RECORD

INTERIORS

Interviews with Two Designers of Uncommon Objects

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EDITORIAL Theory and Practice

BY ROBERT A. IVY, FAIA

ention architectural theory and many practicing architects shudder. The very notion conjures up a jargon-laden fantasyland ruled by academics, a free-floating, selfindulgent university exercise removed from real clients, real budgets, and the real world. Theory, many professionals say, defines a fundamental chasm between school and practice.

The academy often takes the opposite approach, claiming that theory is critical to architectural education, providing the intellectual framework for subsequent work. The university years are a time for stimulation and development of a spirit of inquiry; internship and actual practice will produce mastery of technique and content.

While the profession dithers on with its internal debate, others are pushing the boundaries of what architecture is and what it will become. The dissemination of architectural ideas, particularly through digital media, is encouraging a boundary-free look at the subject by all sorts–artists, builders, kids. Visit any museum or check out the shelter books to verify the claim.

I walked into an exhibition at the Guggenheim Museum SoHo recently called "Reversible Destiny: Arakawa/Gins" and was struck by the richness of thought present in work that spanned several disciplines simultaneously, from architecture to art and philosophy. It was clear that the houses and towns by these two artists/philosophers were extraordinary: the buildings represented in models and computer-generated renderings were provocative, their plans consisting of mazelike labyrinths of arcs and their floors rolling with actual topography. But the spaces were unhabitable: who could live there? Conceived as works of pure speculation, "concept art," the buildings failed almost every test that would be demanded of actual architecture. The work was diagrammatic architectural theory.

You could dismiss the entire effort by the creators as unrealistic, yet shown in the museum context, the works provoked rich speculation. The show suggested that architects help bring meaning to the material world by shaping our understanding of where and who we are. I was also struck by the forms. Walls made of curved, three-dimensional planes seemed to capture something of the spirit of our age, a post-Einstein world in which we, as architects, have traded the right-angled certainty of the T-square for richer, multidimensional tools.

Far from shocking me, as it upset the critic for another national magazine, the work recalled the vitality of the best student work from the design studio. It had that free-ranging outrageousness tempered by strong underlying ideas that you see in school, and that later somehow slips away. Architecture students would have been asked to go further, tempering the ideal with the mundane. One method of the design studio is to harness the same creative energies I witnessed in the work in SoHo and to ask real questions. How will someone sleep in this shelter? What materials embody the ideas? How can these undulating walls connect to the foundation? In architectural education, the spirit of inquiry and human potential is grounded in the pragmatic facts of human need and constructibility. Any project that fails to meet those criteria remains theoretical.

Part of architecture's attraction is the way it synthesizes complex systems of thought into material objects. We need good ideas, grounded in reality, to propel us into the next century. We need strong critical thinking to enrich our practice. We need schools of architecture that encourage coherent thought, imagination, and acknowledgment of reality-based needs. We need exhibitions that challenge us and encourage us to stretch our limits. We need theory and practice.

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CIRCLE 9 ON INQUIRY CARD

DIALOGUE

MENTORS The pros and cons of working with a program manager, and the potential liabilities of using derivative drawings.

William J. Stanley, III, AIA, NOMA, is a founding principal of Stanley, Love-Stanley, a 32-person architectural firm in Atlanta, Georgia, specializing in public and institutional work.

Charles Heuer, FAIA, is an architect and an attorney at law. He runs the AIA's LegaLine program, which offers unlimited access to practice-related legal information to its subscribers.





My four-person office, which is located in a small town, has acquired a major commission: a community library. The client is thinking about hiring a program manager for the project. We have not worked with one before. What should we expect? *—Unsigned*

William J. Stanley, III, AIA, NOMA, responds: First, talk to your client. Find out who the program manager is and what his or her responsibilities are to be. Will this person represent the owner's interest through decision-making? Has the program manager been hired yet?

Unfortunately, program managers are blurring the lines between architecture, programming, and construction. Too often, they manage projects without contributing to master planning, programming, or scheduling. In many cases, they offload liability back to the architect and siphon off clients' dollars from tight budgets in the name of building economy. In some cases, general contractors who have inhouse engineers take this professional name without having the necessary credentials.

Many program managers can be helpful; my firm has had some pleasant experiences. If the client insists on working with a program manager, you must try to determine if this person will help or hinder the project. If you feel the person will hinder the project, you may want to consider withdrawing.

One way to avoid the potential problems of working with an outside program manager is to develop an

in-house capability that you can market on your own. Architects, I believe, are inherently more qualified to be program managers than anyone else in the industry.

Our firm is relatively new. We have been approached by a well-respected local developer who has shown us what appears to be a set of design-development documents prepared by another firm with whom the developer is no longer working. We have been asked to prepare the construction documents for the project (based on the existing drawings) and to perform construction administration services. The client's request seems to be legitimate, but are we overlooking any potential liability problems? -Unsigned

Charles Heuer, FAIA, responds: First, you must determine whether or not your potential clients have the right to use the design-development documents. If they don't, they cannot authorize your use of the documents either. For example, under the AIA B141 Owner-Architect Agreement, the architect owns the copyright to the documents. (It is possible, however, to own the physical documents but not the copyright). Whoever owns the copyright has the right to control-with some limited exceptions-who is allowed to make copies or to prepare derivative documents. Derivative documents are those derived from or based on other copyrighted documents.

Based on your question, it sounds as though you are being asked to prepare derivative documents. With the client's agreement, you may want to speak with the project's original architect to obtain permission. Such a conversation can be illuminating: Did the architect receive payment for the work? Did he or she have any difficulties with the client?

Another approach you may want to consider is to accept your clients' word about their rights to the documents and ask them to agree to defend and indemnify you in the event that the original architect sues for copyright infringement. This approach is realistic only if the client has assets substantial enough to cover the costs of such defense and potential damages.

If you decide to proceed with the project, be careful to verify the underlying code research and other design criteria that were supposed to be reflected in the original set of documents. You should not prepare working drawings without first being convinced that the preliminary work was performed properly and that you fully understand the underlying design criteria and assumptions.

Questions: If you have a question about your career, professional ethics, the law, or any other facet of architecture, design, and construction, send submissions by mail to Mentors, Architectural Record, 1221 Avenue of the Americas, New York, N.Y. 10020; by fax to 212/512-4256; or by E-mail to rivy@mcgraw-hill.com. Submissions may be edited for space and clarity.

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CIRCLE 13 ON INQUIRY CARD

DIALOGUE

PULSE RECORD asks its readers: Should there be a single designation of the master's degree as the first professional degree for all architects?

This Month's Question

There has been continuing discussion among architects and educators regarding the B.Arch., the first professional degree granted by many five-year undergraduate programs, as opposed to the M.Arch. granted by two- or three-year graduate programs. The two degrees have led to confusion on the part of the public—as well as students entering the system—as to the difference between the bachelor's and master's programs.

Should there be a single designation of the master's degree as the first professional degree for all architects?

Yes No

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CIRCLE 15 ON INQUIRY CARD

RECORDNEWS



ASIAN ART MUSEUM'S ADAPTIVE REUSE PLAN STIRS CONTROVERSY

Plans for converting San Francisco's former Main Library into the new Asian Art Museum are igniting controversy among landmark-conscious San Franciscans over the fate of 14 Depression-era murals in the building. Preservationists want the murals to stay, but designers have other plans for the wall space.

Hellmuth, Obata + Kassabaum teamed up with associate architects LDA Architects and Robert B. Wong to devise plans for the 1917 Beaux Arts library. Milanese architect Gae Aulenti, known for her work at the Musée d'Orsay in Paris, is museum and exhibition design consultant on the \$110 million project.

The museum will display the Avery Brundage collection of Asian art, which spans 6,000 years and 40 countries. The collection has outgrown its home in Golden Gate Park.

The project raises the larger question of how adaptive reuse differs from preservation. "We want this museum to be contemporary



and distinct from, but respectful of, the library's historic character. We're walking the razor's edge between respecting historic fabric and providing new life for the building," said project director Mark Otsea of HOK.

Originally designed for reading and quiet contemplation, the dark, enclosed interior of the building will be transformed into a light-filled public gathering place that will encourage walking and looking.

Key elements of the building's historic fabric—including the facade, entrance, grand staircase, loggia and great hall, vaulted ceilings, and travertine finishes—will be rehabilitated in a manner consistent with federal guidelines and San Francisco preservation mandates for historic buildings.

Aulenti's proposal to move the sea and skyscape paintings by Gottardo Piazzoni that flank the building's grand staircase are the center of the controversy. In part, there is concern that the stress of construction, especially the seismic retrofit, will hurt them. Aulenti also wants to punch arched openings into the loggia, creating an orienting platform for museumgoers.

Whether the murals stay or go, the project will have a positive impact on the city's Civic Center district, where there's a surfeit of abandoned and decrepit buildings. The museum, along with several other structures under restoration, will become a catalyst for further neighborhood improvement. *Lian Hurst Mann*

EUROPEAN PARLIAMENT BUILDING UNDER WAY DESPITE SLIPPERY GROUND

The instability of the soil on which the new European parliament building rests is both real and metaphorical. The building, one of the hurdles in creating a united Europe, is scheduled for completion before the year's end.

Designed by Paris-based Architecture Studio Europe, the \$470 million building is on a highly visible though geologically unstable site. Before construction began in 1993, a reinforced-concrete wall was built to contain the shifting soil. In addition, underground water was pumped out and "corks" injected into the soil at 6-ft intervals to solidify the terrain.

Above ground, the project

divides into three forms: a circular tower, a glass-faced wedge, and, breaking through the roof of the wedge, the wooden dome of the parliamentary chamber, which is faced with oak and red cedar slats.

Between each section are informal meeting areas. An interior "street" with shops and restaurants brings the public into the complex.

The clearly articulated design aided the fast-track building schedule, providing clear lines for the division of work crews. Construction is divided into four zones, with four separate contractors. Coordination is aided by shared computer drawing bases, accessed by each of the teams. *Claire Downey*



DIVERSITY AGENDA PROGRESSES AT CONFERENCE

Encouraging diversity in architectural education, design, and practice the tenets of the AIA's "diversity agenda"— was the focus of the fourth annual AIA Diversity Forum conference last month in Seattle. The forum was created to address the lack of representation of minorities and women in the profession. Current AIA membership statistics show that less than 7 percent are minorities and 11 percent are women.

Calling on the AIA and its collateral professional institutions to embrace "true multiculturalism," Dr. Sharon Sutton, FAIA, honorary chair of the conference, said accomplishing change means withstanding the discomforts and inconveniences that come with it.

The workshop that generated the greatest interest among the 300 attendees was on the Boyer Report. According to the speakers, it lacks the incentives necessary for social diversity (RECORD, May 1997, page 124). Sutton described the difficulty in putting together diverse school accreditation teams when the organizations that supply the lists of team members submit neither women nor minority nominees. "That makes it impossible to enforce diversity standards," she said. *Lian Hurst Mann*

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FREESTANDING AIDS CENTER UNDER CONSTRUCTION IN CHICAGO

Chicagoans will soon be able to receive comprehensive AIDS treatment, regardless of their ability to pay. U.S. Secretary of Health and Human Services Donna Shalala attended groundbreaking ceremonies recently in Chicago for the CORE Center, the first freestanding outpatient treatment facility for people with AIDS.

The \$25 million, 60,000-sq-ft center, designed by Perkins & Will, is located in the medical hub west of Chicago's Loop. It's scheduled to open in mid-1998.

Arising from a public-private partnership between Cook County Hospital and Rush–Presbyterian– St. Luke's Medical Center, the CORE Center will offer the combined HIVrelated resources of both institutions, including counseling services, expanded diagnostic facilities, and outpatient treatments that currently require hospitalization.

The center will also offer onsite HIV testing, 24-hour counseling, and prevention and educational programs for women and children, and will participate in clinical research for HIV/AIDS and other infectious diseases, such as tuberculosis.

The two hospitals will share the facility's operational costs, saving an estimated \$6 million annually on inpatient stays.

Funding for the project included \$11.8 million from the federal government and \$5 million from the state. The \$8 million balance comes from a range of private donors, including Playboy Enterprises. Christie Hefner, chair and CEO of Playboy, chairs the CORE Foundation Project Board and has supported the center's development since 1994.

Approximately 23,000 Chicagoans are HIV infected, and half of them don't know it. Cook County Hospital serves 25 percent of all HIV/AIDS patients nationwide, and over two-thirds of the country's afflicted women and children, half of whom lack health insurance.

Barbara Nadel, AlA

IMPRESSIVE ART COLLECTION ON VIEW AGAIN IN REOPENED FRENCH GALLERY

After five years of renovation, Lille's Palais des Beaux-Arts, which holds France's second largest collection (after the Louvre), is now open. The \$44 million project by Paris architects Jean-Marc Ibos and Myrto Vitart returned the museum's generous gallery spaces and tiled interior domes to their original beauty while doubling exhibition space.

The treasures in the imposing 1892 structure were almost forgotten as the city focused its hopes and its budget on Euralille, the super-modern city center master planned by Rem Koolhaas. While Euralille gave Lille a much-needed once used for storage, were converted to medieval and Renaissance galleries.

A second, 6,300-sq-ft gallery was carved out beneath the central atrium. Finished entirely in black, it contains Louis XIV's scale models of northern France, its villages made from fragile silk. A third exhibition space was created under the rear garden court and covered by an expansive skylight.

Ibos and Vitart, both former associates of Jean Nouvel, were inspired by the original building scheme, which included a matching wing that was never built. By slip-



image boost, the historic buildings slid into neglect. The museum was dark and badly maintained, and much of its collection sat unseen in crates.

The architects turned to the basement. The vaulted brick caves,

ARCHITECTS AND MASONS VACATION TOGETHER In a pine forest in Maine, a masonry wall winds a short distance and ends. Scattered around the wall are other architectural fragments—brick benches, fireplaces, tile floors, and foundation walls. This vestigial village was created by the participants in masonry camp, held each summer for the past five years on Swans Island. Sponsored by the International Masonry Institute, the program brings together architectural students and apprentices in the "trowel trades" for a week-long series of lectures, demonstrations and hands-on activities. By exposing the future architects to the art of building, and the future builders to the design process, the Masonry Institute hopes to bring about more harmonious relations between the two groups.

After an early morning breakfast, campers spend the days learning the basics of brick, tile, terrazzo, stone, and plaster work. Evenings are devoted to designing mosaics, making molds, and casting plaster and concrete.

The culmination of the program is a 12-hour building session. The campers are divided into design-build teams, with each team picking an architectural element they can construct. Completed projects are critiqued by guest architects, who this year included Hugh Newell Jacobsen and William Rawn. Deborah Papier

ping a knife-thin, largely transparent 100,000-sq-ft addition along the southernmost boundary of the site and cladding it with mirrored glass, the existing building's facade was captured in the new. A pattern of dashes seriographed onto the mirrored facade dilutes the reflection, creating an impressionistic homage to the original architects, Berard and Delmas.

To reintroduce the public to the museum, a free zone was created that extends from the main entry, through the central atrium, out to the garden, and on to the restaurant within the new addition. Highlighting these public spaces are two brilliantly colored glass chandeliers commissioned from artist/designer Gaetano Pesce. *Claire Downey*

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CIRCLE 23 ON INQUIRY CARD

SHANGHAI'S NEW MASTER PLAN SHELVED-LIKE THE OTHERS

Wolfgang Wagener's "Shanghai 2000: Masterplan for a Sustainable Future," a mixed-use apartment community that's suitable for up to 10 sites in the Yangtze Delta, has it all: lifestyle diversity, minimized environmental impact, economical design, and more. But planning is a sometime thing in Asia, where master plans are commissioned only to sit on the shelf. Wagener's is no exception.

An architect with offices in Los Angeles and Berlin, and a visiting professor at the University of Southern California, Wagener is bitter about the entire process."I wonder if the idea of planning is purely a Western concept that doesn't translate," he said.

Shanghai's current population of 13 million is expected to nearly double in 15 years, and "there's no real model for managing such growth," he said. "Initiating a master plan requires tremendous time and money, and the city's officials are overwhelmed. They are looking for a magic bullet, a solution they can impose now."

The projects that do move forward in Asia, such as Renzo Piano's mammoth airport in Osaka, are those driven by what Wagener calls "pure capitalism." Airports, hotels, and banks are easier to finance and complete. "They quickly start paying back the investment, and they're dramatic. They make headlines and skylines. It's the local projects, like housing, that suffer."

Asian officials like fast-track buildings; they want them to go up quickly. "Their solution is to take Hong Kong–style 20- or 30-story high-rises and march them like soldiers across this totally flat landscape. They'll probably look back in 10 years and wonder what they did wrong."

As for his own plan, he hasn't yet given up all hope. The plan received good feedback from the city's officials. But at this point, it's more a political problem than an architectural or urban-design one. *Bill Marsano*

Housing projects like this one by Wagener are seldom built in China.

EIFS MANUFACTURER WINS COURT CASE, CLASS-ACTION SUIT STALLED

For the first time, a jury has weighed in on the bitter dispute between homeowners and manufacturers of Exterior Insulation Finish Systems. A Washington State couple argued for more than \$500,000 in compensation from Atlanta-based Sto Corp., claiming that the EIFS used on their home was a defective product prone to trap water and cause wood rot. After a three-week trial, Sto's product was deemed "reasonably safe as designed" and the couple's charges were dismissed.

Richard Reyes, corporate counsel for the Sto Corp., cited "errors in construction" as the cause of the wood rot. One expert witness testified that the homeowners omitted flashings specified by the architect

TOWER GLOWS WITH THOUSANDS OF LIGHTS

It's not often that people stop and gape at a building that's been part of a city's skyline for 150 years. But this summer, the stoic, graystone Chicago Tribune Tower was transformed into a shimmering mosaic of magenta and blue to celebrate the building's sesquicentennial. Commissioned by the Chicago Tribune Company, the "light sculpture" was created by lighting artist John David Mooney, a native Chicagoan who was "daunted" by the imposing, neogothic building. He used 1,635 fluorescent lights, 88 tungstenhalogen lamps, and 474 strobes to



fashion a different design for each facade. The lights were wedged into the mullions of the windows on 33 floors. *Deborah Papier*

BETHLEHEM RESTORATION PART OF LARGER PALESTINIAN BUILDING PROJECT

The United Nations Educational, Scientific, and Cultural Organization (UNESCO) is working with the Palestinian Authority to make plans to restore Bethlehem. The project is intended to help Palestinians capitalize on Holy Land tourism.

The announcement was made in Paris by representatives of the Palestinian Authority and UNESCO. Poverty, pollution, neglect, and sprawl have left Bethlehem so badly damaged that it is now "unrecognizable," said UNESCO director general Federico Mayor. He called on the world community to contribute the more than \$2 million needed to fund studies that would determine how to best restore Manger Square and the town's central marketplace. Some preliminary plans have already been drawn by volunteer students from the Belleville School of Architecture in Paris.

The Bethlehem restoration plans, along with other projects in Gaza and Jericho, are part of UNESCO's "Program of Assistance to the Palestinian People," which emphasizes job creation, consolidation of the Middle East peace process, and modern construction in the formerly occupied territories. *Thomas Vonier*

and used substandard windows. Meanwhile, a U.S. District Court in North Carolina has denied certification to a Federal EIFS classaction suit, ruling that responsibility for moisture damage must be reviewed case by case. A separate class-action suit for North Carolina residents will go to trial after six months' negotiations fell apart, according to the state attorney general's office.

Praised by architects and

homebuilders for its insulating properties and design versatility, EIFS came under intense scrutiny in 1995 when some North Carolina homeowners began to find moisture damage behind their new EIFS installations.

The EIFS Industry Members' Association announced that they were "hopeful that the Washington verdict will have a favorable impact on the other class-action suits." *Peter Edmonston*

SEATTLE SLIDES LEAD TO STRINGENT CODES AND LIMITS ON DEVELOPMENT

Between last Christmas and New Year, winter storms dumped record amounts of snow and rain on the Seattle area. Combined with rapid snowmelt, the precipitation resulted *in hundreds* of landslides. Now it is blame that's sliding among city officials and developers as to who's responsible for the estimated \$30 million in damage.

Seattle's Department of Construction and Land Use (DCLU) is establishing stricter codes for building in slide-prone areas. But the new codes make building impossible in desirable areas.

Hugh Shipman, a geologist with the city's department of ecology, explained that the area's thin soil sits atop impermeable hard pan. Moisture percolates through fractures in the hardpan into layers of sand and clay beneath. When groundwater flows between the layers of till and clay, slides result. By understanding these factors, designers can create buildings that are properly anchored, and landslide damage can be mitigated on developed shoreline bluffs. "Little in the way of geotechnics were done in the past," Shipman said.

The DCLU wants to encourage better design by insisting on extensive site characteristic information and updated soil reports. Third-party review with outside geotechnicians will be needed for complex projects and large sites.

But many in the design community are dubious of real change since the city can always sanction construction by issuing permits. Seattle's expanding economy, combined with land scarcity and a political climate extolling development, all favor building. There are plenty of willing buyers and sellers of view property, even if it's located in slideprone areas. *Peter Stekel*



WHITNEY MUSEUM AND CANADIAN CENTRE FOR ARCHITECTURE FORGE ALLIANCE

New York's Whitney Museum of American Art and Montreal's Canadian Centre for Architecture (CCA) recently announced plans to share architectural exhibitions. The collaboration provides the Whitney *an opportunity* to address architecture, while the CCA will finally have a New York outlet for its programs.

"Our exhibitions are shown in Europe, North and South America, yet we have lacked a sustained presence in New York City, the cultural capital of the world," said CCA founder and director Phyllis Lambert. The new alliance means the CCA can draw on the Whitney's strengths and gain access to the lively New York arts and media communities.

Upcoming is a major new exhibition on Ludwig Mies van der Rohe, scheduled for Fall 2000 at the Whitney. *Barbara Nadel, Al*A

ARCHITECTURAL PRESS ROUNDUP

BUFFALO GETS A BOOST

Buffalo Evening News, August 7, 1997 Despite its reputation for lousy weather, there are some nice things about Buffalo, N.Y., including its impressive number of Frank Lloyd Wright-designed houses. Now the Darwin Martin House, Wright's 90-year-old, Prairie style "masterpiece," is getting an estimated \$1.5 million from state government for much-needed restoration work. That'sa tiny part of the \$23 million necessary to complete the job, but someday the house will become an important tourist attraction.

HOUSING FOR GRANDMOMS

New York Newsday, August 8, 1997 "Her mother asked me to babysit for a few hours and never returned," says a Boston woman who's cared for her granddaughter for 12 years. An estimated 1.5 million American children are being raised by their grandparents. Now Boston developers are building "Grandfamilies House," a 26-unit complex that's both handicap-accessible and toddler-proof. Putting the grandfamilies together offers a built-in support network for the residents.

NO MORE OPERA UNDER THE STARS

USA Today, August 7, 1997 With no roof to protect them, patrons of the Santa Fe Opera's open-air theater keep dry during rainynight performances by making raincoats from garbage bags. Now, to the chagrin of some theatergoers, the opera is adding a roof. That means no more rain-soaked evenings, but it also puts an end to views of the stars and the lights on the distant mountains.

SETTING DESIGN LIMITS, THEN BREAKING THEM

The Baltimore Sun, July 20, 1997 Baltimore mayor Kurt Schmoke speaks glowingly about the new \$137.6 million Wyndham Hotel planned for the city's Inner Harbor and the \$150 million Grand Hyatt proposed for a site near Camden Yard. But both of these slick, ungainly towers will violate height limits and other design controls established to protect the city. The test of a successful hotel is whether it can house visitors comfortably and fit the architectural vernacular. These towers succeed on the first count only.

TAMING WILD BEASTS AT THE MALL

The Wall Street Journal, July 8, 1997 New York–based Ogden Corp. will soon open a combination zoo/restaurant/boutique in a mall outside Los Angeles that pushes the limits of what those in the retail business call "shoppertainment." Complete with hidden scent canisters that evoke the smells of the forest, the desert, and the ocean, a series of "biomes" re-create California's various landscapes and wildlife. More than 60 species of animals will roam behind partitions while visitors shop for T-shirts and nature bric-a-brac.

DESIGNING AN ARCHITECTURAL JOKE

New York Daily News, July 7, 1997 New York architect and developer Joseph Pell Lombardi is planning what he calls "New York's first classically inspired folly." It's an old, 12-story loft building that, when done, will resemble a huge classical column in the early stages of deterioration—including cracks, stains, and sprouting vegetation. Inside will be luxury condominiums selling for \$900,000 each. The project gives "shabby chic" a whole new meaning.

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CONEY ISLAND DEVELOPMENT SPURRED BY STATE BOND INVESTMENT

New York State approved at least \$50 million in bonds and a private real estate developer is offering another \$100 million to build a new sports center on Coney Island.

"It's about time the state woke up and smelled the hot dogs," said one Coney Island business owner. The investment is expected to invigorate revitalization and spur private development projects.

Bruce Ratner, a real estate developer who helped revive downtown Brooklyn, is offering the \$100 million. He declined to comment on the project.

The Sportsplex is one component in a development plan for Coney Island that will also include an entertainment/retail complex. The sports center will seat 12,000 and provide an arena for indoor soccer, basketball, and track meets.

Groundbreaking may be as much as two years away. First design studies, zoning reviews, and an environmental impact statement are required. Jessie Mangaliman



IIT FIRST-ROUND LIST CONTAINS MORE THAN THE USUAL SUSPECTS

The "usual suspects," as well as several unknown architects, have been invited to join the first phase of the Illinois Institute of Technology's international campus center competition.

A six-member jury, led by Atlanta architect Mack Scogin, reviewed written or graphic submissions from the first round of competitors and was to announce the five finalists this month.

The big question is: Who will respond to the invitation? IIT will pay the five finalists \$25,000 for preparing drawings, a model, and written material—not enough money, according to some.

The campus center will be built near Ludwig Mies van der Rohe's Crown Hall on a \$25 million budget. The finalists' designs are due January 20. The jury will select a winner in February.

Among those invited to the first round are nine Pritzker Prize winners, including Tadao Ando and Philip Johnson; and seven firms that made the Museum of Modern Art's initial list for its renovation, including finalists Jacques Herzog and Pierre de Meuron.

There are deconstructivists (Peter Eisenman), practitioners of "light construction" (Jean Nouvel), and green techies (Norman Foster). IIT kept its promise to give younger, lesser-known practitioners a chance. There also are some wild cards, like RECORD contributing editor Michael Sorkin. *Blair Kamin*



PAUL RUDOLPH: A PERSONAL APPRECIATION Born in Elkton, Ky., Paul Rudolph earned his architectural degree from Harvard. He served as chairman of the architecture department at Yale from 1958 to 1965, and ran his own New York City firm until his death on August 8 at the age of 78.

Paul Rudolph was the greatest American architect of his generation, the most unself-conscious, the most direct. He shaped mass like clay and had an absolute genius for light, making buildings that were at once remarkably disciplined, sensuous, and tectonic. His buildings were substantial enough to leave ruins—near geology.

The Art and Architecture Building at Yale University is immortal, complex, brilliant, and moody. Together with the horizontal, street-spanning Temple Street Parking Garage, also in New Haven, these are as fine a pair of buildings as ever produced in this country. I especially admire the superb Burroughs Wellcome and Company Corporate Headquarters in Durham, N.C., a monument in modernity's entry into the post-technology age. Paul was an urbanist whose vision, steeped in the history of the town in which he worked, grew richer and richer.

Paul was very Southern, and his work was Southern too. There's a thickness to the atmosphere down south, as if light and space press against the skin. His early projects in Florida have a shipbuilder's elegance and minimalism, as if all were in service of sun and air.

His drawings were the work of angels, and his architectural legacy is clear in these drawings. They're direct, precise, recalling and then exceeding the styles of projection and the pen-and-ink austerity of classical mechanical drawing. There's something incredibly optimistic about these drawings. They are filled with dreams, with an American sense of "Why not?" They are also the work of a music lover—proportioned and rhythmic.

Paul never gave less than his full attention and was always completely engaged and very serious, cutting right to the point. He was terrific on juries and demanded clear communication.

In every life there runs a vein of tragedy. Paul was a post-Roarkian hero, swept from the American scene with shocking speed after the burning of the Art and Architecture Building. This was certainly the central event in the formative years of my architectural generation. I understood that fire, though, not as a protest against architecture but as a kind of outrageous potlatch.

I never lost faith in him, even when he fell somewhat from American architecture's graces. Paul Rudolph was not an architect who preached, he was one who believed. And what he believed was that architecture could make life very beautiful. *Michael Sorkin*



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CIRCLE 24 ON INQUIRY CARD

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Paris fire destroys architec-

tural artifacts Months of renovation work and 10 percent of a collection of architectural artifacts by Viollet-le-Duc were destroyed when fire tore through the eastern wing of Paris' Palais de Chaillot. Another 30 percent of the collection of models and molds of gargoyles and saints, many of which have outlasted their originals, was damaged. The fire, which caused \$10 million in damage to the Musée des Monuments Français, will postpone the reopening of the palace, originally scheduled for 1999.

Meier wins Japanese architec-

ture award AIA Gold Medalist Richard Meier travels to Tokyo next month to receive \$150,000 and a medal from the Japanese imperial family after being named winner of the 1997 Praemium Imperiale for Architecture by the Japan Art Association. The award is given in artistic fields not covered by the Nobel Prizes, including theater, painting, sculpture, and music. Meier is the third American architect to receive the prestigious honor since its inception in 1989. Architects I. M. Pei and Frank Gehry were past winners. Meier said he was "very honored" by the award.

Public-sector buildings sweep

Canadian awards Most of the 20 buildings that won the 1997 Governor General's Awards for architecture, sponsored by the Royal Architectural Institute of Canada (RAIC), are public-sector structures, including a correctional facility for women and a bridge linking two cities. The prestigious RAIC Gold Medal was awarded to Raymond Moriyama, FRAIC, of Toronto. Five Medals of Excellence were awarded to Les Architectes Boutros & Pratte, Montreal; Pierre Thibault Architecte, Quebec City; Sturgess Architecture/FSC Manasc Architects, Calgary and Edmonton; Patkau Architects Inc., Vancouver; and Brian Mackay-Lyons Architecture and Urban Design in Halifax.

The Yukon Visitor Reception Centre won an RAIC Medal of Excellence.



HOK to redesign ferry terminal

Hellmuth, Obata + Kassabaum, in collaboration with Peter Eisenman Architects, has begun work on a feasibility plan for the ferry terminal in Staten Island, New York, which is used by more than 18 million commuters and 12 million tourists each year. In addition to improving the terminal's operation and design, the goal of the study is to assess the viability of integrating the Staten Island Institute of Arts and Sciences.

Outdoor areas to become more accessible Existing and future beaches, campgrounds, and trails may be subject to new accessibility guidelines under the Americans with Disabilities Act and the Architectural Barriers Act. The U.S. Access Board convened a 25-member committee to determine what level of access should be provided. The results will be published by the Access Board as a proposed rule and finalized after public comment has been incorporated.

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Miss America's new address

A new Sheraton Hotel next to the Atlantic City Convention Center in New Jersey is likely to become the new headquarters for Miss America. The 500-room hotel houses a gallery dedicated to Miss America. Scheduled to open in November, the hotel was designed by the Weihe Design Group in Washington, D.C.

Engineering exhibition at

Pompidou In 1923, dirigibles required very big parking spaces. Eugène Freyssinet, an engineer and a pioneer of prestressed concrete, devised an arched hangar with an economy of concrete that's still enviable. The hangars, destroyed in 1944, are among the projects in "The Engineer's Art," a retrospective of important engineering work from the mid-1800s to today, on display until the end of this month at the Georges Pompidou Center in Paris.

Lights, camera, action

Construction of the first new studio



This arched dirigible hangar spanned 164 ft and was 288 ft tall.

in Culver City, Calif., in 78 years is likely to begin soon. Designed by RoTo Architects and developed by LuxCore LLC, the multimedia center will be home to film and TV shows, as well as high-tech media like Web and software publications. The 825,000-sq-ft facility on 12.25 acres will include a 400-room hotel, a restaurant, 12 sound stages, and production offices. "Movie studios have traditionally been patched together over time," said James Magowan of Lux-Core. "Our intent is to make a cohesive environment for producers, directors, and multimedia designers."

Two construction groups allied Construction Specification Canada and the U.S. Construction Specifications Institute agreed to a fiveyear alliance in which they'll "hotlink" Internet sites, exchange articles for each other's publications, and cosponsor continuing education. The alliance will help members in cross-border projects.

Staffing problems a common

complaint In a recent survey conducted by Zweig White & Associates, project managers in architecture, engineering, and environmental consulting firms cited problems in finding, keeping, and motivating project staff as their biggest problem. Other complaints included lack of time, excessive workload, and leadership problems.

Making beautiful music The new \$24 million Rebecca and John J. Moores School of Music building at the University of Houston includes an opera house, a model classroom for preparing elementary school music educators, and a library. Designed by The Mathes Group in New Orleans, the building is due to open this month. ■



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DATES EVENTS BOOKS

Calendar

September 19–October 15

Architectural League of New York New York City

"Paul Rudolph: Selected Drawings" includes approximately 25 of the late architect's projects in the United States and Asia. Selected by Peter Blake and Ernst P. Wagner, the drawings are of both built and unbuilt works from 1948 to 1989. Call 212/753-1722.

September 27–28

Points Hilton Hotel Scottsdale, Arizona

"Does Design Make a Difference?" is the question posed to participants in the AIA Committee on Architecture for Education, held with the Council for Educational Facilities Planners International. Call David Roccosalva at the AIA

September 29–October 2 Marriott Waterside

Norfolk, Virginia

at 202/626-7418.

The 82nd annual conference of Building Officials and Code Administrators International will include business sessions, code development hearings, and educational and professional development events. Expo '97 will be held September 28–30. To register, contact BOCAI, 4051 W. Flossmoor Road, Country Club Hills, Ill. 60478. For information, call 708/799-2300, x248; fax 708/799-4981; or E-mail order@bocai.org.

September 30–January 11, 1998 Cooper-Hewitt Museum

New York City

"Design for Life: A Centennial Celebration," organized in honor of the museum's first 100 years, takes a look at "the central role design plays in our lives." It includes 200 works from the museum's collection of design objects. Call 212/860-6894.

October 5–9

Los Angeles Convention Center Los Angeles, California

Combining Autodesk University and CAD Camp, Autodesk Design World is a meeting of users, developers, and dealers. Events include a hands-on look at new technologies. Call Mark Cohen or David Radoff of Upstart Communications at 510/420-7979.

October 10–13 Marriott Hotel

Miami, Florida

"Reconstruction: A Strategy for Success" is the theme of the 27th annual convention of the National Organization of Minority Architects (NOMA). For information on the conference or NOMA, call Taj Hunter at 305/571-9177.

Through October 13

Los Angeles County Museum of Art Los Angeles, California

"Charles Rennie Mackintosh" is a traveling exhibition of the Scottish architect's extensive body of work. Call 213/857-6000.

October 14-19

Sweeney Convention Center Santa Fe, New Mexico

The 51st National Preservation Conference, sponsored by the National Trust for Historic Preservation, addresses the theme of "People and Places: Living in Cultural Landscapes." Write the National Trust, 1785 Massachusetts Avenue N.W., Washington, D.C. 20036; call 800/944-6847; or E-mail santafe_npc@nthp.org.

October 16–18 The Merchandise Mart Chicago, Illinois

Restoration/Chicago 97 is a conference and trade show for professionals involved with the restoration or renovation of historic structures and traditional architecture and objects. For information, write EGI Exhibitions, 129 Park Street, North Reading, Mass.⁵ 01864; call 508/664-6455; or fax 508/664-5822.

October 17–18

Seattle, Washington

The Interfaith Forum on Religion, Art, and Architecture PIA is sponsoring "Light and Sound for Sacred Spaces," an exploration of innovative acoustics and lighting in religious buildings. For information, call 800/242-3837.

October 17–19 The Merchandise Mart Chicago, Illinois

In addition to an extensive display of contemporary furnishings, the first annual Chicago Design Show will include an exhibition of work by U.K. designer John Makepeace and an exhibition of Vitra's miniature chair reproductions. For information, call 800/677-6278.

October 23–25 **Outrigger Prince Kuhio** Honoiulu, Oahu

The convention of the Society of American Registered Architects includes design awards, seminars, and business sessions. To register, call Michael Jones at SARA at 619/299-8891.

October 23–28

Memphis, Tennessee

"Architecture in Perspective," the convention of the American Society of Architectural Perspectivists, features seminars, workshops, a portfolio exchange, and an auction. To register (by September 23), write Alexander Lee, ASAP, 52 Broad Street, Boston, Mass. 02109; or call 617/951-1433, x225.

October 26–29

Hyatt Regency at Union Station St. Louis, Missouri

"Rail-Volution '97: Building Livable Communities with Transit" is an interdisciplinary gathering of policy makers, citizen-advocates, and planning, design, and transportation professionals. Areas of discussion are linking transit and land use; building citizen and institutional support; and creating a competitive advantage for metropolitan areas. For information, call 800/788-7077 or fax 302/436-1911.

October 28-30

Georgia World Congress Center Atlanta, Georgia

MetalCon International '97, the annual conference and exhibition focusing on the use of metal in design and construction, will include industry meetings and more than 500 exhibits of products, services, equipment, and technology. For information, call 800/537-7765.

October 29–31

Javits Convention Center New York City

InterPlan, an annual commercial interior design and planning trade show, is to be joined this year by BATIMAT North America, the U.S. version of the European commercial and residential building construction and design show. For information, call 800/950-1314, x2611; to register, visit http://www.interplanshow.com.

October 30

National Press Club Washington, D.C.

The annual National Summit on Building Performance is designed to raise awareness of building performance *(continued on page 162)*

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FEATURES

SECOND IN A SERIES Who Controls the Future of Cabrini-Green?

AS PLANS TO IMPROVE CHICAGO'S MOST NOTORIOUS PUBLIC HOUSING COMPLEX INCH FORWARD, TENANTS LINE UP AGAINST POLITICOS AND PLANNERS.

Editor's note: This is the second article in an intermittent series following Chicago's Cabrini-Green housing project as it goes through the throes of a proposed redevelopment. Cabrini-Green can be considered a test case that will have national implications in the realms of public-housing policy, urban planning, and the architectural profession. Here architecture critic Blair Kamin, who has covered the Cabrini-Green story for the Chicago Tribune, follows up on the initial installment of the series, which he wrote for RECORD's February 1997 issue.

f you know the way Cabrini-Green looks today, the drawings of its proposed future are simply stunning. There are no drug dealers milling about on the sidewalks, no 15-year-olds pushing baby carriages. Along Clybourn Avenue, a glass-strewn vacant lot disappears, replaced by a shopping-center parking lot lined with perfectly edged shrubs. In the distance, a boarded-up, 19-story high-rise makes way for a picturesque clock tower. On Larrabee Street, the "\$1 Everything" outlet, the storefront liquor stores, and the jobless men sitting outdoors

on blue milk crates are gone. Instead, there are stately row houses, their swelling bay windows marking a beat along the street, their wrought-iron fences conveying an aura of upper-middle-class respectability.

This is the vision of normalcy for Cabrini-Green that emerged from a two-day charrette last December, held by the city of Chicago at a cost of \$100,000. No one should doubt the ability of the firms involved, especially Goody, Clancy & Associates of Boston, to work such miracles in this closely watched drama. Yet for all one wants to believe that can happen at Cabrini-Green, the gap between ideal and reality there has never seemed as vast as it is now.

Mayor Richard M. Daley, who seized control of the redevelopment last year

Blair Kamin, architecture critic of the Chicago Tribune and RECORD contributing editor, received the 1996 George Polk Award for criticism.

by Blair Kamin

from the Chicago Housing Authority (CHA), had wanted to assign contracts by spring for row houses and flats to replace Cabrini-Green's hellish high-rises. Yet spring came and went without any significant demolition or construction. And so did summer, though a city branch library opened just east of the project in August. In the meantime, Cabrini-Green resident leaders have added Daley and the city to their list of defendants in a lawsuit seeking to block the CHA from further demolition of high-rises.

Textbook urban planning this isn't. When the U.S. Department of Housing and Urban Development (HUD) took over the CHA in 1995, a stalemate at Cabrini-Green was the last thing anyone had in mind. "We're stuck," acknowledges Chicago Department of Planning and Development spokesman Greg Longhini.

At the heart of the dispute over Cabrini-Green is the concept of community—what shape it will take, who will shape it, and who will belong to it. This is no academic debate. It's a classic Chicago political brawl, being fought over a piece of property, just steps from downtown's office towers, that developers long have coveted. And it





Concerned about conditions at Cabrini-Green are Kimberly Davis, 17, left, and Rachella Thompson, 16, right, in a breezeway at their building on North Larrabee Street. Their ideas for the future of the project won honorable mention in the *Chicago Tribune*'s 1993 Architecture Competition for Public Housing.

A vacant lot on Division Street (opposite), where two high-rises once stood, is representative of the stalemate at Cabrini-Green. Chicago Mayor Richard M. Daley wants to put mixed-income housing on the site, but his plan has been blocked by a lawsuit filed by Cabrini-Green tenants.

mirrors those that have bedeviled other attempts to transform public housing nationwide.

"Power designs cities," the architectural historian Spiro Kostof once wrote, "and the rawest form of power is control of urban land." Indeed, the forces of the marketplace are knocking on Cabrini-Green's door, with \$397,000 single-family houses already in place across the street from the project. To compound matters, the political landscape is shifting beneath the residents, as Congress enacts get-tough laws on welfare and public housing that undercut what little legal leverage they once had.

This story is typically told from the perspective of the combatants—HUD, the CHA, City Hall, the tenant leaders and their lawyers. A visit with two teenagers, Rachella Thompson and Kimberly Davis, who live at a 10-story, red-brick high-rise within the complex, opens a window onto the human side of remaking Cabrini-Green.

The inside story

To get to Rachella Thompson's apartment, No. 506 at 1161 North Larrabee Street, you walk past a dirt front yard strewn with shards of glass into a lobby (though that is certainly too grand a name for it), where a cloud of flies engulfs your head. No sign points the way to the elevator, so you ask a thin, young boy smoking a cigarette to direct you. After he does, he looks you straight in the eye and asks: "Can I have 50 cents?"

The elevator has steel walls, painted black and covered with graffiti, profane and otherwise, that has been there, Rachella says, for as long as she can remember. Once the elevator clanks to a stop, you exit and make two left turns to reach the door to Rachella's apartment. A sign on the door used to spell out "Thompson." Now, several of the letters are missing. Rachella is 16 years old, tall, her figure filling out, which can be a dangerous thing at Cabrini-Green. Her friend Kimberly Davis, 17, is shorter and pert. The teenagers are back in high school after summer internships at a nearby children's hospital. As always, they are dealing with life at Cabrini-Green in their own creative way.

"We holler back and forth," says Kimberly, whose first-floor apartment is visible from the window of Rachella's living room, a sight line made possible by their building's U shape. "That's our phone."

While outsiders refer to the streets and buildings at Cabrini-Green by their conventional names, the teenagers and other residents use nicknames that reveal much about the project's physical and psychological landscape. Larrabee Street, outside their building, is known as "The Boulevard," though there are no graceful medians of grass and trees there. Cabrini's high-rises and storefront liquor shops that double as grocery stores flank this hardscrabble stretch of asphalt. It is the place where residents hang out on the sidewalks from morning until night. It also is where the drug dealers ply their trade, serving a clientele that comes from outside the project as well as inside. A quarter-mile to the southeast, almost butting up to the elevated tracks that separate Cabrini-Green from the wealthy Gold Coast neighborhood just to the east, stands a group of high-rises called "The Wild End," a name that suggests the particularly violent nature of the gangs that control these buildings.

Mary Beth Williams, who worked at the hospital where Rachella and Kimberly were interns, has volunteered as a "big sister" to the girls for five years. "I can afford to be somewhat oblivious to my environment," she says. "I'm not looking for potential danger in the way [that] they are."

Weeks after the charrette, on January 9, a nine-year-old girl was



Drawings from a citysponsored charrette project a new image for Cabrini-Green. The town center includes retail stores and a police station (top). Row houses would line Larrabee Street (above left). Duplexes on West Oak Street are modeled after Goody, Clancy & Associates' Langham Court development in Boston (above right).

found in the seventh-floor breezeway of her Cabrini-Green high-rise after being viciously raped, choked, and left for dead. The high-rise is at 1121 North Larrabee Street, just south of Kimberly and Rachella's building. Rachella's aunt, Sharon Thompson, discovered the girl, whose T-shirt was *stained with blood* and pulled up to her chest, revealing gang symbols scrawled on her stomach with a black marker. "Another T-shirt was tied tightly around her neck," the *Chicago Tribune*'s Dahleen Glanton reported. "Her red corduroys were pulled below her waist."

The victim, identified only as Girl X, became a national symbol of sexual abuse, her story told on "Oprah" and other television talk shows. People around the country sent in more than \$500,000, much of the money in \$5 and \$10 denominations, to two funds set up to pay for her long-term care. In April, a 25-year-old man who lives in Girl X's building, Patrick Sykes, was charged with the crime. He has proclaimed his innocence. At press time, Sykes's case was awaiting a trial date. Rachella's mother, Runetta Thompson, 32, works part-time for Federal Express, delivering packages to downtown office buildings and the homes of business executives who live in the nearby Gold Coast. Runetta could go full-time, but that would mean working a night shift. She won't make that change because she feels responsible for Rachella and her two brothers, her sister, and two cousins who live in the three-bedroom apartment. There is no father in the home. "I refuse to do that," Runetta says of the night work. "You have to keep a good eye on your kids. If there's shooting, I'm here. I know where they are."

Apartments in public housing often are havens from the disorderly world right outside their doors, and this one, which rents for \$212 a month, is no different. It is orderly and relatively neat. The cinderblock walls are painted different colors—yellow in the kitchen, for instance instead of the usual white. Yet the stove is ancient, its burners covered with grime, and, until recently, the sink backed up and Runetta and her children had to empty it with a bucket. It took a year for the housing authority to fix the drain, Rachella says, and you sense that she is extrapolating from everyday experience when she is asked about Daley's plan for building row houses and apartment buildings at Cabrini-Green. "As long as it's for us," she says, ruefully, "it'll take 20 years."

Because her mother holds a job, Rachella and her family would

seem to be prime candidates for the mixed-income housing envisioned for Cabrini-Green. But they don't think the CHA will deliver on its pledge to include Cabrini-Green residents in the new housing. In the past, there have been too many broken promises—too many sinks not repaired, too many mailboxes gone unfixed, too many politicians who said things would improve, but never followed up. "I can't see it," says Runetta. "If they're gonna make these nice places . . . it's gonna knock you out of the box."

Community involvement

To outsiders, the rhetoric of the politicians seems to have the ring of common sense: Turn Cabrini-Green from "project" into "community." When you speak to the people who live there, however, the issue seems much ety," remarks Joseph Shuldiner, the executive director of the Chicago Housing Authority. "It's a community that's occurred out of necessity." Shuldiner assumed the job after the federal takeover, giving up his position as HUD's assistant secretary for public and Indian housing. He is known as "The Bureaucrat," and is far less charismatic than his predecessor, Vincent Lane, but seemingly far more level-headed and likely to pay attention to detail.

His voice rising with uncharacteristic emotion during a chauffeur-driven tour of Chicago's projects, including Cabrini-Green, Shuldiner denies that residents have had no chance to be involved in the planning process. He gave them ample opportunity, he says, to modify the development agreement for Cabrini-Green that he reached with Daley,

"PEOPLE HERE ARE NOT BY AND LARGE CONNECTED TO THE LARGER SOCIETY."

more complicated. Cabrini-Green, they claim, *is* a community. It is a place with churches and midnight basketball leagues, summer picnics and block parties. When someone dies, neighbors fix food for the bereaved. When someone else can't pay the rent, residents scrape together a few dollars to help out. Here, it is said, residents accept different levels of responsibility for everyone's children, just as extended families always have.

It is a place, too, with its own political structure, a powerful group of tenant leaders, all women. As at other CHA developments, they are called, somewhat resentfully, the "queen bees." They have status. They command resident management corporations modeled after those of renowned St. Louis tenant leader Bertha Gilke. The corporations run laundromats, security and day-care centers. Their leaders work in offices at Cabrini-Green that have computers, fax machines, and potted plants.

One of them, 46-year-old Carol Steele, a big and determined woman, has lived at Cabrini-Green most of her life. To her, "mixedincome" is another word for gentrification. "We don't want to be mixed out," says Steele, who leads the resident-management corporation for Cabrini-Green's row houses, the barracks-like low-rises built in the 1940s.

The quiet, earthy president of the tenants' advisory council, Cora Moore, who is 57, vigorously denies the stereotype of Cabrini-Green. "Everyone ain't bad and everyone ain't [in] no gang," she says.

One of the errors made during the urban-renewal programs of the 1950s and 1960s was the wholesale bulldozing of inner-city neighborhoods deemed slums by Modernist planners. Both physical and social fabrics were destroyed. That helped lead to the social instability that ultimately undid projects like Cabrini-Green and Pruitt-Igoe. Now, critics say, the same mistake is about to be repeated. "The best of Cabrini-Green has been totally ignored," states the tenants' lawyer, Richard Wheelock of the Legal Assistance Foundation of Chicago. "The community that exists there has not been involved or taken into account in the planning process."

Yet, how one portrays this or any other public housing project is typically a matter of perception and politics. Tenants such as Runetta Thompson, who are trying to break the cycle of welfare and "go mainstream," have acknowledged that living at Cabrini-Green holds them back. They cannot save the money to move out when they are responsible for feeding children other than their own. They find it difficult to get up at 4 A.M. to work for companies like Federal Express when others who don't work blast their radios until the wee hours of the morning. They find it even harder to inculcate the value of work when the most visible male role models for young boys are drug dealers.

"People here are not by and large connected to the larger soci-

but they refused to participate. "This is the devil they know versus the devil they don't know," he says of Cabrini-Green and its residents. He predicts the stalemate will be broken.

What's missing from the plan

Looking at the bird's-eye view of the future Cabrini-Green that emerged from the charrette, one is tempted to believe Shuldiner. From this perspective, the project's troubles seem to have vanished and it looks like any other big-city neighborhood. The streets are not cut off from adjoining neighborhoods. The grid that existed before Cabrini-Green was turned into superblocks has been reinstated. Small parks, even a traffic circle, delineate districts within the development. There are no more drab and boxy high-rises that stand out from the housing around them. In fact, in this view, there are no high-rises at all, even though the plan calls for 15 of the 23 Cabrini-Green high-rises to remain standing.

Fantasyland? No, answer those who participated in the charrette; the politics of the tenants' lawsuit dictated a hands-off approach to the high-rises, as well as higher densities than those usually associated

In the bird's-eye view of Cabrini-Green's future, south of Division Street, the plan's New Urbanist principles are clear, with existing superblocks replaced by the original street grid. Eight high-rises would be razed in this

part of the project; 15 would remain at the area's north and south ends—though these are not shown.



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2

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with the New Urbanism—an average of about 40 units per acre rather than the typical 20. Some blocks would get as many as 60 units per acre. There would be row houses, duplexes, and mid-rises for a total of 2,300 units on roughly 60 acres. Five of every 10 units would be for sale. Two of every 10 would be designated for lower-middle-class families. Three of every 10 would be for people eligible for public housing. Half of those units would be reserved for the so-called working poor who qualify for public housing. The targeted completion date is 2006.

The idea here is bigger than the New Urbanism notion of restoring the traditional fabric of the city. Indeed, in contrast to New Urbanist developments where home prices effectively exclude anyone who is not at

with controversy, no matter how well-intentioned the architects and urban planners—in this case the Chicago office of Ann Arbor, Michiganbased JJR/inc., which led the charrette, and Goody, Clancy.

On the ground, rather than from the air, the view looks very different. Rachella and Kimberly won honorable mention in the *Tribune*'s 1993 Architecture Competition for Public Housing, which focused on proposals for Cabrini-Green. They are skeptical of what the professional designers have done. Their criticism is grounded in the fact that only one resident leader was invited to the charrette by city officials (she declined to attend). And it is additionally based on Daley's call for tearing down 1,324 units of public housing while building only 650 to 700 replacement

"HOW MANY MIDDLE-CLASS PEOPLE DO YOU KNOW WHO WOULD MOVE IN WITH A BUNCH OF CABRINI-GREEN PEOPLE?"



Cora Moore, leader of the Cabrini-Green tenants' advisory council, with her children at the North Burling Street building where she lives. She believes that the project is already a community.

least middle-class, the plan's stated goal is to include the very poor in a complete community with schools, a shopping center, parks, and the branch library. The housing authority won't build this community. Private developers and city agencies will.

As all this is being done, it is supposed to achieve two things: break down the isolated concentration of poverty that sociologists say is the root cause of the projects' woes; and attract private capital to achieve a social good in an era of limited federal spending. That, at least, is the theory.

In reality, as Cabrini-Green shows, the approach can be fraught

units. Rachella and Kimberly also realize that because the vast majority of Cabrini residents do not have jobs, 50 percent of the new housing units will not be available to them.

Although mixed-income developments have worked elsewhere around the country, the teenagers doubt that the concept can succeed in their project. "How many middle-class people do you know who would move in with a bunch of Cabrini-Green people?" Kimberly asks. She and Rachella envision fights over radios blasting. Even now in the project, they say, older people play the blues and "we play loud rap—it's a competition," with the stereos just getting cranked up louder. They wonder about the number of bedrooms in each apartment—it is unclear how many four- and five- bedroom units there will be in the new buildings."Some families got like 16 kids," Rachella says.

Most of all, they worry about rents. "It all comes down to money," Kimberly says. She knows project residents who pay just \$96 a month in rent. If that bill goes up to \$350 or so, they won't be able to afford it. "That's how they're gonna get rid of us."

The teenagers are not the only ones who have problems with the plan. Cora Moore, the tenants' council president, predicts that the supermarket in the new shopping center will

cater to a more upscale middle-class clientele. Most residents won't be able to afford to do their shopping there, she says. To Moore, the shopping center is part of the yuppie culture of Clybourn Avenue, where Volvos, Saabs, and BMWs fill the strip-mall parking lots. Indeed, the mix of uses that emerged from the charrette are physically segregated, as is typical in suburbia.

What Moore envisions sounds more like the southern towns from which the New Urbanists drew inspiration for Seaside, Florida places where screen doors slam in the corner café and neighbors know one another. "How about a music store, a shoe store, people who fix nails, or people who do hair?" she asks. What about job training centers, day-care centers, places that will help residents get off drugs? "*That's* a community."

As always, Shuldiner has a reply. All those things sound good, he

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CIRCLE 35 ON INQUIRY CARD

JOHNS MANVIL



Larrabee Street, known as "The Boulevard" the place "to see and be seen"—among Cabrini-Green tenants, is to be transformed

into an enclave of row houses and apartment buildings.

says, but the primary goal of the redevelopment is to build as much housing as possible. Besides, there are plans for a community center that will provide what city officials call a range of neighborhood services. What those services will be, however, has not been defined.

The dilemma

As a result of its prize location, Cabrini-Green seemed like the perfect place to showcase HUD's effort to reform public housing. For now, that very asset seems to be working against it. At first, the prospect was, "If not here, then where?" Now, it's more like: "Everywhere but here." At other CHA projects, such as the Henry Horner Homes, residents don't appear to fear the minority working-poor families brought in to make their developments mixed-income. What's unique about Cabrini-Green is that the poorest of the black poor live right alongside the rich and white. Partly as a result, the residents have a siege mentality and the process is going nowhere.

How do you break the stalemate? How do you get rid of (or reform) the bad at Cabrini-Green and keep the good? How do you plan with a fine-toothed comb and not a sledgehammer?

One scenario is that the tenants' lawsuit will drag on indefinitely, forcing Daley's planners to tinker around the project's edges, as they are doing now. The mayor himself has ample reason to take a "go-slow" attitude at Cabrini-Green. For getting ahead of its politics could lead to violent confrontation, which is exactly what Daley doesn't need as he prepares to face African-American U.S. Bobby Rush, his likely opponent, in a 1999 reelection bid.

And Cabrini-Green can blow up at any minute. That became clear on March 5 of this year; the project erupted in gunfire when, during a drug investigation, a CHA police officer shot an unarmed resident. After the shooting, at least one sniper in a Cabrini high-rise fired at police—and the police fired back. Following the confrontation, hundreds of residents screamed at the officers, telling reporters at the scene they were being treated like animals.

The second scenario is that residents will tire of the stalemate and realize that they have no choice but to cut a deal; after all, they're the ones who must live with the project's horrid conditions. And there are those who think the resident leaders in the highrises, where conditions are worst of all, will split from the leaders of the row houses, where the environment is more tolerable.

If that were to happen, several possibilities could open up. The charrette team could run another session, this one with resident leaders. Community-based, nonprofit developers might be brought to work with politically connected housing developers to ensure that the plan grows directly from residents' needs, rather than being imposed from outside.

All that seems like a dream just now, and an essential part of the stalemate is the conflict between flexibility and guarantees—tenants, having been ignored so often in the past, want their future assured, while the city and the CHA, both short of capital, prefer a certain latitude in order to succeed in the marketplace.

These are the new tensions inherent in this new brand of urban renewal, and they will require an extraordinary balancing act. The needs of Cabrini-Green's residents must be met, along with those who will make the project a mixed-income community. The art of this deal must be to avoid a developer land-grab, using private funds to achieve the public good.



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CIRCLE 39 ON INQUIRY CARD



BUILDING TYPES STUDY 753

Record Interiors 1997

lay is a word frequently used by Milan-based maestro Achille Castiglioni in discussing his work (pages 90–95), and his attitude is emblematic of this year's Record Interiors. "Play is an important part of life. Basically all things have a playful side," he says about his lighting, furniture, and tabletop objects, which are clever, technologically sophisticated, easy to use, and often witty in form, color, or reference. That's not to say that he doesn't take his work extremely seriously. In fact, at 79 years old, Castiglioni is one of the pioneers of what's come to be known as "Italian Design"-a quasi-official "state" style that during its heyday seemed to enjoy world dominance in matters of taste. Perhaps not as

This issue features work by the following architects and designers: 1. David Woodhouse Architects 2. Gabellini Associates 3. Achille Castiglioni 4. Randy Brown 5. Samuel Anderson Architect 6. Dean/Wolf Architects 7. Valerio Dewalt Train 8. Roy McMakin

well known in the United States as Memphis founder, architect, and industrial designer Ettore Sottsass, who is also about to celebrate his 80th birthday, Castiglioni teaches us less about authorship than about the pleasures of a useful invention. On the eve of a retrospective of his work at New York City's Museum of Modern Art, organized by associate curator and former Castiglioni student Paola Antonelli, we take a look back at some of his designs and hear his thoughts on his still-active career. What's most striking is his modest view of his role in shaping the domestic landscape. In speaking of the familiarity of his objects, Castiglioni reflects, "I often find myself thinking that my designs might perhaps have always existed, as if they had somehow been designed by other people." Though surely at a different point in his career, 41-year-old furniture designer Roy McMakin shares Castiglioni's attitude that his work is the culmination of many seemingly insignificant decisions. "I'm not really interested in stretching the envelope designing the new chair," says McMakin in the interview here (pages 118–23). "I'm interested in the little tiny decisions and how they have meaning." And he, too, broadens the definition of who a designer is and what he or she does. Unlike Castiglioni, who is trained as an architect, McMakin has a background in art. It's his compelling sense of space, not his formal education, that has made him a de facto architect. Along with these two interviews, this issue includes interiors projects that, in addition to other themes, exhibit a sense of serious fun. -Karen D. Stein



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Designed to accommodate 12 people holding hands in a circle, the Chapel of the Word (this page) stands within an existing

building. Translucent fiberglass panels supported by steel "buttresses" mark the new entry to the building (opposite). 70

1
PROJECTS

Inserted into a jumble of buildings, the **CHAPEL OF THE WORD** by David Woodhouse is a calm refuge in a discordant world.



ight is the presence of God, a manifestation of His Divine Word. That's what the client tells you. And when the client is the sixfoot-four-inch Thomas Krosnicki, the charismatic mission center director of the Divine Word Missionaries, you believe too. Krosnicki has given you a tight \$2 million budget to convert nearly 10,000 sq ft of ad hoc space into a visitors' center, lounge, and chapel, and told you he doesn't want any materials that even hint of luxury. "No material is too humble for the Lord," says Krosnicki. On one occasion you suggest a little marble for a small section of floor in the chapel. Krosnicki replies firmly, "It is hard to ask for money when you're standing on a

THE CLIENT SPEAKS IN METAPHORS, SO THE ARCHITECTURE DOES THE SAME.

marble floor." You're left with plywood, pine timbers, Plexiglas, and light. Light—the most precious commodity—is free.

"Krosnicki speaks in metaphors and parables, so we treated the building in the same way," explains architect David Woodhouse, AIA, who designed the chapel and visitors' center at the sprawling Divine Word Missionaries campus in Techny, Illinois. Simple materials carefully assembled, for example, remind visitors of the virtue of craftsmanship and honest work, while new elements inserted into an existing building allude to missionaries bringing new ideas to faraway cultures. Woodhouse's 11-person firm was hired because of its previous work with Abrams, Teller & Madsen, a firm brought in to design exhibits in the visitors' center. While Woodhouse's chapel is completed, the exhibits have yet to be installed.

by Clifford Pearson

- **1.** Chapel
- **2.** Passageway
- **3.** Plexiglas display
- **4.** Visitors' center

About 100 years ago the Divine Word Missionaries bought most of the land in rural Techny and started erecting an eclectic complex of buildings for their dormitories, Bible-printing operations, and world offices. (The orga-

nization has missionaries in remote parts of the world, translating the Bible into myriad languages and forms—even comic books.) Today Techny is rapidly suburbanizing and the missionaries are supporting their worldwide activities by selling tracts of land to companies such as Kraft–General Foods for corporate headquarters and to developers for "premier" gated communities. The envelope that Woodhouse had to work within was a set of three connected buildings put up at different times with different floor levels, materials, and design sensibilities. In the 1950s one of these buildings was wrapped in "a kind of Madame Butterfly pseudo-Japanese" teahouse skeleton of posts and beams, says Woodhouse.

Rather than trying to bring order to this exterior, Woodhouse left it "a cacophony" of styles, adding a 600-sq-ft, two-story entry pavilion with a corrugated fiberglass canopy and a set of steel "buttresses" supporting translucent fiberglass screens. The new entry, which faces the main street running past the campus, gives the building a "roadside presence," explains Woodhouse.

Inside the entry, light comes from above, via clerestory windows set between planks of rough pine. A simple plywood reception desk and slate floor introduce the palette of materials used throughout the project. "All the materials are naked, nothing is painted," notes Woodhouse.

The visitors' center that extends to the north of the entrance is converted space that originally housed a gift shop, now moved to a different part of the building, and a courtyard, now (*text continues*)

Project: Chapel of the Word, Divine Word Missionaries Visitors Center Techny, Illinois Owner: Divine Word Missionaries Architect: David Woodhouse Architects—David Woodhouse, AIA, principal-in-charge; Marsha Woodhouse, interior designer; David

Poorman, Rand Ekman, project team

Engineers: S+1 Consultants (mechanical); Beer Gorski Graff, Ltd. (structural) Consultants: Schuler & Shook, Inc. (lighting); Hanscomb Associates (cost estimating); Jerzy Kenar (sacramental furnishings design and fabrication) Contractors: Service Construction (general construction); Hank Prekop (chapel ceiling)



The chapel's flooring is coir matting and slate. The wooden altar and priest's chair were designed and built by sculptor Jerzy Kenar.

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Double-hinged doors can swing into place to close the passageway from the visitors' center (below). Doors that move like louvers can close off the lounge from the chapel and passage (opposite top). enclosed. When they are completed, exhibits will showcase the religious order's missionary activities in some 60 countries around the world. Once again, most daylight comes from above—from clerestories around the new roof over the old courtyard and from four angular skylights that will eventually have floor-to-ceiling shards of translucent Plexiglas installed beneath them and engraved with words from the Bible.

After walking through the spacious exhibit area, visitors come to a gently sloping passageway that negotiates the different floor levels of two of the existing buildings. The passage has canted plywood walls that angle toward the heart of the project—the Chapel of the Word, designed for just 12 people and often used for solitary prayer. Two sets of four doors, attached to each other by rods so they move together like louvers, can open the chapel to the adjoining lounge/conference room. Inserted within the existing building as a freestanding structure, the chapel is defined by rough basketlike walls of pine timbers and cherry spacers. The pine boards projecting from the walls at irregular angles and lengths represent the messy realities of the everyday world, says Woodhouse.

Inside the chapel the walls are smooth and ordered—making reference to the Lord's realm—and narrow spaces between the timbers allow shafts of light to slide in. On one section of wall, prayers written on colored pieces of paper inserted between the wood slats create a makeshift filter for light. If, as Krosnicki says, the chapel is where people and God come together, then the colored prayer wall is a manifestation of that meeting.

The chapel's ceiling is a cluster of freeform plywood "clouds" with openings in them to allow light from MR16 halogen spots to shine through. Woodhouse originally thought he would use translucent plastic for the clouds. But when he realized how close the halogens would be to the suspended celestial stand-ins, he worried about plastic melting under the heat. Extra distance between lights and clouds would also have produced more shadows on the floor, an effect the architect would have liked. As it is, the backlit plywood forms create an illusion of depth and animation that enhance the spiritual character of the space.

Keeping the chapel abstract in form allowed Woodhouse to evoke the architecture of very different cultures. While its walls allude to the circular African huts in which Divine Word missionaries often preach, its ceiling recalls the swirling geometries of a Roman Baroque church.

"The whole building is about capturing light and making it physical," says Woodhouse. The project's screens, insertions, and materials are all means to that end. ■

Manufacturers' Sources Aluminum storefront windows: Active Industries Built-up roofing: Koppers Industries Clear and translucent insulated glazing: Active Industries Skylights: Imperial Glass Structures Fiberglass panels: Resolite Plexiglas panels: Rohm & Haas Slate flooring: Pyramid Chapel chairs: Luminaire Sacramental furnishings: custom by Jerzy Kenar

Chapel downlights: Tech Lighting Recessed downlights: Halo Exterior lights: Lumark







- 1. Entry
 2. Visitors' center
 3. Passageway
 4. Chapel
 5. Lounge
 6. Religious goods store

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Red walls catch the attention of passersby on Geary Street, a traffic artery (below). The 1907 facade was restored (opposite).

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1

PROJECTS

Known for black and white Minimalism, Michael Gabellini gets colorful at **ULTIMO**, a shop in downtown San Francisco.



ichael Gabellini, AIA, is known as something of a company man in architectural circles. Since completing fashion designer Jil Sander's showpiece Paris boutique, the first freestanding shop outsider Sander's native Germany [RECORD, September 1993, pages 90–95], the architect has designed some 45 Jil Sander outposts for the Hamburg-based clothier. With the recent unveiling of her menswear line, Gabellini says his output for Sander will now increase to more than 20 projects around the world per year, a quantity made even more striking when considering his New York City office staff numbers 20 and he and his high-profile client are known for an almost fanatical attention to detail and craft. These days, however, Gabellini is extending his reach, not only to other fashion companies, but also to new materials and colors.

A case in point is the Ultimo shop in San Francisco, recently opened on Geary Street, a bustling downtown shopping artery. Gabellini's client, Joan Weinstein, owns, among other designer boutiques, a Jil Sander store in Chicago designed by Gabellini. When Weinstein decided to open a Jil Sander shop on Maiden Lane in San Francisco in 1996, Gabellini was the natural choice. Less obvious was Weinstein's decision to take advantage of a potential internal link between the Sander store (in a building that is known to film aficionados as the location of a pet store in Alfred Hitchock's movie *The Birds*) and another building, which fronts

by Karen Stein

Geary Street, to open a West Coast version of her Chicago design emporium, Ultimo.

The Ultimo store in Chicago presents clothing and accessories culled from the collections of some 30 designers and assembled in an almost curatorial fashion. The shop's reputation rests on an interpretation of the current fashion scene offered to its customers: Weinstein and her buyers review what is available, choosing items that are considered most appropriate for the "Ultimo customer," who Weinstein describes as "very urban, very sophisticated." When Ultimo opened in a former antiques shop 28 years ago, a lack of funds shaped its initial design: rcd-painted walls draped in African fabric. "The fabric was \$2.50 per yard. That was what we could afford then," recalls Weinstein.

Though the business has flourished over the years, and Weinstein has since opened other shops in Chicago, she now answers to a board of directors. The board asked three prospective designers to present ideas for the San Francisco shop. Gabellini was chosen because he responded to the retailing attitude of the company, says Weinstein. "I thought he understood Ultimo—the drama and theater of it," she recalls. "And he's easy to work with," which is no small point for someone who spends a good deal of time accommodating what may seem to be con-

ULTIMO PRESENTS CLOTHING IN AN ALMOST CURATORIAL FASHION.

flicting viewpoints among strong-willed, visual-minded fashion designers. Of the meeting of minds between architect and client, Gabellini says: "I managed the design of the shop. She managed the relationships with the clothing designers."

Project: Ultimo, San Francisco Architect: Gabellini Associates— Michael Gabellini, AIA, design principal; Dan Garbowit, AIA, managing principal; Carmen Carrasco, AIA, project architect; Thom Burns, Lily Chiu, Ben Fuqua, Vincent Laino, Elmer Lin, Cathy Jones, Lisa Monteleone, Lily Rutherford, project team Architect of Record: Dennis R. Smith & Associates Engineers: John Rutigliano (structural, base building); Thorton Tomasetti-Cohen Barrieto Marchetas (staircase); Glumac International (M/E/P) Consultants: Focus Lighting, Inc. (lighting); Swenson Stone Consultants (stone); Donald Kaufman Color (color) Construction Manager: Dinwiddie Construction Company



- **1.** Entry
- 2. Showroom
- 3. Cash/wrap
- 4. Fitting room
- The first-floor plan shows the internal connection between Ultimo and the Jil Sander shop on Maiden Lane.





Silk banners and walnut hang bars enliven the space and display special items of clothing (below and right). Hang bars in the vitrines are suspended by static line, used in mountain climbing. The furniture was made by George Nakashima Woodworkers.





Weinstein's architectural mandate was remarkably brief: "She said, 'I don't want a white space,'" recalls Gabellini. But her mission for the shop—"I want to dazzle them"—was as elusive as it was compelling. For Gabellini, the challenge was to capture the bazaarlike feeling of the Chicago Ultimo with an updated vocabulary of forms and materials.

The resulting concept of a painted box relies on what has become so much a company signature that there now is a paint color named after the company: "Ultimo Red." To translate the idea of an emporium into three dimensions, Gabellini devised a spatial layering of

THE CHALLENGE WAS TO CAPTURE A BAZAARLIKE FEELING.

terraced display areas, each devoted to an individual designer or fashion concept. Within the 3,500-sq-ft space, red walls and floating ceiling planes convey a sense of drama and movement. The staircase is wrapped in a cream marble with honey-colored veins, and bronze panels act as spatial partitions. The colors and forms contrast with the white and gray shades of the adjacent Jil Sander shop.

Gabellini likens his approach to directing a play with a large cast, and he says his interest in set design influenced the lighting of the shop. Claiming that many shops nowadays are overlit in an attempt to mimic daylight, he points out that this one, at a level of 3,500K, is slightly cooler than his Jil Sander shops, because of the warming effect of the red paint. For Weinstein, a sense of warmth is key to choreographing the type of shopping experience she wants Ultimo to represent. She explains: "[In the shop] you see customers enjoying themselves, trying clothes on, commenting on each other's clothes," as if sampling a friend's closet. In fact, the walnut furniture looks residential. Everything from tables to cabinets was made in collaboration with Mira Nakashima Yarnall, who has continued the studio of famed woodworker George Nakashima since her father's death in 1990. "When you like this kind of shopping experience, you're hooked," says Weinstein. She, too, seems hooked—on Gabellini, who is just completing an Ultimo shop in Dallas.

To oversee so many retail projects at once, Gabellini's office works with the same group of suppliers for lighting, furniture, and finishes. "If we want to experiment, we can easily modify details," he says. And how did this experiment in color and retail concept appeal to Gabellini? "It was liberating," he says. "I've never thought of myself as a Minimalist," says the architect, referring to the label often attached to his work. "I think about purity."

Manufacturers' Sources

Custom bronze entry doors, interior door frames and closers, interior bronze walls, and guardrails: Blakeway Metal Works Custom marble door; marble wall, stair: Furrer, SpA (Rosa Portugalo) Drywall: Golden Gate Drywall Walnut veneer casework: Pucetti Wood Products Paint: Tnemec Paints, Donald Kaufman Color (Ultimo Red) Walnut veneer paneling: General Woods and Veneers Bluestone counters, plinth: Hedelberg Bluestone and Marble Wenge wood salon floor: General Woods and Veneers Walnut custom furnishings (wrap cabinet, bench, tables, display slabs, ottomans): George Nakashima Woodworkers Salon lighting: Luminary Tools Vitrine lighting: Litelab

INTERVIEW

Milanese design maestro **ACHILLE CASTIGLIONI** discusses his career as MoMA mounts the first U.S. retrospective of his work.

by Francesca Picchi

The work of influential Milanese architect and product designer Achille Castiglioni will be the subject of a retrospective exhibition, "Achille Castiglioni: Design!" at The Museum of Modern Art, New York, from October 16, 1997, to January 16, 1998. Castiglioni, 79, Marco Zanuso, 81, and Ettore Sottsass, Jr., 80, are often regarded as the pioneers of a new kind of Italian design, one that fuses modern materials, mass-production, and an

antirationalist attitude and aesthetic. These elder statesmen, who continue to be active, are thought to be the seminal figures of postwar Italian-if not internationaldesign. "Castiglioni's designs are clever, playful, and easy to understand," says the exhibition's organizer, Paola Antonelli, associate curator in MoMA's Department of Architecture and Design, "and they are timeless because his design method is not about style. It is about common sense, clarity of purpose, memory, curiosity, observation, wit, a willing client, experience, manipulation, perfectionism, luckand talent, of course. I cannot imagine a better way to explain the marvels of design to a wide audience." In this country, Castiglioni is



best known for his inventive lighting designs, the most familiar of which is the Toio, a fishing-rod-thin floor lamp with an automobile headlamp as its source, designed in 1962 and produced and distributed by Flos. The Toio, along with other products designed by Castiglioni and his elder brothers, Livio and Pier Giacomo, with whom he worked until their respective deaths in 1968 and 1979, contains many of the concepts that he has always explored and expressed in his work. This past summer at RECORD's urging, writer Francesca Picchi met with Achille Castiglioni in Milan to discuss his work and his thoughts on the practice and direction of design today.

Architect Francesca Picchi is a contributing editor at Domus. The interview was translated from the original Italian by Rodney Stringer.

Architectural Record: Your work has influenced generations of younger designers, who consider you to be a master and your designs to be historical reference points. Who are your masters, and how did you and your brothers first get into design?

Achille Castiglioni: Ever since our student days [at the Milan Polytechnic], my brothers and I looked up to the masters of the Modern

movement and the Bauhaus. Then, toward the end of the 1940s, the work of Charles and Ray Eames became known in Italy. We felt close to the spirit expressed by them, so it was only natural for us to start thinking in terms of mass production. Another great influence has been avant-garde art movements, such as Futurism and Dada, as well as the work of abstract painter and sculptor Lucio Fontana [who established the idea of Spatialism during the late 1940s]. Our father was a realist sculptor who passed down to us his own great passion for art-which included those movements that had been founded in defiance of tradition and academicism. It has to be remembered that the early postwar years in Italy were a highly experimental

period. The relationship between design and industry was open to great debate; there was a great deal of very animated discussion. The Triennale [in Milan] was an exciting meeting place. It was a time when one always found young architects working together with young entrepreneurs. Since very few houses were being built, it was a perfectly "natural" relationship.

I think that in many ways the really lucky thing about our work, and Italian design in general, is that we had a very free, "disenchanted" relationship with technology. A contributing factor may perhaps have been that it didn't cost very much to carry out experiments, whereas today you need the backing of a big corporation and a heavy financial commitment. Fortunately, in the larger Italian companies there are still

Achille, Pier Giacomo, and Livio Castiglioni, 1952 (Joli to right),



Objects in the Milan studio (above). Achille Castiglioni, 1997 (right). Grand Prix flatware, a 1960 design, now made by Alessi. (far right). Gibigiana 1-2 table lamp, and in section, a 1980 design manufactured by Flos (opposite).





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Gir.

B D 5 A T B de:

by Achille and Pier Giacomo Castiglioni for Flos. Achille Castiglioni photograph surrounded by his designs, including the San Luca armchair, the Arco lamp, and the Rocchetto table (inset below).



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gifted craftsmen with whom it is easy to work, which is a great boon when you're trying to develop something.

In many ways the idea of industrial production for me and my brothers was associated with the invention of the radio set. All our theories on the meaning of commodities, and in a sense, on the actual concept of design itself, sprang from our passion for the radio. One forgets today the extraordinary impact that the radio had on people's lives; they were absolutely transformed by it. At that time the radio was generally treated as a piece of furniture rather than as an apparatus. We, on the other hand, were keen to express a "light" image of technology, to convey a feeling of pleasure and entertainment, while freely alluding to other instruments of communication, such as the telephone.

Record: You often give lessons to your students [for many years Castiglioni was on the faculty of the Milan Polytechnic] with the aid of products originating from an anonymous tradition, which you present as models of a sound approach to design. What latest additions have joined your remarkable collection of artifacts?

A.C.: Well, it's not so much a collection of objects as things charged with intelligence that happen to arouse my curiosity, some of them verging on kitsch. Others, like a milking stool or a pair of scissors, are items that I consider to be "perfect." Over the years these artifacts have grown in number, but I wouldn't actually describe them as having the systematic character of a collection.

The lpotenusa desk lamp, designed in 1975 and manufactured by Flos (left). The Cacciavite table, designed in 1966 for Bernini by the Castiglioni brothers and later manufactured by Zanotta, shown assembled and disassembled (below left). The RAI Pavilion at the 1957 Milan Trade Fair (below), by Achille and Pier Giacomo Castiglioni.



For example, I have just been given what seems to me to be a rather intriguing electric razor, made by a small French firm that markets camping equipment. The idea of being totally independent from electrical power sources led to the invention of a simple and ingenious rotor mechanism. When a cord is pulled sharply, the razor is activated, in the same way that a child's spinning top works. Just enough energy is generated to power the blades of the razor. Now even if all this is in service of something that is not really indispensable, the little gadget nevertheless represents a truly honest invention. Furthermore, its self-generatedenergy feature relies on a simple, familiar action similar to that necessary to start an old-fashioned outboard motor. Which reminds me of another item that has this quality: a small flashlight containing a bicycle dynamo [manually cranked generator]. It dates from World War II and is made entirely of aluminum, enriched by all sorts of details.

These are the kinds of objects I like to show to students, because I think their example assists in encouraging good design. They help students to understand the value of all the parts that go into the making of a good product. These "anonymous" designs contribute to an understanding, first and foremost, of what purpose a product really has to serve. **Record:** Your designs always show a very conspicuous desire to bring the concept of furniture [mobile in Italian] back to its most literal meaning. Your products feature signs of mobility (handles, grips, zippers, or hinges, which allude to the idea of transformation); they are often portable and







1. Brera S suspension lamp, 1992, produced by Flos. 2. Flos-made Fucsia pendant lamp, 1996. 3. Alessi cruet set, 1980, with salt shaker/cellar, 1981. 4. Alessi fruit bowl/ colander, 1995. 5. Sala Espressioni display, Ideal Standard showroom, Milan, 1964. 6. Children's camera prototype, designed for Ferrania, 1958. 7. Parentesi lamp of 1971, designed by **Castiglioni** with Pio Manzú for Flos, 1971, shown packaged. 8. "Sleek" plastic mayonnaise/jam spoons, 1962, made by Alessi.









beautiful even when disassembled and packaged. What do you think is a product's real essence?

A.C.: I have no absolute answer to that. Finding out whether a product is made in one way instead of another helps us to grasp the inner logic of any design. I'm not interested so much in style as in method, in trying to understand the way I have to design in relation to the product's real and intended use. For instance, if while we've been talking you haven't noticed that the lamp on this table is switched on, I consider that a success. I am pleased because of the fact that its presence has been almost abolished, enabling us to forget it. Although it was very much "designed," this lamp is not arrogant or ostentatious, whereas I get the impression that the attitude of design today is precisely to overemphasize form in a product.

The lamp in front of us here (the Ipotenusa, see page 93) sprang from the desire to intrude as little as possible on the tabletop, and not to dazzle the eyes or get in the way of two people talking across the table. I reduced the rod to a minimum. Then, by using a halogen bulb that needs a transformer, I decided to exploit this component as a counterweight to stabilize the whole. Eventually I realized it would need an enormous box for transportation. So it had to be collapsible. Then I had to make sure this wouldn't be dangerous in any way and would comply with electrical safety standards. We thus used a hi-fi radio jack-plug. and a bicycle saddle out of their original contexts to create chairs for inside use.

At the Villa Olmo we tried to display a certain freedom, with a sprinkling of amused irony, to make a statement that was a negation of the thinking behind the domestic interiors designed at the time.

Record: Do designers exercise a personal visionary capacity, an ability to foresee the future? What do you see for the next millennium? How do you picture the house of the future?

A.C.: The first picture that comes to mind is that of an outdoor life unobstructed by needs. On the other hand, I think people want to build themselves a cocoon and surround themselves with chattel. I like to think that in the future fewer things will be necessary to achieve a freer lifestyle, less dependent on technology. I imagine that technology in the future will allow houses to be conceived as the integration of self-sufficient, single spaces and convivial places. In a sense, it will be possible to enclose all life functions in one space, like a monk's cell. But the inhabitants of these monastic dwellings will be able to reach out via media communications. **Record:** You have always shown a certain natural inclination to design object-characters or object-caricatures. I'm thinking specifically of cartoonlike creations like the Bibip lamp of 1977. What are your main sources of inspiration?

"I OFTEN FIND MYSELF THINKING THAT MY DESIGNS MIGHT PERHAPS HAVE ALWAYS EXISTED, AS IF THEY HAD BEEN DESIGNED BY OTHER PEOPLE."

So you see, this again is a game of transferring elements belonging to "industrial" products, or things already in production, to completely different commodities, as is the case of the car headlamp used for the Toio lamp or the tractor seat of the Mezzadro stool. The play of transposed functions expresses the freedom to pick up hints and applications everywhere, and it also serves to mock convention and conformity. Concerning the shape of the Ipotenusa, there are allusions in the shade which remind us more, say, of the visors traditionally worn by American newspaper pressmen than of the helmets worn by polo players. It is references like these that help to kindle a certain bond or dialogue between the person designing the product and its user. I often find myself thinking that my designs might perhaps have always existed, as if they had somehow been designed by other people.

Record: What is your personal idea of a home?

A.C.: I think our idea of a house "alla Castiglioni" is the one we created with the exhibition design at Villa Olmo in 1957; as far as I'm concerned, it still holds. At that time we put together all sorts of different things, designed by us but also borrowed from current production. Those products expressed our feelings about freedom of behavior in living, and about how things have to be usable in a manner free from formal or behavioral preconceptions.

The idea was that of an environment designed by overlapping elements that were different in form but also in origin. For example, we placed a fountain in a formal living room. Our view was that the fountain was there to provide water for flowers or to paint with watercolors. We hung a television set from the ceiling using a very simple pulley system, so that the screen could be kept out of sight when turned off. There were pieces from the anonymous tradition, too, like the steamer chair, which we used to indicate the idea of stackability/portability. There were also designs like Mezzadro or Sella, in which we had taken a tractor seat **A.C.**: Everyday life: the streets, the movies, television, cartoons. That's where one learns to critically observe commonplace gestures and conventional attitudes, the set and stale patterns of people's lives.

Record: In what object do you most clearly see yourself?

A.C.: The electric light switch, because it is an object reduced to the absolute minimum. At the same time it has the correct shape to be held comfortably in the hand and to meet international electricity safety standards. It is conceived to be touched, as indeed an article that has to be groped for in the dark should be. Above all, the light switch is not looked upon as a designer product—it's sold by electricians. It is a product I have grown fond of because I come across it everywhere.

Record: When you design something that's to be mass produced, do you think of the atmosphere in which it is destined to live?

A.C.: Mainly I think of the people who'll be using it. Sometimes I think I might almost like to follow the product through to its end user; I'd like to spy on that person to see how he or she behaves and interprets the product's various uses. I am interested in sparking a sort of reciprocal curiosity between designer and consumer by trying to communicate to him or her a certain pleasure. The best designs are the ones that manage to make contact, that spring from the will to set up even a small exchange with the unknown character who will use that product. I see products as if they were the hub of a network of relations with our environment, affections and mutual appeal.

Record: Your designs are cheerful and ironic, even when they are technologically sophisticated. You have never projected a dull image of technology as something that is incomprehensible and off-putting, represented by black, square, cold products. What actually amuses you most?

A.C.: Playing. I like all games. Play is an important part of life. Basically all things have a playful side. ■

The wood components that divide the space were conceived as freestanding furniture assembled inside a box.

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PROJECTS

Omaha architect Randy Brown uses his **HOME AND STUDIO** to teach clients principles of construction and recycling.



The conceptual diagram of the residence and studio shows a rational building plan consisting of grid lines and a circle. These were the end result of much trial and error.

he studio of Omaha architect Randy Brown, AIA, combines adaptive reuse, business promotion, and experimentation. In addition to all that, it is the office for three staff architects and a home for he and his wife, Kim. The building began its life as a preschool, built in the late 1970s. It was designed as a 40-by-40-ft passivesolar structure, complete with tall, south-facing windows, sunshades, and pipes in the concrete floor to exhaust warm air into the space. Located on Dodge Street, one of Omaha's main thoroughfares, the building still has a noticeable presence, although one would know it was a studio today only because of the sandwich-board sign that is set out next to the driveway at the start of business hours each morning.

When the Browns bought the building for \$70,000 three years ago, it was in considerable need of repair. Plywood had been tacked over missing glass, and paint was peeling everywhere. Violating the standard advice all architects give clients who are contemplating major remodeling of their property—that is, don't live in it while the work is being done—

by Charles Linn, AIA

Randy and Kim sold most of their possessions and moved in. Only the shower was completed. The second bit of advice architects give their clients—don't try to do the work yourself—also went out one of the missing windows. These difficult conditions were compounded by the fact that Randy was already using the building as his office during the year and a half construction was under way.

Randy claims his philosophy for grouping work and living functions together is fairly simple: "I love my work, so there really isn't any need for separation between where I work and where I live. If I get tired of working, I just go shoot some hoops," he says, opening the back door to reveal a basketball court, complete with a three-point line.

But a more thorough examination of the space shows there is a method to what would appear, to some, to be madness. The major components of the space are built of stock lumber, cable, and pieces of hardware available at almost any hardware store, as well as salvaged light fixtures and odd pieces that were picked up during trips to local junkyards. Some elements were reused from the existing building, such as the exterior doors, which are now clad with galvanized corrugated steel. Part

"THERE IS NO NEED FOR A SEPARATION BETWEEN WHERE I WORK AND LIVE."

of the idea behind salvaging a building and its components is to show clients the value of recycling. Another of Brown's ideas was to expose the hidden structure of the studio so that clients can see (*text continues*)









SECOND FLOOR

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"about 500 trips to the hardware store," Brown says. He considers it a work in progress: "It will never be done."



Fitting out a 1970s shell

An exploded axonometric shows how the various parts of the "furniture" fit together. While the complex axial relationships generated by the placement of these parts may appear to be the product of some kind of calculus, this is an after-thefact drawing. Brown says that most of the placement decisions were made by either working with models or simply building things full-size and moving them around. Working at full size also allowed Brown to experiment with different shapes to find those that were the most pleasing to him.

Only one part of the geometry was really a given: the south third of the building steps up 8 in., and a shallow arc was cut out of the step. The curved section of bookcases is nestled into this arc. Other elements, such as the arched vertical form that supports the rolling conference table, have multiple functions integrated into them, so no space is wasted. The metalliclaminate-clad pier holds up one end of the loft; on the inward-facing side of the curve are uplit display niches.





The loft (this page and opposite) and conference room beyond show Brown's limited material palette: unfinished Southern pine, glass and unfinished metal, and white-painted gypsum-board walls.

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The loft's stairway leads to the building clerestory. Brown hopes to add bedrooms over the roof outside these windows and make the loft into an office. Drawers are built to work as lateral files. Piping in the bathrooms, the structure, and hardware are left exposed to show clients how buildings are put together.



what goes into making up a building's skeleton and environmental systems: the framing, ductwork, and piping are left exposed.

Brown also considered how he and his colleagues would work together in the space. "I wanted an environment that would foster collaboration, that would express the architects' office as a creative entity in itself, and that would expose my clients to what an architect's office really looks like," he says. Samples, catalogs, and drawings are organized neatly in view. Unlike many architects' offices where clients are never allowed to see the back room, Brown's office doesn't really have a "back room."

The exterior received a new coat of EIFS and new glazing, while the interior of the building was stripped down to bare walls. Utilities kitchen, bath, mechanical, and storage—were grouped into a zone that is



parallel to the north wall of the building, leaving a large area to the south that is divided into two zones, one that Brown describes as a "free zone" and another that is soley for work.

Inside the free zone is a large piece of furniture Brown calls a "container." It is a two-story freestanding structure composed of bookcases, cabinets, and a series of angled timber braces that enclose a conference and dining room and support a loft that serves as the Browns' bedroom. The entire structure can be disassembled with a screwdriver and a few wrenches, and moved or altered to suit future changes in the building program. In order to be exempt from certain building-code restrictions, Brown even persuaded the building department to regard the "container" and loft as a piece of furniture, rather than part of the building.

A conference-room table with a heavy glass top is supported at one end by legs with casters and at the other end by rollers mounted inside a horizontal slot cut into a curved wall. The wall, covered with

"WE LEARNED THAT THE HARDEST CLIENTS TO PLEASE ARE OURSELVES."

metallic-clad laminate, also supports one end of the loft. Brown notes that he used to specify solid stainless steel for such cladding, but found it to be costly to fabricate, finish, and install, and now uses the metal-clad laminate instead.

"One thing that Kim and I learned was that the hardest clients to please are ourselves. I didn't really do any drawings. We built models and then full-sized pieces, and kept moving them around until they made something that was pleasing to us. But it wasn't always easy to make ourselves happy."

Manufacturers' Sources Exterior finish: Dryvit Systems Glazing: Insulite Glass, Rohm & Haas Hardware: Forms & Surfaces, Julius Blum & Co., The Ironmonger Paint: Sherwin-Williams Laminate: WilsonArt Seating: Herman Miller, Knoll, Cassina Filing cabinets: Steelcase Lighting: Halo, Lightolier Plumbing fixtures: Elkay, Grohe, American Standard, Kroin



Cabinets in the painting laboratory (above) are made of marinegrade mahogany plywood, which contains no formaldehyde that might harm the paintings. Pedestrians on campus can barely glimpse the new west wing, clad in leadcoated copper, above the Fogg Art Museum (opposite).

PROJECTS

Art and science find an uncommon meeting ground at the **STRAUS CENTER** for Conservation and Technical Studies at Harvard.



mong the several thousand paintings in the collection of Harvard University's Fogg Art Museum is *The Holy Family with an Angel.* Attributed for many years to an unknown 16thcentury Dutch artist, the triptych was studied several years ago by conservation scientists at the Fogg. Using a technique called electron probe microanalysis, the researchers identified gypsum in the painting's base layer. A matter-of-fact physical finding, in some sense; as it happens, however, this identification provided art historians with evidence that supports new understanding. Because gypsum was used not in northern but in southern European paintings, and because the painting resembles a Spanish panel in the Prado, art historians are now convinced that this Holy Family was painted not in Holland but in southern Europe, most likely in Spain.

Electron probe microanalysis is just one of several sophisticated conservation technologies developed in the last three decades that enable conservators and historians to understand, in unprecedentedly microscopic detail, works of art and other artifacts. Techniques such as dendrochronology, infrared reflectography, polarizing microscopy, and Fourier transform infrared spectroscopy, to name just a few, yield information about the age of the wood used in panel paintings, drawings that lie beneath the compositions we see in visible light, pigments and binders, the materials of sculptures, the history of repair—in short, about much that we cannot see with our unaided eyes and that was once tantalizingly unknowable. Once used mainly to verify attribution, judge authenticity, and maintain the integrity of the object, the art and science of conservation has become extraordinarily and excitingly complex.

by Nancy Levinson

One imposing measure of its current status is the recent renovation and expansion of Harvard University's conservation facilities. Established in 1928, Harvard's conservation department is one of the oldest in the United States. By the 1980s, the senescence of its physical facility, located on the top floor of the Fogg, was beyond doubt. Conservators and students had long toiled in overcrowded spaces which, despite various retrofits, ill accommodated the new equipment; even worse, given the noxious solvents that are part of the conservator's arsenal, the rooms were badly ventilated. Designed

by the New York City firm of Samuel Anderson Architect, the new Straus Center for Conservation and Technical Studies solves these basic dilemmas of space and air. The new design has replaced the hodgepodge of smallish rooms, inefficient circulation, and antiquated service chases with



Project: Straus Center for Conservation and Technical Studies, Harvard University Art Museums, Cambridge, Mass. **Architect:** Samuel Anderson Architect— Samuel Anderson, principal-in-charge; Edward Gormley and Alexey Grigorieff, project architects Engineers: Severud Associates (structural); Exergen Corp. (mechanical); Thompson Engineering Co. (electrical); R.W. Sullivan, Inc. (plumbing/fire protection) General Contractor: Shawmut Design and Construction





In the paper and sculpture/objects labs (above), ductwork is hidden in a gray fiberglass soffit, but the exhaust trunks coil through the space. Several of the rooms with doors (opposite) were conceived as furniture-like objects within the larger space.

- **1.** Painting lab
- 2. Paper lab
- 3. Sculpture/objects lab
- 4. Analytical lab
- 5. Library/admin.
- 6. Seminar room







An interior skylight (left) connects the analytical and sculpture/objects labs, creating a sense of openness. Casework designed by the architect defines circulation through the open laboratory space (right).

a series of expansive, well-lit, loftlike laboratories and teaching and work spaces. To maximize the square footage for the four laboratories—painting, paper, sculpture and objects, and analytical—interior walls have been used sparingly, mostly in the analytical and painting labs, where researchers requested some privacy; a good deal of circulation is defined

THE CENTER NEEDED TO REFLECT "THE EMPHATIC PRESENCE OF DESIGN"

by furniture, including cabinets, worktables, and closets designed by the architect. Several of the rooms with doors—whose programs vary wildly, from private office to spray booth—have been conceived as furniture-like objects within the larger flow of space. The construction of a new wing along the west elevation of the Fogg yielded about 1,700 sq ft of new space, housing a seminar room, library, offices, and a staff kitchen/ dining area.

To meet the demanding ventilation needs of conservation work, the center incorporates a new mechanical system, including four air handlers and nineteen various supply, return, and exhaust fans. And, to reconcile one of the inherent contradictions of art space design—which is that the high and stable humidity levels, e.g., about 50 percent, that protect art objects from too rapid expansion and contraction can often hurt the building by causing moisture to condense in outside walls—a continuous vapor barrier has been installed in the roof and exterior walls.

Like architecture, conservation blends art with science. What makes the Straus Center so distinctive is the skill with which these two

worlds, so often thought to be opposed, are here married. James Cuno, director of the Harvard University Art Museums, felt strongly that the center needed to reflect "the emphatic presence of design, the signature of an architect." The architect has chosen to work with considerable stylistic freedom, a decision influenced by what Anderson calls the "schizoid" nature of the Fogg. "You walk through the door of what looks like a Georgian building," he says, "to find yourself in the courtyard of a Renaissance palazzo. Clearly this was a building that did not demand strict adherence to a particular style." This freedom has here produced an uncluttered, neomodern interior with a contemporary palette.

The conservators are unequivocal in their appreciation of the new center. Henry Lie, Director of the Straus, recalls that Anderson spent six months talking to the center's staff. Says Lie, "The conversations were extremely thorough and everyone contributed, which is reflected in the great attention to detail that you see throughout the space."

Locksets: Schlage

Manufacturers' Sources

Lead-coated copper standing seam cladding and rcofing: *Gilbert & Becker* Reinforced-PVC elastomeric roofing: *Sarnafil, Inc.* Painted wood windows: *Duratherm*

Exterior glazing : UltraGlas, Inc., Southwall Technologies (Heat Mirror 88) Interior glazing : Bendheim Glass Hinges: Stanley Pulls: The Ironmonger Hollow metal and custom cherry doors: Edward R. Eastman & Co. Sliding door tracks: Lawrence Track Cabinetwork: Mark Richey Woodworking, Inc. Acoustical ceilings: Decoustics, Inc. Paints/stains: Benjamin Moore & Co.



Wolf designed and built this "craft hut" (right) for the groundfloor toy store. The owner says children are usually unable to resist exploring its inner compartment.





By tucking a kitchen, sleeping loft, and bathroom behind a pivoting partition (sketch and photo above), the architects left ample work room for the loft's owner, an artist.

PROJECTS

PROJECT DIARY: Dean/Wolf designed their **URBAN INTERFACE LOFT**, then found getting it built meant do-it-yourself.



This drawing sums up what the architects hoped their house could be: a dwelling where the city meets the sky.

After living in a succession of apartments where sunlight was only an occasional presence, architects Kathryn Dean, AIA, and Charles Wolf sought in their new home "a relationship to the sky." It doesn't seem much to ask. In costly and overbuilt Manhattan, however, achieving their dream meant coping with much more than they had bargained for. The commonplace dream of building a home of one's own takes on additional urgency for architects. It becomes a vehicle for driving a design methodology to the next level or exploring an idea about living. And so it was for Dean and Wolf. Because they had found clients unable to grasp some of what they regarded as their best ideas, they decided to work them through in a space of their own. "We always find ourselves talking clients into things," explains Dean. "They don't always understand where the money is going." The dream held by Dean and Wolf (who are partners in their own firm and married to each other) was to realize a poetic vision of New York City that they had always harbored.

19992-1993 The sky in New York City is not like other places. Whatever it is doing plays across the shafts of skyscrapers and the rooftop jumble of water tanks, fan-coil units, and gargoyle-festooned parapets. "We wanted to reflect and refract the city and the sky into our space," Dean says. Though the real estate market barely pulses in 1992, no one will sell them the top-floor space they seek, holding it for better times, explains Wolf. The couple consider adapting an entire building. Finally, a dilapidated, six-story electrical warehouse in TriBeCa beckons. (Since the mid-1980s the neighborhood has turned from a moribund industrial-loft district to a creatively vibrant residential one.) Though it faces Duane Park, an attractive triangle of greenery, the building appears to have little to recommend it. For lofts, where natural light (and legal windows, required for each habitable room) come largely from the narrow ends, the floors are small, only about 1,350 usable sq ft.

by James S. Russell, AIA

Light from the back is not much use because it faces a tiny, dim court. The building needs every mechanical, electrical, and life-safety system upgraded. Even in such a sluggish market, it needs several partners to work financially. Dean and Wolf find themselves in the real estate business, rounding up a group of friends to purchase units, and packaging the building as a commercial/residential cooperative.

1994 Such an undertaking offers plenty of financial risks and legal pitfalls, not the least of which is the unwillingness of banks to finance a venture by partners with no real estate experience. Actually, observes Wolf, banks "won't finance anything." The building partners leave no stone unturned in the search for sufficient cash. To make the \$850,000 deal work, the seller agrees to carry a mortgage (a bonus made possible by the slow market), and the partners agree to rent out the ground floor as retail space to generate income, rather than sell it off to an additional partner.

The five upper-floor partners (Dean/Wolf Architects, a photographer, another architect, an artist, and an engineering firm) create five equal shares—or sort-of-equal shares: as compensation for taking the presumably most valuable top floor, Dean/Wolf agree to serve as otherwise uncompensated architect of record for the building-wide renovations required to make the structure legally habitable. Getting the building shaped up proves to be a far more open-ended endeavor than the architects anticipate.

JUNE 1995 Renovations begin. Before the building mercial and residential use, it must be brought up to modern code standards. The main stair is extended to the roof as an additional emergency exit, and a new sprinkler system and boiler, as well as hot water, ventilation, and electrical service, are installed. A crumbling parapet and dilapidated roof are also replaced. The general contractor stages the work within

Project: Urban Interface Loft New York City Client: Kathryn Dean and Charles Wolf Architect: Dean/Wolf Architects— Kathryn Dean, AIA, Charles Wolf, partners-in-charge; Karel McAllister, Kelley Bryant, Aaron Fein, project team Engineer: Anchor Consulting—Evan Akselrad General Contractor: LL Construction (core and shell)

CONSTRUCTION



The architect as general contractor Even as professionalpractice gurus urge architects to move into construction processes to increase profits, other architects do it to assure affordable quality.

Charles Wolf did not intend to become a general contractor, or even a metalworker, but he took on much of the construction himself since otherwise he and Dean could not afford to realize their dream. Wolf supervised the building's contractor, who upgraded systems and did minor repairs to the street facade (light-colored building in center of photo left). In adding a new rooftop exit-stair bulkhead (righthand object in middle of drawing below), the builder put new steel supports to widen the rear window openings (early demolition photo



below right) and reframed the steel roof supports for Dean's and Wolf's skylight and courtyard.

An abandoned shaftway was pressed into service for the passenger elevator. The contractor failed to recognize that the shaft was nearly 10 in. out of plumb and work was delayed while corrections were made. Installation of the new elevator's cab was held while the elevator platform served to convey building materials up to Dean/Wolf's floor. Truck-mounted booms lifted the largest items to the roof.

Wolf built out the partitions and installed stairs, pavers, floors, and sheet copper. But as the roof replacement awaited completion of parapet repairs and bulkhead work, the courtyard was temporarily flashed. ("It didn't work," says Dean. "It rained in here for months.") Once the reroof was completed, Wolf was able to finalize interior flooring and cabinetry.



the floor Dean and Wolf intend ultimately to occupy. The space is perpetually strewn with debris, and its design potential begins, in the architects' minds, to leak away. Though contingencies are expected, including an elevator pit that needs reinforcing, they are still at times mentally debilitating.

Worse is New York City's drawn-out process for legal conversion of the building to residential use. The partners need not only a building permit, but a time-consuming permit from the city's Landmarks Commission for the minor facade changes contemplated. Wolf also volunteers to obtain the complex documentation required to avoid paying fully a punitive tax on converting buildings still deemed viable for indus"I was probably a nightmare of a client," comments the secondfloor photographer who became one of Dean/Wolf's clients, "given all the specific requirements that I had, and given that I know something about aesthetics." (He asked not to be identified.)

The architect and client find common ground in a mutual attraction to material detail and simple rectangular forms. Dean founds the scheme on proportions akin to those of the 8-by-10 negative the photographer commonly works with and is comfortable with. "I don't like too elongated a rectangle; I like a sort of blocky rectangle," he says. But it was an education. "I knew nothing," the photographer recounts. "I didn't

THE SPACE IS PERPETUALLY STREWN WITH DEBRIS, AND ITS DESIGN POTENTAIL BEGINS, IN THE ARCHITECTS' MINDS, TO LEAK AWAY.

trial use. By demonstrating to officials that such uses have long departed, Wolf is able to get the that halved.

Dean/Wolf design the dwellings for two of the building's partners. For Suzanne Hanson, an artist who wants to make the most of her work space, the pair pack the core of the fifth floor with a small kitchen, bathroom, and sleeping loft, all for about \$70,000. Because Hanson works out of town much of the time, she is able to close off areas from guests who occasionally use a back bedroom. "I wanted it to be sort of like art camp," explains Hanson, "a place where I could come up and work hard and not have a lot of housekeeping to do." To make the most of Hanson's limited space, Dean designs a worktable that doubles as a place to store the dining table when she is working. The worktable includes a rolling shelf that keeps paints in arm's reach but off the working surface. know what a pull was. I don't think I'd ever bought a toaster. I didn't know what slate was. I hadn't done anything but I wanted to get every-thing right."

Dean/Wolf line his loft with hand-rubbed stucco walls, tucking bedrooms and bath to the back and extending the stair and elevator core with a Z-shaped cabinetry piece. The idea, says Dean, was to make a room that could have a public character for those times when the photographer exhibits work or invites groups of people over. Knowing that Dean might aspire to something more "exciting," the photographer thinks he got "dull," but that's what he wanted. "I didn't want a space in which the architecture was prominent because I felt the view [of the small park] outside the windows was extraordinary and I wanted to make that the most extraordinary element."







A courtyard cut out of the roof (above) is the chief design focus of Dean/Wolf's loft. Sheet copper faces a living room partition (far left) and laps wood cabinets in the kitchen (left). The architects also help the ground-floor tenants, Ellen Rosenfeld and Shaun Asael, realize their dream of opening a toy store, Just Jake. Working with a tight budget, the owners clean up the shell of the space and Wolf designs two key elements, a "craft hut," where craft classes are held, and a "book boat" for readings. "It was very difficult for me to understand the plans, but Chuck had such enthusiasm that I went along," recounts Rosenfeld. Unfortunately, bids come in too high. With success of the store key to the financial viability of the building, Wolf, who has construction experience, ends up building the structures. "He understood exactly what I wanted," says Rosenfeld.

1996 As the rest of the building comes together, Dean and Wolf are able to concentrate on their own space. While the loft is small, its design is intricate, and the architects find it well beyond their means—unless they build it themselves. Wolf has already gotten used to finding subcontractors and fabricators for the specialty items key to the team's designs [in, for example, the Spiral House, RECORD, April 1995, pages 62–67]. Dean/Wolf, like many design firms with demanding detailing standards, find that general contractors and construction managers see themselves as fundamentally coordinating the assembly of prebuilt products, and those trades that require custom or on-site fabrication are increasingly not on a general contractor's list of subcontractors. Dean/Wolf need to become involved in finding specialists, says Wolf, because often the less-experienced subcontractors either offer astronomical bids or are unable to deliver the desired quality.

Wolf supervises mechanical, electrical, and plumbing subcontractors but builds most of the general-construction work himself, including the cabinetry, the metal cladding, the precast-concrete steps that lead up to the roof, even the overscaled pivot door that leads to the courtyard. The office is set up in the front of the building but finishing of this area must await that of the main body of the apartment. The work is staged in the future living area. The bedrooms are finished first, then construction moves toward the center of the loft.

Since the plan is not completely orthogonal, the architects angle the position of the partition that divides the living room and the corridor to create a forced-perspective effect. The key design element, however, is a courtyard carved out of the roof by restructuring its steel-beam structure (drawing right). Their thinking about the way light and views could be drawn into the space comes from the usual sketches and study models. But it is also influenced by explorations in studios at Columbia University, where the partners teach, and examination of work by artists who make light an important element, such as Robert Smithson, Keith Sonnier, Robert Irwin, and Dan Graham.

Around the court, Dean and Wolf carve clerestories and light scoops. One, boxed in wood, draws light from the courtyard to the bathroom. Another low-level clerestory conveys daylight to Hanson's loft

GHOSTLY IMAGES OF THE ROOFSCAPE APPEAR, THEN DISAPPEAR.

below. On the east and west sides, the scoops are partly glazed, creating a myriad of reflections, which, added to the changing patterns visible in the courtyard itself, are picked up deep in the loft by a sliding sandblastedglass partition that divides the office from the living areas.

Layered over the handling of light is a design dialogue among materials. The parts of the courtyard that are not glass are clad in copper sheet. The copper extends into the apartment, demarcating "public" elements and meeting other materials via carefully calibrated laps and



EXPLODED VIEW LOOKING NORTH



At twilight, the city recedes and ephemeral reflections of the loft's interior appear to float in the courtyard. reveals. Maple-veneer cabinetry, into which Wolf fits closets, drawers, and other storage, indicates the private realm of bedrooms and corridors. Skim-coated with plaster, the ceiling is similar in color and texture to the polished concrete floor. Reveals heighten the planar effect, visually floating the ceiling and floor away from the sandblasted original brick walls.

MARCH1997 The do-it-yourself method assures quality, but does not make this a speedy job. Wolf and Dean move into their loft about three months before it is complete. ("I'd never do that again," swears Dean.) Though this construction job has been a part of their lives for some 20 months, Wolf confesses that "I didn't really know what it looked like until the final debris was cleared away." The transition is so unexpected that he wakes up the next day and doesn't recognize where he is.

What Wolf also experiences is the ineffable qualities the architects have sought in the space at last coming to life. The courtyard is not just a copper-clad lens to the sky. As light changes throughout the day, ghostly images of the roofscape and reflected rectangles of light appear, move across the planes of glass, then disappear. As day turns to evening, reflections of the interior begin to superimpose themselves over the reflected deepening sky. As Wolf and Dean alternately open and close the sliding and pivoting planes of glass, the experience of light varies further. And they make discoveries about the design: combined with the ethereal reflections, the forced perspective blurs the apparent sense of enclosure of the space, allowing it to seem larger at times than it is.

Completion of the major work within the loft means less explaining to potential clients. "We may work with materials that are inexpensive," explains Dean. "But, unless they can really see the difference, clients often don't understand why a window should be custom-made,

NOW CLIENTS SEE THE ARCHITECTS' METHOD AND THEY UNDERSTAND IT.

why it's worth spending more money on windows built to essentially no tolerance." Now, when clients visit, "They see it and they understand it."

The effort to realize a home of their own was much greater than they once anticipated, exacted more in tardiness and stress than in cost. Manhattan's real estate market has roared back to life, assuring the viability of the partners' total investment of approximately \$1.7 million. But there's yet more to do. A lobby renovation is in construction and a common roof deck has yet to materialize. Additional facade stabilization and window replacement lies in the future.

One of the original goals of the project, however, may fall victim to success. Dean, in particular, sought a place for both living and working: "We work long hours, our daughter can see what we do, and I have a tendency to get up in the middle of the night to work out an idea." Unexpectedly, the loft has helped the partners boost their workload to the point where they may have to move the office out.

Manufacturers' Sources

Wood windows and door frames: Building Block Bronze window frames: E Fabrication—Scott Enge, Joel Sabel Sandblasted and clear tempered insulating-glass units: Harris Glass Skylights: custom Plaster: Julian Maloney Limestone courtyard pavers and counter surfaces: Pasvalco Sandblasted-glass walls at bath: Kam Cheng Glass Bath fixtures: Porcher Faucets: Dornbracht Appliances: Miele (oven), Sub-Zero (refrigerator), Master Restaurant (custom cooktop)





Juxtaposed materials compound light reflections as in a bathto-bedroom corridor (above) or below a skylight next to the living room (left). Since the building sides weren't square, the architects arranged partitions to emphasize the length through forced perspective (plan).



- 3. Courtyard
- 4. Living
- 5. Office
- 6. Light scoop
- 7. Sleeping loft
- . Sleeping loji







A ductwork fabricator made the entrance's stainless-steel "rotunda" (this page and opposite top). A rank of secretarial stations lies beyond.



PROJECTS

Are engineers too rational and methodical? Offices of **WMA CONSULTING ENGINEERS** show that they can loosen up.



ost architects know that good engineers are hard to find. When consultants and architects successfully collaborate, there's a mutual dependency and trust akin to that between spouses, relatives, or close friends. And most architects also know that professional colleagues, as much as friends or relatives, can be among the riskiest of clients. Should a project for some reason go sour, the relationship, not just the job, falls victim.

In designing offices for a valued consultant, Joe Valerio, FAIA, knew that the project would be neither glamorous nor hugely profitable, and that risking the relationship might be part of the job. But he owed Gabe Reisner, head of WMA Consulting Engineers. It was Reisner who had decided that Valerio, once a sole practitioner, should merge his firm with Mark DeWalt's. He successfully arranged a meeting, which then

PUTTING A PROFESSIONAL RELATIONSHIP AT RISK WAS PART OF THE JOB.

became a successful marriage (the merged firm now has a staff of 40, bigger than the original firms put together). Reisner chose Valerio Dewalt Train Associates to design his firm's new offices.

WMA did not need a wide variety of highly specific spaces, it didn't need complex technologies (though it designs sophisticated mechanical, electrical, plumbing, and fire-protection services for others), and it didn't need a high-concept image. So why did it need Joe Valerio, who has a playful sculptural sensibility evident in such projects as the Gardner Residence [RECORD, September 1995, pages 104–9] and a string

by James S. Russell, AIA

of projects for U.S. Robotics [including UWest, RECORD, September 1996, pages 98–101]? Since so many engineers see architectural design as an inconvenient frill, it is intriguing that Reisner chose Valerio principally because "I think he may be Chicago's most gifted designer." The engineers also had a modest budget, and Reisner hastens to add, "Joe is good at the process of negotiating when a project is over budget—what should stay in and what can be taken out."

One reason Reisner wanted to keep it simple is that the firm strives to minimize hierarchy, and he didn't want the window offices and other trappings of more status-driven organizations to impede interaction among project managers and designers or among disciplines. The firm chose a ground-floor space in a turn-of-the-century loft building framed in steel and wood. It was once at the bottom of the building's light court, but because the court was glazed at roof level as an atrium some years ago, not much light penetrates to grade. The predominant natural light is from the narrow street-facing end.

Valerio describes his clients thus: "Engineers are methodical and well organized, the keepers of rational thought in an increasingly

ambiguous world." Respecting this culture, he zoned the space in plan with Euclidian clarity. Within the 20-by-20-ft bay system of the building, Valerio Dewalt Train devised a modular system based on a U-shaped, 8-by-10-ft workstation that the firm designed. Amidst the gridded framework exposed by stripping the building down to its steel and heavy-timber structure, the open-workstation area rises two stories to a skylight inserted in the building atrium.



Facing these workstations, Valerio has placed a layer of partners' private offices separated by aisles of equal width. On the other side of the

Project: Offices of WMA Consulting Engineers Chicago, Illinois Architect: Valerio Dewalt Train Associates—Joseph M. Valerio, FAIA, principal-in-charge/design principal; Neil Sheehan, AIA, project architect; Kasia Gawlik, Jason Hall, Erica Pagel, Marius Ronnett, Andrew To, design team

Engineer: WMA Consulting Engineers Consultant: Nancy Willert (interiors) General Contractor: The Kaiser Loftrium



Out of the carefully refined plan of open workstations (above) and private offices (within buff-painted "towers," opposite), Valerio Dewalt Train layered overlapping patterns of lighting fixtures and ventilation ducts within the building's exposed structure (axonometric right). Meeting rooms and space for expansion are included in the mezzanine over the enclosed offices.






workstations, project managers occupy a second layer of smaller private offices. Secretaries and support staff are lined up long the north side, in a 15-ft-wide zone aligned within a narrower structural bay facing the reception lobby (opposite). "This is a plan any engineer could love," says Valerio.

Part of the reason such a dense plan works is the efficiency of the desks. Below the medium-density fiberboard tops (lacquered with a hard polyurethane finish), they contain file drawers and drawing storage. A low bookcase floats on a plywood divider and metal pipe.

The architect set lines of direct/indirect fixtures at crisscrossing diagonals (opposite and above), centered within the structural bays. It's

"THE DESIGN GOES NUTTY IN THE THIRD DIMENSION."

part of how "the design goes nutty in the third dimension," explains Valerio. Valerio carried the footprint of the partners' offices upward two stories, making forms akin to "a line of buildings." He turned the diagonal theme of the lighting on its side, dotting the walls with light brackets simply adapted from standard fixtures. The lighting sparkles off stainlesssteel-sheet suspended partitions that offer a modicum of visual privacy. Along with the rotundalike lobby transition piece (page 114), they were fabricated by a favored vendor, Hill Mechanical.

There is, however, no technological exhibitionism here. Even the ceiling fluorescents are good commercial grade, neither high-end nor custom. Layered over the lighting are ceiling-hung round ventilation ducts that feed from, alternately, the north and south sides of the atrium. The rows of desks conceal data, power, and telephone lines drawn from within the walls.

"The idea was to make it mechanical and urban and monumental," explains Valerio. Reisner is pleased, but he looks at the project in a characteristically pragmatic way. "People are able to concentrate better and are at their desks more," he says. "It's a message to people and it's about how we manage. We looked at the space as a tool we needed rather than a place that's about status."

Manufacturers' Sources **Doors:** Ceco (metal), Lazzaro Companies (wood) **Hardware:** Sargent (locksets), Intercon (security devices), Grass (cabinet) **Custom furnishings and millwork:** Mellow Millwork, Baltic Birch Plywood Paints and stains: Dayco Tru-Tone (analine dye), Benjamin Moore (paint) Finishes: Milwaukee Marble (granite), Formica (plastic laminate) Lighting: Illumination Concepts & Engineering (ambient), Winona Lighting, Halo (custom wall brackets) A sampler of McMakin furniture (below). Excerpts from the designer's sketchbooks reveal a continuous refinement of basic forms (opposite).

INTERVIEW

Hailed as an artist, even a de facto architect, **ROY McMAKIN** makes furniture, the building block of a space, transcend the everyday.



Roy McMakin, shown here in his Seattle studio (left). A chest of drawers designed by McMakin is made of Italian cypress (below right).

Roy McMakin's furniture seeps into your consciousness and stays there. It's just hard to recall when you saw it first. In fact, John Walsh, director of the J. Paul Getty Museum, is now one of McMakin's most ambitious clients, although he can't remember exactly when he became aware of the designer's work. Was it on a visit to McMakin's former store, Domestic Furniture, which enjoyed a seven-year run on Los Angeles' Beverly Boulevard before McMakin closed shop and moved to Seattle? Was it in the home of colleague Barbara Whitney? Or did another colleague, Deborah Gribbon, tell him that McMakin had designed the couch for her husband's psychoanalytic practice? Since McMakin began designing furniture for production 10 years ago, his aesthetic seems to have permeated the interior landscape. The feeling is only enhanced by the furniture's vague resemblance to something already known—by Irving Gill or Jean-Michel Frank, perhaps. What's clear to Walsh, however, is that McMakin's designs were in the air as he, Whitney, and Gribbon were making decisions about their office space at the new Getty Center in Brentwood and looking for pieces that would complement the architecture by Richard Meier & Partners. "We all arrived at Roy by different means," explains Walsh of how McMakin was chosen to create pieces for their offices, meeting rooms, study areas, and casual gathering spots. As work progressed, the commission grew to include the selection of paint colors for walls and fabrics for staff task chairs and tackboards. Many clients meet McMakin through his furniture and then ask him to do more, in some cases even design their homes. It's an inversion of the typical architectural process, but is now a recurring theme for the 41-year-old McMakin. "His table is so right for the space that you feel totally comfortable turning the space over to him," observes long-time client Hugh Davies, director of the Museum of Contemporary Art, San Diego. McMakin's training is in art and he began designing furniture as part of an art installation while he was a student at the University of California, San Diego. Although he temporarily abandoned painting to devote himself entirely to tables, chairs, sofas, and storage units, he now spans almost the entire spectrum between art and architecture.

by Karen Stein

Architectural Record: When did you start designing furniture? Roy McMakin: I was interested in furniture as a kid. It was the thing I focused on, but I didn't start making it or designing it until I was doing artwork. I needed a table as part of a performance art piece and I went and tried to find one and was amazed at how particular I was about what I needed it to look like. I went into the shop at school and built a table. I did artwork until 10 or so years ago. I started a furniture company without having ever designed furniture. I got this idea that it would be fun to design furniture part time and still do all these other things. There are ideas about objects that are expressed ideally in the overtly philosophical realm of art. But there are ideas about objects that are best expressed outside that world, and furniture works for me. I felt like I needed to do something in that realm and have the pieces not have quotation marks or be shoved aside like a piece of art. The first group of furniture I designed was the first collection for Domestic, and it was amazing to be doing it as purely design, not as a piece of art. I've never taken a single design or architecture course. My education is in art. Now that I've gone back to making art, there's a certain purity about it. Earlier, there was a purity about being outside the art world and just trying to do a chair that was a chair and that was a nice chair and a table that expressed ideas of being a

table. Now, I really have to do both. Because of the consuming nature of doing a small business and the responsibility of running Domestic at that time—driving trucks and selling furniture—I stopped doing artwork and I became pretty unhappy.

Record: What was the mission of your store, Domestic Furniture? **R.M.:** It's something that happened over time. I never liked any new furniture that I saw, but I liked furniture so much. I wanted a company that duplicated the experience of a junk store/flea market, so to speak—a place where you were surprised and there was a sense of uniqueness to the pieces.



A lot of my inspiration comes from the kind of decision-making process that, say, grandpa in the basement or the garage would go through about how things go together. I'm not really interested in stretching the enve*lope*—*designing the* new chair. I'm interested in the little tiny decisions and how they have meaning. How, for example, on some chairs, I curve the outside of the front leg, because it says something about the function of that leg in relation to the human body being up against it. And the fabric going around that particular corner to answer the curve. It's essenas his desk. What happened was I developed a handful of people who to this day I have intimate relationships with in terms of their homes and their objects. It has led to architectural and interior projects.

Record: If someone buys a piece of your furniture and then asks you to design their home, do you consider that an inversion of the typical process?

R.M.: I had done my own house [the restoration of an Irving Gill house in Los Angeles] when the Benedeks [a local couple] came into the shop

"THE PIECES HAVE A CLARITY AND A FOCUS TO THEM THAT SEEMS TO GIVE PEOPLE CONFIDENCE IN WHAT I DO."

tially the same kind of decision that grandpa in his garage makes too. He doesn't labor with all the theory and meaning that I bring to it.

The shop was open for seven years. At it's peak, it did \$1.2 million of business per year. I was amazed at how quickly people responded to my stuff. I didn't even live in Los Angeles when the store opened. I was commuting from San Diego. There were a lot of people who got what I was doing. I would do a simple table with four legs and somehow it became signature to me: something so simple could have a personality. I did a custom door for a client. I proportioned it in my way. And people came over to the client's house and said, "Oh, that looks like Domestic." It showed how prevalent my aesthetic had become. I ended up working primarily with the end user more than architects and designers. A lot of architects bought my stuff, like Frank Israel, who bought one of my tables and asked me what kind of sofa they should buy for their house, which they were renovating. They showed me what they were doing to the house and I told them I didn't like the plans. [McMakin subsequently designed the renovation.] My pieces have a clarity and a focus to them that seems to give people confidence in what I do. It has led to my doing things like kitchens, which are like big pieces of furniture. With some clients I become their house person. It's odd and it has caused problems. It causes problems when, for example, clients introduce me to their real estate agent and this person doesn't know who I am or what I do. It's not something I can imagine going out and deciding to do with your life. It's just sort of evolved. When I was in Los Angeles doing [residential work], I kind of hated it. It felt like I was a decorator serving affluent people. But now I've been thinking that was because it wasn't *part* of my life, it was





The office of Getty Museum associate director Barbara Whitney (below).

A curatorial study area with a table of Western Big Leaf Maple and chairs with molded plywood backs (bottom).





The furniture in the office of Getty Museum director John Walsh (top and above) includes a desk of Western Big Leaf Maple and a walnut conference table with a veneered center panel.

One of a mismatched set of waiting area chairs (opposite) reveals white-painted feet, a McMakin touch.







McMakin made custom furniture for the Dan House in Malibu (above), which was designed by late architect Frank Israel and his firm, Israel Callas Shortridge. Other residential work includes outdoor chairs of salvaged red wood (left) and a maple dining table with painted maple chairs (below).





Hugh Davies, the director of the Museum of Contemporary Art, San Diego, has several McMakin pieces in his oceanfront office (above), including an aged white oak credenza of 1985. The chairs, the oiled elm desk, and the salvaged redwood desk were made in 1996. my *whole* life. I felt like I was wasting my life. Now I do other things too, so that the process of serving people, trying to help people make the right house decisions, is a total pleasure and I would miss it a lot if I wasn't doing it.

Record: When John Walsh of the Getty asked you to design furniture for museum offices, did it seem like an important change of direction?

R.M.: We talked about what needed to happen. It was clear that [Walsh] wanted something from me that was more than just an interesting, stylish piece of furniture. He was talking about bigger issues [about how people work]. Even though the Getty is a huge institution, there's still a cozy intimacy [with the client].

Obviously, the Getty is very high profile and I was flattered and excited that they were coming to me. I'm happy with what I did because it achieved what they wanted and what I wanted. Initially my work was predominantly plywood, and [at the time] I was thinking of formal relationships: of how planes intersect and how something becomes a leg or something becomes a back or a top or a drawer. The wood was perfectly nice, but I'd become very focused on what the wood was. Some of my running away from Los Angeles and closing Domestic was about trying to rethink my position toward the resources and the way things got made. someone's face you think about differences of 1/16 of an inch here or 1/8 of an inch there [as if the differences wouldn't matter], but the emotional hit [of a perceived difference] is tremendous. I think about that with furniture. Ask my production manager. He sees a piece of wood and he thinks it's close enough in size to what I want. It's never close enough.

I did a spoof of a Jean-Michel Frank sofa that is the most knocked-off sofa of the last 10 years. I wanted to do one that is the bad, clunky American version—as if dad was in the garage doing it for mom but couldn't quite get it. You look at it and you think you're seeing one of those Jean-Michel Frank sofas until you realize that the legs, instead of gracefully tapering, are in fact right out on the edge [of the base] and a little too big.

Record: What about the choice of wood? In the furniture you made for the Getty Museum offices, for example, you used a lot of Western Big Leaf Maple because, you said, it was "a wacky, unruly cousin to Meier's Eastern Maple casework." It was important that the wood come from California, since that's where the Getty is located. What about the use of decoration in your furniture? The grain gives pattern to your pieces and the patches over the imperfections almost read like tatoos.

R.M.: The patches are patterning: another color, another texture. Why

"A LOT OF MY INSPIRATION COMES FROM THE KIND OF DECISION-MAKING PROCESS THAT, SAY, GRANDPA IN THE BASEMENT OR THE GARAGE WOULD GO THROUGH ABOUT HOW THINGS GO TOGETHER."

This sounds tree-hugging and dopey, but I now understand more what it means to use a material. The Getty afforded me a chance to really get into what wood is.... It's a turning point in my career. I couldn't keep doing this plywood furniture. The Getty gave me a scale and a scope that allowed me to do [solid wood pieces].

Record: When people talk about your furniture, they seem to react to it as if the pieces were eccentric people, almost as if they were characters that they've gotten to know.

R.M.: That's true. A few years ago Italian furniture designers got interested in American furniture and in Shaker furniture, in particular. I was looking at it—cherry furniture, pleasantly proportioned—but I kept thinking, "Why don't I like this stuff? What's wrong with it?" Thinking about these questions and knowing what I know now about the Italian furniture industry, [the answer is that] it's completely mechanized. It's in no way handmade. It's lifeless. There's no soul. This stuff is the opposite. There's enormous risk in it. Not just me taking this project on and buying trees, which could have completely sunk me financially. There was a point in time [during the design process of the Getty pieces]—before I figured out the patching [to cover the natural defects in the wood]—when I thought I'd have to sell my house. There's also the risk of the [six or seven mostly one- and two-person] workshops that made the stuff using routers and table saws—only basic tools. All that care and risk somehow comes through in the finished pieces.

Record: There's something about each piece of furniture that you design that looks both familiar and new.

R.M.: It's intentional. I understand that and try to do it, but I also think I don't know how *not* to do it. With the first group of furniture, I was trying to think about a "period." Is it Shaker or Mission or '40s? It's all, all over the pieces. For all the dumb design moves you try to come up with, you feel like you're in sort of a dream when you're designing. A lot of it is being willing to be dumb. Our susceptibility to proportions is incredibly sensitive in ways that people can't really articulate. When you look at

does one want to decorate one's house or why does one want to decorate one's body? For me, I had to have a reason. I created this elaborate system [of salvaging seemingly unusable pieces of wood] to have a reason to decorate. I don't see myself as a Minimalist in that I want to do the plainest and most elegant of anything. I'm fascinated by the idea of creating something that's decorative, but for whatever reason it has to have meaning and reason behind it.

My one main realization is that the chair is not invisible. It's forced to look like something. You have to make decisions.... For me, the decoration of the furniture is about stories, a narrative. It's one of the things John [Walsh] and I were talking about now that he has the furniture in his office. He knows about the wood, why it was chosen, where it came from, and the reason for all the patches. He says he loves sitting there [with his furniture] and telling [visitors] the story of his pieces. You can't separate the design and the look of the furniture from all the stories. That's what I'm doing as a designer. Part of the reason I went through all this wood is to create the story. If I could create some kind of [high-vol-

ume] production facility, it could be a much easier way to make money, but I wouldn't know how to design that way. The patches tell the story of the furniture and they become the decoration. There's something about love in all of that. To create a story and to create something with meaning, you have to love it. That's why I can move into these familial relationships with [clients, including large institutions like the Getty] and care about them and it doesn't seem weird or goofy.





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TECHNOLOGY

Collaboration by Wire

COMPUTER NETWORKS, PARTICULARLY THE INTERNET, HAVE MADE IT EASY AND COST-EFFECTIVE FOR ARCHITECTS, OTHER DESIGN PROFESSIONALS, AND CLIENTS TO WORK TOGETHER EVEN WHEN THEY'RE APART.

t should come as no surprise that architects are increasing their use of modern electronic communications, particularly the Internet, to collaborate. The major CAD software vendors, in fact, have come up with lots of fancy new software to facilitate the process. Oddly enough, however, most design professionals are using older, cheaper, and still-effective collaboration tools—tools that often come free with any modern personal computer. The newer tools are most often needed when the number of project documents requiring collaboration is large, when more than two or three professionals have to collaborate, or when the same drawing has to be modified by several people at the same time. Also oddly enough, the biggest expenses most firms seem to face when they take the plunge involve training. Hardware, software, and communications charges pale in comparison.

This article explores the issues: What is available? How does the technology work? How are design professionals using it now? What have they gained or lost in doing so? And, finally, what approaches are best for specific circumstances?

Obviously, the design process is accelerated if professionals can exchange documents more quickly,or work on the same documents at the same time. "The process speeds things up in good ways and bad ways," says David A. Mintz, president of David A. Mintz Inc., New York City– based lighting consultants. "In the old days, when someone asked where we were

by Steven S. Ross



Joe Conti of David A. ings over the Internet Mintz Inc., sends draw-via an on-line service.

be spread across the country, or across the world. This increases competitive pressures and adds incentive to computerize in the first place.

"You can teach an old dog new tricks," says Mintz. "I've had my

MORE AND MORE FIRMS ARE COLLABORATING OVER THE INTERNET. THE BIGGEST COST IN STARTING UP ISN'T EQUIPMENT. IT'S TRAINING.

on a project, we could buy time on grounds the project documents were at the printer. Now, when we finish, they want it instantaneously."

Less obviously, more documents get exchanged when you use CAD and collaborate over a network, and they get exchanged (and in the early design stages, modified) more often. Keeping track of everything can be the biggest chore of all. And the network itself allows project work to

Continuing Education This month's installment of the ARCHITECTURAL RECORD/AIA Education Series looks at the everpresent influence of technology in architectural practice. Use the following learning objectives to focus your study. After reading the article, complete the questions (page 170) and check your answers (page 172). AIA members may fill out the self-report form in this issue (page 172) and send it in for two AIA Learning Units.

—Mark Scher, AIA Director Professional Education Products and Services

1. *List at least four rationales for electronic collaboration.*

2. Identify the administrative and format issues involved in sharing electronic files over networks.

3. Create a corporate communications model based on Internet concepts and tools.

own firm for 32 years and was a consultant before that. I avoided the whole idea of working on computers until 1994. We held out longer than most large firms. Finally, the demands of the marketplace and one major client forced us to get some machines. I really was reluctant. Less than three years later, we're already on our second round of equipment."

All his employees—a staff of 12, including nine design professionals—use computers. "We have one small office, we call it 'the draftorium,' where they go if they absolutely by some quirk have to use a pencil," says Mintz. Otherwise, they use AutoCAD for drafting. (They still use pastels and paper for renderings.)

The Internet helped popularize this way of working. And most of the newer tools are Internet-based. But there are actually many ways for files to get from one office to another by wire. If two offices are each equipped with a modem, a computer with terminal software, and a telephone connection, for instance, one computer/modem combination can simply call another. Once the connection is established, the terminal software can manage the file transfer. Modems cost about \$100 each, you already have the computer, and basic terminal software comes free, always with the operating system and sometimes with the modem as well.



3D architectural modeling at its best ...



URS Greiner, Inc.,

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All modeling and rendering by: Mark Molen, Paul Helm, Dan Barringer, Rich Piloseno, and Shaun Breslin.

Left, top to bottom: Office Building; NFL Stadium Concept; Military Headquarters; Banking and Data Center Concept.

Above: Zoo Exhibit Concept, Columbus, Ohio.

Below: Advertising Agency Offices, Powell, Ohio.



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CIRCLE 48 ON INQUIRY CARD



It's cheap, and it works wherever phones work. The problem, however, is that both the sending and receiving parties have to be on line at the same time, although the receiving end can be run automatically for most functions. And it only works between two parties. Each extra office that needs the file has to be called separately. If the calls are long distance, costs mount quickly. Mintz uses automatic software so that he and some of his associates can grab files from the office from home by computer.

Large multi-office practices often use private networks to connect themselves together. The network lines can be leased from phone companies, computer companies, and other suppliers. The advantage is that users often see and exchange data with computers in remote offices as easily as with computers down the hall. These private networks (often called Wide-Area Networks, or WANs) can be linked to the Internet or to other WANs, so outsiders (clients, collaborators) can have access. The disadvantage is cost-WANs are expensive to establish and to administer. They are justified only when traffic between sites is very busy.

Why set up a complete private network, when all you really need is a connection to a large network that already exists-the Internet? The Internet is also getting to be a better bet these days because so many vendors are developing software and hardware for it. This makes the Internet, and even commercial services that use the Internet, such as America On-Line (AOL), ideal over the long term for collaboration at a distance.

"We're working on a [300,000-sq-ft] performing arts center for the University of Maryland," says Mintz. "The design architect [Moore Ruble Yudell] is in Santa Monica, the production architect is in Baltimore. The project drawings are huge."

When the project started, Moore Ruble Yudell was using a network that was so old only old-fashioned 2400 bps modems would work with it. Mintz says it was taking six or seven hours to transmit a drawing file. "We switched to AOL," says Mintz. AOL allows use of 33,600 bps modems-14 times faster-dropping transmission time to a half hour or so. An AOL account with full Internet access costs less than \$20 a month.

Putting files on a network

Not surprisingly, the major CAD vendors, Autodesk and Bentley Systems, have taken the lead in providing standards for doing all this on

FILE FORMATS, FILE VIEWERS, AND UTILITIES

Without extra help, the current generation of Web browsers such as Netscape Navigator and Internet Explorer can read only a restricted set of image formats. As a result, most images you see in Web pages are GIF (Graphics Image Format) and JPEG (for Joint Photographic Experts Group, which developed the standard). Both have image compression built in, so they can be moved quickly over networks. But both are pixel formats-that is, the images are made up of individual dots. This makes them unsuitable for representing most architectural work. There just aren't enough dots

in a typical Web image to show fine detail. For architectural images, you must download and install "helper applications" into your browser. They're called "plug-ins" by Netscape and "ActiveX controls" by Microsoft. Here's where to get them.

WHIP! plug-in for viewing DWG (AutoCAD binary files) and DWF (AutoCAD Drawing Web Format files). The file for the current version of this free utility, as of August 1997, is WHIP2.EXE. The 3.5 MB file (14 minutes to download at 33,600 bps) works with Windows 95, Windows NT 3.51 (with Service

Pack 5), and Windows NT 4.0. The Web address for downloading is http://www.autodesk.com/ products/autocad/whip

SVF plug-in for DXF (AutoCAD ASCII files) and SVF (SoftSource Simple Vector Format files). The free version can be downloaded from http://www.softsource.com/ plugins/plugins.html

The latest free version, as of late July, was 1.4 (about 1.2 MB in size) and takes about five minutes to download at 33,600 bps. The more fully featured version costs \$50.

As noted in the main text,

ModelServer Publisher and other products can be set up so that you can view the SVF or DWF file first, and decide whether you need to download the much larger DWG or DXF file.

Other utilities that are useful are translators. SoftSource has translators that can convert HPGL (Hewlett-Packard Graphics Language, a vector graphics file format used to drive plotters) files into SVF on DOS or Windows systems, and on Sun MicroSystems computers. For more information, see http://www.softsource.com/svf/

tech.html

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CIRCLE 49 ON INQUIRY CARD

TECHNOLOGY



Bentley ModelServer Project can automatically maintain an entire project database.

the Internet. The two giants have concentrated in different areas, however. Bentley's ModelServer Publisher handles putting drawing files (including AutoCAD files) from whole projects onto a secure Web site almost automatically. Autodesk, in contrast, has developed better viewing technologies at the user end. Many other vendors have built solutions on top of the giants' work. There are also some robust ideas from companies like Intel that are not meant specifically to make architects' lives easier but have been embraced by many.

Here's how to "publish" drawings and associated files in your office so that others may use them:

Translate your files into a suitable file format. The four most common formats are DWG (AutoCAD binary files), DXF (AutoCAD ASCII

Provide the proper security, so that only authorized users see the files. You can, for instance, require that users sign into your computer system with a log-in name and a password. Such security can be easily added to a telephone-accessible BBS, a Web server, or an FTP server. The Hillier Group's consultants can use Hillier's password-protected FTP site to access its files, download them to the remote site, and prepare them for viewing. The server itself is a Windows NT computer.

Architekton does a lot of design work for the fuel industry. Big clients such as Texaco, who have many design professionals working on projects, handle the coordination themselves. In that particular case, says Scott Harden, Architekton's Director of Internet Media, Texaco Refining and Marketing hired his firm to set up the Web site to publish drawings.

NOT SURPRISINGLY, AUTODESK AND BENTLEY HAVE TAKEN THE LEAD IN PROVIDING STANDARDS FOR PUTTING DRAWING FILES ON THE INTERNET.

files), SVF (SoftSource Simple Vector Format), and DWF (AutoCAD Drawing Web Format). Each has its advantages and viewing technology; see box, page 133, for details. DWF and SVF are 2D formats that are much more compact than DXF or DWG. Thus, they can move more quickly on networks. Also, they can accept hyperlinks to each other and to other places in your file system or your clients' systems. If you or other members of your "family" of design collaborators are using different CAD packages, they may be able to communicate via DXF. Most CAD vendors include utilities that can read or write to DXF.

Store your files where remote users can get at them. You can use an automatic "publishing" program such as ModelServer Publisher. You can also automatically process entire directories full of files using utilities built into AutoCAD 14 and available for downloading for users of AutoCAD 13 (at http://www.autodesk.com/products/autocad/whip/whippubl.htm).

"We've just signed our largest contract, to manage all their drawings, specs, imaging data, and equipment documentation for the western U.S."

Provide a way to handle modified files and notes coming back from remote users. Collaboration usually does not require a perfect back-andforth translation of drawing files. Often, simple viewing and plotting functions are fine. Indeed, David Mintz says that as a matter of corporate policy his lighting designers "will not tamper with architects' drawings," but that despite popular notions about consultants altering drawings when files are exchanged back and forth, there was more tampering before computers came along. "In the past . . . if the architects did a minor wall change, we could trace the print and draw in a little bit of wall—messy over time, and we were drawing architecture, which we really should not do. Now, when they send a change, we have a new file. We don't have to handle it." David Mintz says he often deals with incoming drawings by making them Xref, or With ProShare notebook, multiple users can mark up files on line at the same time, and store them for easy retrieval later.



external reference files that can be viewed but not edited, to his drawings. His drawings, in turn, are Xrefs to the architect's drawings.

His firm is doing the lighting for classroom and public spaces on five floors of a nine-story, 85,000-sq-ft classroom and office building at Columbia University, being designed by The Hillier Group. Ken Douglas of Mintz says, "We gave [Hillier] two options, one with their wall and ceiling and fixtures built in, and a fixture-only drawing they can insert as a block or as another layer in their drawing."

For CAD "we use MicroGDS," says Peter Weingarten at The Hillier Group's Princeton office. Hillier translates the GDS files to DXF or DWG so that Mintz can read them inside AutoCAD. The translation does not have to be perfect, because the transmitted drawings are almost always used for reference only, and not for further editing of the original architect's work by collaborating design professionals.

In the Texaco system, says Harden, "we cannot make changes to the site's drawing at all, and each site is specific for each project. If we make a change [in a drawing file], we send it back to them on disk, or E-mail it to someone, or send it to a company FTP site apart from the project site." Someone at Texaco then updates and merges the files.

Index everything so that old files are purged (or archived away from the active files, if you save everything) and the most current files are available for viewing.

Make sure that users have the proper viewing software. Usually this means a "plug-in" or helper application for Netscape Navigator, or an ActiveX Control for Microsoft Internet Explorer. "We've been using the SVF plug-in because its not proprietary, and it's free," says Weingarten. "We originally used the Vdraft plug-in [SVF], but WHIP! has more security features," says Harden. "WHIP! can also stream the files to users in a condensed file size. Consultants can preview the drawings [in DWF format] before they download them."

Make sure users can handle your layer scheme, pen widths, fonts, and other drawing features. Most users will end up printing or plotting the files they need, and looking at them on paper. "The biggest confusion we have is in layering standards," says Douglas. "All the architects have dif-



ferent standards. No one seems to follow the AIA's format. You often get drawings with layers with names on them—like 'Bob's layer.' Also people find obscure fonts, without regard to whether the receiver has the font."

"We compensate by creating mapping tables for our drawing layers," says Weingarten. Scaling inside drawings is another major issue. AutoCAD users, for instance, normally draw full-scale. "We draw at quarter-scale, which MicroGDS calls 48. We multiply by 12 to get full-scale, creating drawings at MicroGDS 576 [that is, 48 times 12] before translating and posting the file," says Weingarten.

The virtual office

Aside from publishing files, you may want to work with a remote collaborator on the same file at the same time. One solution is provided by Graphisoft, which introduced its ArchiCAD TeamWork package this summer. With TeamWork, multiple users "fence off" the areas of a drawing they wish to edit. Each user's fence marks the user's area off-limits to others. But adjacent areas can be marked off by other users.

The product works on any platform running ArchiCAD, so users can collaborate even if one is using a Windows 95 computer and another is using a Macintosh. The drawing files themselves are downloaded to the users' own machines, so edits can be made quite quickly and the network connection does not have to be continually open. When users save files back to the original repository (which can be and usually is on one of the users' machines rather than a server), each section of the file is updated separately, so an old section doesn't overwrite a new one, and they can continually transmit new updates so that even though users are far apart, each can see what the other is doing to the drawings.

ArchiCAD TeamWork has multiple security levels and can sup-

port Xrefs on import and export. Right now, it can handle AutoCAD DWG versions through Release 13.

More often, you'll want to have several collaborators mark up a project's file without actually changing it, and there are many architectspecific "redlining" packages to do that. One more general solution is Intel's ProShare, which allows numerous users to simultaneously view

THERE WAS MORE "TAMPERING" BEFORE COMPUTERS CAME ALONG.

and mark up the same file; it also has a video-phone connection, so users can see each other. Views can be stored as ProShare "notebook" pages and referred to later. Actual changes in drawing files have to be done manually.

The payoff

Architekton, with more than 50 employees (including 15 architects) in five offices, learned about the advantages of computer communications fairly early. As a result, it found expansion into multimedia projects and Internet services quite natural. "The architecture group has benefited from having these types of services, this synergy," says Harden. "We've picked up some projects because we offer some of these services."

"I can't quantify specific savings," says David Mintz. "We find that our fastest people can do a layout a bit faster on the computer than on paper, and some people are slower. When we design a custom fixture, we still sketch it by hand first. We save time on dimensioning, and the real win comes in the modifications, not the original drawings. Working by computer is something we have to do. If we didn't do it, we would not be in business. Clients demand that we work by wire. Clients need it."

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NEW PRODUCTS

A SINGLE PIECE OF METAL CREATES A SEAMLESS ENTRANCE



Brite Vue, a division of the Kawneer Company since 1989, is now marketing a "seamless" cladding option for many of their entrances. Answering architects' requests for a more striking aesthetic in a commercial high-abuse entrance, the smoothsurfaced configuration was developed from custom doors created for high-profile projects such as the Swiss Embassy in Washington, D.C., where Brite Vue fabricated a patinaed copper entrance with bulletproof glass infill.

Made of a single sheet of 18gauge metal blanked out and formed as a cladding over the stile and rail structure, the door has no visible horizontal or vertical joints in the frame, and on-site welding is minimal. This smooth cladding can be specified in stainless steel, muntz metal, copper, and several commercial bronze alloys in a choice of satin,



antique, or mirror finishes. The single-piece exterior also adds an extra degree of structural strength; cladding can be upgraded to 16gauge metal for projects needing an even higher level of durability. The original seamless door product matched the metal selected for the cladding with the metal of the frame itself: stainless-steel cladding over a stainless-steel door. In order to reduce costs somewhat while maintaining the aesthetics, a valueengineered version puts the seamless finish-metal cladding over a structural aluminum frame. The seamless option is available in almost any type of Brite Vue door, including swinging, balanced, bottom rolling, top-hung stacking doors, or revolving door wings.

Tempered-glass infills can be specified with a ceramic-frit or etched design in thicknesses from 1/4 in. monolithic up to a 1-in.-thick insulating unit. Pulls cast from a solid-metal bar can match the metal selected. The entrance shown, by architects of record MHTN Architects, Inc., Salt Lake City, creates an enclosed lobby from a former breezeway between buildings. 800/423-1885. Brite Vue Glass Systems, Inc., Kawneer Company, Inc., Visalia, Calif. **CIRCLE 250** New Products this month highlights doors and entrance systems for commercial, institutional, and residential use. On this page, there's a high-style, "seamless" entrance (one recently placed in the F.D.R. Memorial in Washington, D.C.) appropriate for prominent locations, and a more workaday folding automatic door that helps speed shoppers into markets and convenience stores. We discuss recent entrance-code changes on page 144. September's Product Briefs include kitchen "workstation" furniture from a firm founded by architect David Beer and a hidden plumbing vent that keeps rooflines clear. And the Literature coverage lists a free guide to ways of saving existing trees on building sites. —Joan Blatterman, New Products Editor

FOLDING PANELS FIT AN AUTOMATIC DOOR INTO TIGHT SPACES

Introduced in England in 1993, Dor-O-Matic's Astro-Fold automatic door has been available in the U.S. within the last two years. Particularly suitable for high-volume traffic in public offices, convenience and department stores, and supermarkets, the bi-fold door design provides an unimpeded entry space of 5 ft 10 in. within an 8-ft span, the same pedestrian access offered by sliding doors that need a 14-ft span. Unlike In addition to its space-saving footprint, the Astro-Fold needs a minimal amount of clearance and prep work in an existing opening. Custom colors may be specified, as well as the company's standard aluminum paint finish options. Doors meet all ADA access codes, ANSI and NFPA egress requirements, and Florida's Dade County high-wind code. 800/543-4635. NT Dor-O-Matic, Harwood Heights, Ill. **CIRCLE 251**



swinging doors, the swing radius allows two-way traffic; as the doors fold to the sides of the opening, sidewalk guard rails aren't needed.

Automatic functioning is powered by a full-size swing-type operator that folds right- and left-hand sections of the door at the same time. Folding points and pivots are shielded by a black-vinyl "finger guard" strip; motion detectors on both sides open the door as traffic requires. A threshold safety scanner covers the blind spot in the dead center of the door.



DOORS MUST MEET NEW STANDARDS

Residential doors (including garage doors) and commercial entrance systems intended for use in southern Florida must now pass the impact- and pressure-cycling tests originally established by metropolitan Dade County following the devastation of hurricane Andrew. In June, many provisions of this code were also extended to the Gulf Coast of Texas. This high-wind standard requires that doors be tested as complete opening assemblies with frame and hardware; a failing grade is often caused by the latch mechanism, which can pop open under impact. Most of the changes made to doors after this test involve strengthening the lock and strike components.

Hurricane-resistant products, ADA guidelines, and life-safety codes are



▲ New doors with old details

A renovation by architects Perkins Geddis Eastman of a prominent Fifth Avenue building involved the fabrication of this bronze entrance in an ADA-compliant system that replicates period ornamentation and paning: the metalworkers' specialty. 801/280-2400. Historical Arts & Casting, West Jordan, Utah. **CIRCLE 252** some of the industry issues to be discussed at the Door and Hardware Institute's annual convention and trade show, being held this year in Charlotte, N.C., September 27–29. Exhibits will display new architectural and security hardware, and door systems for commercial, institutional, and multifamily projects. There will be a seminar on the design and hardware implications surrounding the new requirements for positive-pressure fire testing of interior doors (RECORD, October 1995, page 46). 703/222-2010.

The thermal and air-infiltration requirements of the Model Energy Code for one- and two-family dwellings (now referenced by all national buildingcode agencies) will also affect door specifications. Architects should consult the National Fenestration Ratings Council (301/589-6372) for performance data. —J.F.B.

▼ Prehung solid-mahogany

Shown with triple-glazed sidelights, a new 36-in.-wide entry is made of solid mahogany in a rounded-top style furnished complete with a matching jamb, prehung and ready to install in a standard, squared opening. 616/772-9111. ODL Inc., Zeeland, Mich. **CIRCLE 253**





▲ New wood in new colors

Dramatic residential door designs can now be specified in hard maple as well as oak and mahogany, in a range of five new color options, including Blue Alp Mist, pictured. Glass lights and carvedwood panels are assembled using mortise-and-tenon construction. 800/877-9482. International Wood Products, Klamath Falls, Ore. **CIRCLE 254**

► Two for the money

EFCO's new sleek slider for residential and multifamily use is available in two versions. Series 3014 is a hurricaneresistant door made with laminated glass and an edge capture sufficient to pass Miami-Dade's stringent wind-blown debris and pressure-cycling tests. A thermally efficient model, 3015, lets the architect select a paint color that works with other exterior materials for the outside of the door, and a different color for the interior. A new feature on both sliding doors: a full-length, integral pull handle that doesn't clutter the lines of the frame. 800/221-4169. EFCO Corp., Monett, Mo. CIRCLE 255



✓ Architectural doors in color Expanded stain options are said to help the designer make a visual statement through the use of consistent color when specifying doors. Shown on oak, the line offers shades such as nutmeg, seafoam, raisin, and earth. 800/869-3667. Weyerhaeuser Door, Marshfield, Wis. cIRCLE 256 ■



PRODUCTBRIEFS



Icon revisited

Knoll's office-accessory collection, KnollExtra, offers Finnish architect Alvar Aalto's classic vase, still looking fresh and new after 60 years. The line also includes Smokador and other desktop accessories; Orchestra panel-mounted and freestanding work tools like tape dispensers; ergonomic automation helpers such as articulating keyboards; and an International Collection of "boardroom accessories"—wine coolers and ice buckets. A binder illustrates all pieces. 800/445-5045. The Knoll Group, Grand Rapids, Mich. **CIRCLE 260**



▲ Frames for contract artwork

A metal profile more interesting than standard hotel-issue frames, Innovation Mouldings come in nine shapes and 16 anodized colors. Priced for hotel, corporate, and institutional spaces. Nielsen & Bainbridge, Paramus, N.J. **CIRCLE 262**



▲ Son of Tizio

Designed by Hannes Wettstein, the Spy desk lamp has a fully adjustable shadeset on an extruded-aluminum arm in a steel base. Standard finish is metallicgray lacquer. For incandescent or halogen bulbs. 516/694-9292. Artemide, Inc., Farmingdale, N.Y. **CIRCLE 263**



▲ Encaustic effect

Impronta's Latina re-creates geometric and floral motifs in the matte colorations of traditional encaustic materials. For use on both floors and walls, the ceramic tile comes in an 8-in. size with coordinated borders and inserts. 847/480-7407. MTA, Northbrook, Ill. **CIRCLE 257**



▲ High-tech laundry

The commercial look is creeping from kitchen appliances into the laundry. Amana's new equipment combines stainless-steel industrial styling with a new front-loading, tumble-action washer that uses much less water and frees its top to work as a counter. Doors are set higher for easier access. 800/843-0304. Amana, Amana, Iowa. **CIRCLE 258**

Metal-clad moldings

Trim of brass, chrome-plated steel, copper, and bronze formed over a solidwood core can be ordered in hundreds of different profiles and combined to create chair rails, crowns, bases, cornices, and other architectural elements. Moldings can be used indoors and out; metal surfaces are coated to resist tarnish. Samples: 508/778-6382. CMF/ Colonial Moulding, Hyannis, Mass. **CIRCLE 259**





A Architectural scene-setting B&B Italia let New York architects Peter Stamberg and Paul Aferiat turn the Italian furniture manufacturers' showroom into a kaleidoscope, selecting colors of pool blue, aqua, and chartreuse for pieces such as Melandra dining chairs, shown above with the Atavola glass-top table. B&B Italia USA, Inc., New York City. **CIRCLE 261**



Furniture for the kitchen

Architect David Beer describes his wellcrafted, freestanding pieces as "kitchen workstations." Furniture is dual-function: for example, this farmhouse-style unit hides a full-size dishwasher behind flipper doors. The cabinet above the sink is tall enough to conceal small appliances such as a coffee maker behind sliding milk-glass panels; cabinets are deeper than the appliances to provide more functional work surface. The flat-front soapstone sink blends into the cabinetry. Other Beer designs include an armoire that opens to display a sink, fridge, cooktop, and microwave. 610/838-1194. YesterTec, Center Valley, Pa. CIRCLE 264

For more information, circle item numbers on Reader Service Card

PRODUCTBRIEFS



Functional office art

The Sculpture Collection, a new line from Peter Pepper, includes European-made coatracks, hat shelves, hangers, and wall tables that provide a place for holding garments in reception areas, offices, or homes. Light in scale, the pieces need only a little floor space, and combine a decorative flair with their coathook duties. Materials used include stainless steel, satin-finish aluminum, polished and frosted glass, chrome, and natural woods. 310/639-0390 (phone); www.peterpepperproducts.com (Web page). Peter Pepper Products, Inc., Compton, Calif. **CIRCLE 266**

▼ Out-of-sight plumbing vent

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plumbing fixture is operated and water

drains out, the negative pressure gener-

equalize pressure. When the flow stops,

keep vermin out. 800/447-4721. Studor,

gravity closes the valve; fixed screens

Dunedin, Fla. CIRCLE 267

ated opens the valve and lets air enter to

ates on negative pressure: when a



A replacement for standard vent pipes that have to penetrate roofs to handle sewer gas and prevent backflow, the Studor air-admittance valve can be installed beneath a counter, behind a wall, or in an attic (below). Guaranteed

NEW PRODUCTS

green polymer pulls are translucent; sandstone and black "rocks" are opaque. 800/451-0410. Forms + Surfaces, Carpinteria, Calif. **CIRCLE 268**



▲ Celtic Renaissance pendant Custom 5 1/2-ft-high chandelier made for Old St. Patrick's demonstrates this Chicago firm's fabrication expertise. New Metal Crafts, Chicago. CIRCLE 269



Excitement to order

A New York City workshop creates props for interior architecture—special pieces that add a surreal or exciting touch to exhibits, retail stores, restaurants, even burrito bars (left). Here, cast fiberglass was used to create a surfboard takeout counter. Materials used include resins, wood, metal, and bronze; neon-lit castterrazzo bar tops are a signature item. 212/295-7763. ATTA, Inc., New York City. **CIRCLE 270**

▼ Metal-look resilient flooring

A new floor pattern, Treadplate metallic vinyl replicates the appearance of raisedpattern industrial safety flooring. Offered in an 18-in.-square tile format, the flooring is appropriate for both heavy-traffic commercial and residential spaces. Solid-color Lunar comes in matching shades. Amtico, Atlanta. **CIRCLE 271**



V Chameleon silicone seal

Designed as a repair for failed joints in EIFS, metal curtain wall, and roofing, the 123 preformed silicone seal system is now offered in new texturing, finish, color, and custom-design options that help it blend with more substrates. Dow Corning, Midland, Mich. **CIRCLE 272**





▲ Leather-wrapped interiors

A source of contract leathers from Italy, Spinneybeck is now offering Architectural Applications, a line of new design uses for leather, such as handrails and wall panels, which take advantage of the material's unique tactile and aesthetic qualities. For handrails, 1-in.-wide leather strips are overlapped to create an even thickness and glued to a standard rail. Even when constantly handled, leather needs only minimal care. 800/482-7777. Spinneybeck, New York City. **CIRCLE 265**

PRODUCTLITERATURE

Efficient windows and doors The National Fenestration Rating Council's (NFRC) Certified Products Directory provides accurate energy-performance ratings for windows, doors, and skylights. Listings give descriptive information and thermal-transmission data for over 30,500 certified products. The 1996 edition offers solar heat-gain coefficients for the first time, an important consideration where cooling loads are primary. NFRC ratings permit direct comparisons between products, and give optical and thermal numbers that can be used to determine whether a product meets state or local codes. For more information: www.nfrc.org/nfrc.html (Web page) or 301/589-6372. NFRC Inc., Silver Spring, Md. CIRCLE 273

Woodwork standards

Described as "the only reference work anyone specifying architectural woodwork will need," the seventh edition of Architectural Woodwork Quality Standards Illustrated includes a full set of molding profiles, cabinet details, and a summary of the fire code. Detailed drawings suggest design ideas and profile combinations. Architects are invited to become affiliate members of the Architectural Woodwork Institute (AWI) for a fee of \$50, and receive the \$75 Standards at no additional charge. 703/733-0600. AWI, Reston, Va. CIRCLE 274

Fire-resistant panels

A brochure explains how AFM's new



For more information, circle item numbers on Reader Service Card

Firefinish structural panel offers a factory-applied thermal barrier on the oriented-strandboard surface. Meeting code requirements for a 15-minute fire barrier, the Firefinish interior side is ready for paint or other decorative treatment. 800/255-0176. AFM Corp., Excelsior, Minn. **CIRCLE 275**

Architectural doors

A catalog on the Maiman door describes stile-and-rail doors with 45-, 60-, and 90-minute fire ratings. Labeled doors are offered in over 70 different wood species and 18 profiles; all can be premachined for concealed vertical rods and electric strikes. 800/641-4320. The Maiman Company, Springfield, Mo. **CIRCLE 276**

Save that tree!

Available free in limited quantities, *Building Greener Neighborhoods* stresses the value of saving existing trees and planting new ones in developments on large suburban tracts as well as on the infill sites vital to urban forestry. The 120page book explains how to identify the trees worth saving, and demonstrates construction and grading methods least likely to harm them. Published by American Forests (formerly the American Forestry Association) and the National Association of Home Builders. 800/223-2665. Washington, D.C. CIRCLE 277

Flush wood fire doors

An eight-page catalog supplies architectural details on 90-minute double-egress doors. 800/678-8910. Algoma Hardwoods, Inc., Algoma, Wis. CIRCLE 278



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PRODUCTLITERATURE



Through-wall-flashing guide

Written for contractors as well as architects, a technical manual on FlashGard flashing (pub. 5028) describes the flexible EPDM membrane and details its use at copings, door headers, or windowsills to prevent water penetration and promote drainage. Includes 25 details. 800/428-4442, ext. 7084. Firestone Building Products, Carmel, Ind. **CIRCLE 279**

Recycled building products

A "buy recycled" guide for the design and construction industry, *Building for Tomorrow* gives clear information on incorporating recycled products in building projects. The guide has case studies, examples of recycled-content building materials, and directories of materials, and it explains how to set up a "buy recycled" program. 703/683-9025. National Recycling Coalition, Alexandria, Va. **CIRCLE 280**

Water-based wood stain

A new product, WoodScapes house stain is said to give a long-term, fresh appearance to vertical siding, fascia, shakes, and shingles. Available in an acrylic solid color or a polyurethane, semi-transparent finish, water-based coatings are described as being easier to apply than conventional latex stains. A catalog insert illustrates all colors. The Sherwin-Williams Co., Cleveland. **CIRCLE 281**

Architectural metal CD-ROM

Now available in electronic format, Julius

Blum's catalog covers handrails and guardrails in aluminum, stainless steel, and bronze, all types of specification finishes, and details the nonwelded Connectorail pipe-railing system, which joins components using concealed mechanical fasteners. Also included: glass balustrades and PVC handrails. Free Windows-based guide available. 800/526-6293. Julius Blum & Co., Inc., Carlstadt, N.J. **CIRCLE 282**

Fabrics in architecture

Published by the Industrial Fabrics Association International (IFAI), an annual *Designers Guide* has over 100 pages on architectural fabrics—for awnings, airsupported and tensile structures, and tents—along with full technical and performance data on specific fabric types. Materials are grouped under headings such as fiber type, durability, aesthetics, and the material's compatibility with various graphics techniques like silkscreening. IFAI member contractors are listed. For subscription information (\$21 per year): 800/225-4324. Fabrics & Architecture, St. Paul, Minn. **CIRCLE 283**

Window-design software

CarCAD 3.0, the newest version of Caradco's specification and detail program for wood windows and patio doors, now has an on-line project file illustrating current installation ideas. Available free of charge. 800/238-1866. Caradco, Rantoul, III. CIRCLE 284



BEST ARCHITECTURAL CAD



ARRIS computer image by McCall Design Group, San Francisco Modeled and rendered by John Chan

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