"Power" desks typically sport materials such as expensive woods, stone, and leather, but more affordable plastic laminates and painted metal surfaces also make a strong statement when well designed. Manufacturers are also beginning to use socially conscious and non-toxic products, such as non-endangered species of woods and natural materials.

Most systems now offer wiring and cabling within the furniture. And interrelated casegoods, storage units, work surfaces, and variable-height paneling complement desks, increasing flexibility in private and open offices.

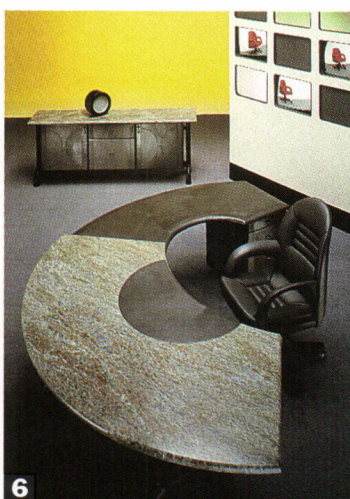
—A.G.L.

4. & 5. The Tinta system of wood casegoods, work surfaces, and variable-height panels can be assembled into modular, free-standing desks and storage units for open areas, or can be used in private offices as well. Woods can be specified in a number of painted-surface options, or custom colors are also available. Desks, credenzas, and tables can also feature granite, marble, leather inserts, and painted inlays in wood tops. Geiger International. Circle 405 on information card.



3. The Camden line of wood casegoods offers double pedestal desks and executive and secretarial L-shaped units and credenzas. Products are walnut veneer with a hand-rubbed mahogany finish. Stow & Davis, div. of Steelcase. Circle 404 on information card.

6. The exotic Italian furniture office system Rotar features round, oval, or modular conference tables, as well as desks, rotating sideboards, consoles, and cabinets. The system has a tubular steel base that accommodates wiring. Adjustable sideboards lay onto pedestal cabinets on casters, and rotate on ball bearings. A green granite top is optional for desks, consoles, and low back-up cabinets. Executive chairs have either leather, upholstered, or synthetic arms. The Pace Collection. Circle 406 on information card.



NEOCON PREVIEW

New furniture debuts in Chicago this month.

NEOCON 22 WILL BE HELD AT THE MERCHANDISE MART IN Chicago from June 12-15, attracting over 50,000 architects, interior designers, facilities managers, contract furnishings dealers, and other professionals. This conference and exposition is the largest contract furnishings industry show in the country. The Merchandise Mart has consistently expanded its floor space and now contains over 2.6 million square feet of product showrooms and offices. A wide range of contract, retail, hospitality, health care, institutional, government, and other market-related furniture is shown. This year's program responds to the new decade by providing a global overview of the changing cultural and international business environment, featuring speakers in the design and business community who will address these issues. In addition to the lectures and numerous seminars sponsored by related industry professions, the products to be unveiled at the show indicate a consistent trend toward more comprehensive work systems furniture. There will also be more Modern-inspired design, and more re-issues of previously manufactured furniture, proving that good design never loses style or appeal. ■

—A.G.L.

3. Paolo Parigi's Canasta chair has interwoven elastic bands in the seat back. Palazzetti. Circle 408 on information card.

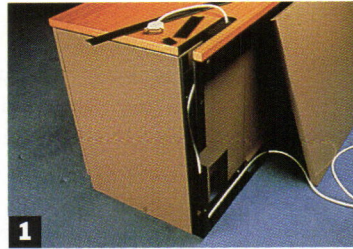
4. Contract tables are designed by Massimo Vignelli and Eric Bartelt. Various tops are available in laminate, veneer, and resin surfaces. KI. Circle 409 on information card.

5. Work Flo panel-mounted rail system supports a variety of supplies and tools for the office. Details. Circle 410 on information card.

6. The Reale table, based on a 1946 Carlo Molino design. ICF. Circle 411 on information card.



3



1



2

1. & 2. The RizziOffice collection of freestanding components features desks, credenzas, overhead storage units, and lateral files in various heights and configurations. A modular wiring system (left and below left) manages wires and cabling within cavities hidden behind side, front, and kneespace panels. The Gunlocke Company. Circle 407 on information card.



4



5



6

Plotters from page 122

machine is the direction of the future: high speed, high resolution, and a minimum of mechanical parts. If costs can be reduced, the small- to medium-size architecture firm will buy it.

—CATHERINE LEE, AIA

WITH A FEW EXCEPTIONS, COST IS MY criterion in comparing plotters for my firm. The exceptions are the OmniPlotter, downgraded because it is so noisy; the LP3500, downgraded because its performance at the evaluation meeting was so erratic; and the SP1800, upgraded because it's very quiet and because it looks and acts strong as an ox, or at least as strong as my Houston Instrument plotters. But I'm a little concerned about the DMP-61 DL because of its pen holder.

The ColorStation D has the most exciting potential, but for its price I could buy three SP1800s and still have \$5,615 cash in my pocket.

Although we didn't see it at the review session, American Graphtec also markets a plotter-like product used in the sign industry to cut vinyl letters. What about letting a CADD program drive a cutter around a sheet of Strathmore board or similar material

to make the pieces for an architectural model?

American Graphtec hopes to demonstrate a model-making machine at A/E/C Systems in Atlanta, June 12-15.

—JOHN C. VOUSEN

I WOULD LIKE TO SEE MUTOH'S TOUCH pad replaced with a joystick to locate the digitizing target. Hewlett-Packard used a joystick on the earlier 7580 series plotters, but replaced it with directional buttons that are only marginally better than the touchpad that most vendors use now, and neither is even close to being as good as the joystick. When using sheets preprinted with borders and title block, you must be able to control exactly where the drawing is placed. No plotter we reviewed had an acceptable method.

The only other plotter in this review that could also plot in pencil was the American Graphtec GP1004. American Graphtec feels its approach is better because the GP1004 can plot in pencil or ink from the same carousel holder.

In application, however, this feature proved to be a significant problem. This is because ink pens are kept from drying up by holding the pen point in a rubber well when

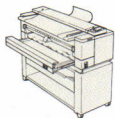
it is not being used. Pens tend to deposit ink in these wells, the amount varying by the size of the pen point and how much it actually leaks.

After seeing the GP1004 plot in liquid ink, I asked to see the same plot repeated in pencil. Not only did several lines have both pencil and ink on the new drawing, but several drops of ink had fallen onto the paper and smeared. Ink from the previous pen had leaked into the pen-holder well and been sucked up by capillary action into the lead holder. The centrifugal force of the plotter caused several drops of ink to fall onto the drawing.

The DraftMaster MX was the only plotter that failed to plot correctly the drawing I brought to the evaluation meeting, even after eight tries.

The SP1800 offered the best value. I even think that Enter defines a border better than Mutoh or Hewlett-Packard. My only objection was that the control panel faces horizontally at a level that assumes you will be sitting down to operate it. But I would not consider buying the other plotters we reviewed in this price range. They are either too difficult to operate, too poorly constructed, or too slow.

—CHARLES R. NEWMAN, AIA



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CALCOMP'S DRAWINGMASTER WOULD rank number one with me if its media were widely available from sources other than CalComp. Mutoh's pencil plotter produced clearer drawings overall, but American Graphtec's pencil plotter drew dot patterns, which the Mutoh did only with pens. Also, I didn't like the placement of the pens in the DMP-61 DL by Houston Instrument.

—WALTER J. HAINSFURTH, AIA

THE VERSATEC CADMATE COSTS LESS than the ColorStation D, but its interface board requires a slot in the host computer, its output is monochrome, and its resolution is 300 dpi. The JDL OmniPlotter fell from favor when we heard the tremendous noise it produces and the time required for raster plots.

The HP DraftMaster MX appears to be a somewhat faster and quieter version of our 7580A. We particularly like the simple plastic skirts that dampened the paper-movement noise. We wish they were available as a retrofit option for our HP.

The Oce G1845-AC would be on top of our list for a new pen plotter if it had pencil capability. It appeared to be the fastest and quietest of the pen plotters of all those we saw during the evaluation. The automatic

advancing, cutting, and stacking of roll-fed media make this machine unique among pen plotters. Another unique feature is the storage area for supplies incorporated into its base.

—JOHN H. HANSON, AIA

Charles R. Newman, AIA, is head of Charles Newman & Associates, a 10-member firm located in Naperville, Illinois. The firm owns a Hewlett-Packard 7585B pen plotter.

Marshall F. Hjertstedt, AIA, heads MFH Associates, Chicago. The four-member commercial firm has a Houston Instrument DMP-56 pen plotter.

John C. Voosen is president of John C. Voosen Architects, a six-member firm in Chicago. Voosen does commercial design and uses two Houston Instrument pen plotters, a DMP-52 and a DMP-42, as well as a Hewlett-Packard 7475A.

Walter J. Hainsfurther, AIA, is president of Orville I. Kurtz & Associates, Des Plaines, Illinois. The 12-member commercial and industrial design firm uses a Hewlett-Packard 7580B pen plotter.

Terrill W. Janssen is director of computer services at Loeb Schlossman and Hackl, Chicago. The 120-member firm uses two

Hewlett-Packard 7586B pen plotters and a Hewlett-Packard 240E electrostatic plotter.

David J. Engelke, AIA, is vice president of Potter Lawson Architects, Madison, Wisconsin. The 38-member firm has two pen plotters, a CalComp 1043, and a Houston Instrument DMP-43.

Michael Tzanetis is an independent architect doing commercial and some residential design in Elmhurst, Illinois. He does not own a plotter, but uses a service bureau and an Apple Macintosh computer.

Catherine Lee, AIA, is project manager at Environ, Chicago. The 22-member residential, commercial, and institutional design firm does not own a plotter and uses a service bureau.

Edward M. Wenzler, AIA, is a partner at William Wenzler and Associates, Milwaukee, Wisconsin. The seven-member firm has a Hewlett-Packard Draftmaster II pen plotter.

Anders J. Nereim, AIA, is a Chicago architect and teaches at the School of the Art Institute, Chicago. Nereim works on both IBM and Apple Macintosh computers. He does not have a plotter.

John H. Hanson, AIA, is president of Stenbro Associates, Chicago. The nine-member firm uses two pen plotters, a Hewlett-Packard 7580A, and an Ioline LP4000.

Continued on page 137



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PLOTTER INFORMATION

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■ **GP1004.** Eight pens and/or pencils. 19MB buffer. E-size. Accepts parallel output. \$8,995. Service: \$444 a year after a one-year warranty. American Graphtec. For more information, circle 420.

■ **DrawingMaster 52224.** Direct thermal process. Up to 200 by 400 dpi. 25MB buffer. D-size. Second color (red) available on special paper. Roll fed. Multiuser. Accepts parallel output. \$14,995. Service: \$1,500 a year after 90-day warranty. CalComp. For more information, circle 421.

■ **SP1800.** Eight pens. 16-kilobyte buffer. D-size. \$4,295. Service: \$240 a year after two-year warranty. Enter Computer. For more information, circle 422.

■ **DraftMaster MX.** Eight pens. 20MB fixed disk buffer. E-size. Roll fed. Multiuser. Accepts parallel output. \$11,995. Service: \$312 after one-year warranty. Hewlett-Packard. For more information, circle 423.

■ **DMP-61 DL.** Eight pens. 48-kilobyte buffer. D-size. \$4,895. Service: \$595 after

one-year warranty. Houston Instrument. For more information, circle 424.

■ **LP3500.** One pen. 14-kilobyte buffer. D-size. \$2,995 plus \$175 for roll feeder. Service: undetermined after one-year warranty. Ioline. For more information, circle 425.

■ **OmniPlotter.** Color dot matrix. Up to 360 by 360 dpi. 2MB buffer. D-size. Roll fed. Accepts parallel output. \$6,690. Service: \$330 per year after a six-month warranty. JDL. For more information, circle 426.

■ **F910A.** Eight pens or 40 pencils. 1MB buffer. E-size. \$8,900. Service: \$720 after one-year warranty. Mutoh. For more information, circle 427.

■ **G1845-AC.** Eight pens. 512-kilobyte buffer. E-size. Roll fed. Cuts and stacks drawings. \$9,490 plus \$500 for parallel output. Service: \$500 after one-year warranty. Oce. For more information, circle 428.

■ **ColorStation D.** Color electrostatic. 400 dpi. 40MB fixed disk buffer. Engineering D-size only (22 by 34 inches). Accepts parallel

output. \$18,500. Service: \$3,138 a year after 90-day warranty. Raster Graphics. For more information, circle 429.

■ **Cadmate.** Electrostatic. 300 dpi. E-size. Accepts parallel output. \$13,900. Service: \$1,380 a year after 90-day warranty. Versatec. For more information, circle 430.

Not all plotters on the market could be reviewed. Additional plotters to consider may include:

■ **Zeta 675.** Eight pens and/or pencils. 30-by 42-inch size standard. 40 kilobyte buffer. \$7,195. Service: \$336 after 90-day warranty. Bruning Corp. For more information, circle 431.

■ **Numonics 7191.** Eight pens. A-E sizes. 500 kilobyte buffer. \$5,495. Service: \$419 after one-year warranty. Numonics Corp. For more information, circle 432.

■ **DPX 3500.** Eight pens and/or pencils in three widths. A-D sizes. 1MB buffer. Flat-bed plotter. \$6,495. Roland Digital Group. For more information, circle 433. ■

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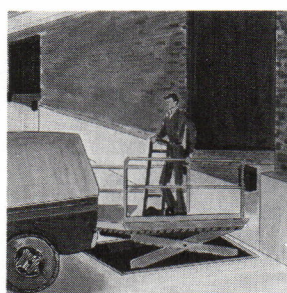
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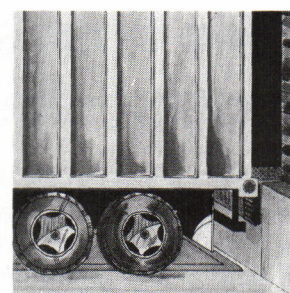
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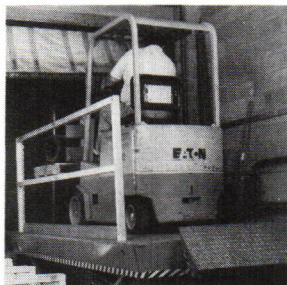
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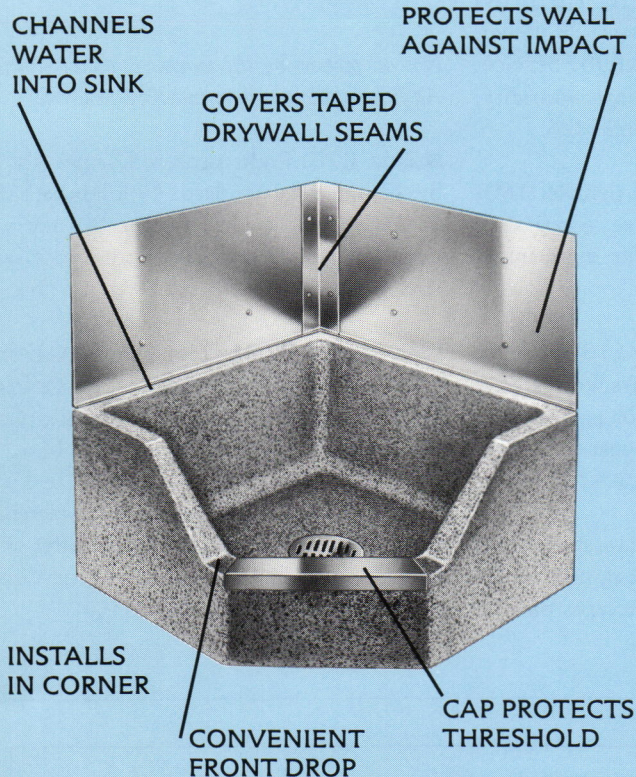
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Codes from page 113

the Codeworks client relationship is confidentiality. "It may be obvious to us by the nature of data requested that firms are bidding for the same project. That internal knowledge is strictly protected. Even in our dealings with a given firm, we communicate only with designated personnel."

After making clear the use of Codeworks products as design and marketing tools, Wheeler like to stress an additional way they are valuable within a firm. "They're great training tools. Architecture schools teach design. They generally don't focus on business aspects like code compliance or budget analysis. The responsibility for initiating a new staff member to these elements of the industry falls to senior staff. The reports don't replace that function, but because they are so logical, tangible, and thorough, they can simplify this teaching process. That frees senior staff members to pursue other important activities."

While developing products to meet the needs of its target market—architects—Codeworks discovered that professionals in other fields could use its database. Construction litigators require facts about the historic enforcement of codes; the Codeworks database includes many dating back to the 1970s. Manufacturers of building materials want to market products that are universally applicable. A producer of coaxial cable, for example, recently needed to manufacture materials meeting codes in New York as well as Phoenix and Chicago. The company has entered into an agreement with the Marriott Corporation whereby Codeworks provides data that affects decisions at the earliest stage of a project: site acquisition.

Even the professionals who are already the best informed about code enforcement—the code officials themselves—may find they have use for Codeworks' services. The newest product, the jurisdiction report, comprises a comprehensive index, cross-referenced by topic, of all the seven major types of building codes and their amendments in force in a given jurisdiction, which can complement a public official's research at the plan review stage. However, Codeworks' primary market has been, and will continue to be, design professionals. Codeworks marketing vice president Christopher Coyle puts it this way: "Architects are trained to create design solutions, not to conduct research. Our reports allow them to get out of the books and back to the boards. They allow architects to do what they do best—design." ■

—JOHN MORRIS

John Morris is a freelance writer based in Washington, D.C.

Books from page 47

to engineers, and argue for the need to reclaim a share of that responsibility. They propose numerous design strategies, including more discriminating material selection and an increase in user control over the local environment.

Architect Hal Levin discusses volatile organic compounds, the chemicals emitted by common building materials such as adhesives, synthetic textiles, solvents, paints, and composite wood products. In combination with inadequate ventilation, such compounds can create an indoor smog that causes irritation, if not illness. He recommends that construction specifiers require manufacturer's safety data sheets, and he provides sample specification wording to ensure that safe products are selected.

One chapter is a non-technical guide to a generic HVAC system, explaining the hardware in terms of opportunities for pollutants to accumulate and redistribute through the air supply. Common problems presented include outdoor air intakes near loading docks and bacteria accumulating in cooling coil drain pans.

The book concludes with a protocol for evaluating problem buildings. This is a methodology for architectural and medical teams working together to identify human symptoms and built causes. With the atti-

tude that health is more than the absence of illness, these authors believe you do not need to prove a building has problems before you can justify preventive and maintenance remedies.

Like strong medicine, this book lacks sugar coating. It is more scientific in tone and vocabulary than most books architects read. Do not expect a miracle cure, but do expect to come away from it with a substantial and important education. Unfortunately, the consequences of ignoring this problem are large and growing. Architects can do their share by incorporating health-sensitive criteria to their everyday design processes.

—B.J. NOVITSKI

B.J. Novitski is an architectural technology writer living in Eugene, Oregon.

Designing Exhibitions

Giles Velarde (Whitney, \$27.50)

IN THIS BOOK ON THE DESIGN OF CONTEMPORARY show space, Giles Velarde, former head of the design department at the Geological Museum in London, surveys exhibit strategies throughout the world. He breaks his book down into the stages of exhibit design, with discussion about the exhibit's content, the role of the designer, the exhibit

program, its descriptive material, the presentation of artifacts, the exhibit's management, its production, closing, and maintenance. There is an extensive glossary, a thin bibliography, and ample illustrations.

Visual Simulation: A User's Guide for Architects, Engineers, and Planners

Stephen R.J. Sheppard (Van Nostrand Reinhold, \$47.95)

AS ARCHITECTURAL PRESENTATIONS BECOME more and more sophisticated with the use of computers, laser disks, and video tape, architects need to know what simulation options are available and how best to employ them. This book, written by a landscape architect and an environmental planner who specializes in esthetics and visual communication, covers the gamut of simulation techniques. It shows how the methods are used, and how they are employed as design tools and for client presentations. The book is also intended to inform clients, such as public servants who must make decisions based on visual simulations by others, on simulation quality and how to spot inaccuracies. The book is liberally illustrated with examples of a wide range of simulation techniques, many of which are amazing.

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**University of South Florida
Architecture Faculty Positions**

The FAMU/USF Cooperative Master of Architecture Program, located at the University of South Florida in Tampa, is a professional degree program offered cooperatively by the School of Architecture at Florida A&M University and the University of South Florida. Nominations and applications are invited for two full-time 12-month faculty positions at the ranks of Full Professor, Associate Professor, or Assistant Professor. These positions are University of South Florida appointments.

The Program offers an eight-semester curriculum to students who hold baccalaureate degrees and who now wish to pursue the professional degree in architecture. Students with previous work in architecture or related disciplines may be accommodated with advanced standing. The Program emphasizes urban architecture and related issues.

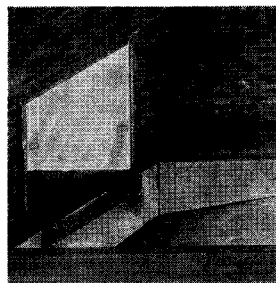
Successful candidates will be expected to teach in at least two curricular areas including: Design, Structures, Environmental Technology, History and Theory, plus advanced electives in an area of specialization. Experience with computer applications in architecture is desirable.

Minimum qualifications for all positions include the M. Arch. degree or equivalent, and appropriate practical experience. Professional registration is preferred. Applicants should indicate the professorial rank of the position for which they are applying and present credentials indicating an appropriate mix of teaching and practical experience to support an application for that rank.

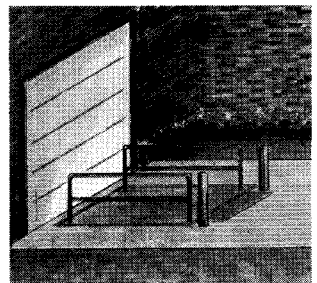
Applications including resumes and the names of three references must be sent by June 30, 1990 to Alexander Ratensky, AIA, Program Director, FAMU/USF Architecture Program, 10770 N. 46th Street, suite A-800, Tampa, FL 33617.

The University of South Florida is an Affirmative Action, Equal Opportunity Employer. All prospective candidates should be informed that, in accordance with Florida law, their dossiers are a matter of public record and are available upon request to its residents.

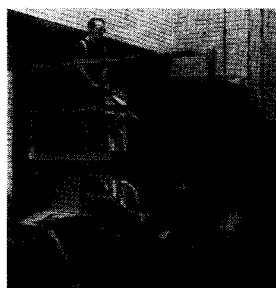
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Books from page 139

**Modern Architecture in Barcelona:
1854-1939**

David Mackay (Rizzoli, \$25)

AUTHOR DAVID MACKAY COMMENCES his survey of Barcelona's Modern architecture at a precise moment in the mid-19th-century. It was then, he writes in the introduction, that "the modernization of Catalan society required space beyond the restricting walls of medieval Barcelona, demolition of which was begun in 1854. The shape of the modern city began to emerge."

By the close of the 1930s however, the forces of fascism brought an abrupt end (Mackay describes it as an "interruption") to the development of Modern architecture in Barcelona. Within this 85-year time span, Mackay examines the emergence of a Spanish modern esthetic, starting with Ildefons Cerda's rational, gridded plan for the expansion of Barcelona in 1859. Barcelona's "Modern Romantics" of the late 19th-century—Josep Vilaseca, Lluís Domènech i Montaner, and Gaudí—attempted a marriage of traditional and modern forms. The "Ideal Romantics," such as Josep Pericas and Josep Maria Jujol, further developed Modernism on a civic scale. The "Utopian Moderns," among whom must be counted Josep Lluís Sert, Joaquim Lloret, and Raimon Du-

ran Reynals, brought Barcelona fully into the modern esthetic of clean lines and new materials.

Mackay's book is filled with excellent photographs of Barcelona's Modern milestones, and the text is well-written.

Russian Architecture of the Soviet Period

Andrei Ikonnikov (Imported Publications, \$19.95)

WITH GLASNOST RUNNING AT FULL TILT and the Communist party throwing in the towel, this book is an extensive survey of what the Soviets have wrought architecturally since 1917. While there are lots of pictures of the monotonous super-block buildings that the Soviets are infamous for, there is also a review of Russia's classical buildings of the 19th-century, and many Modern masterpieces by the Constructivists, such as Tatlin's design for the monument to the Third International, Melnikov's diamond-windowed house and his Zuev club house, and Barkhin's Izvestia newspaper building.

The Stalinist period marked an abrupt end to Constructivist experimentation, and promoted the megalomania of the 1934 Palace of the Soviets (a 1,300-foot-high building crowned by a 26-story statue of

Lenin). Construction on this Soviet wedding cake was halted due to World War II when it was barely out of the ground, and its 65-foot deep foundations were later turned into a swimming pool.

This book, which was printed in the U.S.S.R., contains lots of photos by the author (mostly black and white) with orienting graphics like plans and maps. The text is lively and very informative.

Structural Design in Wood

Judith J. Stalnaker and Ernest C. Harris (Van Nostrand Reinhold, \$47.95)

THIS BOOK, WRITTEN FOR ENGINEERS and architects as a guide to the structural properties of wood, also includes a range of design options and applications of the material. Topics include wood structure and properties, production and grading of sawn lumber, loads and allowable stresses, methods of connection, the selection of various structural members, timber trusses, plywood and similar wood products, the properties and design of wood diaphragms, built-up and composite members, form-work for concrete, and wood durability, protection, and preservation. The authors are civil engineers at the University of Colorado at Denver. ■

—MICHAEL J. CROSBIE

SEARCH FOR AN EXECUTIVE DIRECTOR OF THE ENVIRONMENTAL SIMULATION CENTER AT THE NEW SCHOOL FOR SOCIAL RESEARCH GRADUATE SCHOOL OF MANAGEMENT AND URBAN POLICY

The New School for Social Research is pleased to announce that an Environmental Simulation Center will begin operation this fall, under the auspices of the Graduate School of Management and Urban Policy. The innovative Center will employ sophisticated state-of-the-art physical modeling and computer technology to simulate and analyze the visual and physical impacts of proposed changes in the built environment.

The Executive Director will be responsible for the overall operation and promotion of the Center. The Search Committee is looking for a committed individual with the following abilities and demonstrated interests: design background, preferably an architect, urban planner or designer familiar with urban design, land-use regulations, and public policy in the metropolitan region (in-

cluding zoning, historic preservation, and environmental impact analyses); credentials for a faculty appointment at the Graduate School; familiarity with computers and visualization techniques; and leadership and fundraising skills.

Substantial support from private foundations has been committed to the Center which is expected to make an important contribution to land-use decision-making and planning in New York City.

The New School for Social Research has a strong commitment to the principle of diversity in all areas, and strongly encourages applications and nominations reflecting this commitment. Applications and nominations should be sent, no later than July 1, 1990 to:

President Jonathan F. Fanton

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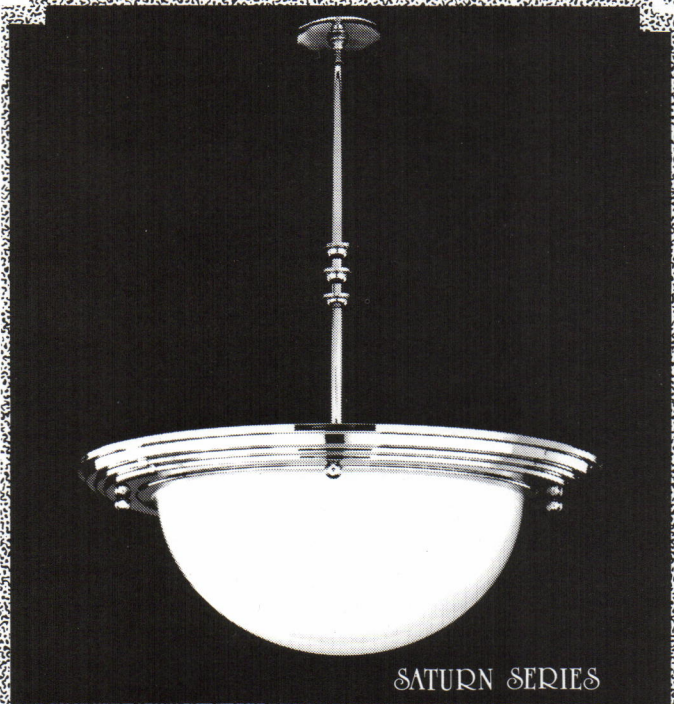
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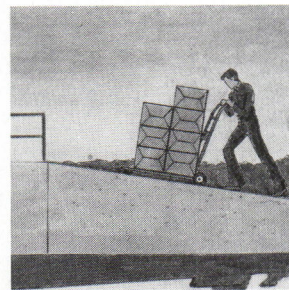
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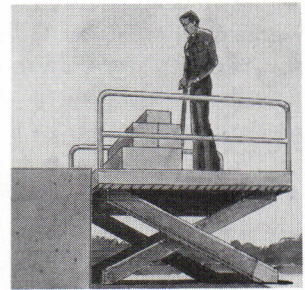
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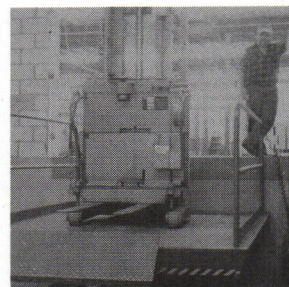
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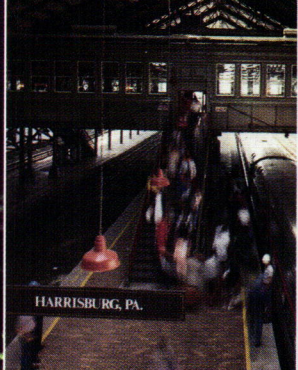
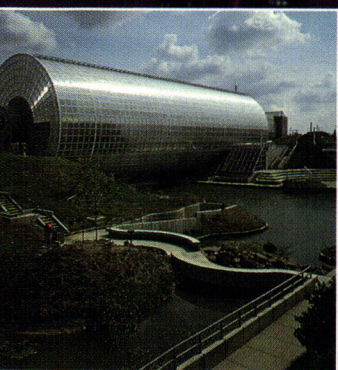
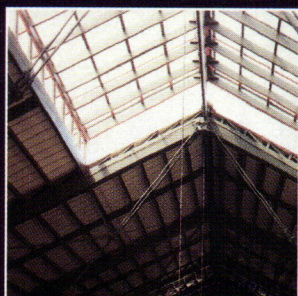
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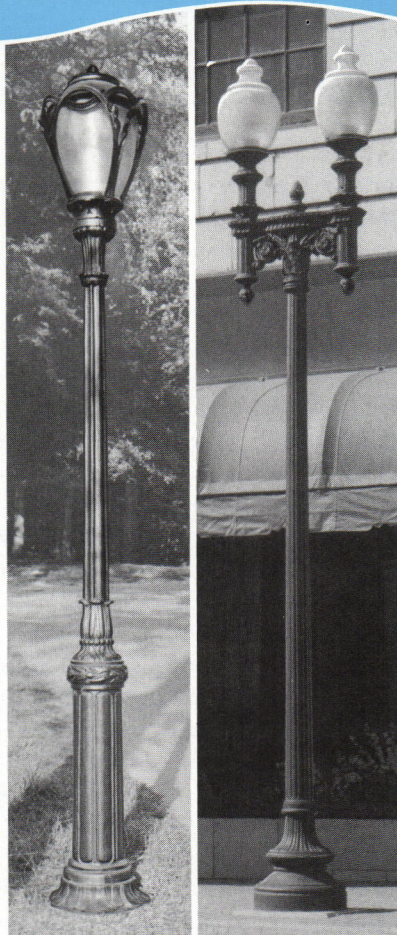
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