

THOMAS & BETTS HEADQUARTERS, RARITAN, NEW JERSEY, BY GWATHMEY SIEGEL GELCO OFFICE BUILDING BY THE LEONARD PARKER ASSOCIATES CLEAR-CUT PSYCHOLOGY FOR SOME VAST INTERIORS AT CBS S.I. MORRIS ASSOCIATES' HOUSTON SCHOOL OF ART BUILDING TYPES STUDY: HOUSING FULL CONTENTS ON PAGES 10 AND 11

# ARCHITECTURAL RECORD

SEPTEMBER 1979 **Q** A McGRAW-HILL PUBLICATION \$5.50 PER COPY

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ecause of the uniformity of light, there's less ed to place fixtures over specified work locans, making it an ideal system for open plan aces. It's aesthetically more pleasing, too.

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#### Letters to the editor

Your article on "Mervyn's: a fastmoving clothing merchandiser" (see RECORD, June 1979, pages 117-120) showed a well-designed interior space for a wholesale business utilizing a program for industrial style traffic. I take issue with your use of the term "high-tech."

While the position of high-tech designers is not well clarified, Helmut Jahn offers us at least a beginning of understanding in his unpublished article "Determinators of Architectural Form." He differentiates lucidly between the industrial look and hightech. He writes that the industrial look deals with the use of conventional items in unconventional situations. The look is nostalgic and eclectic. High-tech, Jahn claims however, has real intention concerning function and purpose. It is aided by technology, engineered rather than designed, with attention to performance, not just appearance.

High-tech is a viable approach to design solution, and to disregard its proper position in the contemporary architectural idiom by a flagrant misuse of its terms offers no assistance to either historical or critical evaluation.

> Ken Draughon Knoxville, Tennessee

For a statement from Helmut Jahn on the "determinators of design," see RECORD, July 1979, page 98.—Ed.

The "partial guide to painless construction management projects" that appeared in the May and June issues of ARCHITECTURAL RECORD was indeed partial, but certainly not painless. Any one of a growing number of competent construction management firms could and probably will take exception to much of what was written. Unfortunately, a great number of practicing construction managers who are still aspiring to competence will accept the article at face value, and innocently move on to still lesser heights in their practices of the art.

The article by Herbert McLaughlin and Cynthia Ripley was obviously written from the perspective of bad CM experiences, experiences with inadequate construction managers, or both. The result is a fragmented essay that will only relate to those practitioners with similar experiences or those that still keep the CM project delivery system at arm's length.

At this stage of its development, CM deserves a more complete and accurate critique from the design community than that provided by the authors. It's time that CM be accepted as an orderly, organized project delivery system that is both definable and explainable. True, CM has many forms; however, the prime elements of an operating CM format are essentially the same, regardless of who provides the service. The only variable is in the degree of proficiency of the construction manager.

Unfortunately, many construction industry participants do not have a complete awareness of the industry they themselves are a part of. We suggest that RECORD take time to look at the whole CM picture and not be satisfied with an obscure point to fill its pages. We don't believe the article does justice to the profession, the industry or to the construction management project delivery system. All three deserve more authenticity, more depth and more consideration.

C. E. Haltenhoff, President Elzinga & Volkers, Inc. Construction Managers Holland, Michigan

With such an elegant, economical and most of all inspiring house designed by Francis Mah (RECORD, June 1979, page 113-116), it's too bad the accompanying article wasn't more comprehensive and technically informative.

Some questions: Is the rest of the "inner house" fully insulated? How hot does the pool/greenhouse area become in summer? Just how much did do-it-yourself work and the reuse of materials contribute to the low price? (I suspect quite a lot.)

This house is so uncharacteristic that all of these elements need to be explained more fully.

RECORD usually gives us the philosophy behind the design of a building, but all too frequently I would like to know how something was done. How was it detailed? How well do the details work? How expensive is the detail?

Obviously, a whole magazine could be devoted to this kind of information, but think of what could be gained. Is it possible to have more of this from time to time?

> Jack Sillaman, Architect Latrobe, Pennsylvania

#### Correction

The architects and engineers of record for Bartle Hall in Kansas City, whom RECORD credited incompletely in its July issue, page 35, are Convention Center Associates, a joint venture of Seligson Associates, Horner & Blessing, Howard-Needles-Tammen & Bergendoff, C. F. Murphy Associates.

#### Calendar

#### SEPTEMBER

Through September 15 "Canada: History Through Architecture," at the Museum of the Building Arts, The Pension Building, Washington, D.C. Sponsored by the Committee for a National Museum of the Building Arts.

**10-11** Seminar, "Design Trends & Techniques for Contemporary Office Interiors," at the Water Tower Hyatt House, Chicago. Program will be repeated Oct. 8-9 in New York City at the Halloran House. Contact: Charles E. Hamlin, ARCHITECTURAL RECORD SEMINARS, 1221 Avenue of the Americas, New York, N.Y. 10020 (212/997-3088).

**12-13** Seminar, "Designing Contemporary Office Lighting," at the Water Tower Hyatt House, Chicago. Program will be repeated Oct. 10-11 in New York City. Contact: Charles E. Hamlin, ARCHITECTURAL RECORD SEMINARS, (see Sept. 10).

14 Seminar, "Marketing Nonresidential Interior Design Services," at the Water Tower Hyatt House, Chicago. Program will be repeated Oct. 12 in New York City. Contact: Charles E. Hamlin, ARCHITECTURAL RECORD SEMINARS, (see Sept. 10).

**21-23** Seminar, "Water/Power/Solar," sponsored by the Los Angeles Chapter of the American Institute of Landscape Architects; held at the University of California Conference Center, Lake Arrowhead, Calif. Contact: Stephen Schwartz, Chairman, AILA, 4122 E. Chapman Ave., Orange, Calif. 92669.

#### OCTOBER

**9-10** National Executive Committee of NIBS Consultative Council, held at the Hyatt Regency O'Hare, Chicago.

11 through December 2 "Emergence and Progression: Six Contemporary American Artists," an exhibition exploring and comparing the works of Jim Dine, Donald Judd, Roy Lichtenstein, Robert Morris, Frank Stella and Andy Warhol; at the Milwaukee Art Center. Sponsored by the Miller Brewing Company and Philip Morris Incorporated. Contact: David Resnicow, Ruder & Finn Fine Arts, 110 E. 59th St., New York, N.Y. 10022.

12-19 XI Congress and Assembly of the International Council of Societies of Industrial Design entitled "Industrial Design as a Factor in Human Development"; to be held in Mexico City. Contact: XI Congreso Y Asamblea Del Consejo Internacional de Sociedades de Diseño Industrial, Av. Insurgentes Sur 753-9 Piso, Mexico City 18, D.F. Mexico. ARCHITECTURAL RECORD (Combined with AMERICAN ARCHITECT, ARCHITEC-TURE and WESTERN ARCHITECT AND ENGINEER) (USPS 132-650)

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# NCARB: reassessing itself—and the training and skills of architects

This summer, after years of somehow or other not managing to get to an annual meeting of the NCARB, I did attend the 1979 (and 58th) meeting of that august body (maybe because it was in Cambridge and Boston my favorite cities and the scene of my college days). I'm very glad I did, because I returned with a renewed conviction that the members of NCARB are activists, actively concerned with the issues of education and examination and licensing that can so affect the future of the profession.

Lorenzo (Pete) Williams' year as president had as its theme "Reassessment"—and it seems clear that thoughtful, well-organized reassessment of NCARB's mission and methods will continue under the new president, John Ross of California.

Mr. Williams outlined some of the guestions that the reassessment is designed to answer: "We thought we knew exactly where we were going when we designed a new professional exam some ten years ago. Later on, when we began to hear doubts expressed about it, we assembled a panel of distinguished architects to tell us-if they could-what we were doing right and what we were doing wrong. The panel expressed general approval of our exams-yet the doubts persist. It seems only yesterday that a ground swell of discontent developed into a mandate to test our candidates' design and site-planning abilities. This mandate produced what we now call Section A of the exam. It, too, seems less than perfect."

Another question under reassessment: "We've heard doubts from around the country that with IDP [Intern Development Program] we've bitten off more than we can chew-that IDP criteria or forms aren't quite what they should be. [Whether or not they are], the simple fact is that we've made a commitment, professionwide, to structured internship as a further assurance to the public-and we must keep that commitment." On that score, it was reported at the annual meeting that 14 states have adopted IDP and have systems in place, six more are "in the pipeline" of developing their IDP organizations, and 12 more are "interested." The consensus of the NCARB board members was that AIA and its components had been supportive and helpful in lining up advisors for the graduates working in their area.

The continuation of the theme of reassessment was the subject of the most important debate of the meeting—on Resolution 5, which passed by a vote of 50-0 after extensive debate. It resolves that "NCARB is directed to analyze and to define the knowledge, skills, abilities and functions necessary for minimum competence for the practice of architecture in the U.S. [task analysis] and apply these findings to an evaluation of the current NCARB examinations, internship standards, education standards and practice standards, and recommend criteria as necessary and appropriate to conform those findings [validation study]." The steering committee to implement this resolution consists of one person chosen by each NCARB Regional Conference plus one alternate; is empowered to retain outside independent experts (specifically including testing experts); may call upon any NCARB committee for assistance, is directed to report periodically to the NCARB board of directors and member boards, and is required "to report to the 1980 annual meeting its findings and recommendations with regard to 'task analysis' and 'validation study '

This was, as anyone attending the meeting would report, voted on as a major commitment. Competition among attendees for a place on this committee was brisk, despite the conviction that the work of the committee would be time consuming and difficult. The committee will also clearly be financed as necessary (the figure of \$100,000 was bandied about) to do the work right.

This new reassessment committee begins not just with the overwhelming support of the NCARB member boards, but with a base of information established this past year by a Task Force on Registration, chaired by Martin Crennen of Montana. In his report to the meeting, summarizing the ground work for Resolution 5 which his committee had done and urging its passage, Mr. Crennan said that "the steering committee may very well find it advisable to go beyond NCARB and solicit the informed opinion of leaders from the other architectural organizations-from AIA, NAAB, ACSA, and the students....We may need, and perhaps should invite, the participation of regulatory officials, consumer-interest spokespersons, educators and others.

"The spirit of Resolution 5 requires that we make certain all legitimate concerns within the profession are not only listened to, but also taken very seriously.... What seems clear is that NCARB, through Resolution 5, is expressing its determination to 'let it all hang out'—to challenge old assumptions, question the status quo, entertain new possibly unexpected ideas. In short, to take a hard look and let the chips fall where they may."

It seems to this observer that the chips are already falling in all the right directions. Right on, NCARB! – *Walter F. Wagner, Jr.* 

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New York's Museum of Modern Art exhibit "Recent Acquisitions: Architecture and Design" will be on display until September 30. Directed by J. Stewart Johnson, Curator of Design at the museum, the display presents a wide range of objects in a variety of materials, made both by industrial and craft processes and spanning one hundred years of design history. Included in the display will be works by Otto Wagner, Mies van der Rohe, Eileen Bray, French Art Nouveau innovator Hector Guimard, Scots designer and architect Charles Rennie Mackintosh, and Louis C. Tiffany. The exhibition was made possible by a grant from the National Endowment for the Arts.

# How do you design the

### NEWS REPORTS

### Recent work of nine American architects is the subject of European exhibition and catalog

An architectural exhibition entitled "American Architectural Alternatives" is being circulated in Europe during the autumn of 1979 and the spring of 1980. The show will open in London at the Architectural Association September 24, and then travel to Amsterdam, Paris, Zurich, Rome and Madrid.

The selected architects represent three architecturally active geographic areas in America. Representing the West Coast are architects Frank Gehry, Franklin David Israel and Craig Hodgetts. Representing the East Coast are architects Cesar Pelli, George Ranalli and Roger Ferri, and representing the Midwest are architects Stanley Tigerman, Thomas Beeby and Stuart Cohen.

Each of the nine architects' recent ideations will be displayed on three one-meter-square panels with a statement describing their current attitudes. In addition, a catalog will attempt to capsulize the work of the exhibition and will include critical essays by Ross Miller, discussing the work of the West Coast architects; Pat Pinnel, discussing the work of the East, and Nory Miller for the Midwest. The show is intended for exhibit in Europe only and is supported by a grant from the Graham Foundation for Advanced Studies in the Fine Arts.

### French and American urbanists convene in Paris

The Institute for Urban Design is a recently formed nonprofit group for the study of urban problems. It is funded by the National Endowment for the Arts, and its director is Ann Ferebee, former editor of *Urban Design* magazine. The Institute began its work in an ambitious way, in the form of an urban design conference in Paris, July 8-13. A co-sponsor of the conference was France's *Metropolis* magazine, and it was organized with the help of Centre Pompidou.

Both French and American planners took part (Centre Pompidou providing instantaneous translation), and emphasis was on advocacy planning and adaptive use. Visits were made to both city and national planning agencies, to the Paris transit authority and to the new town of Marnes-la-Valée. American participants included Mary Means, Midwest Regional Director of the National Trust for Historic Preservation, Ron Schiffman of the Pratt Center for Community Development, and David Lee of Boston's Southwest Corridor. On the final day, Jonathan Barnett, director of the Graduate Program in Urban Design at the City College of New York, made clear some useful distinctions between adaptive use and preservation, between advocacy planning and preservation, and between urban design and urbanism. Leaders of a closing summary included Marc Emery, editor of Metropolis, and Jacques Mullender, director of Centre Pompidou's Centre de Creation Industrielle.

The next conference to be sponsored by the Institute for Urban Design will be held in Philadelphia October 17-20. Those interested in attending should write Ann Ferebee, Director, Institute for Urban Design, Main P.O. Box 105, Purchase, New York 10577.—Stanley Abercrombie, New York City.

December. The jury will include:

Michael Bobrow, curriculum coordi-

### Awards program to spur quality hospital design

The Graduate School of Architecture and Urban Planning at the University of California at Los Angeles, the Columbia University Graduate School of Architecture and Planning, and ARCHITECTURAL RECORD are sponsoring the second biannual competition to reward and encourage outstanding architectural design in the health-care field, By October 31, applicants should send a \$50 entry fee for detailed instructions to the Graduate School of Architecture and Urban Planning, 405 Hilgard Avenue, Los Angeles, California 90024 attention: Harriet Gold. Submissions must be dated by November 30, received at UCLA no later than December 7, and must be in an 81/2-by-11-inch format-including photographs, plans, sections, axonometrics and narratives to describe the project adequately.

Judging will take place in mid-

nator for Health Facility Planning and Design at UCLA, and a principal of Bobrow/Thomas and Associates; Charles Moore, program head at UCLA; Charles William Brubaker, executive vice president of Perkins & Will, Chicago; Joseph Sprague, director, Design and Construction, Department of Health Facilities and Standards, American Hospital Association; William Parker, program head, Columbia University Graduate School of Architecture and Planning Program in Health Facility Design; and William Marlin, associate editor of ARCHITEC-TURAL RECORD and architecture critic of The Christian Science Monitor.

Entries will become property, and part of the library, of the UCLA School of Architecture and Urban Planning. Winners will receive certificates and their designs will be included in a special section of ARCHI-TECTURAL RECORD next spring.



Lasers and photo-flash adapted to construction work

A new technique developed to restore damaged works of art—using pulses of intense light to clean metals, stone, and fabrics—may have wide applications in construction. The "Old Red Courthouse" in Dallas is a test case.

Using only a laser and xenon flashlamps, a crew of three men removed a heavy coating of rust from over 5,000 square feet of steel trusses in Dallas' historic courthouse. The cost was \$42,000, or "one-fifth the cost of treating the steel conventionally" (removing floors and ceilings to gain access, then sandblasting and painting). Not only did the pulsed light equipment clean the steel quickly and easily, it also gave it a protective surface treatment said to be similar to anodizing for aluminum.

Project architect, James R. Pratt of Pratt Box Henderson & Partners, Dallas (shown in photo above with remote flashlamp driver), read in a preservation journal about art restoration work being done in Venice by an American physicist. Dr. John F. Asmus, director of the Laser Laboratory of Maxwell Laboratories, Inc., San Diego, had developed special lasers and xenon flashlamp devices for use in cleaning and restoring stone and metal art objects as well as pollution-damaged stone in buildings. Dr. Asmus has also developed flashlamp units that are cheaper, less sophisticated, and more rugged than the laser, and better adapted by reason of broader "coverage" to construction uses. Although the lasers are still used, they are only required for handling intricate shapes and angles (about 1 per cent of the Dallas courthouse project). Xenon flashlamps, which are most commonly used as beacons on airplanes and in photocopy machines, are, according to Dr. Asmus, "very similar to electronic photoflash units except that they are a few thousand times more powerful. When these lamps are placed close enough to a surface. they can produce enough light to do the same kind of things that you can do with a laser. But since the beam diverges widely, you can prepare surfaces which are much more extensive and larger than would be possible with a laser."

The lamps produce about 1 million watts for about 1,000th of a second, thereby raising the surface temperature to between 1,000 and 3,000 degrees Kelvin, driving out the oxygen and water of hydration (which converted the surface steel into rust) and at least partially restoring the steel particles to their original form-the flash of light removes the scale and loose rust and at the same time it creates a very thin layer of molten metal. This meta laver, technically called a glass because it does not have a crystalline structure, resists corrosion and creates a protective layer.

Dr. Asmus claims the flashlamps are as simple to operate as a photoflash unit on a camera, but due to the intensity of light and heat, caution is to be exercised in much the same way as with welding.

For the Dallas courthouse, the crew consisted of an engineer/tech nician for operating the flashlamp and a laborer to move the heavy unit. The first major construction application o the flashlamp process in the United States was inside the dome and rotunda of the 106-year-old Califor nia State Capitol Building in Sacra mento. All of the original mural paint ings were covered with three to nine lavers of overpaints, which essentially held together the mural. Convention al cleaning tended to damage the murals as it removed the overpain layers, but the light-induced cleaning provided a successful solution. Sev eral hundred square feet of the origi nal paintings were revealed after photo-decomposition of the pain layers using a laser and flashlamp radiation. When cleaning large interiors, such as the Capitol building, the xenon flashlamps can irradiate a much larger area than a laser beam but the laser can be directed over a large distance to clean high ceiling and wall areas which would normally be accessible only by scaffolding.

Other jobs slated for Dr. Asmus's flashlamp and laser are cleaning the fabric wallcoverings and mura ceilings in a South Dakota courthouse, which have been painted over with masonry paints, and cleaning Indian cave paintings in Texas. – *Lorraine Smith, World News, Dallas.* 

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### HUMAN SETTLEMENTS: WORLD NEWS

### NSPE joins AIA in following Judge Sirica's ruling

The National Society of Professional Engineers (NSPE) has joined the AIA in scrapping the so-called "supplant" rule in its code of ethics. The rule barred a professional from taking the work of another once a deal has been struck.

The NSPE amended its code at an annual meeting in Knoxville after the ruling of U.S. District Judge John J. Sirica, (see August RECORD, page 34) which says the supplanting standard in AlA's code is "an unreasonable restraint on competition." The NSPE considered itself covered by the ruling even though it was not mentioned by name.

The NSPE also made another significant change in its professional ethical standards when it lifted a prohibition on the use of commission agents to help its members secure design work. New language in NSPE's code permits the payment of commissions or brokerage fees so long as the payments go to "bona fide employees of bona fide established commercial or marketing agencies retained by the NSPE member."

Milton F. Lunch, NSPE's general counsel, said the new language would still prohibit '`a pay-off to the mayor's nephew'' while making it possible to use legitimate agents. — William Hickman, World News, Washington.

### President Carter's Cabinet changes delight urbanists

Elected city officials with good credentials as molders of an improved urban environment came out as winners in President Carter's recent Cabinet shuffle.

The President's appointment of Moon Landrieu, former mayor of New Orleans, as Secretary of the Department of Housing and Urban Development and Portland, Oregon, Mayor Neil Goldschmidt as Transportation Secretary delighted urbanists, who hold the new Cabinet officers in high regard, as both New Orleans and Portland made impressive strides under their direction.

Mr. Landrieu's main contributions centered on efforts to preserve the French Quarter while promoting nearby development such as the Superdome. Mr. Goldschmidt's mark has been primarily in the transit field, and his programs have raised the number of people coming in to Portland via mass transit from 10 per cent to 25 per cent.

The 49-year-old Mr. Landrieu was mayor from 1970 until 1978. Since leaving office, he has been president of Joseph Canizaro Interests, a firm developing the \$500million Canal Place Project on the Mississippi River in New Orleans. While mayor, Mr. Landrieu was identified not only with the revival of downtown New Orleans but also with the campaigns of the U.S. Conference of Mayors for the general revenue-sharing program and other programs to pump Federal funds to the central cities.

As Transportation Secretary, Mr. Goldschmidt, 39, is expected to be a staunch supporter of mass transit, with more restrained enthusiasm for highways. He was one of the first city officials to use the "Interstate Transfer Provision" to free up highway money for other uses when a freeway project was cancelled. He was also influential in obtaining state funding for the construction of a downtown transit mall that has brought development back to the center city of Portland. – William Hickman, World News, Washington.

### Department of Defense revives design awards

The American Institute of Architects has commended the Department of Defense for reactivating its annual DOD Awards Program and has responded to requests from the Air Force to improve its four-year-old design awards program through close collaboration and assistance.

AIA President Ehrman B. Mitchell, Jr., pledged the Institute's support for DOD efforts to recognize design professionals "who meet and exceed the challenge to produce quality architecture for the Department of Defense."

The DOD program, discontinued in early 1977, was revived this year to honor architectural and engineering design excellence by the military departments and the professional community in DOD construction projects. In addition to creating interest in excellent design, the program seeks to dramatize DOD's concern for creating a more livable environment for members of the military departments.

AIA first vice president and president-elect R. Randall Vosbeck, of Alexandria, Va., has been appointed to serve on the jury for the DOD program. The competition is open to all military construction projects and on-base "non-appropriated fund projects," including in-house designed projects and those designed by architect/engineer firms under contract to the government. To be eligible, entries must have been completed no more than three years prior to submission.

The Air Force Design Awards Program is also receiving the Institute's support this year. For the first time, the AIA and Air Force are collaborating to improve this program that recognizes design excellence in Air Force projects. Like the DOD awards, the Air Force program acknowledges the achievement of excellence in architectural and engineering design by the military and the professional community.

### International involvement for Israeli neighborhoods

Israel has decided upon a new type of program to attack the problem of urban renewal. The project, known as "Operation Renewal," brings together the national government, local authorities, the Jewish Agency (a quasi-governmental agency primarily involved in fund-raising) and Jewish communities from abroad. The aim is for these groups to work as a team in helping to renew underprivileged neighborhoods of Israel that house some 300,000 people.

Each correspondent American community in the program has adopted an area in Israel and will be responsible, along with local and national forces, for coming up with not only funds but ideas. The project has brought together such disparate cities as New York and Tel Aviv's Hatikvah slum, Baltimore and Jerusalem's Kiryat Menashe district, San Diego and the town of Kiryat Malachi, and London and the Israeli town of Ashkelon.

One major difference in this program compared to past urban renewal programs in Israel and elsewhere is that architects are included as members of a combined staff that brings together social planners, sociologists, town planners, and experts in the fields of health and education. Project Director Eliezer Rafaeli says he does not expect the plans to come from Baltimore or New York, but definitely foresees cooperation on every level between the communities involved. Rafaeli says the program differs in that it is based on finding a comprehensive solution that will necessitate combining efforts in all fields. The project is viewed as a renewal of neighborhoods and involves no transfer of population.

Rafaeli notes that many programs in the past have failed because they dealt solely with housing and not with the local people in the neighborhoods. "Operation Renewal" especially differs in that each of the groups from abroad will spend time in the Israeli neighborhoods. This is to assure for the residents a sense of self-help while at the same time aiding the experts in the renewal process. Rafaeli adds that the experiment is not an easy one since it involves groups whose ideologies are totally different.

Those people who are now involved have already spent time in the neighborhoods, living in the same quarters as local residents. This, he feels, "is better than years of sociology courses at a university for giving Americans a truer feeling of the problems." Jewish officials say that in most cases this type of direct approach has worked, as the involvement becomes more than an exercise in fund-raising. New York has already sent a group that included town planners, architects, and sociologists to examine the problems of the Hatikvah guarter of Tel Aviv-known as the country's worst slum. Another and larger delegation from New York is expected in the near future.

The program is just now getting off the ground, but so far about 50 neighborhoods have been adopted by Jewish communities in the United States and elsewhere. The preliminary work now being done includes checking into the number of people in an apartment and social services available in the area—such as stores, clinics, schools, and entertainment. In addition elements such as crime and juvenile delinquency are being taken into account.

Rafaeli admits that the first stages have been difficult, mainly because of the problems of getting the local residents involved, but he adds that without neighborhood cooperation "Operation Renewal" will fail. And he expects the process of involvement to be a gradual one "since it takes time for the inhabitants to trust and accept outside groups."—Neal Sandler, World News, Jerusalem

The Nation, and served as Editor of Architectural Forum for 15 years (1949-1964). Besides his prodigious work as a writer, editor, and critic, Haskell was active in the causes of urban renewal, public architecture, preservation, and landmarks. He was adjunct professor at Pratt Institute and Columbia University.

Although never a practicing architect, his concern with architecture led the AIA Board in 1953 to admit him as a corporate member, in 1962 as an AIA Fellow, and this year he was awarded an AIA Medal for his contributions to the cause of architecture.

Throughout his career, his central, passionate concern was with architecture, which he saw as a concept "of man working upon the *whole* of his environment to put it into habitable, workable, agreeable, and friendly shape."

ARCHITECTURAL RECORD September 1979 35



Douglas Haskell 1899-1979

Douglas Haskell died August 11 at Lake Placid, New York, after more than 50 years of journalistic and other service to the cause of architecture. Mr. Haskell was affiliated with ARCHI-TECTURAL RECORD for 20 years (1929-1949), serving first as contributing editor and from 1943-1949 as senior editor. He also, for 13 years, wrote a monthly column on architecture for



The Bard Awards for Excellence in Architecture and Urban Desig were established in 1962 by the City Club of New York. They a named in honor of Albert S. Bard, a former trustee of the clu who had crusaded for 60 years to improve the quality of civ design and urban living. By giving the reward of public recognitic to the best of the city's architecture and urban design, th program encourages architects and their clients to strive for higher standards of achievement. The jury of architects, enginee and developers made the following comments about the 197 award winners:

#### **United Nations Plaza Hotel Roche Dinkeloo & Associates, Architects**

"One United Nations Plaza site. Particularly noteworthy is acts as a pleasing visual and functional complement to the UN complex across First Avenue. The color and form of this hotel/office building demonstrate a complex and convincing response to the

the manner in which the building meets the street: the glass and metal canopy not only gives variety to the sheer surface, but also acts as an inviting and protective extension to the sidewalk."





#### Abraham Goodman House Johansen and Bhavani, Architects

``The Abraham Goodman House-combining a school for music and dance and a center for Jewish culture-is perhaps the most noteworthy example among this year's winners of a building which extends itself to the community. Of city-wide cultural importance is its 460-seat concert hall of acoustical excellence. The building's form, too, relates to its surroundings-the

facade of the Goodman Hou takes its cue from neighbori structures and the glass-fac corridors provide an away ness of the outside world. T economy of means and spa which produced this buildi in no way deters from success-in fact, the attenti given to details such as t subtle use of color prove interesting as the over-all i pression of the building."

### **BUILDINGS IN THE NEWS**



Pedestrian shelter, TWA Flight Center, JFK International Airport Witthoefft & Rudolph, Architects "The architects of this shelter have achieved what under the best of circumstances is a difficult task—the design of an addition which is both func-

tional and sensitive to the existing building. That they have achieved this synthesis with a building as unique as Saarinen's TWA terminal is a further measure of the quality of their efforts...as well as a fine design, this shelter acts as a fitting gateway to New York City."

#### 5 East 66th Street—Apartment Tower uzen and Partners, Architects

arough the combined tals of the architects and the repreneurial spirit of the veloper, an apartment lding of high quality has en produced in a market so en devoid of excellence. a jury recognizes the elitist d isolated character of this high-income residence and has reservations about the extensive use of glass in such energy-conscious times. Nevertheless, 265 East 66th breaks the monotony associated with this indigenous New York building type and justly deserves the label of luxury."



#### Turtle Bay Towers, Bernard Rothzeid, Architect

"The reconstruction of this damaged former industrial building into an apartment complex of quality is a credit to its architect. Through the inclusion of such features as an applied glass facade, greenhouse enclosures and a new entrance lobby, the Turtle Bay Towers set a high standard for adaptive re-use projects. Through its selection of this renovated structure, the jury wishes to encourage the continued conversion of older building stock not originally intended for residential use. The value of projects like the Turtle Bay Towers extends beyond the building itself, through the improvement of street life, giving new incentive to the upgrading of the community at large."



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### 979 Red Cedar Shingle & Handsplit Shake Bureau/AIA Award Winners Announced

our projects from widely separated locations have een selected as First Award recipients in the 1979 ed Cedar Shingle & Handsplit Shake Bureau/AIA rchitectural Awards Program. A biennial event nitiated in 1973, the program was conducted to onor architects and their projects which demontrate design excellence and significant functional r esthetic uses of red cedar shingles or shakes. here were 218 entries from architects in 42 states nd two Canadian provinces. The winners were elected by a jury consisting of chairman William urnbull, Jr., San Francisco, California; Richard Bergnann, New Canaan, Connecticut; and E. Fay Jones, ayetteville, Arkansas. Additionally, ten projects vere given merit awards. They are: MacKiny/Winnacker/McNeil, AIA, & Associates, San rancisco, for a mountain solar house in Lake ahoe and Orindawoods in Orinda, California; arson, Lagerquist, Morris/Architects, Seattle, Vashington, for the Larsen residence in Seattle; lorman Jaffe, AIA, New York City, for a house in 1ontauk, Long Island, New York; Bissell & Wells, rchitects, New York City, for the Flintoft resience in Nantucket, Massachusetts; John Blanton, IA, Manhattan Beach, California, for the Marsh emodeling in Manhattan Beach; Arne Bystrom, rchitect, AIA, Seattle, Washington, for the ystrom family cabin on the Washington coast; The Aithun Associates, Architects, Bellevue, Washingon for the Towerhouse Building in The Meadows, edmond, Washington; Sohl & Palmer, Architects, IA, Santa Rosa, California, for professional offices Santa Rosa; and Fisher-Friedman Associates, San rancisco, for Summit Ridge in Walnut Creek, Caliornia. Pictured are the First Award winning strucures with judges' comments.

acific Heights Townhouses is project completely compatile with its traditional San nent. Designed by Daniel Soomon & Associates of San sistency with the exterior."

Francisco, the complex was cited for "very good use of materials without elaboration rancisco row house environ- or 'gimmickry.' Simplicity of interior space provides a con-





"Sandanwede," a coastal Mas- fabric of the old house and the manner." This landmark pro-

"the respect for the existing to the old forms in a sensitive ton, New Jersey.

sachusetts shingle-style man- thoughtful restoration of the ject was designed by Short sion, was cited by the jury for exterior. New additions relate and Ford, Architects, of Prince-



The Architects, Inc., of Cleveland, Ohio, received a First Award in the competition for its design of Hidden Harbor restaurant, of Pompano Beach, Florida. The curved-roof

shake-clad project was cited by the jury for its "bold handling of space, light and form. The curved roof forms enhance the reflective light quality of the cedar shakes."

Designed by Roger H. Newell, AIA, Seattle, Washington, this First Award winning residence was planned for a single person who desired a maximum interaction with the site and maximum privacy. The structure was cited by the jury for the "skillful handling of sculptural and volumetric qualities; the cascading living spaces with natural light entrances, the interior orientation to light and landscape."



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### Post-occupancy study leads to insights on elderly housing

Why do a post-occupancy evaluation study? Like other people in service professions, architects want to know just how good their services are and how they can improve them. The ability to improve their services depends, in part, on taking time to visit the building they have designed in order to find out how users view and react to the spaces the architects have provided. Such studies provide architects and people who plan specialized kinds of facilities and buildings with information about: 1) How well basic concepts and specific design features are working; 2) For which users they work most and least successfully; and 3) Under what conditions various aspects of the design are most and least enjoyed. A post-occupancy study can enable designers to find out if their basic pre-design assumptions about the lives and activities of the users were accurate and, if not, what the major differences are between those assumptions and current reality. The post-occupancy evaluation study suggests ways in which the architects might modify the present design—if this is still a possibility—and the most desirable ways to go about future planning of similar buildings for similar kinds of users.

The study summarized in this article was intended to provide the San Francisco firm of Kaplan/McLaughlin/Diaz with information about Martinelli House, a 66-unit apartment house (photo below) for the elderly designed by the firm in 1974. In addition, the firm felt that by studying other elderly housing projects at the same time, different but equally valid approaches to meeting the needs of similar tenants might be discovered.

Two projects were located that resembled Martinelli House in many ways, but not in their basic design concept. Four weeks were spent at Martinelli House in San Rafael, California and two housing projects (A and B) in Oakland, visiting, talking with tenants, observing, meeting with project managers and architects, asking questions, and having many questions asked of the researchers. The findings are presented with the understanding that they are part of an ongoing process of questioning and discovering what works and for whom—in the design of housing for the elderly.

In order to begin the study the firm's researchers had to find other projects which, like Martinelli House, were designed for independent living. They had to be very similar to Martinelli House in terms of: 1) The age, sex and health of their tenants; 2) The past history of tenants, such as their income/occupations, their familiarity with the neighborhood/community, and their race or ethnic backgrounds; and 3) The role played by the resident project managers in the lives of tenants.

The research took about four weeks to accomplish and was carried out by an urban planner/environmental psychologist, and an architect/anthropologist: Judith Bernstein and Laurie Hart. They divided their time among the three projects, visiting them at different times of the day and evening, and on different days of the week. Their research was designed to learn:

What activities are happening—when, where, how often, and with whom participating—and how does the basic project layout and design influence these activity patterns?
How tenants were using the central outdoor courtyard and a variety of multi-level patios, terraces and sitting places at Martinelli House in comparison with the more traditional outdoor spaces of miniparks and landscaped grounds at the two other projects.

 If tenants enjoyed the many choices of common outdoor spaces provided at Martinelli House or if they would have preferred more private outdoor spaces.

• If apartments grouped around a central open courtyard and connected by an open corridor system resulted in more socializing and casual encounters than did the conventional double-loaded corridor system at the other two projects.

### Finding: central grouping of activities and multi-use space enliven the house

Tenants seem to enjoy activities and facilities which cluster together and flow into each other at Martinelli's "activity hub," or courtyard, where lives can easily and casually touch and connect. The more activities which are grouped together, the more tenants have the opportunity to engage in them; there is then a logical flow of routine daily events and a chance for spillover activities and unplanned encounters to happen.

Different areas of the hub are important at different times of day. The mid-morning arrival of the mail was one of the day's exciting events and drew tenants down to the mail area to await the mailman. Because this is a time to exchange greetings and news, people are often in a mood to socialize: the location of the mail area on the acitivity hub makes it easy for conversations to continue over longer periods by moving to the immediately adjacent community room or patio. For people who are in more of a hurry, the route they take through the open corridors and patio as they come to collect their mail means that they, too, have many opportunities to greet fellow residents: along the open corridors; through the bordering apartments' Dutch doors; in the elevators; on the two sets of outdoor stairs; and on the first-floor and upper-level patios.

Tenants gather in the community room on a fairly regular basis throughout the day. But because the community room sits squarely in the center of the hub and is so easy to *text continued on page 70* 



## When Hewlett-Packard selects you to supply building system

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her as much as two months earthan if a traditional structural tem were used. And the Vulcraft tem has since been used in five e Hewlett-Packard buildings: a ond in Cupertino; two in Corval-Dregon; one in Boise; and one in Diego. The Vulcraft system can work just as well for you. To learn how, contact your local Vulcraft representative for your Joist and Joist Girder Specification Guide. Or write Vulcraft, P.O. Box 17656, Charlotte, North Carolina 28211. (See Sweet's 5.2/Vu.) Or call 704/366-7000. We have the know-how. And we have five plants located around the country to make sure your deliveries are on time. So your building can be ahead of its time.







ne efficiency of Vulcraft's standardized column ections speeds up steel erections and saves costs.

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Martinelli House

The site of Martinelli House is an 85-acre parcel located in the city of San Rafael, which is bounded on one side by a small-scale commercial street and on the other by an established residential neighborhood. The downtown shopping area of the city, located within walking distance of the project, provides tenants access to a full range or required goods and services including specialized centers of senior citizen activity.

The primary organizational concept of the project is the large open central courtyard which is the major focus of the living units. The majority of the 66 units—49 studios and 17 one-bedrooms—are accessible via a system of terraces and decks.

Access to the building is provided through a controlled main entrance, visually supervised from the manager's unit, and through a keyed door at the parking lot. Restricting the points of entry to the building to two doors is a feature designed to minimize uncontrolled or random access to the building, thereby addressing the tenants' potential concerns for security. Parking for residents is provided at the rear of the site, screening it from the view of all residents and neighbors and minimizing its functional intrusion into the building.

At Project B, community activities are better grouped, but are too far apart and lack enough space and/or amenities to give rise to a true "activity hub." Residents approach via a long walk-long for some of the older tenants-through a parking lot, over a bridge and up an inclined driveway which some feel is relatively steep. The outdoor area includes attractively landscaped grounds and a sunken minipark. One then uses an intercom security system to gain entry to the building. The entry is not really a full-scale lobby, but it does provide access to a good deal of activity: the driveway with its vehicular and pedestrian arrivals, the mail area with a small bench, the elevator, the lounge, and a corridor leading to the laundry. Many tenants gather or casually meet here for brief periods of social exchange at predictable times of day: mail time, lunch, and early morning/late afternoon arrivals and departures.

The entryway is quite small, considering all the activity that does, and potentially could occur there. Rather than being confined by the somewhat limited space and uncomfortable seating, residents often disperse to their apartments after passing through briefly. Had the entryway been somewhat larger, more attractively and comfortably furnished, and better integrated with the lounge (for sightlines) and outdoor grounds (for immediate proximity of inviting seating) an activity hub might have resulted.

Study of the three projects suggests that designers should take advantage of the natural rhythm of daily events by providing space and facilities which enhance the social possibilities of these occasions. However, mere placement of activities near each other is not enough: there must also be careful attention

enter from three different entries, residents often drop in for short visits when they're in the vicinity carrying out chores (mail collection, laundry) or going about activities (gardening, sunning on patios). Thus, the courtyard, by acting as a functional, social and visible hub of activity, makes the community room an integral part of the project's daily life; there is a high amount of use as hub activities overlap and a social flow is created.

Finally, the outdoor circulation paths, which are part of the central courtyard activity hub, bring people into physical contact, visual and aural, as they surround and circulate into the hub.

The activity hub at Martinelli House is missing one important element: a physical and/or visual connection between the community room and the mail/entry area. Such a connection is needed for several reasons:

People want to see when the mailman or friends arrive without having to stand by the door or pop up and down at nearby benches.

Tenants prefer the option of dropping into the community room when there are people present whose company they enjoy. In order to see who is in the room, they must now come directly into the large, undivided space; this can cause embarassment if a decision to depart is made. If there were a glass wall or a large window on the community room side bordering the entry/mail area, tenants could view arrivals, would have more information to decide about visiting the community room, and people sitting in the community room would have more passing activity to watch.

Finally, the location of activities in close

proximity to one another could be reinforced with furniture and amenities which enhance participation. Elderly people find benches with firm, high backs to be the most comfortable and easily used form of seating; the placement of benches or other seating on the patio with good views of all points on the hub would enhance the courtyard.

### Finding: designers should take advantage of the natural rhythm of daily events

Projects A and B took a more static approach to grouping community activities. At Project A tenants enter the front door immediately from the street via a short ramp or stairway, and then find themselves in the lounge/mail area, near the elevator. The recreation room and laundry are located in the basement and are reached by elevators, while the outdoors space—a small, pleasant minipark—is reachable only by traveling out the front door and around to the back or through a basement side door.

At Project A, tenants have the most opportunities for unplanned encounters and casual chats while they are sitting in the entry floor lounge before or after mail arrival. They also have a relatively good view of the street from the lounge, and enjoy watching activity and waiting for arrivals while sitting together on the couch. Unfortunately, other community activities are separate and distinct from one another; tenants must make purposeful trips to sit in the recreation room, visit the outdoor sitting space, wait for/collect mail, or catch friends in the process of coming and going. The provision of a small, homey lounge within the mail area of Project A is, however, a successful idea and is enjoyed by tenants for a morning meeting spot.







#### Project A

The site of Project A is an urban lot of approximately 14,000 square feet (.32 acre), bounded on the front by a mixed residential and service street leading to a small shopping area approximately two blocks away. One side of the site is bounded by small single-

paid to spatial needs of regularly occurring events, the physical requirements of the elderly, and the design and furnishing of these areas.

### Finding: circulation should provide

options for exercise, and social exchange Elderly people vary widely in physical capabilities and in their need for exercise; in fact, the same person's needs and abilities may vary from day to day. It is important, then, to offer the residents of an elderly housing project a choice of circulation routes and of different types of movement through their environments, so that they can move in accordance with their physical competence and desires. In addition, this variety of routes accommodates circulation needs throughout the year, recognizing seasonal variations in the weather. Projects A and B do not offer many such options. With the exception of fire stairs, there is only one possible route from the entryway to an individual apartment: doorto-elevator-to-double-loaded-corridor. As a result, tenants do not have variety in their movement patterns, nor are they presented the challenge of exercise that circulation paths may provide. Arriving at Martinelli House, you are confronted with several ways of reaching your home destination: if you live on the ground floor, your apartment is on the open courtyard, or just off it. If you live on an upper floor, you may choose a route taking you past terraces and open corridors—and perhaps people sunning or gardening—as you move from the front elevators to the rear elevators which go to the upper floors.

People used the elevators in combination with other routes and their individual use patterns varied from day to day. The *text continued on page 74*  family residences and thick vegetation, while the other side is occupied by a four-story apartment building. The rear of the site slopes steeply down to a small stream.

The basic layout of the building is a double-loaded corridor served by an elevator

core. Studios and some one-bedroom apartments open off the corridor, with apartments on the front and some on the rear having balconies. The exterior of the structure is a basic rectangle with parking and services underneath four apartment floors.



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#### OFFICE MANAGEMENT continued from page 71

second-floor corridor was most heavily used since it served people on that floor; people passing through to take the rear elevator to floors three through five; and people walking up/down the two sets of stairs from the patio. Tenants used the corridors for exercise on occasion: one man was seen in jogging shoes, running around the second floor corridor. The circulation system includes the upper level patio, which some people used to extend their walking spaces, and the indoor fourth and fifth floor corridors used by residents of these floors only (as contrasted with project-wide use of the outdoor corridors).

A common use of the corridors is as an extension of personal space and a means of displaying gardening skills: plants in tubs, on tables or stands, some creeping up walls, line the second and third floor corridors and their railings. The width of the outdoor corridors, the strategic placement of sitting terraces along the circulation system, and the extensive natural light have contributed to the secondary uses of the corridors.

Although the corridors of the fourth and fifth floors function somewhat differently in that they are used by residents of each floor, they too have many of the residents' personal touches: plant stands, antiques, old trunks, and paintings fill the halls, particularly near windows. These corridors have views of mountains and receive bright light through windows located at either end which create an outdoor-indoor effect lacking in typical artifically lit, double-loaded corridors. Undoubtedly, these bright areas at the ends of the corridors first attracted tenants to display and grow their plants. From this practice came the idea of placing personal belongings outside the units in the corridor space, thus creating additional common space. The choice of high-quality carpets, attractive woods for handrails, and a light color for the walls also contributed to an inviting ambience. What was designed as a circulation path has become a living space.

Residents expressed the opinion that the internal circulation system is safer than in other buildings where there are many entrances and surrounding pathways. By directing all access, except tenant parking (even taxis must wait on the street), through the front door and, subsequently, through an interior courtyard/open corridor system, the design provides tenants with many opportunities to function as their own security system. Residents said they felt completely comfortable with their "Dutch doors" open during the day since they knew that strangers would easily be spotted and questioned, if necessary, by tenants in and around the courtyard. The fact that many people pass by a given individual's open Dutch door during the course of the day provides an additional sense of personal security to tenants on the open corridors. In addition, if they became sick or were just lonely, the chance of contact with a passer-by has been enhanced by this design feature.

The corridors are of ample width for current uses and users, as are the elevators. The size of these areas—five-foot-wide corridors-is established by current standards for elderly housing. However, project management and residents have voiced some concern regarding their future adequacy when the current residents are older and may use wheelchairs, walkers or other devices. In addition, the necessity for all tenants to use at least short stretches of outdoor circulation space to reach apartments or elevators means exposure to wind and damp during the Bay Area's rainy season. Also, it is not known to what degree the open circulation system reduces desired levels of privacy for individuals on the open courtyard, and whether increased social contacts for these tenants compensates for the increased noise and visual intrusion they experience.

Projects A and B link their interior spaces and activities primarily with lobby-oriented elevators and with double-loaded corridors. Outdoor spaces are external to both projects. At Project A there are no front grounds and no visible circulation links to the rear minipark; minipark users may reach it by exiting through the front of the building or a basement side door and then walking through the sheltered garage/driveway to the back. At Project B, a visitor approaches the building via a small sidestreet, passes through the parking lot, walks over a small bridge, and up the circular driveway to the front door. Extensive grounds, which include a sunken minipark, are located on both sides of the driveway.

At Projects A and B, the circulation systems do not bring tenants in contact with each other unless they meet by chance in the elevator or in the corridors on the various floors. Activity areas which adjoin one another are not specifically linked by the circulation system, but are simply located in proximity. Hence, the circulation system per se does not lead to flow or spillover between activity spaces, as it does at Martinelli House. And finally, a circulation system in which tenants must take one route to a lounge and another to a minipark may mean that they have to make several trips to reach activities/spaces, which are reached at Martinelli on one route/trip. Hence, the circulation system may lead to less use of well-designed, but inconveniently situated, spaces.

Residents at Projects A and B have not personalized their interior corridors although management has placed furniture in alcoves near the elevators in Project B. Tenants apparently do not regard these areas as opportunities for personal expression or territorial expansion as they do at Martinelli House. Primarily, this is because these areas are artificially lit and will not support plant life. Additionally, the corridors are not inviting because of the darkly colored walls and paintings which have been provided by the management. The initiative for individual decoration has been discouraged in these settings.

There are some potential advantages to these traditional circulation systems. First, there seems to be a high degree of corridor/floor spirit with a "buddy system" between tenants for security/health reasons.

Neighboring is more corridor-confined and less project-wide and perhaps it is more intimate and intense than it is at Martinelli House. There is also more individual privacy on the interior corridors at Projects A and B, and some tenants may value this highly.

#### Finding: 8 factors influence use of outdoor spaces by the elderly

An inviting place in the sun—or the shade on hot days-is particularly appreciated in California where the weather is mild much of the vear. Often, elderly housing projects are located in neighborhoods or communities where there are miniparks, pathways and gardens. Some elderly people enjoy a short walk or bus ride to a setting away from their home environment, but most spend a good deal of time at home and prefer to relax outdoors in a place where they feel safe and among friends. Many elderly housing projects are located on small sites with little open space. It is, therefore, most important that outdoor spaces be well-designed and conveniently located at such projects to maximize their potential benefit to residents.

Based on research at the three housing projects, and extensive readings in the fields of gerontology and open space design, approximately eight key factors have been identified which appear to influence the extent to which the elderly use and enjoy outdoor spaces: 1) Options/variety in types of spaces, their potential uses, their location, and degree of shelter afforded; 2) Proximity to main circulation routes and to common activity spaces; 3) Contact with visual/aural pleasures of the natural world; 4) Variety of tenant exercise and recreational activities; 5) Opportunities for personalization and territorial expansion; 6) Security and freedom from intrusion of outsiders; 7) Location within hearing/sight of other tenants; and 8) Accessibility to individual apartments.

Tenants at Martinelli House who have access to private areas indicated that they appreciate the chance to sit alone and to personalize these spaces with tables, chairs and household items. Uses of the outdoor spaces for sitting and relaxation were primarily influenced by climatic conditions: when the sun was directly on the balconies and patios, tenants did not use them because of their eyes and skin being sensitive to extremes of heat and brightness. When these private spaces were cool/cold in late afternoon, they were not used for similar reasons. These private spaces were also used to accommodate the placement of some personal objects. and household tasks such as shaking out dustmops were also performed on them.

The ground floor patio (photo) is most frequently used during the afternoon when people return from shopping or community activities. Residents often check for mail, rest packages on the patio tables, obtain a cup of coffee from the the common room, and sit talking with friends. The patio also is occupied before and immediately after the mail arrives. The success of the patio is due to its central location at an activity hub or "crossroads" and the sheltered and functional



space afforded by its tables and umbrellas. More variety in seating options, and perhaps additional shaded areas to use on hot mornings might lead to increased patio use.

The upper-level patio is primarily used as a resting point between the two short flights of stairs from the first to the second floor, but as the residents have begun to add plants, people are strolling by to look at them. This level is quite brightly illuminated throughout the day and probably wouldn't be used for sitting/socializing unless shelter were provided. Since a diversity of concrete patios and terraces is provided throughout the project, the upper-level patio might draw more users if it offered a visual contrast to the rest of the building or an opportunity for activity not occurring elsewhere.

The various terraces and patios on the second and third floors have not been used exactly as the architects had anticipated. Those which are located between two apartments (rather than on the "neutral" courtyard side of the corridor) or in front of an apartment have not been used as common spaces. Because of their placement, those residents living adjacent ot the space have highly personalized them with lawn furniture, plants and other personal possessions. One resident spoke of this area as "my deck" and how other residents were "invited" to visit there on special occasions.

### Finding: variety should be provided in open spaces, including private areas

When considered as a system, Martinelli House's open spaces offer variety in the types of settings they provide and in their location. However, in light of the desire of many residents for access to quiet, private places, it is recommended that future designs include more private or semi-private secluded spaces. These could be provided by eliminating some of the numerous terraces and the upper level patio. There are some kinds of activities/spaces that are not provided, including: 1) Recreational facilities or more active "doing" spaces; 2) Focal points to observe such as fountains or bird feeders; 3) An area designated for more ambitious gardening; and 4) A garden-like setting with trees to stroll through.

Both Projects A and B have provided some outdoor spaces, although their variety is more limited than at Martinelli House. Both Projects A and B have private balconies, which are attached directly to apartment units. Tenants use these balconies primarily for gardening and occasionally for observing the busy street life. Residents were rarely observed sitting on the balconies and this may be due to the extremities of heat/cold and lack of privacy. Tenants do, however, place a high value on balconies; one resident related, "I couldn't stand to live in an apartment without one; I'd feel all cooped up." An unfortunate design aspect of some balconies, however is that they are accessible to intruders equipped with ladders. One problem does appear to be common in all projects with private balconies/outdoor spaces. When some residents have such spaces and others do not, there may be some degree of jealousy unless those apartments without the spaces offer some additional amenities such as a sleeping alcove, a sit-in kitchen or a superior view.

The common outdoor spaces at Projects A and B potentially lend themselves to varied types of use, particularly the extensive and attractively landscaped grounds at Project B. They are not, however, being extensively used, due to their location away from activities/circulation routes and due to limited facilties/amenities, aside from a few benches. When residents were asked what value the outdoor spaces had for them, there was general agreement that the opportunity to see trees, flowers, and animal life was a special pleasure; contact with the natural world was gained by walking through the grounds or observing the park from the units.

At Project A the minipark is not directly connected to the main building by any circulation path, and its only connection to an activity space is its adjacency to a small parking lot—and this proximity may actually reduce its use. At Project B the landscaped grounds are connected to the pedestrian/auto approach routes, but the designated seating areas are not linked to pedestrian circulation paths and are clearly separated from activity hub spaces.

Martinelli House does not offer an opportunity for a variety of tenant exercise experiences, but its open corridor system does provide a chance for frequent walking as part of the everyday routine. Project A provides the least opportunity for exercise only a short walk to the minipark. Project B provides, and virtually requires, the most physical effort since many tenants walk to and from the nearby shopping area on an almost daily basis. It, too, fails to provide a variety of exercise options for people of different levels of physical competency. The extent of the grounds, the steep slope of the driveway, and the location of the park down a flight of stairs may, in fact, be too much physical exertion for some of the older tenants and discourage their use of the outdoors.

Unlike Martinelli House's public display of tenant plants and decorations, Projects A and B offer opportunities for personalizing space only on private balconies and patios. This, then, partially explains the high premium placed on having such spaces, and the jealousy felt by those who do not. Rooftop common open spaces do not seem to answer this need; tenants at Project B who have such a space rarely use it because it is windy and remote.

The interior courtyard system at Martinelli House is designed for maximum security without the psychological intrusion of high fences and obvious barriers between it and the surrounding neighborhood. At Project A. there is a possibility for outsiders to enter the minipark from either the street or by climbing down a gully at the rear. The project's orientation toward a busy street does provide visual exposure to all passers-by in addition to the surveillance provided by project residents; hence security is only a minor factor in the under-utilization of its outdoor space. At Project B, however, the potential level of visual supervision is limited because the grounds are open on many sides to penetration by pedestrians, cars, bicycle riders and children on skate boards. Elderly people not only worry about personal safety, but are easily annoyed by random intrusions and the boisterous behavior of young people. Since the means to control the access of the outside world to portions of the project have not been provided, both a security and a privacy problem have been created.

Martinelli House's interior courtyard approach is not the only solution to security issues, though it is a successful one. Project A might have included a partially walled outdoor terrace directly off the lounge, or could have divided the building into two low-rise elements, facing each other on either side of the creek. Whatever approach, designers should carefully study the traditional neighborhood use of a project's grounds before they plan its open spaces and should be aware of the opportunities for intrusion that specific elements of their design may create.

### Finding: management attitudes, location are keys to success of a community room

The function of a community room has often gone unquestioned by designers of elderly housing. It has been assumed that elderly people have a good deal of free time, and that they enjoy a place to gather. Most designs for seniors' housing, therefore, have included such a space, calling it a "community room," "lounge" or "recreation room." This study found somewhat less use of community rooms than might have been expected, particularly in the evenings. Discussions with the tenants and project managers brought out some of the possible reasons.

#### OFFICE MANAGEMENT continued from page 75

Elderly tenants participate in local community groups and activities. When they return home after a day or afternoon out, they are often looking forward to the privacy of their individual apartments, rather than to more social contact. Once the "public" self has been put aside, tenants do not like to go down to the lounge unless there is a particular event or occasion of interest.

Tenants and management prefer not to have a television in the community room because it disrupts other activities and may lead to disagreement over program choice. However, tenants do spend a large proportion of their in-project time watching television and this can only be done in individual apartments.

These constraints and problems notwithstanding, community rooms or lounges are seen as an integral part of the activity system in an elderly housing project. Since not all tenants are interested in either casual socializing or planned community events, there are some locational, design and management factors which appear to contribute to the success of community rooms:

Location close to, but not necessarily on, circulation routes and activity hubs.

Provision of furniture which is comfortable (but not soft), home-like and functional (tables for cards, coffee, and packages), and facilities for making coffee/tea and cooking for special occasions.

Opportunities to enjoy views of nature, day-to-day activities, and streetlife. Lounges sbould be located "where the action is," giving tenants a "window on the world."

Management's attitude toward community room use, including discouragement/encouragement of daytime/evening drop-in use; planning of events such as pot-luck suppers, Thanksgiving dinners, bingo night, slide shows, etc., and the manager's presence in and use of the lounge.

Variety in lounges/recreation rooms: there might be a small area for reading and quiet conversations, a larger, more general purpose space for social mingling; and a workspace for crafts.

As mentioned previously, the community room at Martinelli House is located off of the central courtyard and can be entered on three sides. It is a large, spacious, brightly-lit room with furnishings which are of livingroom quality. There is a roomy kitchen area to the rear of the room with ample space for cooking and warming food. It is sometimes used by various churches and charities for meetings and events unrelated to Martinelli House. These uses are supported by tenants except when use by outsiders is constant and, therefore, disruptive.

Project A has a recreation room located in its basement adjoining the laundry room. The room is located partially below-grade and as a result it is poorly lit and offers no. views of street life. Linoleum floors, the prominence of a card table and the basement location give it a "rumpus room" feeling, and its primary use has come to be for games, monthly slide shows and holiday parties. Use of the room on special occasions only is in

contrast to the daily, drop-in casual socializing found in the community room at Martinelli House. The under-utilization of this room at Project A is primarily due to its remote location away from almost all other project activities, entrances, and circulation routes. Management policies such as not making coffee available, keeping lights off and clearing the room after scheduled events have led to the impression that casual lingering and spontaneous use are not appropriate.

The lounge at Project B is better located than the lounge at Project A in that it is, like Martinelli House, visually and physically connected with the entry/elevator/mail area. Thus, opportunities for unplanned visits to the room are greatly increased. The furniture, while not particularly attractive, is functional and comfortable and a window at one end permits a view of the landscaped grounds.

In spite of the central location of the lounge and adequate furnishings, it is not well utilized in terms of the number of users and types of uses. A core group of from approximately four to six women gather here regularly each day, and about 20 per cent of the residents attend regularly scheduled bingo games, tenant meetings and birthday parties. Although management has not provided coffee or other attractions as at Martinelli House, tenants are encouraged to use the room as they desire. Possibly, the under-use is due to the age of the project's tenants who, generally speaking, are somewhat older than those at Martinelli House.

### Additional design issues: apartment layout, changing tenant profile

There are some issues which have not been explored during the course of this study, but which are relevant to the general topic of the design of housing for the elderly. The first such area is the design of individual apartments. Little time was spent talking about private spaces, yet certain issues were raised at all three projects with some insistence. The first such issue emerges from the fact that approximately 80 per cent of the residents of these projects are women, and that women of this age group are about four inches shorter than young women today. For this reason, kitchen shelves, cabinets, stoves, and various bathroom fixtures should be placed with both this height factor and with the physical limitations (back problems in stooping, etc.) of older women in mind. Second, many people come to elderly housing projects from single-family homes or from one- or twobedroom apartments. Although they are good-natured about their reduced space, attention should be given to creating some spatial differentiation in studio apartments between living room/social areas and sleeping space/private areas. Some residents felt this would be especially desirable if they were sick or simply in need of a psychological change within their private living space. A sliding door or movable screen device in conjunction with additional square footage, if possible, would serve this purpose. Third, although people moving to seniors projects are prepared to reduce the amount of furni-

ture and belongings they have, there is a need to bring enough of their former lives with them to feel emotionally whole. Therefore, some storage space in addition to one clothes closet would be highly valued. Finally, there was expressed a need to strike a balance between apartments which are acoustically sealed-off and where no sound from neighbors intrudes—since this does not permit informal monitoring of a neighbor's well-being—and apartments where noise is a constant irritant.

The importance of the manager in creating an ambience of friendly and open living cannot be over-emphasized. If the basic concept and the site plan/design features of a project are deficient in important ways, then even an enthusiastic manager would be unable to generate community spirit. Some locational drawbacks such as the community room and minipark at Project A, for example, present major limitations. When lifestyles and special physical needs of the elderly have been considered in the design of a housing project, a proportion of the successful utilization of the various facilities and common spaces can often be credited to the policies and personality of the manager. In the course of the interviews with tenants at all three projects, typically someone would reply to the question of what they liked best about life at the project, "Oh, the best thing is how wonderful a person the manager is; she's just terrific and really cares about us!"

Finally, there is the sensitive issue of what happens as tenants get older. There are three kinds of changes that can affect the use and enjoyment of seniors' projects: 1) Physical and emotional changes that happen when tenants move into their eighties; 2) Changes in the original tenant group as residents move for health or other reasons and are replaced by new tenants, who might differ from them in ways not anticipated by the designers; and 3) Changes in the surrounding neighborhood (the kinds of stores, the price range of their goods, the number and types of social programs for seniors, etc.) which may make tenants more or less dependent on in-project services and social programs.

Designers have been most concerned with issues relating to the changes in physical capacities as tenants age and what this may suggest in terms of individual apartment, corridor-circulation system and common rooms' designs to accommodate wheelchairs and other devices. These are important guestions, as is the whole issue of whether projects such as Martinelli House and Projects A and B should be designed for maximum flexibility or whether tenants whose abilities to care for themselves diminish appreciably should be required to move to a setting requiring less independence. There are, however, many other kinds of subtle changes that may occur even for a relatively healthy group of tenants as they lose friends in the project through death and relocation, and as they themselves become older. Designers need to consider broad issues of change in lifestyle and physical needs when planning housing for the elderly.

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Above: San Mateo County Social Services Building, Palo Alto, CA James W. Foug & Associates, Architect.

Left: Academic facility for Rush University at Rush-Presbyterian-St. Luke's Medical Center in Chicago, Illinois. Architects-Engineers: Metz, Train, Olson & Youngren, Inc.



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Cross-sectional view shows how patient rooms are separated from diagnostic areas by a building-high atrium.

Owners: Thomas Jefferson University, Philadelphia, Pa. Architect: H2/L2 Architects/Planners, Philadelphia, Pa. Consulting Engineers: D'Ambly Inc., Philadelphia, Pa. Prime Contractor for Structural Steel: Lehigh Structural Steel Co., Allentown, Pa. Sub-Contractor for Erection: Cornell & Company, Philadelphia, Pa. General Contractor: Hospital Constructors, A Joint Venture of R. M. Shoemaker Co. and Irwin & Leighton, Inc., Philadelphia, Pa.

(ABOVE CENTER) The 750,000-sq-ft Clinical Teaching Facility is essentially a series of smaller, administratively autonomous hospitals stacked vertically within one building.

(ABOVE LEFT) All ductwork, plumbing, electrical distribution, and large pieces of equipment are arranged within the interstitial spaces to permit future revisions to rooms without disrupting adjacent spaces.

(LEFT) A building-high atrium separates the patient care areas from the diagnostic and treatment areas. A dining area, located on the deck of the atrium, serves visitors, students, and staff. Glass-enclosed elevator lobbies overlook the center court.

(ABOVE RIGHT) A steel-framed bridge, utilizing curved beams to accommodate differences in floor levels, connects the new building with the existing hospital.



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### A SECTION THROUGH THE THINKING OF GWATHMEY SIEGEL ARCHITECTS



Otto Baitz

Up on the seventh floor of Carnegie Hall, out of the old elevator, one comes upon a smudged-up wall, a door, and (next to the door) the faded, flaking outline of what used to be raised letters reading: Gwathmey Siegel Architects.

Knowing that one of the toughest, most sensitive teams in the field is working in there, one sort of wonders where the letters went, but in any case, the scruffiness of it all, giving way to offices in which even the clutter is immaculate, is an aptly played-down introduction to Charles Gwathmey and Robert Siegel who, while standing for style in its most polished, permanent sense, do not stand on ceremony.

Gwathmey—first in practice with Richard Henderson (from 1966), then with both Henderson and his high school chum Siegel very briefly, and finally with Siegel alone (from 1969)—was one of the "New York Five." The other four were Peter Eisenman, Michael Graves, John Hejduk, and Richard Meier. This group was proof, after one of Andy Warhol's quips, that in the future every architectural movement will be famous for five minutes.

Yet when *Five Architects* (that book!) was brought out in 1973, several town criers of the profession yelled out, across the land, that a "school" had formed, which it had not, since all the "school" had in common, other than a syntactical crush on the early Corbusian *oeuvre*, was axonometrics to grind.

"Let's put away the Five," says Gwathmey, glowering.

Well enough. But the three buildings we are here to discuss, while taking a section through the thinking of Gwathmey and Siegel themselves, also afford a useful perspective on architectural thinking generally over the last few years—years that have seen diversity of style described as the new revolution, years that have seen the lamps of history relit, and years that have seen that good old modern architecture wandering in and out of our lines of sight like a gregarious wraith, wanting to be of some assistance.

Here are the three buildings we are here to discuss: a large, complex headquarters in New Jersey for Thomas & Betts (above, overleaf); a dune house on Long Island (page 96); and the dormitory and dining hall of the New York State College at Purchase (page 100). The headquarters and the house are new; the buildings at Purchase were completed in 1972.

There is an all-around facility at work here, at many levels of function and scale, along with a respect for materials and for the ways materials are put together. These architects obviously like to *build*. They do not carry their intellectuality as conspicuously as some of the other architects they have been identified with, but then it must be said that some of those do not seem quite as convinced that *building* is one of the two, three, or four most important things about the art of architecture—from the semiotic seminarians, with their Jesuit rigor, who behave as though a building should not be built at all unless it is an uncompromised fulfillment of its own theoretical terms, to those who, sacking the Renaissance for clues to stylistic diversity, have incited a mob of screaming Borromini's.

Whether the Corbusian oeuvre is one's cup of tea or not, Gwathmey and Siegel, of all those who have acknowledged they have a crush on it, have demonstrated the most consistent understanding of the technical and environmental circumstances of architecture. Thinking and doing are on an equal footing. They are totally convinced of what they are doing, but they are also guestioning - pushing and pulling at the boundaries of what they have done, dicing Corb's cubes in many directions, and on as important a level, the cubes of old New England as well. They are not precious. They risk their antecedents (and themselves) amidst the practical facts and rigorous physicality of the world. The buildings generally-the ones here-did not "want" to be concrete or stucco, instead of granite-aggregate panels (the headquarters), cedar (the dune house), or brick (the dormitory and dining hall at Purchase). The largerscale buildings did not "want" to be jackedup versions of smaller-scale obeisance to the Villa Savoye or the Villa Stein.

"What worries me about architecture today is that so *much* is so temporary."

Gwathmey is unconsciously thumping his fingers on a book about Palladio; a sheaf of drawings of a house for developer Gerald D. Hines is next to it. "The history of architecture isn't about that! The history of architecture is about a lintel being a lintel, and about material and form being inherent to each other. Now a lintel is often a cardboard-thin image of a lintel; now material and form often mock each other; now you're back to pattern books, to pictorial representation. I try to be possessionless in that I stay away from ideas that are so strict and abstract that unless they're built full-blown they must lose. To be possessionless, you purge yourself recurrently; you negotiate with yourself; you keep working out, hoping you'll always be able to feel the ache of muscles you didn't know you had. And you damned well better put yourself in the company of a partner like Bob Siegel-it was the High School of Music and Art, in New York City, where we met-who will be a real critic, someone who'll tell you you're full of...well, you know: keep you from getting the wrong kinds of possessions."

While Corb is obviously a major reference for Gwathmey and Siegel, it is such a renegotiated inspiration. "Corb still works for me," says Gwathmey. "That perception of space, the richness of the intersections, the clarity and the complexity, the articulation that is systematic but never stultifying, and that is never whimsical and yet has romance. Furthermore, though it is not so outwardly evident, Wright works for me. Corb and Wright. Both of them understood section; both of them understood incidence, horizontally and vertically; both of them understood physical and sensory movement as a material consideration. With Wright, for example: You take Unity Temple, the Robie House, the Larkin Building, Johnson Wax, the Taliesins; no one handles incidence quite so richly. And because structure was in the service of such an understanding, Wright's structure had an integrity and presence far beyond those associated with mere technical innovation.

"Corb and Wright. They are reasons why I have this passion for permanence. For style, sure, but also for soundness. And I had to find out what that meant for myself. The Cedar House, the one for my parents that got all the attention (that's back to 1966 now)the Cedar House, I built it myself with the help of a couple guys from Brooklyn who still do work for Bob and me. Is it Corb? No one's gonna let me say it isn't, and I wouldn't, but all I know is that I researched the hell out of cedar; it's a really built house, every last board of it. And maybe, as some have pointed out, it's really quite an American house, too, what with its woodness and lightness and the roof slants and its plainspokeness. All right, Corb works for me formally; that is an attitude I have maintained, but also one that I have constantly reinterpreted, looked at from different vantage points, and poked at - just as a structural grid is given support by subtle but strategically located distortions. There is a difference between a formal attitude and formalism."

his The Thomas & Betts af of d D. itecitecbout skylit galleries



SECOND FLOOR





The headquarters for Thomas & Betts, a New Jersey maker of electrical components, was "set up" conceptually, say the architects, by three principal concerns that became the design issue for them: public space, circulatory elements connecting the public spaces and interweaving the 150,000square-foot building, and the introduction and celebration of natural light throughout. Accordingly, the building is articulated in three principal sections: managerial and general office space is on two levels, with research laboratories on one and a half levels: a skylit gallery, separating the offices and the labs, running the length of the building; and a lobby on one end of the building (opposite, top) and a dining area on the other end (opposite, below) that are joined by the gallery. Precast wall panels with granite aggregate are used outside, giving texture and tautness.





#### GWATHMEY SIEGEL

An example of this formal attitude working with its sleeves rolled up is the Thomas & Betts job in Raritan, New Jersey—the most recent pick of the crop of office buildings, classy and economical at the same time, that Gwathmey Siegel has done in recent years (see RECORD, December 1977, page 108). The firm's facility with scale, at many levels, is dramatized here, because although the architects approached the design of this 150,000square-foot building much as they do a house, this is not to say that it (or any of their larger buildings) looks like a distended cubistic composition. "Just like the houses," says Gwathmey, "we look for a clear and convenient arrangement of spaces, and those spaces for circulation (which we think are as important as rooms) organize the whole thing."

Thomas & Betts had already worked out a guaranteed lump-sum price under a designbuild contract, with J.L. Williams & Co., an investment builder in Dallas, when Gwathmey Siegel came aboard. Now this business of "designing to suit," in the no-nonsense parlance of the industry, would drive most high-style firms up a wall (if they ever got the chance to be so driven). But Gwathmey, while pulling no punches in making design suggestions, is eloquent and persuasive in his fashion. And Siegel is an absolute genius especially, on these larger corporate, speculative, or institutional jobs, in directing such punches in the general direction of making Gwathmey's suggestions realizable. So what these two have been able to accomplish, even in the rawer speculative market, and certainly here at Thomas & Betts, amounts to a lot more than just souping up prepackaged specifications.

Three basic elements were braided together with the office and research precincts—public space, including a lobby on one end of the building and a dining area on the other end; circulation space; and light, the matter of letting it in, letting it loose. "You let the thing organize itself," says Gwathmey. "Once you've got the vitals clear, once you've got what is priority, you get a richness by allowing the thing to do that. And this organization *is* circulation, which is about orientation. In architecture, it's not just room; it's about moving on through, physically and psychologically."

Moving on through Thomas & Betts, there is a central gallery rising up between a two-level section containing managerial and office space and a one-and-a-half-level section containing research laboratories. This gallery also connects the lobby (shown at the right)—it has a mural by Richard Shepard and Samina Quraeshi-with the dining hallwhich has a mural by Charles Nesbit. Having the gallery extend into these public areas (it glistens over the lobby like a greenhouse) was Gwathmey Siegel's principal concept, given a far less eventful connector suggested by that design-build "package." They further suggested using quarry tile in these public areas, vinyl wall covering, and some elegant pipe railings (most of which were treated as extras, thereby not affecting the lump-sum agreement). The physical, and one must add





Williams & Co.









Otto Baitz photos

### GWATHMEY SIEGEL

sensory, outcome of all this caring (and at times heavy consultation) is an architectural experience far richer than a study of the budget alone would ever suggest. The skylit gallery, splicing the spatial elements of the structure together, is utility at its light-stepping best; the stairways are as impeccably detailed as the executive suites. The juxtaposition of the two major sections of the building, edging the gallery opposite one another, is scaled just right.

From all around, the building shows Gwathmey Siegel's interest in composing rectilinear surfaces and volumes, weaving in and out with curvilinear ones. The tautness of the exterior is, if continuous and sweeping in its over-all effect, hardly featureless. The prefabricated insulated wall panels, of varying size, have a granite aggregate embedded in a cement matrix on a four-inch-thick asbestos board over metal studs. Depending on the light, it looks either like a pebbly enameled surface or a matte finish. While most of the materials and methods used at Thomas & Betts may be called conventional, the building has composure in the landscape, and an invigorating atmosphere inside-both of which reflect the architects' practicality as well as their creative convictions.

It is of course at the scale of the house, not the office building, that Gwathmey Siegel (and going back to Gwathmey's earliest association with Richard Henderson) has worked out those convictions most concentratedly.

"Much in the sense that Corb did, I see the house as an investigatory framework, and while making a house work for a particular, localized set of circumstances, you can resolve guestions of scale and organization that are applicable at many other levels, ' says Gwathmey. "See, beyond making a house work for itself (you do that naturally), you make it work in other ways, and again as in Corb, even the most rural house can have urban implications (something Wright certainly understood too)."

This recently completed house at Quogue, Long Island (shown at the right) is built on dunes that slope steeply from the north upward to the south. Its owners required two separate guest suites, each with its own kitchenette, bathroom, and direct access from the outside. In addition, the program called for two studies for the owners, plus a lot of deck and terrace space, a pool, and tennis courts. Not only did this present a complex challenge from the standpoint of separating the private and public areas of the house, but it also presented one from the standpoint of knowing where to hinge the hierarchies of sharing and solitude within.

The wood-framed house is clad with tongue-in-groove cedar siding; the interior surfaces are of laminated sheet rock; the floors are either carpeted or surfaced with quarry tile; the cabinetwork is of white oak and laminated plastic. Ever since the Cedar House (the one for his parents), Gwathmey has kept a special place in his psyche (not to b mention work) for this material, and here its ₹ handling and finishing are brought off with a technical attentiveness worthy of that passion శ్





This house on Long Island is the robustness of nature frankly expressed

Situated on a grassy dune that slopes north to south, this three-level house, reaching a long arm toward the sea, has the "mind's-eye" imagery of the early Corbusian work that Gwathmey Siegel venerate, but the building is nevertheless a frank expression of its own functional and locational circumstances. Tongue-andgroove cedar siding is fitted and finished with craftsmanly precision. Facing south, toward the sea, decks are arrayed and stacked in deep recesses (left), not only affording dramatic "cropped" views of the salty surrounds but also sheltering the larger areas of glass on that side of the house. Geiger Berger Associates was the structural engineer on this project; Thomas A. Polise, the mechanical engineer; and the contractor was Harold Reeve & Son.



#### GWATHMEY SIEGEL

he was describing for permanence.

The formal adventure, given the essential needs of the client, began with reconciling the organizational implications of the program with the site, the views, and not least of all, the movement of the sun. Gwathmey Siegel point out that this matter of "energy efficiency" everyone has been fretting over is really a matter of "architectonics," and what that means here is that there are roof extensions over the seaward southerly decks, protecting the major areas of glass, plus the use of insulated glass and, in all of the walls, soffits, and ceilings, full thick batt insulation. Not so incidentally of course, this solution to "energy efficiency" has effloresced great formal elegance and spatial interest while, all around, the rambling dunes have made themselves very much at home and the bracing views are very much at home inside. This is much more than the reification of some treasured Corbusian model; it is a solution to actual problems, but one engineered with a tenderness that is sensual; expressed with a directness that is seductive.

Driving up the dune from the road, toward the tennis courts, one starts hitting it off with this place, seeing two white cubes cozying up to one another. The ground level takes in the carport and one of the two guest suites. The pool with its terrace is on this landside as well, and the pool is slid slightly beneath the second-level overhang, and people are sitting around, soaking up serenity. Already, and to be repeated at several points on the other sides of the house, the "pure" volumes (imagery of those treasured models) have been chipped away at. Now one notices, just to the side of the pool, this stair going up. And it goes up to that second level where there is a second guest suite, housed in one of the "pure" volumes (one turns to the right). The main living, dining, and related residential elements are housed in the second, larger "pure" volume (except that looking on through the living area from the second-level entrance, one sees the deep overhangs beyond the glass toward the ocean and knows that many more than two dimensions have been measured in here). So one comes into the living room, turns around, and there is this other stair going up; in fact, the whole room is going up, grabbing hold of the third level and, as it goes up, the room is also flowing out of a tall window. This and other sheets of glass explode any sense of confinement. These stairs (there is another flight coming up from the ground level at this point as well as the one coming up from beside the pool) are Gwathmey's organizer and, as if to emphasize this practical fact, this stair up to the third level (where the master bedroom and the two studies are) is announced with a two-level-high pillar that houses a fireplace and, above the fireplace, a built-in television. At every level, the organization of the house is expressed with lucidity. The flow of space and the disposition of structural elements are tightly knit as are the inside and the outside of the house. The second-level kitchen-and-dining area and its windows are clearly expressed outside, and






As much as Gwathmey Siegel has learned from Le Corbusier, this house shows that they are not bound by the so-called pure, inviolable volumetric associated with his early work. Here the volumes frankly express the complex public and private functions they enfold; there is no shoe-horning of function in deference to some ideal model. The landside (below)-past a pool and, in the carport, a Porsche-gives a stair up to the living areas (right and below right); another stair (left) leads up to the master suite. These levels interweave and overlap, as the window patterns outside suggest (above).







#### GWATHMEY SIEGEL

the tall living room window generates a composition of smaller windows that clearly clue one into the relationship between the ground-level suite, the living room itself, and the third-level study. As already mentioned, there are deep overhangs on the southerly side, where the decks of the second and third levels are, but again, on the east facade (the side where the tall window is) these deep overhangs are alluded to by way of a large square punch-out in the side wall bracketing the overhang. This punch-out gives a "cropped" view of the study on the third level that sticks out over the far side of the secondlevel deck. The forms frankly express the functions they enfold; there is here, as in Gwathmey Siegel's work generally, no forced play of shapes and volumes as an incantation of some eternal "truth." The changes of height, the juxtapositioning of levels, the ways in which different parts of the house share themselves with all the other parts-all evoke "old modern" precedents-but there is no jerking of the head around as one vista or volume takes hold of one's attention and another lets go, and there is a distinct feeling that the place is a remembrance, but of things present.

The architectural historian and critic Kenneth Frampton wrote of an earlier period in architecture: "Pure reduced structure became the paradigm of architecture, and light came to be regarded as a metaphor for the illumination of reason itself." Beautifully put! That may have been the "self-evident lucidity" of one of the 18th century's ideas of architectural expression, which Frampton was addressing (and that of the early 20th century's?) But the lucidity of this house, the lucidity of this firm's approach, while "selfevident," need not illuminate more than the multiple dimensions of this specific situation in time to be significant.

The whole proposition about purity, the prismatic purity of early Corb, his philosophical attitude toward light-both are interpreted freshly in these house designs. Certainly this one is a microcosm of one man's development, a place to think about how circumspectly Gwathmey has reconnoitered Le Corbusier in the process of reasoning out the nature of Corb's persisting radiance. "I could never build my parents' house again," says Gwathmey, "and I won't be able to build this house again. Art is not about what you believed fifteen years ago or five years ago; it's about what you believe today; it's about what builds up in you, and around you, moment by moment. But it is this very moment that matters most, and if you get that straight, then you can keep a judicious distance from references like Corb at the same time that you can draw his most lasting artistic value to you exactly to scale." This house is such a judicious distance. . . exactly to scale.

Gwathmey Siegel's facility with scale, the firm's agility amidst practical constraints, its love of materials, and its creativity with the elements of circulation and orientation in architecture, got a thorough schooling in the late 1960s and early 1970s in the course of



The dormitory and dining hall of the New York State College at Purchase mediates between the axial formality of a mall and a flanking meadow

The dormitory and dining hall of the New York State College at Purchase is a U-shaped composition that mediates between the strong axiality of the campus master plan by Edward Larrabee Barnes and a meadow flanking the axis. Transcending the unimaginative program of the dormitory experts, the architects-Gwathmey, Henderson & Siegel-evolved a formally rich, budgetarily practical, all-brick structure (not brick over steel). Stair wells, room clusters, and rounded all-purpose spaces are pushed out from the main masses of the dormitory, creating visual complexity and interest (right). Set asymmetrically into the "outdoor room" created by the composition, and facing out toward the meadow, is the multi-leveled dining hall, with other kinds of commons activity (left and below), its robust triangularity dramatizing the transition from the main level of the dorm complex to the meadow. This transition is firmly but quietly indicated all around the area in the form of a berm. The project architect for this job was Andrew L. Pettit. Geiger Berger Associates was the structural engineer; William Kaplan, the mechanical engineer; Peter Rolland was the landscape architect; the contractor was los L. Muscarelle.









#### **GWATHMEY SIEGEL**

their doing the 800-student dormitory and the dining hall of the New York State College at Purchase—the master plan of the College having been done by Edward Larrabee Barnes. This \$13,000,000 facility was the firm's first big project, and both technically and contextually, the architects had some "toughing it through" to do. Both men feel it is a strong solution, and looking back on it now is useful in a number of respects.

First of all, Mr. Barnes' spatial mandate was a strong classical axis flanked with buildings by other architects (four to either side), this axis stepping down (at both ends) into the countryside. His material mandate as far as the buildings were concerned was brick and brown window frames. His historical mandate, if one may call it that, was a very scholarly, gentlemanly respect for the University of Virginia, although it is clear that Mr. Barnes did not literally mean that he was sniping shoots off of Mr. Jefferson's adroit axiality and planting them in such very different soil. There is at Purchase a more than casual allusion to the Jeffersonian precedent, but that is all (besides which Jefferson handled the ends of his axis, that great lawn, very differently where it intersects with the minor axis and the famous arcades latch onto the approachways of the Rotunda; besides which, too, Jefferson smartly got some sound advice about resolving those intersections from the likes of Dr. William Thornton and Benjamin Henry Latrobe. At any rate, whereas the buildings on some recent college and university campuses remind one of Emily Dickinson's line about "menagerie to me my neighbors be," the Purchase plan, spatially and materially, is a proposition about order, unity, and, within them, sparing innovation in the interests of classical calm. The architects-Gwathmey, Henderson & Siegel at the time-had to address that proposition. Even though the facility was not one of those eight buildings edging the main mall, its site beyond the end of the mall, diagonal across its cross axis, still flanked the major axis of the campus; its linearity and directionality had to be respected.

Accordingly, the dormitory gives the axis a firm edge, acknowledging the central design discipline of the campus plan, but on the other side an exquisitely informal kind of "formality" takes over as the composition of the facility ranges out, perpendicular to the axis, into a meadow and makes of it a kind of outdoor room. The architecture thus mediates between formality and informality, between an urban and a rural ideal, and (literally) between the datum of the axis side, flowing in at the corners of the U-shaped composition-between this datum and the meadow, with the mediating element being a terrace that steps down in a berm. Dramatizing this transition, and situated next to the terrace and berm, sticking out into the meadow, is the dining hall and commons-its triangularity creating a prow-shaped contrasting element set asymmetrically between the ranges of dormitory on either side. It was meant to be a round-the-clock venue for students, more than an eating place, and it has turned out that way, being one of the more popular, personable interiors on the entire campus (according to a broad sampling of students, who should know). This isolated but geometric object, reached through an underground passage, proffers a terrace to the meadow, from which the play of levels, visually and in terms of actually moving around, is very dignified and yet exciting.

As the architects have emphasized with respect to their other work, this architecture is "about circulation," and there is a lot of it—vertically, in the form of stair towers, and horizontally, obviously in the form of corridors and such, but less obviously, from outside in an elaborate latticework of spaces and connectors beneath the terrace level. Although the facility was designed back in the days when dormitory experts deified doubleloaded corridors, the planning approach ensured an unusually wide variety of dormitory rooms. The idea was to house 20 students in each basic plan unit (of which there are 40), and within each unit there are single and double rooms on the corridor, plus suites for four, six, and eight, and a lounge.

The project was also interesting because (in contrast to the other campus buildings, which are basically brick veneer) this facility is a *real* brick bearing-wall structure. The architects set out to do this, not to "paint" brick onto a hidden steel frame. The basic bays are 24 feet, and prefabricated lintels span these distances (one bay representing two room widths). The bricks are the finished surfaces inside and out, the lintels supplying the texture of a soldier course along the facades in addition to, of course, structural integrity. Back when "systems" were all the rage, this design was developed as a nonfussy, forthright, doable solution.

Siegel says, "If the campus were hit by a bomb, the dorm is the only building that would look like a ruin." Which may be carrying the firm's passion for permanence a little far, but the point is made: the architects were given a program without richness, complexity, or the potential for engendering an environment of interest; the architects reprogrammed the program and created a building at once commonsensical and classical, at once clearly organized and compelling in its material and spatial texture-a building that reflects a larger framework physically and philosophically but that also showers its own radiance amidst the daily ordeals of use. -William Marlin.



## LOWELL NATIONAL CULTURAL PARK



That place where the Merrimack River dips closest to Boston, where the River tumbles down 30 feet of falls and rapids, is the site of the nation's newest national park. It is Lowell, Massachusetts and what has been preserved here is not a virgin forest or a range of snow-clad peaks. It is the sights and sounds of America's industrial cradle: the barge canals, steam whistles, old textile mills, the looms, clock towers, and company boarding houses that speak so eloquently of an earlier, proto-industrial America. To many Americans, these remnants could not be called beautiful, for they evoke images of a lifestyle many say we are well rid of, but that in a sense is beside the point. Lowell's cultural park locks a chapter of the American experience into place and serves as an important and interesting educational tool to those who wish to discover how we came to be the kind of people we are.

Planned by The Lowell Team (a joint venture of David A. Crane and Partners, Gelardin/Bruner/Cott and Michael Sand and Associates), Lowell's National Historical Park is the first facility of its kind, but it will almost certainly not be the last. —*Barclay Gordon* 



Commonwealth of Massachusetts. Within this inear mass, right at the edge of the Merrimack Canal, the Mack Building has been completely renovated. The story it now tells is the story of the city's elaborate and intricate system of canals, canals that were once he life's blood of Lowell industry, carrying aw materials and finished goods to markets around the region. Nearby is the old Wentworth Building now under reconstruction. Keyed to the needs of modern Lowell, it will offer, when complete, new commercial space at street level and housing above. Several structures have been or are being converted to housing the elderly (photo 10).

The outlying districts of the city are no less interesting. A canal tour takes the visitor past the Francis Gate area (photo 5) which has been completely restored to provide a significant exhibition of 19th century hydropower and includes the original lock mechanisms that protected the city from flooding and allowed barges to bypass the Pawtucket Falls. Not far away is the Northern Canal Walk where early Lowell mill girls promenaded after church on Sunday. At the Lowell Museum, nearby, visitors can watch an early power loom in operation—and may shudder at the noise it generates.

What emerges from these and the other exhibits is a particularly vivid portrait of life in early industrial New England. But this is not a "northern Williamsburg" in any sense, for old and new are intermingled and the two cities are made mutually reinforcing. Much about the present city can be inferred from the





past-its diverse ethnic composition, for example-and the re-establishment of the past city, or parts of it, will revitalize the new Lowell by attracting new uses, new capital, new people.

Lowell's cultural park, or that part of it that now exists, could only be accomplished through the closest cooperation between Federal, state and local agencies. Each has made-and continues to make-an important contribution toward development. In the text piece that concludes this coverage,

Dennis Frenchman and Jonathan Lane (Lane/Frenchman, Inc.), architects who have been intimately involved in the Lowell project from the start explain the nature of this cooperation in more detail. They also discuss what conditions must be present before a cultural park can even be contemplated. Finally, they look ahead to the future of cultural parks at a time when more and more Americans are recognizing the importance of preserving their past and using it-as at Lowell-to enrich the present.



John Rogers Flather



In an era of widening intere in the preservation of our p the lessons of Lowell seem to have broad applications in many placesin New York State, for insta

#### **1 KINGSTON**

10

The proposed park at Kingston would focus on the historic district of 19th century structures near the Delaware and Hudson Canal Terminus. Kingston in its earliest days was the state capital.

#### **2 SACKETT'S HARBOR**

A small town on the shores of Lake Ontario, it was settled as a naval depot to secure the northern boundary of the United States shortly after American independence. Its early history and later development as a ship building center make it a prospect for consideration as a cultural park.

#### **3 SENECA FALLS**

Located in the Mohawk Valley, Seneca Falls bases its proposal for a cultural park on the theme of women's rights. In addition to the Women's Hall of Fame presently being established, the National Park Service is contemplating the creation of a visitors' center in the Elizabeth Katy Stanton house.

#### **4 UTICA**

This city's potential as a cultural park centers around Bagg's Square, the location of the restored Union Station. Service on the Adirondack Railway will be restored to furnish transportation from central New York to the 1980 Winter Olympics site in Lake Placid.

#### **5 HUDSON MOHAWK**

This would be a regional park with points of historical interest in several communities that are grouped around the confluence of the Hudson River, Mohawk River, and old Erie Canal. Included in the park would be the site of the first Shaker settlement in the United States, the old Burden Iron Works, and the remains of an old Revolutionary fort.

Studies, roughly modeled on the Lowell prototype, are now underway for the Office of Parks and Recreation, State of New York. Phase I of this project has involved the inventory and identification of locations in New York State that might qualify for development as cultural parks.

Of the many such sites now under consideration, several (selected almost at random) are shown in diagrammatic form at right. Like Lowell, each has an important physical heritage largely intact. But for consideration as a cultural park, historical icons are not enough.

To qualify for inclusion in the State's proposed system, a number of other conditions must be met as well. Each area must have a physical coherence, a means by which a park plan could be implemented, and a strategy for interpreting its heritage to both residents and flocks of visitors. The potential park should also offer some recreational options, some possibilities for revitalizing the local economy and—perhaps most important of all-each park must contribute without obvious redundancy to the larger composite of a statewide system.

Phase II will involve more detailed study and the selection of the individual sites. Funds for study and development will be provided by Federal grants, local funds, and newly allocated monies from New York State's budget.

About two years are set aside to complete this phase in the development of the State's cultural park system.



Jonathan Lane and Dennis Frenchman, principals of Lane/Frenchman, Inc., played a major role in the Lowell project from its start and are now consultants to the State of New York for the development of the Urban Cultural Park System. Both are trained as architects and planners, and share a concern for implementing urban design projects which make the most of heritage resources. ARCHITECTURAL RECORD asked them about the future of the urban cultural park concept:



#### Why are urban cultural parks being developed now?

Most of the architects and planners in practice today were trained during the '50s and '60s, when everyone agreed that cities were declining-in population, in economic value, and in liveability. Over the past few years there has been a dramatic change in the way that cities are perceived and used. The rising cost of energy and construction, and a growing appreciation for cultural roots have combined to increase the desirability and demand for older urban areas as places to live, play, and work. These areas possess environmental valueshuman scale, richness in materials and detail, and a sense of permanence that are difficult to duplicate in modern construction. We must recognize that these areas are non-renewable resources that are disappearing at an alarming rate. Urban cultural parks represent an attempt to secure such resources, educate the public as to their value, and enhance their viability for modern use. Because urban cultural parks are based on the premise that existing structures are, in general, of greater value than what could replace them, they represent a reversal from the "urban renewal" mentality and a new approach to urban design.

### What was so unique about the Lowell plan and why is it significant to the notion of urban cultural parks?

Lowell represents one of the first attempts to determine what is most valuable about a city's environment and to develop a systematic means of preserving it. Following the recommendation of a team of design professionals, historians, and public officials, Congress established the Lowell National Historical Park to protect those features of the cityscape which illustrate Lowell's unique role in the Industrial Revolution. Congress recognized that to preserve such a large area was beyond the means of any existing agency or level of government, and that substantial involvement of the private sector would be required. A joint state, local, and Federal commission was established to manage Lowell's historic environment by offering incentives for reuse and by regulating design. Presenting Lowell's unique story to a wide audience was considered essential to attracting private investment as well as public support. The accompanying figure illustrates key features of the preservation and management strategy. The essential first step is to improve the image of the area; both the actual structures and the perceptions of people regarding their value.

#### Is the program in New York aimed at developing a set of Lowells around the state?

Not really. The New York Legislature has mandated a system of urban cultural parks which will collectively illustrate the state's history and cultural development. Few of the cities likely to be included in this system possess resources as unique or clearly defined as Lowell's. In this context, the determination of what is most valuable about a place can be difficult but critical—since the choice will determine the theme

of the park and the resources to be included and will color the image of the city in the minds of residents and visitors. As opposed to Lowell, local governments will be totally responsible for managing their parks and little on-site involvement by the state is envisioned. The aim will be to target and prioritize a variety of existing state grant-in-aid, technical assistance, and regulatory programs to provide incentives for developing preservation, education, recreation and economic programs.

## What is the role of the public sector in preserving this type of resource?

The overwhelming majority of buildings now standing in this country were constructed during the past 25 years. As more and more older areas have been replaced, the constituency for preservation has grown dramatically. Likewise, the focus of government initiatives in the environment have shifted from removing older areas to preserving them through an increasing array of incentives and controls. Yesterday's blight has become today's resource, and the choice between whether to preserve or redevelop is now a central issue in many local planning agencies. The comfortable approach to dealing with such problems has always been to proceed on a project by project basis. This approach may preserve a landmark, but destroy its context. The urban cultural parks concept is fundamentally different because it deals with preservation on a citywide basis, emphasizing the importance of historical continuity and integrity in the environment. The value of a place is largely determined by its role in the story line of the city. Those areas which were central to the city's growth and development or dated from a generative period should receive the highest preservation priority. Of course, such areas should also demonstrate a high degree of physical integrity.

#### How can an architect support such projects?

Architects and design professionals have been central to the historic preservation movement and can support the development of urban cultural parks in several key ways. First, they can join in the public debate over value in the environment by helping to define what should be preserved on a citywide basis and why. Second, they can identify and call attention to candidate sites for urban cultural parks. Generally these are cohesive historic areas of significance to the development of a community or its region. The site must illustrate a story that can be easily interpreted, and must offer the potential to support recreational activity and adaptive reuse development. Lastly, architects can work to improve the quality of design in such areas by developing a greater understanding of the city's history and how it can be "read." Designers must be sensitive to the need for temporal continuity in the environment and the fact that today's buildings will form tomorrow's heritage. One could ask: what visual and symbolic messages will be conveyed by our buildings to our descendants?

## OFFICE BUILDING FOR GELCO IS REFINEMENT OF CONTEMPORARY FORMS AND MATERIALS

The International Headquarters for the Gelco Corporation near Minneapolis, designed by The Leonard Parker Associates, has a strength of form that matches its untouched site of varied topography with clustered trees and open space so typical of the Midwest. Paradoxically, there are overtones of subtleness in the building's details despite its large size. While the design's dominant visual features are common contemporary forms and materials—such as terraced levels and reflective glass—it is the sensitivity and refinement in handling their mix that has created such an inviting working environment. —Janet Nairn



What could be construed as a formalistic design of multi-levels and shape for the Gelco office building is really the most advantageous and logical solution to specific site problems and client needs. Of the 31-acre site of forest, meadow, marsh land and lake shore (surrounding a rather large on-site lake), only 18 acres were usable for building. The most appropriate location for the structure was on a knoll at the edge of the forest line, thus minimizing the disruption of the forest, maintaining an ecological balance of the low lands, and capitalizing on views. The company required that each of its eight divisions be on a separate floor and that there be little vertical circulation. The L shaped building handily solves this probler with terraced levels distinctly marking each division and stepping up the 50-foot slope of the knoll. Parking for 230 cars was carved ou of the forest, yet hidden by it, with the main access to the project along a forested drive that connects to a nearby freeway. An additional 70-car parking garage was located under the building.

The structure is framed in steel with masonry base and reinforced masonry stai towers. A curtain wall of insulating reflective



Constant of

glass was specified partly for energy-conservative reasons but predominantly to help the large, 110,000-square-foot structure "blend" with its surroundings (and during certain times of the year and at certain angles, this is wholly achieved). Other energy conservative measures include a 16-in.-deep soil and grass cover over each terrace, thereby reducing heat loss and gain through the roof. And a heat recovery system was a special consideration of the hvac system. At this spot on the site, the L-shaped building uses wind patterns advantageously. As sited, the building deflects northwest winter winds to the south

Balthazar Korab photos except as noted



The dominant form of the structure is the L-shape with terraced levels, but three enclosed stair towers and masonry base help define the building's edges. A geometric simplicity on the western elevation (below) contrasts with the multiplicity of dimensions and mirroring reflections of the inner corner (left). Also along this perimeter is an open walkway on the base that allows access to the meadowland. The scale of the building is deceptive through the variation of the four-story height, but can be clearly understood from selected pedestrian spots, including the walkway platform (right).







Stu

#### GELCO OFFICE BUILDING

toward the lake, and south-southeast summer winds that sweep through the meadow are directed upward by the terraced levels.

The interiors, of course, benefit from the terracing of levels. From each floor there are views beyond to the meadow and lake over grassy lower roof tops. Upon looking outward, the strong horizontal and vertical members of the aluminum window mullions and muntins frame these views, an intentional reminder of the structure. The majority of the large working force, of necessity, is closely seated in open-planned desk units. To add diversity to the arrangement, file cabinets are used as area dividers, conference rooms and common facilities are centralized and the corners of the building remain open. Most of the open-planned areas are grouped on the first and second floors; executive offices are located on part of the third floor (see plans). Presently, an addition is being constructed to the west to ease this spatial load as well as to accommodate the fast-growing divisions of the company. Special attention was given to the entrance and lobby. While these areas do not receive abundant light because of the courtyard trees and building overhang, filtered light flows through the entry window wall creating a pleasant perimeter corridor.

INTERNATIONAL HEADQUARTERS FOR GELCO CORPORATION, Eden Prairie, Minnesota. Architects: The Leonard Parker Associates—Leonard Parker, principal-in-charge; Ray Geiger, Dennis Reseutek, Daryl Hansen, Steve Huh, project team Engineers: Fowler-Hanley, Inc. (structural); PACI Engineering Inc. (mechanical/electrical). Landscape architects: Charles Wood Associates. Interior design: Warren Platner, Inter-Design, and The Leonard Parker Associates. Graphics consultant Inter-Design. General contractor: Kraus-Anderson of St. Paul.





#### GELCO OFFICE BUILDING

The most important of the public interior spaces in the Gelco office building are the lobby and its entrance. With the building nestled up against a rich forested area on the site the entrance (see previous two pages) is sheltered by trees on the north elevation. A further intimacy is created by an overhang, above which the upper floors are clad in reflective glass and below which is see-through glass. A smaller horizontal dark-colored band above the door directs the visitor to the glassenclosed entryway. Handsomely detailed glass flanges on the entrance wall (see previous page) heighten the visual experience of the inner parallel corridor. Once inside, a two-storyhigh lobby (below) opens up. A second floor bridge (left) connects both wings of the L-shaped building. Floor tiles are identical to those outside of the entrance and on the perimeter walkway on the south and east elevations.





CLEAR PSYCHOLOGY FOR VAST INTERIORS: CBS'S NEW YORK PRODUCTION OFFICES BY BEYER BLINDER BELLE In understanding the problems of organizing this 40,000 square-foot space on one rectangular floor of a speculative office building, it is useful to realize that the area is almost the size of many entire buildings. Besides the obvious limitations of standard ceiling heights and large areas far from windows, there were strict limitations imposed on the budget and on anticipated long-term operating costs. Accordingly, the spaces on the following pages show the results of some exceedingly thoughtful design within great limitations and restrictions. And out of a typically mundane program that could have produced a rabbit warren, the architects have created spaces that are both pleasant and polished. -C.K.H.



"Taking a clue from the theatrical operations, the designers have given the windowless spaces the panache of a filming studio." In one rectangular 40,000-square-foot space, architects Beyer Blinder Belle were asked by client CBS to house both the offices of performing personalities and such spaces as those for film editing. To provide a comprehensible organization of the many small programmed rooms and access to them on the vast floor, the architects devised a double ring of outer and inner corridors that are so different from each other that there can be no confusion. Taking a clue from the theatrical nature of the operations to be housed (and from the lack of possible natural light), the designers have produced a dramatic inner ring that recalls the atmosphere of a filming studio. Low wattage incandescent lamps, baffled by perforated black aluminum strips provide pools of bright light along the otherwise minimally lit-linear spaces. The resulting low consumption of electricity pervades the floor with generally low light levels and task lighting at desks—even in the outer-ring corridors and the spaces off them, that seem light and bright in an intentional psychological comparison. But the lighting was only one of many subjects of intensive study by the architects for both efficiency and cost effectiveness. For instance, the movable wall system was ultimately installed under in-place ceilings and over carpeting. (The initial savings were estimated to be \$1.50 to 2.00 per square foot, without considering the advantages of not having to patch when partitions were moved.)

CBS OFFICES, New York City. Architects: Beyer Blinder Belle—partner-in-charge: John H. Beyer; project architect: Michael A. Geyer. Engineers: William A. DiGiacomo Associates (mechanical/electrical). Consultants: Howard Brandston (lighting); Rudolph deHarak (graphics); Harold Rosen (specifications). Contractors: A-J Contracting.



There was a programmed need for the many isolated rooms that made planning especially difficult here (see plan above). Capitalizing on the nature of the interior circulation spaces that were remote from windows, the architects made these give a strong sense of location on the floor by being relatively dark so that the working spaces (photo below, right) seem brighter by contrast. While most of the walls, finishes, and furnishings are of standard manufacture, special graphics include the three-dimensional panel in the reception room-made of projecting strips that are triangular in plan (photos opposite and below)-shows either the moon landing or the first flight at Kitty Hawk, depending on the angle from which it is viewed.











Light reflected from the ceilings in the main conference room (photo top) provides not only visual variety for the interior spaces, but an airy atmosphere that belies the real distance from natural light sources. The glazed doors in the photo above define the exterior circulation corridor. Typical reception areas off this corridor contain still more graphics designed by Rudolph deHarak and produced by silk screening photographic images onto three-dimensional panels. While the colors of the inner corridor are in the strong contrast of red and black, colors in the brighter perimeter spaces are largely neutral. Two hundred people occupy these offices, and the architects are just completing another entire floor for the same client in the same building.

## REFLECTIVE WONDERS:

HOUSTON'S GLASSELL ART SCHOOL BY S.I. MORRIS ASSOCIATES



Unlike so many reflective-glass buildings located where there is little of note to be reflected, The Alfred C. Glassell, Jr. Art School is located in a gracious and highly visible neighborhood. It might then be thought ironic that its reflective glass block skin holds clues to coping with mirror-like finishes on buildings that are less fortunately sited. S.I. Morris Associates' innovative design, shown on the following pages, uses an old and familiar material-the glass block with a special finish-in a new, large-scale manner. High on reflectance and low on heat transfer, the many-faceted walls break up light and surrounding images in a way that produces shimmering intimations, rather than literal reproductions of the surroundings. The new building also completes a triangle of distinguished modern cultural institutions (see site plan overleaf). Of these, The Contemporary Arts Museum by Gunner Birkerts (see RECORD, October, 1971, page 110) was a pioneer in the use of reflective sheathing materials (in that case polished metal). All of which brings up another important attribute of the bold use of the glass block. In its important location, the building takes on a new flavor that is both very visible—in honor of its formal relationship to the other institutions—yet partially dematerialized in favor of the trees and smaller-scaled older buildings that immediately surround it. (The degree of either attribute depends on ever-changing light angles.) Straightforward in its large rectangular volume, the building has become a sympathetic tour-de-force simply through a novel choice for the skin. But another irony here is that glass block is a product that may well soon go out of American production, because of lack of demand—leaving this building a kind of final statement of the potentials of its use. -C.K.H.



At once, the Alfred Glassell Art School has a strongly sculptural, almost scaleless visual quality and an equally strong utilitarian organization. While the visual qualities become self-evident in the photographs, the utilitarian logic becomes evident in the plans (overleaf). The program called for almost 42,000 square feet of space, and the economic (and indeed urban planning) considerations called for a substantial massing-in this case rectangular with lots of space isolated in the center. But all studios requiring natural light (such as those for painting) are located near the lightdiffusing outer walls (see photos overleaf). The key to this sensible plan is the location of the many functions that do not require natural light in the center of the rectangle-along with a dramatic, two-story exhibition space for students' work that bisects the basic rectangular building volume into two visually manageable parts. Part of the dramatic qualities of the gallery spring from a centuries-old formula for achieving an elongated perspective: greater width at the entrance than at the far end, 150 feet away. But the real drama is in an overhead translucent vault (overleaf), running the entire length, that not only brings light into the building's interior, but which forms a visual punctuation of the split volume from both within and outside. Created from 174 steel-edged panels of pre-set glass block, the vault is both dramatic and innovative in the consistent use of the basic sheathing material. The poured-in-place-concrete structure is partially exposed on the exterior for both visual definition and support of the glass-block walls. On the interior, the structure-along with mechanical equipment-is fully exposed for economy and flexibility and in recognition of the almost industrial nature of many of the activities. Construction costs were about \$1.6 million.

THE ALFRED C. GLASSELL, Jr., ART SCHOOL, Houston, Texas. Architects: *S.I. Morris Associates — partner-in-charge: Nolen Willis; designer: Eugene Aubry*. Engineers: *Walter P. Moore & Associates* (structural); *Southwestern Laboratories* (soils); *I.A. Naman + Associates* (mechanical/electrical). General contractor: *McGregor Construction Co, Inc.* 





GLASSELL ART SCHOOL













Despite the large rectangular plan, the studios requiring natural light can be near the exterior walls-partially because so much of the center of the building's volume is taken up by the two-story gallery, shown on the opposite page. Allowing views to the outside from within and still providing privacy from the outside world, the glass-block walls provide a diffused light for a calm atmosphere, isolated from more mundane concerns. Chosen to express the guasi-industrial nature of the activities, exposed construction and mechanical equipment belie the extreme sophistication of the facilities.









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Beside the reflective coating on the glass block in the walls, fiberglass screening has been inserted in the block of the gallery's skylight to further reduce glare. Fifteen- by twenty-two-foot overhead doors open the sculpture studio to a walled yard on the east side. Adding to the industrial qualities of this heavy-duty space, a 3-ton crane moves large objects from place to place, and a compressed air and gas distribution system supplies this space and the jewelry workshop and spray glazing booths. The entire building has been designed for accessibility for the handicapped.



# HOUSING

A recent study which was conducted by ARCHITEC-TURAL RECORD showed that nearly two thirds of the architects randomly polled had been involved in the design of multi-family housing during the past two years. Such statistics are, of course, subject to sampling errors, but even so the message is very plain: the design of housing is now, as a professional activity, almost as ubiquitous as is the desire for it among the general public. Architects everywhere are making themselves heard in the housing market. The issues are universal: shelter, image, comfort, location, cost, and a host of others. It is a matter of great luck, though, that the results are by no means universally similar. There is these days no one new ideology, no single new trend in housing design. Perhaps this fact signals the beginning of a longoverdue awareness that there shouldn't, even can't be one, since houses are as different as the people they house and the places where they stand. The following collection witnesses that fact.

BUILDING TYPES STUDY®536





#### In San Francisco the remembrance of things past

Anyone who has given much thought to the subject knows that the new fad for historicism among architects is new only to architects and, for that matter, only to architects of recent generations. For their parts, builders and amateurs have always built buildings that look "historical," and they continue to do it right up to this very day. But there is a difference: builders and amateurs do it naively, which is to say unselfconsciously-and also sometimes blandly and ineptly, but not always. Architects, on the other hand- -particularly "highstyle" architects do it another way: with skill, and wit, and irony, and (above all else) with high-powered rhetoric. They announce that they of all people are doing it.

But the architects of Victoria Mews in San Francisco, shown on these and the following two pages, are adding a new twist. They are at last doing what everybody else has been doing; they are imitating the style (and many of the construction techniques) of nineteenth-century San Francisco houses.

All of this may come as a shock to other architects, the



Karl Riek photos





Karl Riek photos

great majority of whom are bound to react negatively. But before dismissing the project out of hand it is worth asking not if this is a bad idea but, if it really is, why? Curiously, there do not seem to be any really ready answers to all of the usual objections. Do these imitations violate the spirit of the originals? Yes, but so did Jefferson's Rotunda violate the spirit of the Pantheon without being a bad building. Is it wrong to use one form (a single house) as the stylistic trapping of another? Maybe, but people have been doing it for centuries. Is it "modern"? Anything built in the 1970s is by definition "modern." Conversely, even faithful imitations of Georgian houses built in the 1930s now look 1930s. Is it well done? Well, that's harder, and is also probably the crux, and one worth pondering in the historicism racket: the final question is not so much *that* you do it as it is how well, and that can be anybody's guess. Victoria Mews walls itself around its site to enclose a central, private courtyard from which all of the apartments are entered. It is designed to contain 87 different units, all with the full battery of modern conveniences and in the luxury-price category.

VICTORIA MEWS, San Francisco, California. Architects: *Barovetto, Ruscitto and Barovetto*. Engineers: *Cole, Yee, and Schubert* (structural); *James Buscitto* (mechanical/electrical). General contractor: *Ralph Larson & Son, Inc.* 











An in-town site in Houston gives the chance to create traditional domestic urbanity

The architect and developer of these four speculative townhouses in Houston found himself with a small, in-town lot, and he wanted to capture something of the spirit of European and American urban-as opposed to suburban-houses by using nearly all of the land for the houses themselves, their cars, and related services. Accordingly, parking is on grade directly beneath the houses, with some of the living spaces on a ground floor behind (photographs below right). On the roof, two floors above, are spaces for washer and dryer rooms, wet bars, sauna tubs, storage-and for gardening. The middle floors are for sleeping and other living spaces (at the level of the windows and glass blocks on the facades in the photograph on the left).

There are two units with three bedrooms and two and a half baths, and two units, which are smaller, with only two bedrooms and two and a half baths. The houses are built of eight -inch concrete block stacked dry without mortar, then coated with fiberglass epoxy. A sheet of white fiber paper is used as a membrane in the glass block to soften the light and also to give better insulation on the south (street side) elevation. Paint grip sheet metal, left natural, is used for all gutters and flashing.

FOUR SPECULATIVE TOWNHOUSES, Houston, Texas. Architects: Burdette Keeland and Associates—project architect: Donald C. Reese. Engineer: R. George Cunningham (structural and mechanical). General contractor: Keeland Associates, Inc.













#### Townhouses in tall triangular shapes help capture an urban view

Like the townhouses shown on the previous two pages, these houses are the results of their architect's deciding to become a developer and put his architectdesigned wares out on the shelf. Like those houses, these have also done well in Houston's bustling real-estate market. Here the program called for five different floor plans, ranging from one to three bedrooms, with different combinations of dens and libraries and other ancillary spaces. All of the units nonetheless have the same over-all shape: a tall, thin (24 feet wide), four-story triangle with a view from the top of the Houston skyline in the distance (see section below).

Inside, there are a kitchen, dining area, and guest room on the ground floor; the living room is on the second level, overlooking the dining area (photos below). It is reached by a flight of stairs that lead from the entrance gate up to the second level. Some plans also include a library or den at this level. Above it is normally the master bedroom. The roof deck can be reached from it by a cedar stair, which is also connected to all the other floors in order to function doubly as the fire stair. Walls are textured stucco over concrete block

FIVE SPECULATIVE TOWNHOUSES, Houston, Texas. Architects: Burdette Keeland and Associates—project architect: Donald C. Reese. Engineer: R. George Cunningham (structural/mechanical). General contractor: Keeland Associates, Inc.




Luxury housing for "empty-nesters, move-ups, and young singles" This collection of luxury condominiums in Stockton, California is in its context a maverick, nestled as it is, the only multi-family housing in a suburban development of some three hundred singlefamily houses. The magic magnet is slightly less than an acre of water, a cove which is a part of the much larger Quail Lake.

There are in all twenty units of four basic types, and together they encircle the cove. The format is this: each unit has an enclosed courtyard on the entrance side, one of which is shown in the photograph on the right. Bedrooms are on this side. On the other side, facing the views, are the family and living areas. The living room of a model apartment shown below right, with its traditional, store-bought furniture, contrasts in feeling with the exteriors of the buildings, done in the now-familiar California vernacular in redwood.

QUAIL COVE CONDOMINIUMS, Stockton, California. Architects: Donald Sandy, Jr. and James A. Babcock. Engineers: Dizon Engineering (structural). Developer-builder: Patmon Company, Incorporated.





Karl Riek photos





Simon Scott photos

A cooperative organizational structure provides the chance for user participation in Vancouver







The area known as False Creek is being developed by the city of Vancouver to provide housing for 2,800 people in 850 to 900 units. The planning concept breaks the area down into eight irregularly shaped enclaves, one of which is shown in the aerial photograph below. These enclaves are in turn being developed by a variety of sponsors for non-profit cooperative housing, for limited-dividend senior-citizen housing, for free-market housing, and by a number of other institutions.

Working with a cooperative afforded the architects much greater user input than in most housing projects, where the users are anonymous, and a large number of proposed unit types were in fact rejected because of users' preferences. Four types of townhouses were developed, all on a module of fourteen feet; a 24-suite apartment was also designed, in the same vocabulary as the townhouses. For the most part, living spaces face out from the enclaves towards park areas, public squares, and the waterfront beyond.

FALSE CREEK CO-OP HOUSING, Vancouver, British Columbia. Architects: Henriquez Architects Urban Designers. Engineeris: C.Y. Loh Associates Engineering Ltd. (structural); Keen Engineering Ltd. (mechanical); Nemetz Engineering Ltd. (electrical). Consultant: Jeffrey Phillips (landscape). Contractor Project Manager: Frank Stanzl Construction Ltd.







#### A modest camouflage at Kiawah Island

This collection of sixty-one condominium apartments on Kiawah Island, the South Carolina resort, was designed by the Atlanta firm of Jova/Daniels/Busby, and in doing it the architects were faced with a classic dilemma. A building of such size, particularly one in a delicate environment, is bound to make an impact. Either one can choose to make esthetic hay out of the impact, emphasizing size and shape and mass-as, for instance, Moore Lyndon Turnbull Whitaker did in the 1960s in their famous condominium at the Sea Ranch in California. Or one can take the opposite approach, deemphasizing the size of what is there, breaking up its surfaces and creating a smaller system of scale-which is what the architects attempted here. There are two, and only two, choices, since the potential third choicedoing nothing-is not valid.

Thus these buildings come together with a purposeful articulation of the perimeter and the roof line. Beyond that, the choice of natural materials—cedar shingles and cypress trim—disguise and diminish the building's overall mass as well. The somewhat free-form entry deck (photographs below), with loosely grouped collections of indigenous plants around it, was also consciously designed as a foil to the size and rigidity of the building itself.

Because seismic and other subsurface conditions placed a penalty on the weight of the structure, a steel frame was chosen. Walls are 20-gauge metal studs; exterior walls are fire-rated cedar shingled on gypsum sheathing; interior partitions are gypsum on metal studs.









The sixty-one units—one, two, and three bedrooms—are arranged, fifteen units per floor, along a partially double, partially single loaded open corridor so that thirteen of the fifteen units have views of the beach. Elevators, laundry rooms, and other central services are in a core at the junction of the two wings.

RESORT CONDOMINIUM, Kiawah Island, South Carolina. Owner: Kiawah Island Company. Architects: Jova/Daniels/Busby—principal-incharge: Joseph C. League. Engineers: Hartrampf Powell & Associates (mechanical); John H. Matthews (electrical). General Contractor: Ruscon Construction Company.





### PRODUCT REPORTS





#### estanding modular ood furniture

office furniture has been intro- /storage system is based on duced by Herman Miller, Inc. six basic units that are available Called "C-Forms," designed in 22 different sizes for providby Californian Don Chadwick, ing any arrangement of secre-

One of the newest designs for the wood desk/credenza

tarial stations, free-standing open plan arrangements and executive offices. The straightforward and uncluttered design is achieved from the

detailing of the units, including no visible hardware and hidden wiring. - Herman Miller, Inc., Zeeland, Mich.

circle 300 on inquiry card



#### Special safety doors newly redesigned

The ``Safetyline'' metal door manufactured by Amarlite safety and security features in with textured panels in antique bronze, pewter or copper with recommended applications in high traffic areas like commercial buildings; the stan-

dard model (left) is a lighter weight door suited for stores Anaconda and introduced in and restaurants; and the insti-1973 has been redesigned into tutional model, which coma handsome, streamlined bines the ruggedness necesproduct. The door utilizes its sary for use in schools and auditoriums. Safety features inthree models-the deluxe clude a rubber finger-guard on style (shown center) comes the lock stile, a concealed panic exit device and electronic floor pad operator. . Amarlite Anaconda Co., Atlanta.

circle 302 on inquiry card more products on page 151



#### A machine to augment time management

new concept in aids to time nagement is this electric k-top unit, called ``Time nagement Machine," which nitors schedules and autotically counts down the nber of days to a specified

channels, each programmable for an individual project. Once cates the number of days tingdon Valley, Pa. remaining to that deadline.

target date. There are 20 There is also a corresponding plastic reusable reference card, and there is no loss of a date is set in a channel, there memory in case of a blackis a number displayed that indi- out. 
ERGO Enterprise, Hun-

circle 301 on inquiry card

For more information, circle item numbers on Reader Service Inquiry Card, pages 221-222

**SIGNAGE** / A condensed catalog sheet illustrates a complete line of dimensional lettering products in *Plexiglas* and high-density foam. Over 30 styles are shown, suitable for product/department identification, point-of-sale displays, office, directional and informational signage, exhibits, etc. • Scott Plastics Co., Sarasota, Fla.

circle 400 on inquiry card

FABRIC STRUCTURES / "Air Supported Structures, Reservoir Covers & Pond Liners," a fourpage brochure, describes this maker's fabric products, their application and technical information, including a patented bias steel cable harness net system and heat-welded thermaliners. Tennis court, swimming pool, ice rink and field house enclosures are shown. • Air-Tech Industries, Inc., East Rutherford, N.J.

circle 401 on inquiry card

**ACRYLIC CARPET** / A technical bulletin discusses the general properties of *Acrilan* acrylic carpet fibers, available in five luster types, from semi-dull to bright. Flame spread and other product characteristics are given for the fiber. • Monsanto Textiles Co., Decatur, Ala.

circle 402 on inquiry card

**MATERIALS HANDLING** / A 16-page booklet describes all products and services of this manufacturer's Material Handling & Storage Products Division. Pallet racks of various types are featured; two fold-out pages show application ideas. Also included are a gravity-flow storage rack; conveyor components and systems; manual, semi-automated and automated storage, with and without *Courier* storage machines; and related machinery and services. Interlake, Inc., Chicago.

circle 403 on inquiry card

AUTOMATIC SPRINKLERS / The "Decor" line of automatic fire protection sprinklers, with glass bulbs color-coded to indicate individual temperature ratings, is featured in a color brochure. A selection guide lists standard, flush and concealed sprinkler heads to meet varying fire protection needs; basic specifications and performance parameters for each device are given. The Viking Corp., Hastings, Mich.

circle 404 on inquiry card

**HEALTH CARE CASEWORK** / Steel-framed furniture for health care facilities is shown in a product brochure. Illustrated are mobile and stationary models of bedside cabinets, dresser desks and wardrobes, all offered in a number of wood grain or solid color plastic finishes. Also shown are mirrors, trays, towel bars and other accessories. • Norco Mfg. Corp., Missoula, Mont.

circle 405 on inquiry card

**WOOD USE MANUAL** / Intended as a basic reference source of design values for selecting and specifying Western lumber, the "Product Use Manual" supplies professionals with standard size and grade information, values for light framing and structural light framing materials, span tables for joists, rafters and decking, etc. The manual also contains information on machine stress rated lumber and end-jointed products. • Western Wood Products Assn, Portland, Ore.

circle 406 on inquiry card

#### OFFICE LITERATURE

**SPECIAL DOORS** / Special service and rolling doors are shown in an architectural catalog. Dimensions, operating information, and pertinent code approvals are given for a full product line which includes rolling metal doors and fire doors; rolling grilles, shutters and packaged units; rolling fire shutters; and sliding chain link grilles. Highlighted is a new rolling grille glazed with acrylic panels, forming a 96 per cent "see through" barrier. • Cornell Iron Works, Inc., Mountaintop, Pa. *circle 407 on inguiry card* 

**TRASH COMPACTION** / Industrial and Commercial trash compaction equipment is described in a four-page brochure, which outlines the cost savings possible by reducing refuse storage space and lowering bulk hauling charges. • Metalfab, Inc., Beaver Dam, Wisc.

circle 408 on inquiry card

**EVAPORATIVE COOLERS** / Technical brochure describes the operation of *Z*-Duct indirect evaporative coolers, capable of producing EER's of over 100. Coolers may operate alone or in combination with conventional air-conditioning systems; tables, charts and example calculations are used to show how to determine the amount of cooling that can be expected under various kinds of operating conditions. *Z*-Duct installations are suggested for improving the worker environment in such hot operations as foundries, mills and kitchens. ■ Des-Champs Laboratories, Inc., East Hanover, N.J.

circle 409 on inquiry card

**INSTITUTIONAL LAUNDRY** / The Hands Off fully automated laundry system is explained in a 16-page booklet. Tilting washer-extractors, in 275- and 600lb capacities, are basic to the system: these machines load and unload with no manual assistance at all. Different loading methods, equipment and options and partially-automatic versions of the Hands-Off installation are included. ■ Pellerin Milnor Corp., Kenner, La.

circle 410 on inquiry card

**PLYWOOD SIDING** / Four-color end-use photographs demonstrate some of the effects that can be achieved with redwood siding in panel form; an eight-page brochure also supplies product data and plan details of specific designs. Patterns and finishing recommendations are given for exterior and interior applications. • Simpson Timber Co., Seattle, Wash.

circle 411 on inquiry card

LAMINATED PLASTIC / A four-page brochure, "Solid Color-Design Group I" depicts 34 soft, muted pastels; intense, bright colors; and rich earth tones offered in high-pressure laminated plastic. • Ralph Wilson Plastics Co., Temple, Texas.

circle 412 on inquiry card

**COMPOSITE PANELS** / An eight-page catalog describes *Petrarch* interior and exterior building panels, a slate composite with a high percentage of stone granules bonded with resin, reinforced with glass fiber, and cast in a natural slate mold. *Petrarch* available in 5/16- and 7/16-in.-thick panels, has high impact strength and stain resistance; ASTM test results are included in the catalog. • Redland Petrarch, Prismo Universal Corp., Parsippany, N.J. *circle 413 on inquiry card* 

more literature on page 149



First a rigid panel of Expanded Polystyrene that offers optimum insulating qualities. It becomes the foundation of any "U" value that is required to really control heating and cooling costs.

Our specially woven and treated Fiberglass Fabric that prevents surface cracking and that's important — no cracks mean no leaks or maintenance.

Our special Primus/Adhesive, a unique plaster material mixed with Type I Portland Cement to adhere Dryvit Insulation Board to the back-up surface and to embed Dryvit Reinforcing Fabric on the face of the board.

Dryvit Finish; a synthetic plaster material having high bond strength, extremely pleasing in appearance in a choice of 14 integral colors and various textures. It provides a water resistant, jointless exterior that is maintenance free.

Lightweight Is Important

Only 7½ pounds per square foot, so you can reduce your steel usage substantially. Thinner walls also increase useable floor space.

DRYVIT SYSTEM, INC. Warwick, RI—Tulsa, OK

Circle 63 on inquiry card

**OFFICE PARTITIONS** / Techniques for achieving greater office productivity through improved acoustical control, greater privacy, employee convenience, and comprehensive wire and cable management are outlined in a 16-page brochure describing the Harter/Wall a moveable architectural office wall. Color photos show wall installation procedures; diagrams and close-up photos illustrate details of Lockslide panel joints, acoustical cross-sections, and techniques for handling components. • Harter Corp., Sturgie, Mich. circle 414 on inquiry card

**3ARRIER-FREE HARDWARE** / A 24bage color booklet contains the results of a manufacturer-sponsored study on designing special products for the disabled and elderly. The requirements of this market are discussed; specifically designed furniture, plumbing fittings and builders' nardware are shown. The International Nickel Co., Inc., New York City.

circle 415 on inquiry card

SILICONE FLUID / A literature package provides scientific and technical material on the toxicity, environmental impact, and flammability of silicone fluid used as an alternative to organic compounds in chemical processing, electrical products, textiles, paper and printing, etc. • Dow Corning Corp., Midland, Mich.

circle 416 on inquiry card

DATA BASE INFORMATION / A product brochure and catalog explains information gathering and rerieval services offered in various microform formats. The Technical Data Services Group provides current nformation, on an annual subscripion basis, on industrial products, ncluding catalogs from over 22,500 manufacturers; industry codes and standards; such international standards as the British Standards Institute and Japanese Industrial Standards; and a large collection of Federal Government regulations, specificaions, and standards, Information Handling Services, Englewood, Colo. circle 417 on inquiry card

RADIANT HEATING / Panels for resdential, commercial and industrial applications are described in a sixbage catalog. The capabilities of radiant heating is discussed, comparng its safety, function and effectiveness with other conventional heating systems. Therma-Ray Mfg., Inc., DId Saybrook, Conn.

circle 418 on inquiry card

CHAIR EXERCISES / "Sitting Fit," a booklet of muscle-toning exercises devised by Lilias Folan, nationally known authority on yoga and physical fitness, has been published by the Architectural Systems Division of this office furniture manufacturer. The five simple exercises described can be done easily by office workers using a comfortable armchair. • Westinghouse, Architectural Systems Div., Grand Rapids, Mich.

circle 419 on inquiry card

SEATING / The "riding chair," designed to allow the human body to assume a comfortable, normal posture with no unusual pressure points, is described in a color brochure. Entitled "The right way to sit," it explains how the chair incorporates a tilting action to encourage a more natural sitting posture. The "riding chair" is available in examining stool and chair formats, as well as versions suitable for use by semi-invalid persons in the home. • Rajowalt Co., Atwood, Ind. *circle 420 on inquiry card* 

WESTERN WOODS / A 310-page Use Book provides a technical reference covering the uses of the major Western lumber species, with the latest engineering and other data needed by architects, engineers and others involved in the design and specification of wood products. This 1979 edition supplants the first, 1973, version, and is available from the Western Wood Products Assn., 1500 Yeon Bldg., Portland, Ore. 97204. Cost per copy of the "Western Woods Use Book is \$20.00.

**CARPET POSTER** / A striking 24- by 18-in. color poster is available in limited quantities to design professionals. Prepared by a source for handcrafted rugs, the poster introduces a theory of color use where any hue may be read as both color and no-color. • V'Soske, New York Citv.

circle 421 on inquiry card

#### IN-FLOOR ELECTRIFICATION/

Twelve-page catalog describes the benefits and use of in-floor electrification systems in single- and multi-level concrete and steel-framed buildings. The catalog shows how the systems account for future changes in service and communication requirements, and how they apply to various structural framings. Included is a fire-rated "pokethru" assembly for low-cost construction. Mac-Fab Products, Inc., St. Louis.

> circle 422 on inquiry card more literature on page 155

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#### Stark Structural Tile is: Glazed Facing Tile Acoustical Tile Textured Tile Textured Acoustical Tile . . . also utility and lustre finish utility brick and High Brick.

PRODUCT REPORTS continued from page 145



CERAMIC TILE / Handcrafted commercial tile line is offered in contemporary colors and sizes. Unglazed pavers and glazed tiles meet heavy-duty requirements; sizes range from 3- by 6-in. to 12by12-in., and include new 6- by 6-in. radius corner tile and slip-resistant textures for floors. 
Forms & Surfaces, Santa Barbara, Calif.

circle 303 on inquiry card

SOLID WOOD PANELING / "Tostado Ash" is



solid hardwood plank paneling, manufactured in random lengths and widths; each panel is 3/4in.-thick. Each piece is prefinished, with a variety of natural surface marks that add interest to

the rich color of the wood itself. 
Townsend Unit, Potlatch Corp., Stuttgart, Ark.

circle 304 on inquiry card



CONTROL ROOM CASEWORK / This line of component housing modules is intended to streamine the organization of this maker's "JC/80" nput/output console devices. Six basic units can be assembled to accommodate any number of buildng management components; included are turret sections to contain slide projectors, CRT's, CCTV monitors and keyboards. Specially designed tables and cabinets organize related control room equipment. Turrets are positioned to provide a clean line of sight to each alarm annunciating screen. The panel section supporting the legs serves as a wireway; duplex connection receptables can also be ncluded to simplify power wiring terminaion. Johnson Controls, Inc., Milwaukee.

circle 305 on inquiry card



CABINET PULLS / Solid brass hardware is offered in four distinctive styles and three finishes: polished chrome, satin chrome and oil rubbed chrome. · Forms & Surfaces, Santa Barbara, Calif.

circle 306 on inquiry card



DESK CHAIRS / "Carini Executive Seating" chairs roll on a steel base covered in self-skin urethane foam which protects users shoes and will not damage other furniture. Both high- and standardback versions are fully upholstered in a choice of fabrics, vinyls or leathers. Height adjustments can be made while seated by activating a gas spring mechanism. 
Atelier International, Ltd., New York City

circle 307 on inquiry card



STORAGE CABINET / The "Sigma" buffet is finished on all sides in Carpathian Elm burl; the interior of the cabinet is lined with natural oak veneer. Piece is set on a 2-in.-high mirror chrome plinth base with adjustable glides. Available interior appointments include adjustable height shelves, and a three-drawer unit lined with cloth for flatware. Stendig Inc., New York City.

circle 308 on inquiry card more products on page 153

### Granite. A step up to beauty. A step up to wearability.



Cold Spring Granite Company, Dept. AR-9

SECTION

Circle 66 on inquiry card

202 South 3rd Avenue, Cold Spring, MN 56320



#### THE ONLY DOOR THAT'S EASY ON THE FINGERS IS NOW EASY ON THE EYES.

Admittedly, looks were not the first consideration in designing

Safety was. So we gave it a flexible rubber guard to save fingers. And perhaps even save you a lawsuit.

We gave it a cylindrical stile and a 2-point flush-mounted

locking mechanism. And a push-pull that fits snugly so it doesn't

snag clothing. It was the only door of its kind. And it still is.

Now come the looks. A variety of looks, including the textured panel above, to dovetail with any design.

And if you don't find exactly what you want, we'll custom

make it. Either way, you get a door that doesn't give up aesthetics for safety. Or vice-versa. Your Amarlite Representa-

tive will be happy to show you all the ways we've dressed up

the Safetyline Door. For more information, write to Amarlite Anaconda, P.O. Box 1719, Atlanta, Ga. 30301. Or you can call us at (404) 691-5750.



PRODUCT REPORTS continued from page 151



**ILLUMINATED CEILING** / Three-ft-sq interlocking aluminum suspended in shadowline or sculptured perimeter profiles create a wall-to-wall or floating ceiling. "Bold Cel" modules are available painted white, metallic or colors, or in mirror-finished chrome or gold tones. Lighting elements are designed for efficient, even illumination. • Neo-Ray Products, Inc., Brooklyn, N.Y.

circle 309 on inquiry card



**WATER SERVICE FITTING** / This line of *Celcon* acetal copolymer compression-type fittings may be installed on any pipe, metal or plastic, used with domestic water service. The body of each fitting incorporates a rubber 0 ring, with a fitting nut and conical split ring made of *Celcon* all working together to hold the pipe securely in place. Resistance to ' pull-out ' increases in direct proportion to the amount of stress exerted in an effort to break the connection; the plastic's high stripping torque prevents loss of thread contact, eliminating leaks. Unions and male connectors are offered in <sup>3</sup>/<sub>4</sub>-in. and 1-in. sizes. ■ Plasson Fittings, New York City. *circle 313 on inquiry card* 



**PEBBLE-FINISH SKYLIGHT** / An outer, textured dome of *Protect-A-Glaze* sheet is used over an inner diffuser panel of double-layered *Lexan* structured sheet in the *Tri-Therm* skylight, providing thermal performance superior to double-and single-sheet acrylic units. Condensation resistance on the interior surfaces is rated at 59, compared to 52 for twin-dome acrylic. The lightweight skylight's simple design permits installation on a wooden curb, lowering in-place costs. • Faulkner Plastics, Tampa, Fla.

circle 314 on inquiry card

#### FABRIC WALLCOVERINGS / Designed for the American market and ful-



ly stocked in this country, the "Range 3" natural fabric wallcovering collection is woven in Scotland in a variety of linens, cable stripes, honeycomb designs, open weaves,

chevrons and herring-bones. All fabrics have a Class A fire rating. • Sidlaw of Scotland Inc., Atlanta, Georgia.

circle 310 on inquiry card

FURNITURE CASTER / Constructed with a double



ball bearing swivel-two sets of hardened steel balls that roll freely in two separate tempered raceways-this heavyduty furniture caster moves easily for a long performance life. Wheels may be two-in. diameter

"Baco" soft rubber for hard, smooth floors, or 2½-in.-diameter hard "Atlasite" rubber for carpet use. ■ Bassick Div., Stewart-Warner Corp., Bridgeport, Conn.

circle 311 on inquiry card



**LABORATORY FURNITURE** / A recent addition to the *Contempra* line of modular laboratory furniture, this dual-purpose unit offers the protection of an in-lab safety cabinet and serves as a fume-hood base unit. The cabinet meets all OSHA and NFPA design and construction requirements for safe handling of flammable and combustible solvents. Height and depth dimensions are the same as other base units in the line, 35<sup>1</sup>/<sub>4</sub>- by 22-in.; it is available in 3-, 4-, and 5-ft widths. • Fisher Scientific Co., Pittsburgh.

circle 312 on inquiry card



For ordering information, call or write! Solar Components Division, Kalwall Corporation P.O. Box 237, Manchester, NH 03105 Phone 603-668-

Circle 68 on inquiry card

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new barrier-free products catalog that contains basic washroom design criteria plus specifications on our new products. A 30-minute film, "Barrier-Free Washroom Design" is also available for viewing. Contact your Bradley representative or write: Bradley Corporation, 9101 Fountain Blvd., Menomonee Falls, Wisconsin 53051.



Bradpack<sup>®</sup> Wash Center





Modesty Module® Shower



Barrier-Free Washfountain

**DATA BASE INFORMATION** / A product brohure and catalog explains information gathering ind retrieval services offered in various microform ormats. The Technical Data Services Group provides current information, on an annual ubscription basis, on industrial products, including atalogs from over 22,500 manufacturers; industry odes and standards; such international standards is the British Standards Institute and Japanese industrial Standards; and a large collection of Feder-I Government regulations, specifications, and stanlards, • Information Handling Services, Englewood, Colo.

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ADIANT HEATING / Panels for residential, comnercial and industrial applications are described in six-page catalog. The capabilities of radiant heatng is discussed, comparing its safety, function and ffectiveness with other conventional heating ystems. Therma-Ray Mfg., Inc., Old Saybrook, Conn.

circle 426 on inquiry card

**ACTILE SIGNS** / Twenty-page "Handbook on factile signs and Location Cues for the Blind and /isually Impaired" contains practical guidelines and ecommendations helpful to architects and others esponsible for making environmental modifications. The booklet discusses the Rehabilitation Act, compliance, existing standards, and describes the 'Touch-and-Know'' signs, location cues and elevaor signage developed by the not-for-profit Dialogue with the Blind. • Dialogue with the Blind, herwyn, Ill.

circle 428 on inquiry card

**REE-LAY CARPET** / A color card binder contains watch cards of all *Interface* flooring products, a ne of free-lay modular carpets. *Interface* is availble in various pile heights and face weights to neet individual commercial and institutional specifirations. Carpets International-Georgia, Inc., La-Grange, Ga.

circle 429 on inquiry card

**VOOD USE REFERENCE** / The 1977 Western Vood Products Association Statistical Yearbook ontains data for that and preceding years covering umber orders, production, shipments, use areas, iousing starts, forest facts, etc. Copies are offered t a \$5.00 charge from the WWPA, 1500 Yeon ldg., Portland, Ore. 97204.

RCHITECTURAL METAL WORK / A hard cover, 60-page catalog of stock components serves as a eference for those concerned with the design and onstruction of railing systems, decorative metal creens, and other architectural metal work. Prodcts are offered in aluminum, steel, bronze and tainless steel; handrail moldings are also shown in inyl and acrylic-treated wood. I Julius Blum & co., Inc., Carlstadt, N.J.

circle 430 on inquiry card

AMPUS LIGHTING / Efficient, cost effective light or college facilities, indoor and out, is the subject f a 10-page color brochure. Suggestions such as onversion of existing mercury-vapor lights to HPS xtures are made, showing how this will lower nergy use while providing 106 per cent more light. en luminaires are pictured for a variety of lighting pplications, including parking lots, indoor athletic reas, walkways, building entrances, roads and riveways. • General Electric Co., Hendersonville, I.C.

circle 431 on inquiry card

#### 69 on inquiry card

Circle 70 on inquiry card

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United Bank of Boulder, Boulder, Colorado E. C. Grabow Associates, architects, Boulder, Colorado





Bloomingdale's, White Flint Mall, Kensington, Maryland RTKL Associates, Inc., architects, Baltimore, Maryland

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<sup>+</sup>The use of polyurethane, polystyrene and isocyanurate cores in these applications may present a fire hazard under certain circumstances. Consultation with building code officials and insurance company personnel is recommended.

Detroit Science Center, Detroit, Michigan William Kessler and Associates Inc., architects, Detroit, Michigan



#### OFFICE NOTES

#### irm changes

idney E. Snyder, Jr., AIA, has been named presilent of the architectural firm of Ossipoff, Snyder, lowland & Goetz. Gregory C. Goetz, AIA, has een named the firm's senior vice president and reasurer, and Alan W. Rowland, AIA, will serve as ice president and secretary.

A Baltimore architectural firm, Building ciences, has changed its firm name to Parsons and aukhages, Inc.

Pearce Corporation, a St. Louis-based architecural firm, has recently hired David E. Moreno as lirector of interior planning and design, and romoted Patrick M. Finn to associate vice presilent, M. Kent Turner, AIA, to principal, and James . Dutton, AIA to vice president.

The planning and architectural firm of William . Pereira Associates has announced the appointnent of five new vice presidents. They are George . Bliss, III, Arthur Golding, AIA, Graham Kaye-Eddie, ictor R. Schumacher, AIA and Robert Stockton, IA. Chris Northrup has joined the firm as director f public relations.

Steve Reigle has been named an associate of ierce Goodwin Alexander, Architects, Interior rchitects, Engineers, Planners.

RNL, Inc., a Denver-based architectural, engieering and planning firm, announce the promoon of six new officers. Gary T. Merideth has been romoted to vice president, interior design, and ruce E. Gerwig, Vishram G. Karmarker, Charles R. ugton, Joseph Naso, and Ronald L. Whatley have een promoted to assistant vice president.

RTKL Associates Inc. announce the following ppointments to associate principal: David R. eard, AIA, W. Barry Graham, Thomas C. Gruber, IA; and as associates: Jyotin J. Choksey, PE, Steven V. Eastwood, William W. Houston, PE, David C. ludson, AIA, Paul F. Jacob, III, Charles A. Kubat, tephen K. Loos, and Charles Millenburg, Jr.

Joseph Ehardt, Jr. has been elected associate ice president of Reynolds, Smith and Hills Archiects-Engineers-Planners, Incorporated.

Sert, Jackson and Associates announce the ppointment of James B. Herold as vice president nd director of the corporation. Sert, Jackson also nnounces the advancement of Priscilla D. Kern nd Hugh Phillips, Jr. to associates in the firm.

Charles Uray, Jr., PE, has been named execuve vice president of Snell Environmental Group, ic. Richard Burke, PE, has been named project anager, Susan Bugher, PE, has been assigned to ne civil engineering division; Valerie Johnson has vined the firm as a landscape architect; Paul G. aerman, RLA has been named division manager of ndscape architecture; and Lawrence W. Fulton PE as joined the firm as a project manager.

The Edelman Partnership/Architects announce e following changes: new partners: Harold Edelian, AIA, Judith Edelman, AIA, Gerald Buck, RA; nne Tichich, RA; associates: Dennis Bator, RA, irginia Yang, RA; administrator: Whitney Merritt.

The Hillier Group, Architects and Planners nounce the promotion of seven members of the rm to the level of principal. The seven are: eorge Cedeno, John Pearce, Edmund A. Wilson, Dennis Wyckoff, Joseph J. Bavaro, Steven eRochi and Joel Spaeth.

The Smith, Korach, Hayet, Haynie Partnerip/Architects/Engineers/Planners, announce the pointment of Helen Mamber Levin, ASID, IBD, chard L. Bennett, Jr., AIA and Avinash Gupta as sociates in the firm.

The Turkel Collaborative Architects and Plan-

more Office Notes on page 159



### "I went for design. He went for cost. We both went for powder dispensers."

As the designer of this building, I had two things to consider when I chose the soap dispensers for the washrooms. Cost and design. The building owner asked if there wasn't an alternative to liquid soap. He said the dispensers always clogged or leaked. He also mentioned there was more waste with liquid soap—and the dispensers always seemed to need refilling.

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I'll be installing powder dispensers and MD\*7 in all the buildings I design. And for good reasons. They please my eye, the tenant's hands, and my client's budget. Who says you can't please everyone?

For further information see Sweet's Catalog 10.16 Un.



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OFFICE NOTES continued from page 157

ners announce that Kenneth R. Resheske, AIA, has been appointed an associate of the firm.

Benjamin Thompson & Associates, Inc. announce the appointment of Bruno D'Agostino as vice president and Jane Thompson as vice president for development and planning research. Newly appointed associates are: George Bissell, MacGregor Freeman, Kenneth J. Gritter, Philip Loheed and Marcus Rector. Philip Goldberg has joined the firm as vice president for financial planning and administrative services. Allan Chapman, Edward Diehl and Rick Lamb have been named consulting associates.

3D/International announce the following promotions. Appointed to vice presidents are: Kermit S. Harmon, Jr., PE, director of mechanical and electrical design, and Lemuel M. Bottoms, director of time cost control. Jack B. Esmond PE, manager of mechanical design, has been promoted to senior associate. The following people have been named associates of the company: James R. Baker, interior architecture; Marvin L. Cleavinger, technical services; Earl N. Douglas, procurement services; Emad Khaja, technical services; David J. Leaker, project management; Charles R. Love, procurement services; Eric S. McCann, technical services; Frank D. Tincup, procurement services; Billy G. Tomlinson, interior architecture and Gabriel A. Carrillo, international project management, architecture and engineering.

Donald C. Vitters, has been named an associate in the architecture/planning firm of Wallace, Floyd, Ellenzweig, Moore, Inc.

H. A. Williams and Associates, Inc., Consulting Engineers, announce that Richard W. Payne has been appointed to the newly created post of executive vice president.

George Wittenberg, III, John Sloan and Gerald Hammons have been named partners in the Little Rock architectural firm of Wittenberg, Delony & Davidson.

#### New addresses

Cassway/Albert and Associates will now be located at 2130 Arch Street, Philadelphia, Pennsylvania.

Cline Smull Hamill Quintieri Associates have a new address located at Idaho First Plaza, Suite 1700, Boise, Idaho

Devrouax & Purnell announce their new office location at 1215 Connecticut Avenue, Northwest, Washington, D.C.

ED2 Architects/Planners have moved their offices to 1550 Pacific Avenue, San Francisco, California.

Gaul & Associates, have expanded their offices and moved to 415 North Dearborn Street, Chicago, Illinois.

Mackinlay Winnacker McNeil AlA & Associates Inc. offices are newly located at 2333 Harrison Street, Oakland, California.

Herbert L. Mandel AlA Architect and City Planner will be located at 443 Park Avenue South, New York, New York.

David Lloyd Maron Architect has a new office address at 130 Madison Avenue, New York, New York.

David Todd and Associates have relocated their offices to 134 East 95th Street, New York, New York.

Max O. Urbahn Associates, Inc. Architecture Planning & Management wish to announce the relocation of their offices to 1250 Broadway, New York, New York.

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ARCHITECTURAL RECORD September 1979 187

#### Truth in rendering

ARCHITECTURAL ILLUSTRATION: THE VALUE DELI-NEATION PROCESS, by Paul Stevenson Oles, AIA; Van Nostrand Reinhold, \$34.50.

#### Reviewed by Charles K. Gandee

Not since the Beaux Arts has drawing held such a prominent position with architects. Under the tutelage of the Modernists, models acceded to a position of favor, supplanting drawing until it was resuscitated by the post-Modernists. Now with the resurgence of drawing comes a rash of important questions: What should it look like? What purpose does it serve? How is it to be done? The answers of course depend on who is asked, but practitioners divide roughly into two campsrealists and conceptualists. The realists hold to the view that drawing serves as a taut visual bridge spanning the sometimes incongruous and often precarious distance between the abstract and the built. The conceptualists practice drawing as an auto-didactic means of exploring the possibilities of space, with license to editorialize or even to create something only tagentially related to the built.

Paul Stevenson Oles has placed himself in the vanguard of the realists by refining the technique of architectural rendering to the point of almost complete correspondence between rendering and reality. This is important for the architect, because it illuminates design problems while there is still time to make changes, and important for the client as well, who is more likely to understand and approve a project that is visually clear. Since what looks good in plan and section doesn't always result in the same thing in reality, the high degree of visual accuracy accomplished by rendering performs an important service for architect and client alike.

Oles' book, Architectural Illustration: The Value Delineation Process, is a "how-to" manual that sets forth a specific format for achieving accurate portraits of unconstructed buildings. His goal is a kind of photo-realistic illustration which conveys not only the accuracy of line and form we expect from conventional renderings, but also an authenticity of mood, tone, and feeling, a heightened sense of participation in the actual experience of the design which is unique to architectural rendering. Oles calls his method of representation the "value delineation process." The point of his book is to teach this process to neophytes in a series of illustrated lessons.

Oles begins his book with a discussion of



the various forms of architectural illustration and with an explanation of why his method is superior to others. He quickly dismisses models because they are fragile and expensive, and also because their scale is difficult to perceive. While he admits that conventional schematic drawings (axometrics, isometrics, plans and sections) are important in the early stages of design, he notes that they cannot present a realistic final view: they are helpful in presenting an abstracted version of the design, but the most they can do is give a formalized impression of what a building will actually look and feel like. By contrast, the heightened realism of Oles' "value delineation process" creates in the viewer an important sense of being there first-hand, of being involved with the real building, and only then can its quality be fully gauged.

In Chapter 2 ("Planning a Drawing"), Oles sets down guidelines for achieving a successful perspective, composition, and value, selecting the most representative vantage point, choosing the "cone of vision" that most avoids distortion, and determining the most advantageous angle for viewing the interior of a building. He reminds us that the eye naturally focuses on high resolution and high contrast, and that it is therefore important to exploit this tendency in order to emphasize centers of interest such as entrances and intersections. Doing this involves creating value—the illusion of shape through the play of light on surface and form. This creation of value, or chiaroscuro, is the crux of the "value delineation process," the essential technique on which the success of Oles' renderings ultimately depends.

In Chapter 3 ("Building a Drawing"), Oles emphasizes the need for a careful blending of hard and soft elements—hard elements referring to construction materials, soft elements designating the elements of the environmental context: sky, clouds, climate, people, and planting. He stresses the fact that in the "value delineation process" it is the soft elements which establish scale and, most important, the verisimilitude which is the ultimate goal of his method. Oles also introduces the problem of color in renderings, an especially important feature in interior renovations. He cautions, however, that color should be used with extreme care, and he urges the architect to employ a modest palette.

In his final chapter ("Delineation Devices"), Oles gets down to the specifics of his technique, which are ultimately responsible for the almost photo-realistic impression he achieves. Here he emphasizes not only the materials to be used in rendering but passes along detailed instructions for drawing. For example, he guides the draftsman in using "edgers" to produce a graphically hard edge, dry wash for a smudge technique to achieve the desired tone and contrast, "linedge" to sharpen the edge for contrast, and tuning to make subtle adjustments of value. These are some of the technical refinements that guarantee for Oles an unusually accurate illustration-refinements which produce for the viewer the sense of a more complete, more authentic experience of the architect's design.

Although the technical nature of Architectural Illustration: The Value Delineation Process is no doubt responsible for a somewhat dry and prosaic presentation, Oles nevertheless succeeds in conveying some of the excitement and potential of his "value delineation process." Too bad, then that a book which takes such pains to present a meticulously detailed process for achieving effective renderings is itself so confusing and poorly produced. Illustrations frequently appear several pages before or after their referents in text; sentences-and sometimes even hyphenated words-are interrupted by several pages of illustration; and the book suffers further from Oles' inordinate fondness for architectural jargon, which in this case requires a glossary of over 100 words. The book is also of an awkward size that is cumbersome to hold.

Despite these drawbacks, however, Oles' "value delineation process" represents a contribution to the technique of architectural rendering and one that might well prove useful to architects who want to achieve more clear-cut and articulate illustrations.

#### **Books received**

### BAUHAUS: WEIMAR, DESSAU, BERLIN, CHICAGO; by Hans Wingler; The MIT Press, \$17.50.

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#### BOOKS RECEIVED continued from page 188

collection of documents and illustrations ever published on this famous school of design. A major work and the accepted text on one of the most important catalysts of 20th-century architecture.

BUILDING WITH FRANK LLOYD WRIGHT: AN ILLUSTRATED MEMOIR, by Herbert Jacobs, with Katherine Jacobs; Chronicle Books, clothbound \$14.95; paperback \$8.95.

A rare and personal account by a two-time client of Wright's. Traces the conception and building of Usonia No. 1, the first of Wright's low-cost houses, and the hemicycle. Written by Herbert Jacobs, who commissioned both houses and later went on to write Frank Lloyd Wright's biography.

CENTRAL PARK: A PHOTOGRAPHIC GUIDE, text by Henry Hope Reed, photographs by Victor Laredo; Dover Publications, \$4.50.

A brief history followed by an extensive photoessay on one of America's greatest urban parks.

CIVILIZING AMERICAN CITIES: A SELECTION OF FREDERICK LAW OLMSTED'S WRITINGS ON CITY LANDSCAPE, edited by S.B. Sutton; The MIT Press, \$7.95.

A valuable compendium of the published work by the designer of Central Park which focuses on his contributions to the theory and practice of city planning.

DESIGN: PURPOSE, FORM AND MEANING, by John F. Pile; University of Massachusetts Press, \$20.00. An exploration of the role and ramifications of design in modern society. The author develops a general theory of design based on logic rather than taste with a focus on functional utility and the linking of theory with practice.

THE EADS BRIDGE, text by Howard S. Miller, photographs by Quinta Scott; University of Missouri Press, \$19.00.

A visual and historical introduction to a landmark in American architecture and engineering—The Eads Bridge, which spans the Mississippi River at St. Louis. Richly illustrated with first-rate architecturalstructural photographs.

ENGLISH STAINED GLASS, text by John Baker, photographs by Alfred Lammer; Thames and Hudson, \$8.95.

A generously illustrated picture-book with a brief historical introduction.

ENVIRONMENTAL DESIGN SYNTHESIS OF ARCHI-TECTURE AND THE INHERENT STRUCTURE, by Ronald J. McMillan; Vantage Press, \$12.50.

Architecture as the four-dimensional art—the fourth dimension being its continuing function. Explores the symbiotic relationship between architecture and engineering, disciplines once unified but now merely related.

THE ENVIRONMENTAL PROTECTION HUSTLE, by Bernard J. Frieden; The MIT Press, \$12.50.

A provocative and timely essay that raises serious questions regarding the integrity of environmental organizations. The author contends that environmental concerns are exploited as a means of excluding the middle class from suburban living. Professor Frieden traces an ideological elitism that serves to protect land for a privileged minority.

more books received on page 192

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Refer to Sweet's Catalog 11.20/Je for quick reference. HOUSING ASIA'S MILLIONS, edited by Stephen H.K. Yeh and A.A. Laquian; International Development Research Centre.

Research compiled from a low-cost housing study in the early 1970s concerning the "problems, policies, and prospects for low-cost housing in Southeast Asia."

HOW TO BUILD A HOUSE WITH AN ARCHITECT, by John Milnes Baker, AIA; J.B. Lippincott Company, \$6.95.

A useful and practical guide for the layperson. Clarifies popular misconceptions and explains the procedure, vernacular, and process of working with an architect.

### THE LOG HOUSE BOOK, by Jack Kramer; The New American Library, \$4.95.

The do-it-yourselfer's guide to planning, building, or buying a log house. A step-by-step "how to" manual which includes instruction in insulation, plumbing, fireplaces, and preservation.

#### PLANTING DESIGN, by Brian Hackett; McGraw-Hill, \$16.95.

A practical guide to landscaping with esthetic and ecological considerations. Explains how to achieve balance, contrast, and unity. Includes chapters on indigenous planting and erosion control.

ROLLING HOMES: HANDMADE HOUSES ON WHEELS, by Jane Lidz; A & W Publishers, \$7.95. A photographic guide exploring the domestic possibilities of hand-crafted buses, trucks, and vans as the covered wagons of the 20th-century. For the sentimentally peripatetic.

THE SOLAR DECISION BOOK: A GUIDE FOR HEAT-ING YOUR HOME WITH SOLAR ENERGY, by Richard H. Montgomery with Jim Budnick; John Wiley & Sons, \$12.95.

An idea whose time has come. Instruction for homeowners and contractors in the design, installation, and financing of solar energy systems. Timely, accessible, and pragmatic.

STRUCTURAL DESIGN GUIDE TO THE ACI BUILD-ING CODE, second edition. by Paul F. Rice and Edward S. Hoffman; Van Nostrand Reinhold, \$24.95.

A useful guide for the structural engineer that assembles and organizes for efficient design the code requirements applicable to the design of basic structured-building elements. Updated and reorganized from the first edition for better clarity.

SURVIVAL STRATEGIES: PARIS AND NEW YORK, edited by George G. Wynne; Transaction Books.

Report on the May 1978 Paris Conference. French and American urbanists met to discuss the problems and prospects of their respective cities. Issues of racism, housing, economics, urban planning, and survival strategies are raised.

VIENNA TO LOS ANGELES: TWO JOURNEYS, by Esther McCoy; Arts & Architecture Press, \$17.50 paperback; \$25.00 hardcover.

A personal history and memoir of Los Angeles in the '20s and the emigrés who shaped Southern California. The letters between R.M. Schindler and Richard Neutra, and from Louis Sullivan to R.M. Schindler, comprise an epistolary overview of modern architecture.

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