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Architectural design

57 Introduction: Vienna—Sons and fathers
Today's Viennese architects react in various ways to the historical framework within which they find themselves.

60 Magnificent obsession
Boris Podrecca's insertions into the Neuropsychiatric Institute reflect his response to existing architecture of the former Starhemberg Palace.

64 'Architecture must blaze'
Coop Himmelblau's Rote Engel wine bar and song club protests complacency with a provocative environment.

70 Quiet on the Viennese front
Missing Link creates an office for the Kuoni Travel Agency with careful detailing for an unobtrusive effect.

72 Tread softly, carry a big dish
Gustav Peichl's ground relay station for receiving and transmitting satellite communications fits into the natural contours of a field.

78 Curie Metropole
Space in a 16th-Century building is restructured to accommodate a furniture shop and gallery.

80 The undecorated shed
Two warehouse buildings are transformed by Frank O. Gehry & Associates into the Temporary Contemporary, a home for the Los Angeles Museum of Contemporary Art.

86 Blind trust
The Rio Grande Nature Center and preserve in Albuquerque, by Antoine Predock, is a small Modernist building within a site plan developed with several preservation groups.

93 Technics

95 Slammers
With a record number of inmates in correctional facilities, many of which are overcrowded, architects are stressing the importance of good prison design.
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Crusade against preservation

A campaign to exempt religious buildings from landmarks laws in New York State underscores the need to defend preservation efforts against misguided special interests.

A battle is taking place in Albany, N.Y., that will test our ability to protect architectural landmarks in the public interest (see News Report, page 19). The antagonists: architects and preservationists on one side, religious leaders on the other.

Anyone who finds these to be unlikely opponents is a victim of wishful thinking. This battle has been brewing for some time and follows logically from the history of the preservation movement to date (see Editorial, May 1982 P/A).

Until the establishment of the New York City Landmarks Commission in the late 1960s, legal protection of historical architecture in America had been limited to a few special districts and to isolated landmarks spared under urban renewal plans. New York City's law could apply to any structure over 30 years old, alone or as part of a district. Drawing on previous legal experience, the law backed up designations with documentation and hearings and spelled out conditions under which permission to demolish or alter would be granted or financial relief offered. Repeatedly upheld in the courts, it became a model for regulations in other cities.

As the city law survived court challenges and preservation seemed to gain popular support, the city's Landmarks Commission became a bit too confident. Instead of approaching each designation as if the Supreme Court would review it, the commission seemed to be swayed in some cases by citizens more intent on blocking new development than on saving landmarks per se. A couple of instances involved religious buildings of less than stellar quality. Meanwhile, a congregation with a church of true distinction—Goodhue's St. Bartholomew's—was thinking of capitalizing on its priceless Park Avenue real estate by razing its adjoining community house to erect an office tower on its site, overshadowing its landmark building. That proposal is now before the commission for approval.

Last year, religious leaders chafing under landmarks laws in several New York State communities organized and developed a new strategy. Instead of arguing building-by-building with local commissions, they asserted that landmark regulation of religious properties violates the Constitutional guarantee of separation of church and state. And instead of taking this argument to the courts—with attendant delays, costs, and risk of failure—they decided to circumvent due process by appealing to the state legislature.

Here they present themselves as righteous and economically pressed, burdened with maintaining landmark buildings to please influential aesthetes. The bill drafted to placate them would invalidate landmark control over any religious building, unless it had the consent of the owners; that innocent-sounding consent clause is what makes some existing landmarks laws ineffectual.

The argument that control over religious buildings infringes on the right to the free exercise of religion contradicts precedent. Religious edifices have always been subject to building and fire codes, zoning laws, and other regulations in the public interest. The holders of these buildings have enjoyed the benefits of such laws—including landmark preservation laws—in their communities.

The bill before the legislature singles out only landmarks regulations, claiming that "resources dedicated for religious purposes should not be diverted by government to the nonreligious cause, however worthwhile, of historic preservation." To those who built them, these buildings were the very embodiment of religious purpose, and they have remained tax exempt on the presumption that they serve a religious purpose. To claim that maintaining them now is a "nonreligious purpose" is sheer hypocrisy.

Some of the holders of these religious buildings are having real economic difficulties in preserving them, but notwithstanding assertions of the bill's backers, relief is available to them under present law. Others simply want to convert accumulated real estate value into funds for anything from soup kitchens to television sermons. What they fail to acknowledge is that the land values they would exploit have been created substantially by public policy and investment. If religious leaders cannot bear in mind their obligation to the community in managing their property, what are we to expect of others?

If this bill should succeed, if these religious leaders are able to cast aside the public's legitimate interest in landmarks preservation through dubious legislative appeals, other owners will try the same strategy. Ultimately, landmark protection by law could be annihilated.

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Views

P/A Awards: urban challenge
I’m appalled both as a San Franciscoan and a sometime commentator on environmental design and planning to see that the Mission Bay superplan received a P/A Citation in your 1984 awards program. My perception of this project is that is nothing more than a latter-day attempt to apply cardiopulmonary resuscitation to that tired old turkey, the “new-town-in-town,” which many of us had hoped decently interred in the 1970s.

Reasons for Mission Bay’s wrongness:
• It inevitably will downgrade the port uses of the nearby shores and inlets of San Francisco Bay by increasing surrounding land values and bringing in upscale type developments. Concurrently, it will cause the disappearance of blue collar jobs and businesses in the area.
• It will act as a magnet to pull high-rise development across the waterfront from the downtown business district, not only obliterating views of the Bay, but more importantly destroying the present smaller scale intermixture of lofts, warehouses, studios, businesses and residential areas in between.
• It does not acknowledge other large-scale proposals for the bayshore and nearby areas with which it will combine to alter completely the face of San Francisco and the city’s relationships to the Bay. These include Mayor Feinstein’s desire for a bayside sports stadium of giant proportions, with attendant parkland and a sometime commentator on environmental design and planning to see that the Mission Bay superplan received a P/A Citation in your 1984 awards program.

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• It does not acknowledge other large-scale proposals for the bayshore and nearby areas with which it will combine to alter completely the face of San Francisco and the city’s relationships to the Bay. These include Mayor Feinstein’s desire for a bayside sports stadium of giant proportions, with attendant parking; the “Rouse-ification” of the Ferry Building and its neighborhood (also by Pei, shown in your January news); and a huge regional Postal Service center proposed south of the site.

P/A juror Professor Schlantz is exactly wrong in stating that this is a proposal that “few could find any reason to be against.” It remains, on the contrary, an extremely controversial and, many believe, totally inappropriate development. Professor Kirkland was more on the mark in observing that the blocks surrounding the plan’s set-piece “descend into nervous speculation.” I suggest that nervous speculation of the client, Southern Pacific Railroad, and too-ardent respect for passé trend-planning by I.M. Pei/WRT Associates, make Mission Bay a candidate for obloquy, not a P/A citation.

Jim Burns
Planning Consultation
San Francisco, Calif.

[James I. Freed of I.M. Pei & Partners observes that this letter represents an antidevlopment position and maintains that the port operations mentioned have already moved elsewhere.—Editors]

Stucco distinctions
It was with more than passing interest that I read the article, “It looks like stucco...” in the December, 1983 issue. To see Philip Johnson’s wish of a half century ago fulfilled by exterior insulation systems such as ours is rewarding.

However, there are several areas on which I would like to comment in hopes of clarifying some ambiguities and in one case, answering a question raised by the author.

The use of terminology such as hard coat and soft coat to describe these systems is inappropriate. They might more appropriately be designated resinous and crystalline. The use of soft coat implies far greater susceptibility to impact damage than hard coat. Given the introduction of Panzer Mesh® by Dryvit in 1981 and the more recent introduction of similar heavy-duty meshes by other manufacturers, impact resistance of resinous systems is equal to or better than crystalline systems. Clearly every building material has limitations on its use.

Additionally, resinous systems are more readily and easily repaired than hard coat systems or virtually any other building material. These versatile resinous systems often provide architects and owners dramatic opportunities for design concepts as well as increasing site selection due to the low weight of walls. When we combine the features of insulation, heavy-duty mesh, light weight and ease of repair, these systems shine.

The question raised on Page 85 as to why the introduction and acceptance of these systems lagged behind that of Europe could beget a treatise as an answer. Suffice it to say that without the foresight and entrepreneurial daring of Mr. Frank P. Morsilli, President and founder of Dryvit System, Inc., who brought the concept and the System to the United States in 1969, the question would not even be asked as there likely would be no industry as we know it today. The road from introduction of Dryvit in 1969 until the existence of an industry circa 1981 was one trod by one company led by one man—Dryvit and Frank Morsilli.

My commendations to the author on what is otherwise one of the most comprehensive and accurate articles on what is going to be the growth industry in building products through the end of this century.

L. Douglas Mault
Executive Vice President
Dryvit System, Inc.
West Warwick, R.I.

[Members of the Exterior Insulation Manufacturers Association regularly use the terms “hard coat” and “soft coat.” P/A appreciates the writer’s observations on the terminology and history of the product.—Editors]

Credit extended
Credits for the P/A applied research citation “Energy and Occupancy” (P/A, Jan. 1984, p. 154) should have included the firm that did the extensive energy analyses and evaluation on the subject building, Dublin-Bloome Associates, New York.

Photography credit correction
Model photography of the Light of the World Catholic Church (P/A, Jan. 1984, pp. 96–98) was the work of Greg Hursley.

P/A Awards: Seaside credits
The list of consultants for Seaside (P/A, Jan. 1984, pp. 138–139) should have included Richard Rothman Associates, Architects & Planners. They were instrumental in the conceptual stages, as well as in refining the plan, even though the actual drafting of the document was done by those listed as architects in the citation.

Sponsorship credit
Michael Blackwood’s film “Beyond Utopia” (P/A, Jan. 1984, p. 22) was sponsored by the Architectural League of New York and underwritten by Knoll International.
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EagieRidge: An Architectural Design Competition From Inside the Jury Room

Preface by Charles W. Moore, FAIA

EagieRidge is the documentary of a nationally advertised, privately sponsored architectural design competition which began March 15, 1981 and concluded October 26, 1981. The two stage jury deliberations were tape recorded and the transcription tells a story of “Winners” and “Losers”.

This book is an inside study of an architectural competition from inception, through development, to final announcement of awards. Its startling conclusions pose serious questions to a profession and its professionals.

Professional Advisor: Mr. Bill N. Lacy, FAIA
Jury: Mr. Moshe Safdie, Architect
Mr. M. Paul Friedberg, Landscape Architect
Mr. Charles W. Moore, FAIA
Mr. Ralph L. Knowles, Architect
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Save the law that saved the landmarks

Challenged on both local and state levels, New York's landmarks law has become the focus of an increasingly acrimonious dispute between the preservation community and religious institutions. In New York City, the battle of St. Bartholomew's has been shaping up for three years, ever since the congregation/caretakers of Bertram Goodhue's 1918 church announced their intention to tear down its landmark community house and erect a reflective glass office tower in its place. The proposed tower, which architects Edward Durell Stone Associates unveiled before the New York Landmarks Preservation Commission on January 31, preserves only the façade of the community house, whose functions will be housed on seven floors of the office tower.

At present, the Commission is reviewing only the church's petition for a certificate of appropriateness, based on the specific merits or demerits of the Stone scheme. Should that fail, the church can file for exemption from landmark regulations on the basis of economic "hardship." St. Bart's, with its $12 million endowment, could hardly state such a case convincingly.

Pastor Bowers and his Episcopal superiors insist, however, that the issue is not one of aesthetics or even of hardship but of law, and they claim that landmarking violates the separation of church and state, as guaranteed in the First Amendment. This Constitutional question, while finally irrelevant to Commission proceedings, goes straight to the heart of the proposed Flynn/Walsh bill now pending in the Albany State Legislature. The bill would exempt all non-commercial religious properties from landmark regulations. Its proponents, led by the broadly based Interfaith Coalition to Study Landmarking of Religious Properties, argue that "landmark regulations have challenged the right of local congregations to decide how to use their own resources for their ministry."

Championing "mission over mortar," several dozen religious leaders representing New York's Council of Churches, Board of Rabbis, Catholic Conference, and other organizations, pressed their case in a hearing staged by Messrs. Flynn and Walsh on February 8. The bill's opponents, over 100 of whom also traveled to Albany under the banner "Save the law that saved the landmarks," countered that the separation of church and state does not apply in secular matters of property use. Further, religious institutions should be no more
Charles Correa has been named this year's Royal Gold Medalist. The Indian architect is to be honored at the 150th Anniversary Banquet of the Royal Institute of British Architects in May.

England's Festival of Architecture is also shaping up for the month of May. Exhibitions, auctions, a stamp series on urban renewal, and "at home days" for architects are planned to rev up public interest in architecture.

Trinity Church, Boston, has been awarded $4 million in damages (doubled with interest) in its suit against the John Hancock Mutual Life Insurance Company. The church claimed that construction of I.M. Pei's Hancock tower had shifted the foundations and cracked stained glass in the 1877 H.H. Richardson landmark.

Historic Camp Sagamore should survive, say New York State voters, who approved the necessary land swap (P/A, Nov. 1983, p. 32).

The J. Paul Getty Trust has assumed operational and financial responsibility for the Avery Index to Architectural Periodicals at Columbia University. The Index, which will remain at Avery Library in New York, is this country's principal bibliographic resource in the field of architectural journalism.

Louis L. Marines, former general manager of H.L.W., will replace David Meeker as executive vice president of the AIA.

Robert Geddes, former dean of Princeton University's School of Architecture and Planning, will receive the ACSA/AIA Award for Excellence in Architectural Education.

Aldo Rossi's four-piece furniture collection for Longoni will be imported and distributed in the U.S. by Furniture of the 20th Century. Introduced at Milan's September furniture fair (P/A, Nov. 1983, p. 37), the group includes a chest, tall cabinet, chest of drawers, and free-standing cupboard called the Elba Cabin.

Furniture by Stickley, Greene & Greene, Purcell, Feick and Elmslie, and Frank Lloyd Wright fetched record prices at an American Arts and Crafts auction at Christie's in December. A Honduran mahogany hall bench designed for the Blacker house by the Greene brothers went for $93,300, Wright's Tree of Life door [Pencil points continued on page 24]

A new opera house for Paris

The Bastille, long the symbol of the French Revolution, gives its name to a vast, vaguely defined square in East Paris. Into this charming, ambiguous site rich in history will be inserted the new Opéra de la Bastille.

The international competition for its design, last in the trio including Villette (P/A, May 1983, p. 26) and Défense (P/A, July 1983, p. 21), took place in two phases. More than 1600 architects answered the call for entries issued by cultural minister Jacques Lang in December 1982. The 744 entries accepted by a technical review committee were narrowed down by the international architectural jury to six semifinalists. Three were then selected by President Mitterrand and asked to proceed with more complete documentation (P/A, Nov. 1983, p. 37).

On November 17, 1983, Carlos Ott, a 37-year-old Canadian originally from Uruguay, was pronounced the winner. His first-phase esquisse and second-phase drawings and model were the central features in a gigantic exposition of all 744 entries held at the Palais de Tokyo this winter.

Ott's scheme impressed the jury with its "freshness and clarity of expression ... resolutely modern, but also a good example of contemporary urbanism, well allied to its site." Its complicated silhouette resembles a giant mechanical piano (and its details bear more than a passing resemblance to the work of Richard Meier—eds.). On the Place, the curved and transparent façade reveals a grand stair leading to the various levels of the 2800-seat main hall. A second 1500-seat hall and rehearsal hall are marked volumetrically as half-cylinders. Between these are mechanical functions.

Ott's Opéra de la Bastille.
Ott, who is now working on the project with the Canadian firm NORR, prefers his original esquisse to the chaste, white model and drawings of the second phase. "I would like this 'opéra populaire' to be transparent and open but also mysterious and dramatic," the architect says. "The Opera at Beyreuth was built for Wilhelm II; Garnier's Paris Opera was constructed for an imperial bourgeoisie. Today we need a new form for a new audience. The program is rich and complex, as complex as the site itself, or the epoch." In fact, debate in Paris has centered less on the considerable architectural and urbanistic issues than on the programmatic ones: Will the new opera replace the old? Can opera in fact be popularized? What role should this new opera house play in the cultural life of its city?

[Marie Christine Loriers]

Editor's note: There remains one final competition in Paris for a music "city" in the Parc de la Villette, limited to invited contestants, this spring.

Marie Christine Loriers, formerly an editor of Urbanisme, now runs the Galerie d'actualité, Institut français d'architecture.

Funding the costly prototype

Set up to bridge the gap between design and execution, the Innovative Design Fund provides grants of up to $10,000 for the fabrication of prototype textiles, furnishings, and other products. The Fund, brainchild of fashion designer Bonnie Cashin, is itself funded by grants from the National Endowment for the Arts, the New York State Council for the Arts, and private foundations.

Cashin hopes to speed up the time it takes for innovative products to reach the public through funding the prototype and assisting the grant recipient in contacting potential manufacturers. The Fund also plans to document each project's process for archival, educational, and promotional purposes.

Organized in 1980, the Fund has just awarded its first grants to Kent Bailey, a California jewelry designer and photographer, for a stabilized land and sea lamp, and to Tod Siler, an MIT graduate student, for a fabric screen with concealed light source.

Interested designers should send a letter of intent (three pages, double-spaced, typewritten) describing the design concept to the Innovative Design Fund, 866 United Nations Plaza, New York, N.Y. 10017.

Re-forming Manhattan

at the Whitney

Two branches of the Whitney Museum of American Art recently hosted small shows of special interest to architects. The midtown branch at Philip Morris featured "Raymond Hood: City of Towers," a show originally organized by the Institute of Architecture and Urban Studies and curated by Carol Willis. (The accompanying IAUS publication by Robert A.M. Stern and Thomas P. Civilization is available from Rizzoli Publications.) Hood's lifelong search for an appropriate skyscraper expression was illustrated through the Chicago Tribune (1922), American Radiator (1924), Daily News (1929), McGraw Hill (1930), and Rockefeller Center (1931) buildings, but it is Hood's drawings for a utopian "city of towers" that dominate and ultimately steal the show.

These drawings present a vision of urban transformation very different from that proposed in the downtown show "Metamanhattan" (Federal Hall National Memorial). Hood's sweeping proposals for Manhattan in the year 1950 (produced in 1929), while not as radical as those of Le Corbusier and other utopian visionaries, are far removed from the more modest, incremental program of "change through gradual accretion or selective elimination" advocated in "Metamanhattan."

This second show was organized by four Helena Rubinstein Fellows at the Whitney, and it is clear from the outset that each curator had a separate agenda. The playful, pop satire of Saul Steinberg's cartooned "Eighth Street" is set cheek by jowl with the pure formalism of Steven Holl's "Bridge of Houses" (for an abandoned railway), or the propagan-

dizing of PADD's (Political Art Documentation/Distribution) "Stop Gentrification."

The four curatorial voices overlap and even argue in the tabloid-format handout that serves as the show's informal catalog. This messy mix of ideas, however, provides a welcome contrast to conventional, cool museum presentations, provoking rather than suppressing controversy.

Criticizing the critics

With some justification, Houston is becoming known as a repository of some of the most notable recent work of notable American architects. Yet what is perhaps the biggest ongoing story in town has been relegated in the city's two major newspapers to a position of dubious importance as one of several beats covered by a fine arts editor and a design writer, neither of whom is a specialist in

Progressive Architecture 3:84 21
the field of architecture. This perceived indifference on the part of the Houston media became the catalyst for a symposium at the Museum of Fine Arts (Jan. 25) on “The Role of the Press/Criticism in Architecture.”

Organized by the Rice Design Alliance and the Houston Chapter/AIA, the symposium assembled a respected cadre of writers and critics, including Suzanne Stephen, an editor of *Vanity Fair*; Rice professor Peter Papademetriou; Peter Blake, former editor of *Architectural Forum*; David Dillon, architecture critic of the *Dallas Morning News*; Diane Ghiarado, an architectural historian at Texas A&M and an editor of *Archetype*; and Joseph Giovannini, design reporter of the *New York Times*. Representing—and put in the position of defending—the local media were Ann Holmes, fine arts editor of the *Chronicle*; and Pamela Lewis, *Post* design writer.

The panelists considered present-day architectural criticism pale by comparison to the "profound contributions" of such past luminaries as Schuyler, Mumford, Jacobs, and Huxtable, and lamented the tendency to lapse into noncritical description, lacking what Stephens termed “an evaluative framework.” Addressing the reluctance of critics to be critical, Giovannini advocated “reasoned discussion” as a means of defusing negative reactions to unfavorable reviews. But Ghiarado argued for an unreasonable criticism, hard-hitting reporting that “questions not just the way a building looks on the outside, but the basic assumptions behind it.”

Blake observed that criticism indeed has shaped the direction of American architecture during the last decade, “but not always in the way I would like to have seen it.” Houston, he said, is a case in point. [Larry Paul Fuller]

Larry Paul Fuller is the editor of Texas Architect.

**P/A Awards at the Plaza**

Some 360 members of the architectural community joined *Progressive Architecture* at the Plaza Hotel on January 20 to honor the winners in the 31st annual P/A awards program. All but one of the winning designs, urban planning, and research teams were represented at the awards luncheon. (Steven Holl picked up the citation for absentees Bayey and Mack.) Six of eight jurors assembled for the event.

On Thursday, January 19, the magazine honored 25 advertisers and their agencies at the ninth annual Ad Awards dinner, also held at the Plaza. Special accolades went to Nevamar and Jack Lenor Larsen, selected by the architect-jury for Awards of Distinction.

**Reconstructing Tatlin’s tower**

Vladimir Tatlin’s “Monument to the Third International,” a watershed work in Constructivist art and architecture, has long presented a puzzle to historians. The 1920 project for Petrograd was never actually built, but drawings and model were widely exhibited in the early 1920s.

Tatlin’s original model, however, was destroyed, and only scant documentation survived. Over the past 20 years, five separate reconstructions have been completed. Now the Hirshhorn Museum Model Shop has built its own version, based upon some newly discovered photographs. The nine-foot model with its rotating, lighted chamber was the star of “Dreams and Nightmares: Utopian Visions in Modern Art.” (The catalog for the show is still available from the Smithsonian.) [DBB]

**Tuning in to technology**

“Technology has become a separate but equal subject with design in the minds of many architects and educators.” With that keynote remark by Ulrich Franzen, the participants in the Second Annual ACSA Technology Symposium set about exploring ways to integrate the two subjects. The common commitment to integrated curricula fragmented in debates over implementation in the studio.

Speakers discussed technology not as an isolated discipline but as one heavily influenced by aesthetic, economic, and cultural developments. Gordon Simmons, University of Cincinnati, claimed that “stylistic periods are as evident in technology as they are in design.” David Glasser, University of Wisconsin/Milwaukee, criticized the profession for “our collective lack of a body of technical knowledge and our preoccupation with novelty.” All urged that architects rethink the relationship of technology to design and design education. [TF]
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Pencil points

(mean house) for $104,500 (PIA, June 1983, p. 48).

A second auction of the Arts Nouveau and Deco and Post-war design set records for furniture by Albert Cheuret, Eileen Gray, and Josef Hoffmann.

Fifty years ago, Robert Moses was sworn in as New York City’s Parks Commissioner. His achievements are the subject of a Parks Department show “Building the Parks: Art and Architecture in the Robert Moses Era” (through March 31).

Those were the days. Moses’ army of 84,000 relief workers and 1800 architects now numbers only 1800 total, and his 100 parks, 658 playgrounds, 17 pools, 3 zoos and one aquarium are showing their age.

The City Council of Alexandria, Va., has ordered its Board of Architectural Review to approve only those projects dressed in Georgian, Federal, Greek Revival, or Victorian garb for historic Old Town.

Angered by the BAR’s “liberal” actions (it was the Art Deco restaurant that did it), the council dissolved and restructured the Board, reducing the number of architect members by one (to two of seven).

Architect Jeffrey Milstein’s first collection of architectural notecards (PIA, May 1983, p. 52) was such a hit that he’s produced a second set in Stick, Carpenter Gothic, Eastlake, Chateau, Tudor, and Painted Lady.

Both sets are available from the AIA Service Corp.


Also in New York, the West Side Rail Line Development is fighting to preserve an elevated Conrail freight line that runs from Greenwich Village to the Convention Center site.

The abandoned line, if renovated, could solve some of the West Side’s pressing transport problems.

The creators of “Cadillac Ranch” have sued the owner of an L.A. cafe for the “unauthorized reproduction” of their 10-car composition, buried fins-up near Amarillo, Texas.

The artists, Ant Farm, are asking $1 million in damages from the Hard Rock Cafe for its “imitative” Cadillac-adorned façade.

“Plantations” shall henceforth be termed “manor houses,” says Virginia’s State Secretary of Commerce and Resources, who wishes to avoid “offensive” memories of slavery days. Would that the historical record were so easily erased.
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In progress

Two new cultural facilities—Hollein's Culture Forum and Stirling's Performing Arts Centre at Cornell—in progress.

Culture Forum, Berlin, West Germany. Architect: Hans Hollein, Vienna. A large square and four fairly small buildings are used to tie together several significant and disparately styled structures—Mies van der Rohe's National Gallery, Hans Scharoun's Philharmonie, and the Classical Matthäi Church among them—as well as to give a focus to an important area in West Berlin. An exhibition building and a guest house for the city, and a Bible museum and a monastery for the Protestant Church will be located towards the outer parts of the square. Waterways will be drawn from the nearby Landwehr Canal to define and to link the square and the surrounding buildings. A station for a rail system stands at one corner of the site, and two-thirds of the area under the square will be used for parking. Hollein won the commission in an invited competition sponsored by the Berlin Senate in association with IBA. Completion is expected in 1987.
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In progress

Cornell University Performing Arts Centre, Ithaca, N.Y. Architects: James Stirling, Michael Wilford & Associates, London, England, and Wank Adams Slavin Associates, New York. Sited on the town side of Cascadilla Gorge, the Performing Arts Centre is split into two phases for funding. The first phase incorporates a 400-500-seat proscenium theater and its public foyer, a dance studio, and support facilities. The second-phase building is planned for a flexible 180-seat theater and additional studios, classrooms, and offices. A walled garden has been designed to fill its site temporarily. An open-air, public loggia ties the separate components of this villagelike ensemble together, presenting a uniform elevation to the university across the gorge. A ticket-sales pavilion pins one end of the loggia; at the other, a spiral stair connects down to existing footpaths at grade. The center should be in use by early 1986.

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Building for the Ages

The Solomon R. Guggenheim Museum in New York City, designed by Frank Lloyd Wright, was completed in 1960. The circular structure has the effect of providing one great space on a continuous floor so that the eye sees no angles or abrupt changes of form.
St. John, New Brunswick, Canada's oldest city, has a new architectural showpiece. The multiuse Market Square, located at its heart, is an important element in the ongoing revitalization of the city's downtown core.

The waterfront site has historic significance as well. Two hundred years ago, the Loyalists landed at the Market Square site—the City of St. John will celebrate the bicentennial of its charter in 1985. Few vestiges of the early settlement survived a fire of 1877; however, the landscaped Loyalist Plaza on Market Slip commemorates the landing.

Market Square's central building complex, which faces the plaza, incorporates seven 19th-Century warehouses, converted to house the city's trade and convention center, a three-story commercial atrium, the main branch of the St. John regional library, office space, and underground parking for 650 cars. Adjacent to this central building is a new residential complex, composed of a 250-room hotel, luxury condominiums, senior citizens' housing, and rental apartments, all of which are still under construction and due to open in 1984.

The inclusion of housing and the public library in the Market Square program ensures the presence of local citizens as well as tourists and conventioneers.

The $71 million project was sponsored jointly by federal, provincial, and municipal governments in partnership with a local developer, the Rocca Group.

The Montreal firm Arcop Associates (Ray Affleck, partner in charge) was responsible for architectural design and civic improvements. Mott, Myles & Chatwin served as associate architects for the central building complex; Cochrane & Forsyth for the historic warehouses; and Nakashima & Timoon for the residential buildings.

Relating new to old
The sympathetic integration of old and new structures is obviously a key design issue at Market Square, affecting both the treatment of individual buildings and the overall planning. The new buildings, while compatible with the old, are also clearly distinguishable. New details are occasionally played off against old: for example, the striking blue-green
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Perspectives

color of the central building's main entrance is juxtaposed against adjacent brick facades. The city's street patterns have been retained and landscaping has been extended from King Square to the waterfront, creating a mall that ties back to the center of town. Brick sidewalks, old-fashioned lighting, benches, and potted plants have been installed along the mall, and a new 30-foot-wide boardwalk provides public access to the harbor.

Parallel to this outdoor mall is an interior one that links Market Square, via skywalks, to City Hall and beyond to Brunswick Square, a major new hotel and shopping complex. A future connection to the City Market, currently undergoing renovation, is also planned.

This integration of old and new, while successful at the urban scale, is less so inside the main Market Square building. Although the three-story atrium incorporates the rear sections of the seven warehouses, its unique architectural quality is diminished by conventional mall decor, including the central fountain, tile floor, and colored banners. These details are reminiscent of other major mall projects on the eastern seaboard, such as Manhattan's South Street Seaport (P/A, Sept. 1983, p. 29) and Boston's Faneuil Hall Market (P/A, July 1981, pp. 105–106). In all three cases, architectural history has become an important marketable commodity. Characteristic of these large-scale projects is the tendency to overrestore older structures, removing their historic patina, and thereby setting restored structures apart from the surrounding neighborhood. While Market Square is nearly complete, the nearby Prince William Street, one of St. John's few remaining intact 19th-Century commercial streetscapes, remains in a state of neglect despite its prime location a mere 1000 feet from Market Square. Nevertheless, it presents a unique opportunity to preserve the neighborhood as a working ensemble that can only enhance new developments at Market Square.

Judy Oberlander, a graduate of Columbia University's preservation program, now works for the Heritage Canada Foundation.

Left: library facade; above: mall interior.


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**Through Apr. 13**
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Historic Preservation in America: The National Park Service. College of Architecture, Ball State University, Muncie, Ind.

**Mar. 23–Apr. 11**
Recent Works by Anna Wernner. First Street Gallery, New York.

**Mar. 27–Apr. 26**
H.H. Richardson’s Allegheny County Courthouse and Jail. Gallery at the Old Post Office, Dayton. Also, through Mar. 22, OSU Center for the Visual Arts, Columbus, Ohio.

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**Conferences, seminars, workshops**

**Mar. 22–24**
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**Apr. 13–15**
Revitalizing America’s Historic Resorts, 11th Annual Back to the City Conference, Miami Beach. Contact Miami Design Preservation League, 1300 Ocean Dr., Miami Beach, Fla. 33139 (305) 672-2014.

**Apr. 14**

**Apr. 15**
Enter deadline, Second Annual ASID/Wilsontart Design Competition. Contact 1984 ASID/Wilsontart Design Competition, % McKone & Company, Inc., 2700 Stemmons Tower East, Suite 800, Dallas, Texas 75207 (800) 433-3222.

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Solution: Interior Arts has utilized a transparent "watery" look to reflect the existing landscape and enhance the light regardless of weather conditions. The design accommodates the view while working in concert with the interior.
Off-the-shelf software: Getting a quick payback

"Our practice is unique, we don't do things the way other firms do. We need highly specialized computer software. Let's hire a programmer." Heard this before? Actually, this scenario has a sequel: "Let's spend lots of money, quickly and needlessly. Let's reinvent the wheel." And eventually, "Let's rid ourselves of this albatross. Let's go back to doing things manually—computers don't work."

Maybe this is a "worst case scenario," one that many unsuspecting A/E's have stumbled into. It doesn't have to be this way, provided you know what to shop for. Hardware costs are plummeting and will continue to do so. Conversely, specialized software costs are spiraling upward. But the good news is that you don't have to spend a fortune to gain the benefits computers offer.

Microcomputers are within the budget of every A/E firm, even the one-man office. And every firm that doesn't have one yet should get one soon. For as little as $2500 you can buy the needed hardware (a 64K dual diskette system with a draft quality dot matrix printer plus all the usual accessories). And with a software budget of $500, you can move quickly into the computer age, buying the more sophisticated applications later when you are ready for them. (Don't spend money on higher level programs that will sit idle for months while you try to master the fundamentals.)

"Off-the-shelf" software can help you get your system productive quickly. And the faster it becomes productive, the faster you'll be able to bill your computer time to your clients.

Whether you're a novice or you've had a system for some time, you're from a small firm or a large one, "canned," off-the-shelf, ready-to-use software can be a bonanza for A/E computer users. Oftentimes overlooked, it can offer these advantages:

*It's cheap*—downright inexpensive. Unlike hardware or expensive custom software, if you make a wrong choice, your investment is low enough that you can discard the package and get another that's more suitable. For example, if you choose the wrong word processor, you may be forced to live with a $10,000 mistake. But if you choose the wrong word processing software, your loss may only be $100 or $200.

*It's reliable*—for the most part if you stick to the leading brand name developers and vendors. The leading programs will have well-established track records and many times extensive reviews will have been published in computer journals. If you buy your off-the-shelf software from a computer store, the salesperson will often point you in the direction of his best selling, best proven programs, or new programs, developed by reputable companies, that appear to have the potential to become popular.

*It's easy to use*—and ready to use. Programming is seldom required. Most programs are designed to take information or variables fed in by the user and process the data in a logical manner. The computer doesn't care if what it's processing is for an architect, a banker, or a plumber. Assuming one already knows how to operate a computer, most architects and engineers say the programs listed below take anywhere from a few hours to a day to learn the fundamentals and gain most of the benefits a particular program offers.

*It's readily available*—If a particular program is a hot seller, it seldom is long before the program is cloned by the competition. Thus it's not uncommon for the user to have the luxury of choice among a half-dozen generic programs.

And unlike highly specialized programs, you won't have to wait while it's developed and debugged; you can grab it off the shelf, walk to the cashier, and have it in your office the same day.

There's a slight catch to all of this, however. You have to know what to look for. The key to your success is your ability to understand what a program is intended to do and relate that process to what it is you want the program to do. Says Richmond, Va., architect Page Highfill, "There are hundreds of these treasures out there for people with the right attitude. Shop for program 'personalities' instead of specific uses."

Highfill does just that. While browsing in his computer store he found a book containing 32 programs. The book cost $5.95. Once an interesting program was selected, it had to be typed and saved on a diskette before using. In the book, Highfill found a decision-matrix program that allows the user to compare several items by establishing a set of criteria for comparison and assigning a number from 1 to 10 to that particular criterion, ranking its value. When all values are submitted, the program automatically determines the best choice by assigning it a rating of 100, and then ranks all other choices as a percentage of that total. For example, Highfill uses the program to help certain clients determine the best possible site for their projects, by having the client assign values to such criteria as traffic, egress, visibility, cost, etc. Once the criteria and values are plugged into the program, the sites can be objectively compared very quickly.

El Paso architect George Staten feels that for most firms, the ability to per-
Word processing software: Considered one of the easiest to learn (at least the fundamentals), word processing software should be at the top of your shopping list. It simply turns your computer into a typewriter with memory—no special A/E application here! Excellent packages are available from $100 to $500. Since specifications will consume a great deal of computer time in many firms, you may also want to buy an existing electronically stored master specification. [For a complimentary checklist on what to look for in word processing software, write A/E Systems Report, P.O. Box 11316, Newton, Conn. 06111.]

Mailing list software: Although your data base management software will usually allow you to set up your own mailing system, there are a number of good, low-cost packages that will spare you the effort. Many allow you to save and print out additional information about the record (e.g., phone numbers, brief notes or comments, etc.) and to sort records by user-defined categories as well as geographic regions. Some even have a built-in word processing capacity for generating short letters to each name stored. They're excellent for client mailings and regular progress mailing to consultants and contractors.

Electronic spreadsheet software: Oftentimes referred to as forecasting programs, the most popular is Visicalc. Formulas and variables are user defined. Once the categories and formats are determined, it permits "what if" solutions for planners. By changing values, new projections can be made rapidly. A/E's are using this program extensively to monitor energy consumption, for lifecycle costing, for fee projections, as well as job costing and analysis. Many other programs have mimicked Visicalc, and even Visicalc has an expanded version. Costs for "electronic spreadsheet" software range from about $200 to $400.

Specialty software: Many other programs are available to perform very useful functions within your office, most of which, however, will not be used as often as the above. Among them are scheduling programs to monitor Critical Path, PERT, etc., which are excellent project management tools; time management software, helpful to analyze time, costs, and manpower; spelling dictionaries, with vocabularies of 100,000 words (and most allow you to key in terms unique to your practice); real estate analysis software, excellent for financial and site analysis; inventory control software, useful for in-house as well as project inven­tory control; and communications software, which permits your computer to hook up via direct connect or telephone to other similar computers or to larger, more powerful computers out-of-house, further expanding your applications options.

As you grow in confidence and intelligence with your system, at some point you may want to do some very specialized things. And to do them will require a lot of time, effort, and money. Tackle those applications only when you've exhausted the usefulness of this "off-the-shelf" software. It will pave your way for a smooth transition.

[George S. Borkovich]
**Review of shop drawings**

An architect’s responsibility for the review and approval of shop drawings, and the related subject of his liability in connection with such practice, has been a continuing source of concern. It is the contractor’s initial duty and responsibility to assure that shop drawings conform to the plans and specifications. The question is often raised, however, as to whether some part of this responsibility has in some way been shifted to the architect as a consequence of his review and approval of shop drawings. Particularly worrisome is the claim that an architect who has approved a shop drawing that reflects a hazardous method of construction is thereby liable for injury to a person resulting from a dangerous condition at the building site.

The workmen on a construction project utilize shop drawings to instruct them what to do. Consequently, much of the information contained on such drawings may relate to the fabrication process or to construction techniques that normally are not specified in the contract documents. It has generally been held that where it is established that the approval of shop drawings by an architect is not for the purpose of approving construction means or methods, the architect will not be subject to liability for defective construction, even though reflected in the shop drawings. For example, in the leading Louisiana case of *Day v. National U.S. Radiator Corporation*, it was held that the failure of shop drawings to show pressure relief valves for a boiler (the absence of such valves leading to a serious accident) did not subject the architect to liability, as his review was not for the purpose of approving fabrication. On the other hand, shop drawings often reflect dimensions, quantity, and details inconsistent with similar information contained in the plans or specifications. An approval under such circumstances may subject the architect to liability even though the construction contract provides that the contractor shall not be relieved from liability by the architect’s review and approval of shop drawings, and even if the contractor has failed to notify the architect of deviations from the requirements of the drawings and specifications.

The form contracts of the AIA seek to limit the architect’s responsibility by providing that the architect will review and approve shop drawings only “for conformance with the design concept and with the information given in the drawings and specifications.” The latter phrase is quite ambiguous and therefore the limit of the architect’s responsibility continues to remain uncertain.

The standard contract between owner and architect issued by the AIA provides that the architect will not be responsible for construction means, methods, or techniques or for safety precautions or programs, and places those responsibilities affirmatively on the contractor. Such language has been of substantial benefit in limiting the architect’s liability, but has not necessarily resulted in an avoidance of legal actions. For example, in Oklahoma in the case of *Waggoner v. W & W Steel Co.*, 657 P.2d 147, an architect was sued for damages resulting from the injury and death of workmen occurring as the result of the collapse of a portion of steel framework during construction of a hospital. The architect’s design had provided for expansion joints that allowed for expansion and contraction with changing weather conditions. The expansion joint was designed so that a shelf welded to a column provided a seat for a beam, which was held in place by “keeper angles” welded on either side of the beam. The opposite end of the beam was to be secured...
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to another column with large bolts. At the time of the accident, the "keeper angles" had not been installed and the beams were not secure in any other way. The accident occurred as workmen on upper floors of the structure were waiting for other workers to bring up guy lines, which were to be used in securing the steel, at which time an approaching thunderstorm rolled in and a gust of wind hit the unbraced steel causing it to collapse.

The theory of the plaintiffs' action against the architect was that he had been negligent in reviewing and approving shop drawings that did not include provision for temporary connections.

Although the court absolved the architect of responsibility, it would appear that there is an area of potential risk to the architect in reviewing and approving shop drawings which, in addition to contractual language of limitation, can only be reduced or minimized through careful analysis and study of shop drawings.

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

Games contractors play

Since specifications are the technical portion of the agreement between the owner and the contractor, it's important for the specifier to know how to prescribe most effectively exactly what the contractor is to do in the course of constructing the building. In instructing the contractor and his subs about how certain parts of their work are to be done, the specifier needs to know not only what options are available, but also what mistakes are likely to be made. He needs to ask himself how the work might be done in an unacceptable way in order to prevent that from happening by giving specific instructions and by forbidding certain detrimental actions.

Because twenty or more trades and hundreds of activities are often involved, the goal of preventing anything at all from going wrong by writing the specifications carefully is hard to achieve in practice. There is always likely to be something left unmentioned, something overlooked or unanticipated, or something left to the contractor's decision.

Even where the documents are excellent and the instructions clear, things can still go wrong on the job. The specifier is often heavily involved in resolving construction-phase problems not of his making, but which call upon his technical background and knowledge of the construction game in its entirety.

While many contractors are capable and intend to do the work as bid or negotiated, there are some who seem to find their own interest diverging from that of other members of the building team at times. While the specifier's main opportunity to deal with such divergence is in the preparation of the project manual itself, the game isn't over when the bids are received; on the contrary, it is often just beginning.

Here are a few of the games contrac-

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tors sometimes play. There are many others and variations are constantly being invented.

Substitutions (a favorite pastime): You have listed six acceptable paint manufacturers. The contractor submits a seventh (an unknown). Should you call out the chemistry lab? You are offered an unfamiliar membrane "just as good" as the one(s) specified. Do you search for evidence from ten prior satisfied users? The burden of proof is on the contractor in such cases to convince the architect that the proposed product meets the job requirements. Provided the specifications were carefully thought out and well drafted initially, this game can be played at the contractor's expense, not the owner's. But be satisfied you are not giving away the store before accepting the substitution.

Highball: "Galvanizing the steel lintels will triple the price and take ten weeks. We didn’t bid it that way because nobody galvanizes lintels anyway." This is a test of the architect's willingness to stand behind his specifications. A phone call to a galvanizer or two might bring the price and the timing down to proper scale. But the specifier needs to have a good idea of the cost and availability of what he specifies to deal with this game.

Credit card: If you left something out and have to add it, you always pay more; if you deduct something you did include, you never get full credit. True, there are administrative costs in both cases which the contractor is due in all fairness. But sometimes the numbers get out of hand, and we are off into playland very quickly on either the up or down side. Limiting unit prices by providing for add-only sums and deducting a uniform percentage for decreases (say 10 percent) helps bring some control to this popular on-site game.

Mail order: "Yes, we can provide what you specified, but it will delay the job (because we didn’t order it early enough), so please accept our (cheaper) substitution so we can get the project done on time. Otherwise the delay will be your fault." Should there have been a critical path diagram for this job which included lead time for this item? (Or maybe it was too small to warrant attention at first.) This game needs stopping in the shop drawing/data submission stage. It may be hard to do now.

Special delivery: "I know it’s not exactly what you specified, but they just delivered it to the site and I don’t want to send it back (delay, expense), so can’t we please unload the truck right now? It’s four o’clock and the men go home in half an hour." How did we get into a spot like this? Didn’t we get shop drawings and manufacturers' data approved before shipment? How did it get this far before anyone checked? Will we have to take an unwanted credit for defective work not remedied?

The project manual is still the rule book for playing the building game, but rules are sometimes subject to interpretation; and if someone cheats, a friendly game may turn sour. With large amounts of money at stake, the temptation to play games is often compelling. A certain amount of worldly-wise understanding of the construction process is useful to the specifier, and experience in the field on construction sites is unquestionably valuable.

It's important to remember also that it is by compromise, adjustment, and alternate solutions that problems get resolved on the site, and that the specifier can have a key role in playing (and winning) the games that are played there. [Walter Rosenfeld]

Walter Rosenfeld, AIA, CSI, is Managing Director for Professional and Technical Services at The Architects Collaborative in Cambridge, Mass.

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The rush of glory and optimism that catapulted Vienna to the center of the vast Austro-Hungarian empire left a physical fabric and a tradition of intellectual controversy sufficient to inspire—or to overwhelm—today's practitioners. These Viennese architects are heirs to a legacy so potent as to inspire—Or to overwhelm—working in a city whose economic and political grandeur is now all but decimated—Davids in the face of a Goliathian past.

Architectural philosophies in Vienna overlap and replace each other rapidly now, as they did in the past. During the last years of the Hapsburg Empire, history moved quickly. Architecturally, movement followed movement with breathtaking rapidity. Camillo Sitte supported the 19th-century historicism trend, but countered the Haussmann-like enthusiasm for broad ceremonial avenues that took form in the Ringstrasse replacing Vienna's medieval walls. In opposition to historicism and to Sitte's nostalgia for the medieval town, and almost concurrent with his efforts, Otto Wagner championed monumental urbanity and the rational modernism of functionally and structurally expressive architecture. He soon joined in support of his students Joseph Maria Olbrich and Josef Hoffmann, together with Gustav Klimt and Koloman Moser, who formed the Vienna Secession, in mandating a break with the imitative styles of the past for the invention of a new decorative language. Adolph Loos, Josef Hoffmann's peer, in the early 20th Century seceded further, one might say, denouncing the pretty, meaningless production of the Wiener Werkstätte designers (Moser, Hoffmann) as unreflective of what he saw, with prescience, as the realities of a changing social order.

Today, the most talented Viennese architects generally receive pebble-sized commissions that allow them to intervene in the Goliath-like framework, but they are armed with slingshots powered by three forces: the habits of craftsmanship (resurrected with the help of Sitte in the 19th Century); the inspiration of the still extant products of their creative ancestors; and the Viennese tradition of intellectual exploration and exchange. Following the latter tradition, they are active in mounting exhibitions, discussing, issuing manifestos... and disagreeing. Given the power of their forefathers and the relative puniness of their resources, they inevitably work in reaction to the past—either with respect, clarifying, interpreting, or embellishing the given context, or Oedipally. As attitude follows attitude, like-minded architects band together and are declared (or declare themselves) the newest and the most appropriate wave.

The tradition of critical discussion and uncompromising exploration was conveyed, after World War II, by teachers such as Clemens Holzmeister and, more recently, Wilhelm Holzbauer, Friedrich Kurrent, and Johannes Spalt. In the early 1960s, Hans Hollein and Walter Pichler staged their secession
in the form of an exhibition to express their stormy impatience with what they saw as the complacency and monotony of established Modernism. “Everything is architecture,” they declared, and they found genuine architecture in, for example, industrial artifacts, from dams and railway cars to computer networks. They were, they felt, clearing the ground of the accepted strictures to make way for untrammelled creativity. Hollein has gone on to design buildings, interiors, and furniture that explore and release unexpected fantasies and depths of sensuousness (his famous Austrian Travel Agencies, P/A, Dec. 1979, p. 76; his recent Schullin Jewelry Shop, P/A, June 1983, p. 76) and investigate urban systems (his winning design for the extension to the National Gallery in Berlin).

Other groups established in the 1960s continue to espouse the antiestablishment stances of the 1968 student revolts in Europe and America. The Coop Himmelblau architects say that “Architecture must blaze,” and “The harder the times, the harder the architecture.” In the Rote Engel bar (p. 64) they drive a shaft (literally) through the walls of the containing structure built by a famous forefather. They have no patience with historicism, no patience with the bourgeois comforts of Biedermeier, and their work—generally sculpture and unbuilt architectural projects—reflects aggression and anger against an assumed permanence. Paradoxically, their executed architecture (the above-mentioned bar, for example) is built to last. Industrial materials are arranged at provocative angles but are finished carefully. Somewhere, on the way to their critical stance, traditional lessons of craftsmanship and of the neat resolution of details were absorbed. They set out to crucify the social order, and in the act, sublimated their anger. The result is artistically impressive, if in a way unintentional.

In contrast to the Oedipal approach of Coop Himmelblau, many architects of Vienna today have come to terms with the past and with the scale of their opportunities. Herrmann Czech (in response, it would seem, to Hollein’s 1963 edict) has said “Architecture is not life. Architecture is background. Everything else is not architecture.” His well-known cafés designed in the 1970s (Kleines Café and Wunderbar) use slightly overscaled medieval moldings, subtly placed mirrors, carefully unobtrusive piers arranged according to a system in Loos’s American Bar, and tufted lounges to create smoky, yellowish environments within existing buildings—environments that feel as if they have always been there. His current crop of smallish houses continues his low-key approach and picks up cues from the early Austrian Modernist Josef Frank. The diffident approach to history can be subtly rewarding, as in Czech’s cafés, or disappointingly gawky and boring, as in recent houses by Luigi Blau (who showed a far surer touch in earlier, more Modernist schemes, P/A, Sept. 1980, p. 151) and in folkly community centers/churches by Appelt-Kneissel-Prochazka.
Missing Link’s respectful dialogue with the past, on the other hand, reveals care in forms as well as details, resulting in, at the least, integrated layers that glow as if worked, handled, and polished with infinite patience, and at the most, cool levels of sophistication (the Kuoni Travel Agency façade, p. 70).

Boris Podrecca has humbly expressed respect for the Viennese past and confessed modest achievements in juxtaposition to it. In fact, he is an untrammeled sensualist who produces (like Hoffmann) thoroughly luscious and luxurious effects uncowed either by the impressive existent surroundings or (like Hoffmann) by wordy theories. The importance of black rectilinear frames and grids and of rich and appealing materials is also reminiscent of Hoffmann’s work: the use of marble in the Neuropsychiatric Institute (p. 60) recalls the Palais Stoclet living room, and the appreciative exhibition of sanitary fixtures, where appropriate, has parallels, too, in Stoclet.

Gustav Peichl, older than the other architects whose work is featured here, might be called this issue’s candidate for the Otto Wagner seat, insofar as he combines the expression of advanced technology and gentle domesticity. Wagner’s fin-de-siècle concern for urban development is replaced, in the Aflenz relay station (p. 72), by the environmental concerns of our times.

We end the Vienna section with a quiet shop, designed with a Wagnerian section and minimal Loosian details, which respectfully displays the fine furniture of 20th-Century Austrian and German designers.

The clambering for the badge marked “the right stuff” continues, of course, in Vienna and out, in the Austrian provinces. Not represented in this issue is the so-called Graz school, whose members include Gerngross-Richter, Paris-trained architects who live in Vienna. Like Coop Himmelblau, they reject the “good manners” of their Viennese colleagues towards the past, and they use industrial metal parts. Unlike Himmelblau, they do not seem to be making forms that hurt, but that are somehow robustly cheerful. Their work is related to the aggressive (and not cheerful) anatomical representations of Günther Domenig (P/A, Sept. 1980, p. 180). And the list goes on. For a tempest in a teapot, the finesse is remarkable. Or perhaps it is to be expected. New voices emerge, but each architect remains true to his own approach. And clients are not beating down the doors with new commissions. As the commercial march of time seems now to pass them by, the Austrian architects have time and perspective to study the past, explore its meanings and their new ones, and to transform their ideas slowly into ripened architecture.

Given the external circumstances, no performers with the grandeur of Wagner have emerged; despite the external circumstances, no moralist with the rigor of Adolph Loos has surfaced. Still, Post-Modernism here (if it needs such a label) appeared early, and is not a cloak. It is body, and soul. [Susan Doubilet]
“Every productive thought process,” says Boris Podrecca, “begins with a sense of new interrelationships. In my case, these causalities take place in a city that in every respect is ‘complete.’” As an architect, he must respond to the existing layers of historical evidence by “clarification,” as he puts it, rather than by “invention.”

His work, however, seems to belie the modesty of his statements and the passivity of his expressed attitude. He has had the opportunity of working within buildings of such renowned architects as Theophil Hansen, Otto Wagner, Otto Schöntal, and Josef Plecnik; and while he does not violate their forms, his insertions bear his own unmistakable signature and never seem the result of compromise: They may clarify, but they are certainly also inventive.

Pushed to explain further, he adds, “Well, according to Wittgenstein, one must not only ‘speak or be silent,’ one can also point.” He does this, pointedly. He does not make the small, almost invisible moves of Hermann Czech (p. 58), say, nor the gently seasoned ones of Missing Link (p. 70). On the other hand, he uses a form of Modernism that responds to the complexity of the existing field and is richer than that which is based on what he calls “the neopuritanism of the tabula rasa,” which, he says, was never really “real.”

His insertions within the Neuropsychiatric Institute, located in the former Starhemberg Palace (built in 1733 by the Baroque architect...
The Physical Therapy room (its doorway to the adjacent dressing rooms shown in the photo below), benefits by Podrecca's formal inventiveness and illustrates his relationship to Hoffmann—the black linearity, the sensuous use of marble. Here and in the hypnosis/analysis wing hall (opposite page, left) and in the reception hall (opposite page, right), the cantilevered lamps are designed by Podrecca. Solid black doors contrast with glass block surrounds.
Neuropsychiatric Institute

In the Physical Therapy room (right and below, left and center) the abstract but insistent patterns of marble, the cool gleam of sanitary fixtures, and the row of uplights create a provocative fantasy-laden environment. Therapy Room I, for infusions (opposite page and below right), is a hall of columns divisible by curtains, with randomly arranged recessed lights making a star-filled heaven of the existing plaster ceiling.

Mathias Steinl, but altered and simplified in the 19th Century), seem to derive from Josef Hoffmann formally (the gridlike patterns) and sensually (the exploitation of rich materials). Rather than create a Modern white clinical aesthetic, he exploits, he says, "methods from earlier times, more colorfully suggestive of recuperation."

The front room, Therapy Room I, is the "infusion area," and is treated as an exterior space, in a way, with small lights randomly placed in the ceiling, suggestive of stars, and a forest of 15 columns regularly arranged to form 12 cubicles separable by curtains. This room is slightly off-center, comprising four rather than the five middle bays of the building, and the interior columns are located according to a "correction" of the flawed plan derived by means of a perspective projection from an off-center station point.

On the other three sides of the central court, which is to be landscaped, are the Hypnosis and Psychoanalysis rooms, the Physical Therapy room with showers, massage beds, and underwater massage facilities, and the washrooms and cloakroom. In the Physical Therapy room as well as in the corridors, the high, narrow proportions of the spaces are adjusted by lamp fixtures suspended or cantilevered from tracks several feet below the ceiling. In rooms where patients are supine, these lamps have the added advantage of preventing glare. Above the Hypnosis/Psychoanalysis rooms, the ceiling is lowered to create a space for storage, heating, and hot-water supply, accessible through panels by means of movable ladders.

With its insistently grained marble, its definitively black-framed doors solid within glowing screens of glass block, its distinctive floating lamps, and its variety of tracks that make their own uncompromising patterns, this is a psychiatric institute that is provocative, though not literally associative, and certainly not warm, soft, and soothing. In the city of Freud, one might expect attentive listening, but a silent response. Boris Podrecca responds, and volubly. [Susan Doublet]
Project: Neuropsychiatric Institute, Vienna.
Architect: Boris Podrecca, with S. Horn and G. Podrecca, Vienna.
Clients: Drs. Littasy and Salzmann.
Program: to locate, on one 6000-sq-ft floor of the 1733 Starhemberg Palace, therapy rooms (infusion, hypnosis and psychoanalysis, and physical therapy) and attendant reception, meeting, and mechanical areas.

Major materials: new and existing wood floors, marble Carrara Arabesco floors and wall cladding, steel doors, frames, tracks, and freestanding columns, aluminum and steel tracks, glass and aluminum lamps, existing plaster and new gypsum board ceilings, glass block.
Photography: Eleonore Littasy.
Der Rote Engel—the Red Angel—Bar with its piercing forms and jagged compositions dispels all notions of the sort of soft-edged, gemütlich hangout where Viennese love to pass countless hours, drinking (sometimes wine, usually coffee, exquisitely rich) and talking. Der Rote Engel hurts—or at least that is the intention of its architects, the Coop Himmelblau.

"The untouched world of architecture no longer exists, nor will it ever again," say Wolfgang Prix and Helmut Swiczinsky, the remaining partners in the once larger group (whose name means Blue Sky Cooperative), which was founded in the rebellious late 1960s and originally built inflatable structures, in part in reaction to the all-too-solid "establishment" forms around them. They no longer shun solidity, but they still want no identification with any cozy Viennese school. "We don't want to build Biedermeier," they insist. "A complacent democracy lives behind Biedermeier façades. . . . We want architecture that bleeds, that exhausts. . . . That stings, that rips. . . . Cold—then cold as a block of ice. Hot—then hot as a blazing wing." A recent exhibit by them in Graz lasted about 15 minutes; it was a blazing, winglike form dropped from a scaffold. Their book Architecture is Now was published last fall in German and in English by Rizzoli. They want their built work just barely to freeze the nervous energy of their spidery sketches and of their models made of sticks and threads that teeter precariously on the edge of instability.

The "spirit" of the Angel of Sound (the German word ton means both tone and clay) permeates the Rote Engel, a wine bar/song club that seats 120. The plaster and glass-block body of the angel—"the solidified breath of the singers, the built melody of the musicians, the materialized words of the actors"—rises above the stage at the low end of the long, vaulted space, spreading its tin and stainless-steel-edged wings over the performers, around and over the audience, and finally, piercingly, out of the space, through the exterior walls, the tips coming to rest in an inner court.

Entering the bar, which is located in an 1835 landmark structure designed by Josef Kornhäusl in Vienna's former Jewish quarter,
The angel's "body" (above, as executed and in design sketch, left) crashes through the original main entrance of the building (opposite), a section of its stainless steel wing reaching out across the façade.
The angel hovers over the performance stage (opposite page and above top), while its wings extend along the vaulted ceiling over the audience. The bar (above middle) has a roughened wood front and a red pine top.
the visitor is warned of the impending spirituality inside by both a wing-section over the door and a quotation from Melville's *Moby Dick* on a plaque beside it: "Ha! a cowardly wind that strikes stark naked men, but will not stand to receive a single blow . . ."

The 1300-square-foot space, created by the removal of partitions between three existing rooms, has a stuccoed vaulted ceiling and tough, urban finishes: corrugated tin doors and wall cladding, lamp coverings of standard industrial handrail sections, wall ledges of sealed concrete, and an asphalt floor. Shelves and bar-top are of red pine. To remind the visitor that the environment is provocative, wall radiators are mounted at an angle.
An earlier champagne bar by Coop Himmelblau, near Vienna's chic Kärntnerstrasse, is a rendition of a fissure-and-turnbuckle theme that is, after all, polite and elegant, arousing doubts about the architects' sustained anti-establishment attitudes. Der Rote Engel is more violent, but it has still a polished, neatly finished violence. Perhaps it is the exploitation of 1960s protest imagery, as well as the insistent presence of the architecture, that led Austrian-born San Francisco architect Mark Mack to call the bar "cheap-thrill architecture" (in an Archetype article); but he sells it short. The authenticity of the protest may be sublimated, rather than spurred on by the art, but oh, what art: a highly effective embodiment of Bob Dylan ("It's all right, Ma, I'm only bleeding") by means of a neatly inserted, Viennese crafted shaft. [Susan Doubilet]
Kuoni Travel Agency
Vienna

Quiet on the Viennese front

A travel agency in Vienna by Missing Link is made up of meticulous details that create a thoughtful, unobtrusive effect.

Missing Link architects Adolf Krischanitz and Otto Kapfinger are representative of the many young, thoughtful, devoted Viennese architects who, located in fairly generous and sometimes historic quarters (Missing Link's office overlooks Olbrich's Secession Building), work steadily and carefully on modestly scaled projects, developing subtle details and intricate metaphoric systems, commenting reflectively on history and upon current developments in architecture.

Missing Link's Kuoni Travel Agency in Vienna, across from the Historical Art Museum by Gottfried Semper, glows warmly and at the same time intriguingly as a result of their labors. The facade, as originally designed (the clients have altered the front in keeping with a chain-wide scheme), is most refined, compositionally and metaphorically. The existing masonry wall has been restored, and its depth has been increased by a glass skin. The aluminum mullions of this skin repeat and "perfect" the intended but not-quite-achieved symmetry of the masonry wall, the resultant shift playing upon the organization of the entrance. Similarly, shifted shadows are cast by the leaning, linear lettering above the glass facade.

One cannot think "travel agency" and "Vienna" without remembering Hans Hollein's agencies for that city. Missing Link responds to this association both by creating an interior that is more earthy, less fantastic, than Hollein's, and by making a direct hit upon his brass palm trees, whose overuse, they say, has rendered them inflationary. The main shop room is lined with natural wood drawers and paneling that have a somewhat nautical effect, with a row of wood-framed mirrors above to create the illusion of windows. Customers are served at individual wood tables rather than at a single counter, creating the impression (and the reality) of old-fashioned, personal service. And finally, the brass "palms" take the form of skinny brass tubes that support three functional elements: at their bases, um-
Project: Kuoni Travel Agency, Vienna.
Architects: Missing Link, Vienna (Adolf Krischanitz, Otto Kapfinger).
Client: Kuoni.
Program: to create, in a Late 19th-Century building, a new shop front and 520-square-foot interior, with a main shop room, office area, and coffee nook for up to five staff members.

Materials: aluminum, glass, faux-marbre, granite, cherry and beech wood, brass, plastic laminate, painted composition board.

Photography: Margherita Krischanitz.

umbrella stands shaped like ships' steering wheels; above their centers, knobs acting as coat hooks; and at their tops, bare bulbs on standard electrical parts that can be bent downward or upward to light the blue "sky" of the drumlike vaulted ceiling.

Behind the main room is a rear office area ship-shape in its compactness, containing a tiny kitchen, tinier coffee nook, desk space, and a washroom. Here, the imagery reflects the planked wood back shed, smartened up with bright colors.

Missing Link has labored carefully that their labor not be evident. They have built up meticulous details and layers to create a space that, aside from a few pointed elements, might always have been there. This—and not an obvious arrangement of Post-Modern elements—is their aim. [Susan Doubilet]

In the façade (large photo above), the window opening balances the real entrance by being interpreted as a "gate to the world," with a faux-marbre globe within. The center pier curves on one side to inflect to the door, and the door handle (above left) imitates the columns on the facing museum (cf., scale of Lees's Tribune tower!). Small photo above shows present façade. The back area of the shop (above), in contrast to the naturally finished main room, is artificially lighted and has artificial finishes—paint and, on the work surfaces, the last remaining sheets of a 1950s striped plastic laminate developed by Pirelli/Fiat.
Tread softly, carry a big dish

Gustav Peichl has designed a ground relay station for receiving and transmitting satellite telecommunication, in the midst of fields and meadows in central Austria.

From a tiny office beside Vienna's Opera, a compact man with emphatically round glasses masterminds two networks, one of the airwaves, and the other of the printed press. As Ironimus, the political cartoonist, he has used newspapers—Die Süddeutsche Zeitung in Munich and Die Presse in Vienna—to disseminate his satire. As Gustav Peichl, the architect, he has designed six Austrian Broadcasting (ORF) Studios, as well as the Ground Relay Station (Erdefunkstelle) at Aflenz, shown on these pages.

Peichl, a professor at the Academy of Building Arts in Vienna, won the commission for the ORF Studios in a 1968 competition, and the first four—in Linz, Salzburg, Innsbruck, and Dornbirn—were built in the early 1970s; the last two—in Graz and Eisenstadt—around 1980. All were based on the same schema, with five segmental studio buildings that radiate from a central point and use three quadrants but leave room for expansion, and with a geometric modular administration building in the fourth quadrant. The first four studios used identical prefabricated parts: windows, doors, precast concrete panels. With their orchestrated multiplicity of parts based on the diversity of the program, and the strong organizational concept tying them together, the studio brought down upon itself an abundance of metaphors—all of them more or less apt: for their organization, the snail's shell, the nautilus, Duschamp's Anaemic-Canema, Tatlin's 1920 Monument; for their industrial vision, Sant'Elia, Tony Garnier's Lyon, Erich Mendelsohn's 1917 industrial building sketches, the 1937 Braun Oil Refinery; for their mechanical expressionism, Piano and Rodgers' Centre Pompidou; also ocean liners; Stirling and Wilford's 1968 Cambridge building, and so on.

No one metaphor captured the studios' surprising unity, which was sustained despite their eccentricity and their combination of the picturesque, the mechanistic, and the bureaucratic. And it is interesting to note that as time went on, from the first four studios to the last two, to the ground relay station at Aflenz, the picturesque and the humanistic were given progressively freer rein. At ORF-Eisenstadt, for example, the ocean liner metaphor is as apt for its gay and picturesque implications as for its mechanistic expression. At Aflenz, the buildings are slipped neatly into the earth, the softened peaks of the residential quarters peeking gently out. The naughty wit and, ultimately, affectionate heart of the cartoonist, perhaps, has relaxed the cool precision of the architect's hand.

The Aflenz relay station is located north of the community of Grassnitz in the province of Upper Styria, on a site of fields and meadows sloping gently to the south. As a result of action by the neighboring populace, all buildings were located underground, with the final slope elevations almost unchanged from the original. Ninety-foot-diameter holes were hollowed out for each of the ninety-foot-wide parabolic antennas (first one, with provisions for three more) and the central operations building. The operations building uses the circular hollow as a court, lodging electrical supply rooms into the hill on the north,
In response to community action, only the broadcast mast and the smiling face of the antenna (right and opposite page) protrude into the skyline, and natural contours are almost unchanged. A minimum slit in the earth allows windows in the south face of the central operations building (below). The visitors reception room (bottom) takes advantage of these windows, while the control room (second from bottom) faces the inner court.
Ground relay station
control rooms facing the court on the south, and on the outer southern circumference, lounges, dining rooms, and visitor rooms, with windows requiring the minimum slit cut into the earth.

The operations building is crisply, brightly detailed, its radiating columnar system picked out in red, its curtain wall emphatically gridded and bounded by a blue fascia, its radial beams highlighted by fluorescent tubes, its ventilators grouped within squares of brightly colored tiles. It boasts of its modernity and its technological functions.

The staff domestic quarters, on the other hand, are gentle and soft in form—simple white stucco shapes facing southward, with indented entrances, painted wood windows, and curved grass-covered roofs, like rural thatched cottages worn by the elements over time.

In the Aflenz ground relay station, Peichl has been able to express the brashness of the mid-20th Century as well as the humility and humor with which mankind must face the vastness of nature. Within the natural environment, technology has been made to talk softly. [Susan Doubilet]
Three partners in a furniture shop/gallery in central Vienna restructure the space to pay respect to their architectural forefathers and their designs.

The story is simple. Wolfgang Rischka, Christian Meyer, and Georg Kargl sought a new location for their 10-year-old business selling fine pieces of 20th-Century Austrian and German furniture. (They also have a three-year-old shop in New York.) They acquired a 350-square-foot space in the center of Vienna, just off St. Stephan square. The ground floor locale, a 16th-Century base upon which four stories had been added during the Baroque phase in the mid-18th-Century (as was typical in central Vienna), had a Gothic vault that sprang directly from the floor, rendering useless the perimeter of the shop. The partners restructured it simply, bringing the front and back walls up vertically to a usable height, supporting the new ceiling on tubular steel columns, and completing the central span of the ceiling in a form based upon the section of the main hall of Otto Wagner’s 1904 Post Office Savings Bank. The two front openings, the window and the entrance, project from the main space, creating bays in the thick exterior wall, and are made up of glass with cherrywood frames, like shop windows designed by Adolph Loos.

A slit cut into the inner wall is lighted from within and serves as a cabinet for small objects. A spiral corner staircase was removed and the space converted into a circular office. All plaster and stucco surfaces, as well as the steel columns, are painted white, and the floor is...
of white Carrara marble (heated by under-floor electrical wiring). A mirror at the far end extends the space, and adds a note of ambiguity as one enters the shop. Lighting consists of surface-mounted spots. All is bright, white, and open, the better to view the fine furniture of Koloman Moser, Josef Hoffmann, Adolf Loos, Otto Wagner, and the Bauhaus.

To give the space added flexibility, the columns have dowels at several points, which can accept bolts supporting panels of various heights in four directions. The cabinet slit can be closed by panels flush with the walls.

The story is simple, the result effective.

[Susan Doubilet]
The Museum of Contemporary Art had two warehouses and a vision. Frank Gehry understood the value of each.

The Museum of Contemporary Art, conceived in Los Angeles in 1980 and heralded with great fanfare, has billed itself as "a private museum with a public conscience." Its director, Richard Koshalek, has stated that "Contemporary art should be close to the street." When the museum's $22 million future home (designed by Arata Isozaki as part of the Bunker Hill redevelopment plan) ran into unforeseen delays, the museum found itself closer to the street than it ever imagined. Last November, it moved into temporary headquarters in two warehouses—on a dead-end street in the downtown Little Tokyo section—that were renovated by Frank O. Gehry & Associates for just over a million dollars. That this "world-class" museum still looks like two warehouses, and still seems exactly right, challenges our notions of how best to house contemporary art.

The Temporary Contemporary, as it is named, arose, as do most simple and elegant solutions, out of dire necessity and no money. Between the slow-starting Bunker Hill project and the seemingly endless battles between the beleaguered Isozaki and the museum's infamous (and now defunct) architecture committee, it occurred to MoCA that outside interest in the project would evaporate long before its projected 1986 completion. So Koshalek, an irrepressible and inveterate risk-taker, enlisted the aid of Frederick M. Nicholas, vice-chairman of the board of trustees, in finding MoCA a temporary home. Nicholas (who also helped rescue Isozaki's commission) found the buildings, negotiated a five-year, $1 annual lease.
Central Avenue, the dead-end street on which the Temporary Contemporary is located, was closed to traffic in front of the museum to make room for a canopy of steel and chain link, designed by Frank Gehry to create a pedestrian plaza (facing page). The canopy's columns are a deliberate extension of the colliding column grids of the two existing warehouse buildings that comprise the museum (plan, right). Except for the new entrance doors, the buildings' façades are unaltered. Gehry's double-cube ticket booth at the museum entrance takes on sculptural connotations that are intensified by night lighting.

The lobby (below, looking toward entrance), which was formerly the larger building's loading dock, was given a series of concrete ramps to meet accessibility codes.
A room in the larger building that was once used for explosive materials storage is now gallery space, with a mezzanine above, from which visitors can look down into the main exhibition area (small photos below).

ect with typical self-deprecation: "My job was not to screw it up." The budget left him little choice. The vast, generously daylighted spaces were brought up to seismic, fire, and accessibility codes, cleaned, and given basic museum amenities. But if Gehry knew when to leave well enough alone, he also knew when to step in: Structural steel columns burst from their fire-code gypsum-board wrappings at a point that marks the implied ceiling plane, and a huge rolling door becomes Minimalist sculpture. Outside, Gehry's powerful canopy announces his uncanny knack for revealing beauty in the seemingly banal. These interventions are few not just out of necessity but out of deference. Gehry is no stranger to art or artists, and his approach to the museum stemmed partly from his recognition that the buildings, which already looked much like many artists' studios, jangle with the same raw energy that marks the art the museum is meant to show.

It's no secret that Gehry was sorely disappointed at not having got the MoCA commission, although he is quick to praise
In what was essentially a clean-up effort, additions included a new roof, structural reinforcements, gypsunboard partial enclosure of steel columns to meet fire codes, storage areas (behind new corrugated aluminum door, top photo), and new lighting, as well as the lobby ramps and stairs (large photos). Exhibition walls can be constructed and removed at will. Existing steel crane rails were kept, as it cost too much to take them out.
The public's first glimpse of the Temporary Contemporary came last October, a few weeks before its official opening, with the premiere of Available Light, a collaborative work by choreographer Lucinda Childs, composer John Adams, architect Gehry, lighting designer Beverly Emmons, and clothing designer Ronaldus Shamask. The dancers performed on Gehry's set, a two-tiered stage of wood scaffolding with a shimmering wall of chain link along one side. Conceived by museum curator Julie Lazar, the performance also marked the museum's debut as a patron of contemporary artists, a role it intends to pursue actively.

Isozaki's design. And the museum's unanimous, almost instinctive choice of Gehry—whose name is now synonymous with industrial materials and "deconstruction"—to renovate two warehouses smacks of typecasting. But what other architect would have acknowledged the inherent elegance of what was already there with such confident self-effacement? Gehry got the right building after all: he was spared the endless squabbling that invariably accompanies the making of a monument, which is what the Bunker Hill building will certainly be. And those who worried about displaying Pollocks and Rothkos in a warehouse have been soothed by the museum's subsequent success; two months after opening, it had 10,000 members. More than a few people have, in fact, wondered whether the temporary shouldn't become the permanent, but the museum is committed to Bunker Hill, although it may use these buildings in another way.

Koshalek has said that the Temporary Contemporary met with relatively little opposition because "it didn't scare anybody," but he also maintains that it "saved" MoCA. As an inspirational (and cautionary) fable for the museum world, it doesn't come a moment too soon. [Pilar Viladas]
The smaller of the two buildings that make up the museum (below) was once a garage for city police cars, and connects to the larger building through two doorways, one of which leads to the museum lobby via a set of steps (below and right).

**Project:** The Temporary Contemporary, Los Angeles, Calif.

**Architect:** Frank O. Gehry & Associates, Inc., Venice, Calif. (Robert Hale, project architect; Frank O. Gehry, Robert Hale, C.G. Walsh, Rene Ilustré, David Kellon, Michael Moran, Tomasz Osinski, Sharon Williams, design team).

**Client:** The Museum of Contemporary Art, Los Angeles, Calif.

**Site:** Two existing warehouse buildings located at the dead end of Central Avenue in the downtown Little Tokyo district.

**Program:** 42,000 sq ft of open exhibition space; 15,000 sq ft of support areas; and a 5000-sq-ft lobby, including bookstore and lounge (62,000 sq ft total).

**Structural system:** Steel frame with wood roof; and masonry division walls, upgraded for seismic loads.

**Major materials:** Aluminum storefront; shop-painted steel canopy, structural elements, and handrails; gypsum board, metal studs; chain link mesh (see Building materials, p. 116).

**Mechanical system:** Roof ventilators; fans; gas space heaters.

**Consultants:** Kurily & Szymanski, structural; Sullivan & Associates, mechanical; Athans Enterprises, electrical.

**General contractor:** HCB Contractors.

**Costs:** $1.3 million.

**Photography:** Tim Street-Porter, except as noted.
A small building reaches out to the landscape that guided its form, and also suggests that pure Modernist vocabulary can be used for a richer definition of regionalism.

The image of New Mexico, both its landforms and architecture, represents only a partial view of a more diverse context. A recently completed little building by Albuquerque architect Antoine Predock in his home town suggests there are alternatives. While it may be impossible to burden a small project of the scale of the virtually one-room Rio Grande Nature Center with an overload of significance, it nonetheless does demonstrate a variety of issues.

In its broadest sense, the Nature Center marks the conjunction of a variety of scales and acts as an "interface" of them for its users. Located in proximity to both new and old town Albuquerque, the site is in the mid-north valley area, at the foothills of the Sandia Mountains in the rolling terrain of the Rio Grande Valley. It is one of the last vestiges of a historic pattern of rural agricultural land-use of open fields that were once a pastoral setting of overpowering beauty that stretched the length of the city. It is an area of natural wetlands whose ecosystems harbor a diverse set of processes contrasting dramatically with the upland semiarid mesas—the popular image of New Mexico.

The site, threatened by ever-increasing urban settlement, is a living textbook of all forms of natural and man-made waterways supporting human occupation of the landscape. While the Rio Grande, directly west of the site, is the major watershed and historical source of water, a combination of irrigation, flood control, and water storage agreements has brought it into continuous management.

A large drainage ditch, the Albuquerque Riverside Drain, parallels the river and flows between it and the site, collecting seepage and drainage overflow from the many acequias, or small irrigation ditches, which are predominant in the valley and protect the site from flooding, even though it is in the flood plain of the Rio Grande.

Beginning 15 years ago, studies were undertaken to include the site in the "Rio Grande Valley State Park Plan." The present site was consolidated in 1977 after a number
The nature center is set in the rolling valley of the Rio Grande River at the foothills of the Sandia Mountains. Located near the center of Albuquerque in one of the last remaining natural preserves, its purpose is to recreate part of the valley's floodplain so that people can rediscover and appreciate the threatened wetlands. The corner of the center (bottom) near the path to the trails will become outdoor seating.

of public agencies and citizens' groups formed an ad hoc committee for the nature preserve. Overall site planning and determination of the program for a new physical facility were developed with these groups, which included in addition to city, federal and state agencies, the Audubon Society, Sierra Club, and the Bosque Nature Preserve Society, as well as a neighborhood residents' group of the Candelaria Farms area, as the site had once been known.

The Rio Grande Nature Center, the only true facility of its type in the country totally within city limits, is part of a major open space strategy for Albuquerque. Its presence and impact operate in a larger context of reestablishing a marshland pond; its siting adjacent to the major flyways along the Rio Grande attracts native wildlife. Deliberate enhancement of the indigenous soils, plants, and animal communities constituted not only protection and conservation, but also management on a limited scale.

The building itself becomes a medium both to introduce natural relationships to visitors and to introduce visitors to the site. Its presence as part of the initial development of the preserve was also to caution the dirt-bikers and chainsaw-firewood collectors who had progressively ravaged the woodlands. Its im-

Progressive Architecture 3:84 87
agery was, in this respect, somewhat deliberately chosen; its bunkerlike appearance shows that the naturalists mean business.

A related aspect of site development was reconstitution of the grasslands setting through a share-crop scheme whereby local farmers maintain leased land and designate a percentage of the crops as forage for wildlife. These, in turn, become one of the thematic views from the center.

In form, the Rio Grande Nature Center is a rich combination of factors that define the ultimate image and sense of place. Its primary mission is educational, and therefore the primary principle of its organization is a response to program as an instrument of education.

In addition to necessary support facilities, there is a flexible classroom for use by local naturalists and community groups, and a small library with a vista across the pond. Essentially, however, the center is a single room, organized as a progression through an introduction to the varied dimensions of the site. Its low profile and stretched-out form provide views for the rooms that would benefit from overloading the site's principal feature, its pond. Its circular center flares out to "view rays" directed toward specific and directed views, and to facilitate a ramp that literally and symbolically takes the visitor "through" layers of the site: from high views of the bosque canopy, to the fields and wetlands, and a reverse periscope for an underwater view. At the uppermost level, a small thrust balcony in the center of the space is marked by a single column; from here, one sees the overall panorama. This column also carries a main beam, which articulates the beginning of the semicircular ramp sequence, further developed by a change in ceiling level. The lowest level also culminates in a small interior seating area, which in turn leads to the exterior and an amphitheater and introduction to the nature trails. The service elements and classroom are contained on the south side of the building within a bermed roof, through which is cut an entry tunnel. After the tunnel, one is surprised by the interior panorama, which has been obscured by the location of the building itself. The "lobby" entrance and circulation zone separate from the ramp sequence are given form by a wall of transparent "water columns," whose spacing is progressively widened to open into the ramp and exhibits sequence. Skylights above are angled toward the "columns," which in turn also have incandescent lights above them. The effect is essentially visual: the shimmering light conjures up the quality of an underwater world. The columns, however, also are modest passive solar storage tubes. And the bermed exterior wall, oriented to the south, forms a passive solar barrier for the building. The tripartite program is expressed in the building's overall form: bermed roof
for support functions, wood ceiling for public spaces, separate pedagogic zone along the circular ramp.

Predock’s building also represents a transition in his own work. Long associated with the too easy imagery of “puebloid modern,” he has sought to recognize in the Nature Center the potential for other regional forms. Specifically, he has sought to exploit the imagery of a “Corps of Engineers” aesthetic. The entrance recalls a culvert, the berm and sheer wall evoke images of retaining walls and water transfer structures, with both images emphasized in a material sense by galvanized and corrugated metal and raw concrete. Such forms and images are a vital part of the New Mexico landscape, particularly river basins, and present perhaps a tougher realism than the coziness of adobe forms, and offer an alternative definition of “regionalism” for the emerging Southwest.

An overlay of geometrical formalism in Predock’s work is also present in the center, but the various shifts and conjunctions of circles, diagonals, and rectangles help to organize the building’s siting and orientation to context. The geometries are in fact extracted from both program and site, and appear as accommodations to the setting. The architectural character also suggests the image of a “blind,” a reasonable precedent for the observation of nature. Furthermore, the building embodies Predock’s penchant for the abstract traditions of Modernism, one sustained by the deliberate selection of water-management allusions of a technological and engineering aesthetic.

By being a marker in the development of an overall landscape plan, through its pivotal position as a mediating educational experience and observation point to the subtle qualities of a significant natural setting, the Rio Grande Nature Center illustrates how a modest building can extend its influence to a broader context. Its formal vocabulary is almost an anomaly relative to the axiality and shifted grids of recent American architecture, suggesting perhaps that such intellectual superimpositions are inappropriate in the austere landscapes of the Southwest; its formal gestures are more tied to land forms, Aalto-like in effect. Predock’s allusions imply a different context for building types and a regionalism recognizing other urban systems; its bare-bones directness also demonstrates that when used sympathetically, Modernism is alive and well. [Peter C. Papademetriou]
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Construction of corrections facilities is booming amidst a hardening of public attitudes towards offenders. Architects are increasingly the lonely advocates for good design, and more.

These are unprecedented times in the corrections business. A record number of over half a million Americans are incarcerated in state and federal prisons or are locked up in city, county, and state detention facilities. Overcrowding and other conditions have resulted in court-ordered inmate releases and have "hardened" the general class of prisoner, while the facilities available to house convicts and detainees have never been less adequate in quantity and quality.

On average, 25 percent of the federal penitentiaries are occupied above capacity, and in mid-1983 44 states were under court order to expand or upgrade their facilities. By present standards on institutional size, promulgated by the American Corrections Association, fully 75 percent of the country’s jail and prison cells are too large (not the same as being overcrowded), and the cost of bringing them into line with other ACA standards has been estimated at $10 billion. States are now planning 60,000 additional prisoner beds by 1986—65 percent of them maximum security lodgings at an average cost of $80,000 each. Over the next decade, states will spend $4.7 billion on new prison construction, including 16,500 cells in California, 8800 in New York, and 4000 in Illinois. A 1983 federally funded report suggests that an additional 100,000 beds will be needed over the next 30 years, at a staggering cost. Yet another report suggests that 85 percent of all existing criminal justice facilities need expansion or major renovation.

It is little wonder, then, that even among those architects for whom corrections work might once have been anathema, interest is growing in commissions for jails, prisons, detention centers, court complexes, and the host of ancillary facilities. The experienced hands at corrections design, few of whom are pleased by this development, agree that more and more firms that have never done any corrections work are now starting it or are at least trying hard. Some express concern that lack of knowledge, experience, and sensitivity will produce a next generation of disastrous jails and prisons. Yet there is a great deal of work to do, and much of it will be done by relative newcomers to the field.
It is encouraging, for at least one reason, that more architects are turning to this work, for they will help resist the substantial and growing turn toward simple “warehousing,” of which the use of prefabricated mobile modular units on a temporary basis (too often to become permanent later) is one widespread manifestation. These offer little beyond the basics, and even their presumed lower cost is subject to serious question.

Architects bring a fervent, if sometimes lonely and naive, set of attitudes about the design of what Michael Graves calls the “meanest” of our buildings. Jordan Gruzen, chairman of the Gruzen Partnership and a long-established corrections design expert, says, “Architects have a responsibility to create in the interim, until society finds solutions to these problems, environments that are tolerable for the guards and humane for the inmates.”

Faith in good design, which is by no means the sole province of those firms established in producing architecture for the criminal justice system, encompasses a number of viewpoints, some of them shared by corrections officials:
- conviction that the facility alone will produce few results—that programs are needed;
- resistance to highly complex electronic surveillance, detection, and control systems as substitutes for basic line-of-sight supervision, highly durable fixtures and hardware, and careful security planning; and perhaps most important,
- basic belief in the possibility that good physical environments can help people become better.

### Why incarcerate?

Punishment, deterrence, protection, rehabilitation, and reintegration are the five classic purposes behind the practice of imprisonment. Few with any experience of the system would deny that the first continues to be well served, but there is argument about whether prison constitutes a sufficient threat and deterrent to the prospective or “repeat” criminal (with those believing it does not apparently winning on statistical grounds). Prisons usually remove convicted offenders at least temporarily from further threatening the community, yet even here certain escape-prone facilities raise doubts.

It is on the last two points—rehabilitation and reintegration of the convict into the community—that the debate rages. Here distinctions should be made among jails, prisons, and detention centers, or more accurately, between imprisonment and detention. Persons being held for arraignment or trial have not been convicted and are therefore not being punished; they’re held to ensure court appearance or for protection of the public pending trial.

In a sort of inversion of logic (after all, the presumption of innocence would seem to imply a less harsh environment), many such detention facilities are considered to require fewer amenities than their prison counterparts. This is based on the theory (not always the fact) that the prisoner’s stay will be relatively short and rehabilitation is either unnecessary (on the presumption of innocence) or unrealistic (not enough time). Jails, in contrast to prisons, are generally reserved for the punishment of misdemeanors and less serious

<table>
<thead>
<tr>
<th>1 Learn About Corrections</th>
<th>Corrections, Standards &amp; Legals</th>
<th>Operations, Design &amp; Costs</th>
<th>Sources &amp; Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Start Planning</td>
<td>Identify Problems</td>
<td>Develop Mission Statement &amp; Action Plan</td>
<td>Select Consultants</td>
</tr>
<tr>
<td></td>
<td>Document Trends &amp; Project Capacity</td>
<td>Convert Projections</td>
<td>Document Results</td>
</tr>
<tr>
<td>4 Determine Feasibility</td>
<td>Establish Needs</td>
<td>Evaluate Facilities</td>
<td>Consider Consolidation &amp; Other Options</td>
</tr>
<tr>
<td></td>
<td>Evaluate NEC</td>
<td>Determine Cost &amp; Funding</td>
<td>Select Feasible Option</td>
</tr>
<tr>
<td>5 Develop Facility</td>
<td>Facility Development Process</td>
<td>Facility Programming</td>
<td>Site Analysis Planning</td>
</tr>
<tr>
<td></td>
<td>On-Going Management</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**OVERVIEW OF THE CORRECTIONS PLANNING PROCESS: FIVE PHASES**

Excerpt from Corrections Planning Handbooks prepared by Farbstein Williams & Associates for the State of California Board of Corrections.
CONSIDERATIONS IN THE DESIGN OF FOOD SERVICE FOR CORRECTIONS FACILITIES

Food is an extremely important aspect of prison life and presents special challenges to designers. Inmates are rarely involved in food preparation in jails and other short-term detention facilities, but use of inmate labor in high-security and longer-term prisons is common. These are general considerations that may apply to varying degrees.

Security

Tools and equipment
There is potential for misuse of knives, glassware, fryers, grinders and other items; electrical panels, generally placed within the line-of-sight of guards, may need to be placed in a supervisory office or other secure area away from food preparation area.

Hot water
Kitchens require hotter water than the 100° or 110° water maintained in other areas; warewashing (140°) and sanitizing (180°) can be served by local booster heaters, or chemical sanitizers can be used. Hot water for food preparation can be made as required using steam-jacketed kettles.

Supervision
Centrally located, fish-bowl kitchens are best; designs should be as open as possible, without blind areas, L-shapes or full-height walls. Remote cameras or panic alarms should be placed in storage and other nonvisible areas.

Delivery and trash removal
Opportunities for escape must be thought through and protected against; scheduling is an important factor.

Serving methods

Common dining area for general population
Common multi-use areas can be employed, easing supervision and reducing prisoner movement; portion control is more difficult and waste may be increased.

Preplated satellite service
Portion control is improved, but control of quality and temperature is more difficult; equipment required is less able to withstand abuse. Solitary confinement and medical areas may require separate feeding, and provisions will have to be made for separate common staff dining area.

Utensils
Disposable items are more expensive and create waste management problems, but are less subject to misuse. Metal knives, forks and spoons can be detected electronically. Compartmented trays eliminate plates but cannot be used for preplated items unless insulated.

Menu

Quality and selection
Food must be nutritious and filling. Studies have shown increased inmate satisfaction when choices are available, but this complicates preparation and service. Recipes and food should be simple, to ease preparation and assure inmate acceptance.

Religious and medical special menus
Vegetarian and other special diets are an increasing factor in most institutions. Provisions will have to be made for servicing health care patients.

Simplicity and durability
Kitchen equipment is subject to unusual degrees of abuse, either through maliciousness or lack of understanding. In general the inmate-worker is poorly motivated and cannot be expected to care properly for equipment. Replacement of broken or damaged equipment should be easy; avoid built-in or specially mounted equipment. All devices should be uncomplicated and easily serviced. Complex controls and procedures should be minimized.

Cleansing ease
A critical factor in situations where workers are not well motivated. Equipment and general preparation areas should be designed to ease cleaning without special equipment or great care.

### Getting tough

The movement of the 1960s and 1970s toward liberalization and humanization of prison environments is giving way to harsher public attitudes, with a stronger movement than ever afoot to bring institutions into line with basic minimum standards.

The ACA's standards for adult corrections institutions must be met by any jurisdiction seeking federal funds for its facilities and have been adapted for use by many states. The ACA's 160-page volume details nearly 500 separate standards that are classified as mandatory, essential, or important. Some that have direct design implications are:

- Institutions should have no more than 500 inmates, or should be subdivided administratively to accomplish this size.
- Cells must admit natural light, provide a minimum of 20 footcandles for reading and grooming areas, and must have no more than 70dB sound during the day and 45dB at night.
- Inmates should have separate, individual cells with a minimum floor area of 60 square feet if occupied not more than 10 hours a day, or 80 square feet if occupied more than 10 hours per day.
- Each cell must have a toilet above floor level and a wash basin with hot and cold water; a bed must be provided above floor level and all cells, including segregation areas, must have a desk or writing area with stool.
- A facility must meet all mandatory standards, 90 percent of the essential standards and 80 percent of the important standards.

Design professionals have not given up on efforts to rehabilitate. Paul Rosser, chief executive officer of Rosser White Hobbs Davidson McClellan Kelly, Inc., an Atlanta design firm with major involvements in criminal justice facilities, sees prison as an institution of learning: "It may serve a different type of human being, but it's just as valid as the vocational school in terms of the needs it should meet." He believes that concentrating only on the punitive aspects of prison "cannot succeed within any context of modern philosophy." He is concerned that architects not do merely what is asked of them: "These are total communities we're designing, and opportunities for inmate dissatisfaction, unrest, vandalism, neglect, and abuse cannot be overlooked in any aspect of correctional institutional design, least of all in planning and implementing food service.

Adapted by Thomas Vonier, AIA from an outline prepared by James H. Peterson, Jr., FCSI/CI/ADA Food Service Design
Technics:
Jails and prisons

Direct line-of-sight cell and dayroom supervision remains a key concern (right, NBBJ Group for Kings County). Adapting existing prisons (below) to today's requirements often demands increasing cell size and admitting more daylight (Anderson Architects and Walker McGough Foltz Lyerla for the State of Colorado).

Limiting the size of prisons to fewer than 500 inmates (right) can be accomplished physically and administratively on the same site, but requires taking maximum advantage of common facilities and extra care in site planning (the Hope Consulting Group for the State of California). External corridor addition to an existing facility (below) capitalizes on the existing structure for cell space and its heavy masonry for security, while providing additional light and circulation (Rosser, et al., for the State of Georgia).

There is widespread agreement on one point: There will be very few minimum-security facilities built. Almost all federal facilities will be maximum security, and most state facilities will be medium security or above. Some states have placed emphasis on being able to "switch" from medium to maximum security with a few simple changes in hardware and management practices. The penitentiary in America has gone through generations of "systems" and philosophical attitudes embodied in plan types with such names as Auburn, panopticon, radial, telephone pole, highrise, courtyard, and campus. None seems particularly in vogue today (although some are definitely out), so basic physical arrangements are largely a matter of site, program, and budget, influenced by aims to reduce the overall size of the facility or its components.

There is also increasing adaptive reuse of existing, outmoded jails and prisons, largely as a result of the drive for cost savings and the very substantial difficulties in finding suitable sites for new facilities. Most often these projects entail the gutting and reoutfitting of areas within an existing shell, thus constraining the flexibility of overall layout.

Whether new construction or a redesign, the degree to which a facility is to encourage inmate interaction with staff also influences the basic design approach; the "nonbarrier" environment, which attempts a certain degree of openness and tries to bring security personnel into more contact with the convicts, is achieving wider currency in longer term settings.

Basics
There is also agreement among designers, corrections administrators, and politicians about the basics of facilities design, as summed up in the introductory words of a technical letter issued last year by Syska & Hennessy Engineers. They are: "security, reliability, and simplicity."

While electronic and mechanical devices have proliferated for security, surveillance,
detection, and access control systems—each of which may have a place at some point in an overall scheme—direct line-of-sight supervision remains the byword. Most interest in substitute approaches has stemmed from a desire to trim staffing needs. Using electrically activated devices from a central control panel, it is possible for a single guard to lock down or open up entire banks of cells and other prison areas. Monitoring devices and various kinds of “status indicators” also can give corrections staff continuous readings on conditions in controlled spaces.

Jerry Winkler, a principal with Walker McGough Foltz Lyerla corrections consultants, believes that direct line-of-sight layouts can be well designed with no additional staffing expense. The use of remotely activated access control systems can help to implement the concept of “floating secure perimeters,” in which the prison environment expands and contracts based on inmate activity schedules. During the day, for example, certain areas may be open to inmates, while at night or during cell-time, the secured perimeter contracts. In almost all maximum security situations, a system of outer walls, double chain-link fences and/or barbwire coils serves as the last and presumably inviolate secure perimeter.

Nearly all detention environments are subject to extraordinary levels of abuse, and thus need to be vandalproof, safe for personnel and other inmates, free of hiding places for contraband, and incapable of being breached from within or without. Some specifiers have argued against “overdesign,” largely on grounds that costs won’t allow use of the most resistant features in all situations. For example, some have suggested the use of standard vitreous china plumbing fixtures in medium- and minimum-security cells, which cost a fraction of their virtually indestructible heavy-gauge stainless steel counterparts. But most authorities will opt for the toughest features possible, even in less-than-maximum-security situations, knowing that sooner or later they will pay for themselves in saved repair and maintenance costs.

Because disruption of mechanical or electrical service can lead to disastrous consequences in such volatile environments, reliability is essential. This usually demands simplicity in all systems, not least because prisoners (and often their keepers) can deal only with simple things. All piping, wiring, and fittings must be as secure as possible and kept well away from inmate areas. Prisoners must have control over cell lighting, but this must be capable of being overridden. Fire alarm systems and some other controls should be accessible only to officers.

There is less agreement about cell doors and glazing systems. Privacy for prison inmates, ranked high among ACA standards, is best afforded by solid wood or steel doors equipped with view and access panels, not bars. It is increasingly common for prisoners to have keys to their cells and freedom to move between day rooms and cell areas at certain times. But hinged swinging doors—easier to maintain and less costly than sliding doors—can be dangerous when swung out in attacks on guards or other inmates.

Emphasis on natural light, in part brought on by the ACA standards, has meant that the modern penitentiary and detention facility makes much greater use of transparent viewing panes (not strictly windows) than earlier counterparts, leading to consternation over the quality and performance of glazing materials. Glass-clad polycarbonate laminates, responsive to needs for fire and scratch resistance while providing a penetration barrier, have proved to be less than satisfactory over time. The outer glass laminate is easily broken, and when this happens the entire system must be replaced. Monolithic polycarbonate sheets have certain weaknesses under attack and fire, although some manufacturers are offering products that combine the best properties of glass and polycarbonates. There appears to be no single best answer, however, and designers are well advised to study needs very carefully on a case-by-case basis, ascertaining the performance of a given approach against highly specific requirements.

Walls, roofs, and floors also present unique considerations, including resistance to inmate attack, sound-deadening, fire resistance and maintainability. Precast and poured-in-place concrete receives generally high ratings on all scores, especially for maximum security applications, with the speed and modularity of precast becoming an increasingly important advantage. Block and mortar walls are subject to abuse—either breakage, unless cores are
Technics:
Jails and prisons

The use of colors (right) to enliven interiors and promote a sense of “spaciousness” is widely advocated, but there is little evidence from documented research to guide applications or support the view that real changes are effected in inmate behavior (project by the Architects Design Group of Florida for Orange County).

Concerns have been expressed over the noise properties of steel-paneled prefabricated units, but experienced users report that metallic ring can be virtually eliminated through insulation and sound-deadening wall inserts. Masonry construction can also present noise problems, primarily from reverberation; some guidelines encourage the use of acoustical ceiling tile and even carpeting in applications where destruction by inmates can be avoided.

Jerry Winkler and his colleague Joseph Haines at WMFL also caution relative novices in correctional facilities design to:
- be prepared for incredible difficulty and delay in project decision-making; jails and prisons are unpopular, often emotional projects, subject to the full gamut of political, legal, and bureaucratic vagaries.
- recognize that costs, both initial and operating, are supersensitive issues; analyze staffing and maintenance needs from the outset, and evaluate all design decisions from both perspectives.

WMFL’s approach to corrections project management entails development of a detailed security manual. This serves as a record of decision-making through the process, and is ultimately incorporated into a training, management, and operations manual for the facility owners. The approach allows tracking of probable staffing requirements at all stages of a project, and is also highly responsive to the ACA requirement that each adult correctional institution have a preventive maintenance plan that is updated annually.

Pink rooms

The real question is how to get beyond the basics. Jay Friedman, a psychologist who serves as manager of correctional services for the Vitetta Group architect/engineers, sums up the challenge: “We have a professional obligation to understand the relationship between the buildings we construct and their effects on the attitudes, behavior, and well-being of their occupants.” He carefully acknowledges that focusing on the building alone may lead to a distortion of its significance among a host of other influential factors, but is clear on the need for privacy and

A scale model of the dayroom for a new women’s detention center (above) shows emphasis being placed on access to daylight in common areas as well as in cells (the NBBJ Group).
Further reading
The federal government and many states promulgate their own special guidelines, which should be consulted. Good general references are: Design Guide for Secure Adult Correctional Facilities, American Correctional Association, 4321 Hartwick Road, Suite L208, College Park, Md. 20740, 1983; Standards for Adult Correctional Institutions.


For product and literature information related to this article, see p. 107.

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Thomas Vonier, AIA, is a Washington, D.C., architect and correspondent for PIA.

A maximum security cell layout using precast concrete panels (top) shows the importance of modularity in walls, ceilings, and floors, and the characteristic separation between cells (also used with most other construction systems) for secure location of piping, wiring, and ductwork. Lightweight mobile modular units (above) are fabricated offsite and assembled to create cells and dayrooms. Wood systems are generally discouraged for any but the most temporary, low-security situations; steel modules are preferred. The increasing use of mobile modular systems for inmate "warehousing" has met with wide concern, as the systems offer no genuine "rehabilitative program" space and few opportunities for prisoner/guard interaction.
Eisenman and Graves

One of them wants to make poetry, the other geometry, yet both are architects. One of these monographs is a polychromatic encyclopedia of collaged design implications gathered from our culture and others, while the other presents us with one lonely unbuilt project in monochrome illustrations keyed to type whose color is as carefully balanced as the numerous measured drawings of the different stages of the project. The works shown in these two volumes are poles apart, yet their authors once worked together. Together, they have produced the most comprehensively defined boundaries of American architectural practice—or at least architectural fashion. These two volumes ask the question: If Michael Graves is our architectural equivalent of Calvin Klein, and if Peter Eisenman wants to be so obtuse as to confuse even himself, is there anything wrong with that? These books make a strong case for the argument that in fact their respective strategies are as viable and productive as any. Their styles, for that is what they are, can provide projects defined by the narrow boundaries of technology and economy with a humanistic hue and appropriate delineation which will make architecture. Eisenman and Graves indeed explain the necessity of artifice to us.

The reason for their success lies in their elaboration of the by-now-commonplace realization that it was not the forms of the Modern movement, nor its social rhetoric that failed us, but its moral megalomania. In response, these two architects look back to a time when architecture was a form of social and civic communication. Their architecture acts as tragedy, comedy, or ritualized masque. Although its metaphors and allegories may aim for a critical refraction of what is in front of the stage, it cannot achieve the satisfaction of its audience except through a skillful manipulation of its own rules. Its structure is not necessarily honest in a Victorian constructivist sense, but it is contained and defined from the outside, to which it presents an ordered and illuminating mirror. It is playing the game, through either making or viewing, that involves one with culture, not understanding the meaning floating on the surface. Both Eisenman and Graves are strange structuralists and both deny architecture is anything but its own structure. While Eisenman spends a lot of time celebrating his work and his fragmenting architecture, Graves spends his time divorcing architecture by denying the coherence of his work. But the celebration is better than most, and in line with some of the grandest architectural spectacles of the 16th through 18th Centuries. They have gone Krier one better and revived the true architecture of the prerevolutionary days: that of the ruling classes.

Yet their revivalism has a nasty twist. What they are both denying is the logic or humanistic pretensions of architecture. Ironically, instead of merely abdicating the triumphal positions of architecture as the ultimate embodiment of coherent meaning, they try to stay on top through a reversal. Architecture becomes exactly the place to explore the impossibility of meaning in our world. One is reminded of the admonition of Manfredo Tafuri that “no salvation is any longer to be found within [Modern architecture]: neither wandering restlessly in labyrinths of meaning so muddled they end in muteness, nor enclosed in the stubborn silence of geometry content with its own perfection . . . ;” except that Graves and Eisenman have adopted this as a battle cry.

Eisenman’s previous work had been in the avant-garde of the Modern movement’s battle to establish architecture as the autonomous by absolute, the ultimate definition of our world, in pure abstracted relationships. With House X, a project for a home never built, Eisenman has come to the realization that such an ideal implies the destruction of man in favor of not only such pure relationships, as Le Corbusier had already envisioned, but in favor of pure structure. The viewer or user and the maker of architecture must be destroyed through their participation in the structure and all of its internal contradictions. According to Mario Gandelsonas’s foreword, this has been the main quest in Eisenman’s work, and House X is his holy grail. Essentially, even this architectural monument must self-destruct, so that this post-humanist box aims to achieve its Mission Impossible by immediate destruction, or at least lack of construction.

The resulting architecture is meant to defy our attempts to appropriate and subsume its meaning, and thereby, as Eisenman states, to cast doubts on our own perceptions and autonomy: “In the end, though, the whole from which the process of decomposition initially proceeded (if, indeed, there ever was one) is not completely knowable. Like atoms disturbed by the instruments used to measure them, the ontology of the formal universe remains fundamentally ambiguous and mysterious. While the architect’s assumptions in the past could be characterized as a search for the basis for objecthood that would provide or verify known cultural facts and that would serve to illuminate man’s condition in relationship to the object he made, his new function is essentially one of recorder rather than manipulator of his material.”

To construct a house, or at least the plans for one, Eisenman must resort to artifice. As soon as he poses a geometry, in this case a division into quadrants, he attempts to undercut his own definition by imposing a random rational notation over the grid, and by setting this dual system at odds with what might be called the other, social, definer of value and meaning in the house, that of function. This opposition is in fact not only formal, but integrated with the perception of the house as well. By mixing public and private realms in each quadrant, he confounds our ability to see the house as part of our social value system. His use of arbitrariness is then posed delicately close to enforced geometry, especially on the façade, so that one is led almost to the point of identifying the composer through his composition and the rules he is following, before Eisenman pulls a piece of the geometry out, frustrating this process of naming and
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categorizing. Similarly, his use of the "el" form is adept: not quite a square, not quite a fragment, without any social or (art) historical baggage, but full of potentials for order; it is, in Eisenman's hands, a perfect tool for a Zen-like posing of the possibility of the absolute by the designing of the essentially imperfect.

Less original are Eisenman's perceptual games of rotation and inversion, such as the reversal of horizontal and vertical data, though they are justified by an analysis of the importance of our ability to understand a physical object in the landscape in perspective and therefore to master that object. Even more problematic is the fact that, despite all of the architect's attempts, he is still the maker of this object, however obtuse and self-negating it might be. Eisenman seems to recognize this problem, not only by using such fanciful devices as proposing the erection of the model of the house underwater in the pool of the constructed house, thus dealing the final blow to our notion of "reading" his architecture ("... thus the underwater of the pool becomes the real place of reading, the nonreality of the diagrams, and paradoxically, the reality of the act of reading would reveal their nonreality"), but also through a process that might be termed emptying out the plan.

Given the iconographic content of the house as the potential place for "being," for communion with the land as the supposed stable cultural structure to be constructed from such a sense of place, Eisenman proposes an inversion. Instead of the hearth as center, instead of the sense of dwelling and of the object in the landscape, he proposes the house as the urban intersection and the center of the house as a void. The center of the project can thus become the destruction of the dilemma of the suburban house as the ultimate compromise of architecture, the ultimate achievement of American design, which allows man to resolve the dilemma of the suburban house as the nonhome of the nonwhole person. The pool becomes the real place of reading, the nonreality of the diagrams, and paradoxically, the reality of the act of reading would reveal their nonreality.

The forcefully composed shape sits lost in a series of vignettes, a quick but comprehensive bird's-eye overview of nearly every collage and enfilade he has put together in the last 20 years. It is the act of collecting, the lavishness of architectural possibilities compiled, but never fully worked out, that forms the heart of his work and of the book discussed here. If the business of architecture is not the capture of meaning or relevance, or the coherent solution to the world's problems, then its possibilities to critically resemble these problems is limitless. By not answering the question, the question itself is posed with delicacy and becomes the focus. If Eisenman designed a death mask, then Graves designs a mask more lively and for daily use.

The central strategy of Graves's work is the same as its presentation: collage. In fact, wherever Graves is faced with the exigencies of site, economy, or function, he produces a trompe l'oeil collage. If the site of the Humana Building does not allow a symmetrical enclosing colonnade, a blank wall of the adjoining building becomes a willing perceptual accomplice. If the formal progression from the city to the heart of Humana Corporation leaves the visitor facing the back of the highrise elevator core (because after all, the boardroom is over 20 stories up in a skyscraper whose height was not even dreamed of in the school that created the ground rules Graves is selectively applying), then another collection of architectural fragments painted on the wall will allegorize the management of sickness into an altar to sky, land, culture, and Kentucky. The Gravesian design is made up of allusions, illusions, and elisions, creating forceful poetics of free and modern fragments of ancient authority.

Nowhere is the necessity of vagueness or artful artifice as clear as in his description of and designs for the library at San Juan Capistrano. Graves describes this project as follows: "... there is some symbolism intended in the 'fall of water' from the higher level to the courtyard 'ground,' as we as a society tend to make referential connections between archetypal elements in nature and our invented literature. The sustenance of the water in a physical sense is, of course, akin to the sustenance provided by material held within the library itself."

What exactly "signifies" is left to inference, at least in the use of "archetypal architecure" elements (in a way no more "referential" than in your average McKim, Mead & White style provincial library) might "refer" to is left completely unclear. What is made clear is that the architectural game is being played with perfection. Aediculae, pedimented portals, keystones and rustication, courtyards and fountains all make the building have some vague associations with monasteries, Laurentian libraries, Louis Kahn, or any authoritative authentication of library forms. None of the sources is footnoted or even carried through. Yet they are all present. What is more, the plan appears to be thrown into confusion by all of these grand schemes.

At the risk of being accused of reading artifice into romantic imagery, the case could be made that this refusal to admit functional and contextual sense closely parallels Eisenman's facade games. Graves is avoiding a bland decoration of functional plans, which would identify the architecture as the carrier of an empty set of values. The function of the collage is to make one aware not of the objects, but of the disjunctive relations between the objects. Humana's massing makes one dream of skyscrapers while seeing a slab sticking out of the 19th-Century Imperial Box, and at the same time makes one realize that neither skyscrapers nor civic grandeur are possible in any kind of technological, economical, or historical sense in 1983 in Louisville.

In his most successful work to date, the recently completed Nature Study Center in New Jersey's Liberty State Park, Graves has achieved the most fruitful translation of his beautifully drawn wishes into a new civic reality. The forcefully composed shape sits lost in the swamp, into which its elaborate decomposing axis sinks. It seems like a form landed one late August evening.
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from the Italian hills into the neighboring Newark Airport. The actual building gives one a realization of place and function lacking in the isolated drawings collected in this book. What appeared as fragments of villas here becomes a strange set of civic intentions out of civil service materials in the space left over and looking out at our post-industrial society. It allows us to act out an elaborate set of attitudes towards the complicated relationships between culture and nature through a use of all the tools at the disposal of the architect. Yet it sits isolated in its morass, not turned towards anything in particular, another collage lifted from the compilation of collectibles.

Perhaps this attitude is, as Vincent Scully would have us believe in his afterword to the volume, tragic. The Portland Building in particular resembles an emaciated member of a race of giants from before the age of the civilizing gods, and thus from the same era as Eisenman’s sacrifice. The mood is romantic, the failure of will is willful.

The project that seems to sum up the result is once again a suburban house, whose appearance even in the construction photographs attests to the fact that, as with Eisenman, to Graves the project is more powerful than the result. In the Plocek House, the unknown businessman is allowed to live in pieces of a California hot-tub palace, an 18th-Century English townhouse, a palazzo, and a split-level ranchhouse all at the same time. None of the pieces fall apart, but none fit together. The uncomfortably collaged block is, like House X, dropped onto a suburban lot. Also like House X, its center is voided. Yet this empty center, a round Rossiesque stairhall, is not purely negative: people move and see through it. It is the stage set at the center of the house, the place not for belonging and being, but for acting out possible roles in a setting neutral but reeding with tantalizing vistas of architectural predecessors and colorful possibilities. Like the center of House X, it is a shrine to its own artifice.

Both Graves and Eisenman fill valuable voids with these books. Both the intensive concentration on one form and the elaborate exposition of many forms seem to lead to the construction of an artifice on the final frontier of our culture, the alienated semisociety of Suburbia. These two architects populate that semilandscape of failed architectural languages with an artifice that outstages our greatest dramaturgy: it has as many channels and is as abstract in structures as the television.

Reviewed by Aaron Betsky, assistant professor of architecture, University of Cincinnati.

Other titles


This large, all-inclusive volume surveys the great pieces of furniture by architects, from Gaudi to Graves, which are currently in production. Author Emery, editor of L’Architecture d’Aujourd’hui, traces the history of the pieces from 1900, includes a brief biography of each architect, and a complete list of manufacturers and distributors.


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general and technical information
about solar control, sound control, safety, bullet-resistant,
and burglar-resistant laminated
glass. Laminators Safety Glass
Association.
Circle 200 on reader service card

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design brochure illustrates examples of
door systems and controls (both
manual and electric), door and
wall systems, windows, furnishings,
and laminated safety glass.
The eight-page, full-color brochure offers planning advice
and assistance with product
selection. Standard or custom-
designed systems are available.
Southern Steel Company.
Circle 201 on reader service card

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prison facilities are among the
modular buildings produced to
alleviate overcrowding. A four-
page brochure covers dormitory
housing, kitchen/cafeterias,
dayrooms, medical/dental units,
staff offices, guard control sta-
tions, and administration build-
ing. Company capabilities in-
clude design, manufacture,
construction, and servicing of
the modular facilities. Arthur
Industries, Inc.
Circle 202 on reader service card

Detention and thermal deten-
tion window systems brochure
describes D-2100 and D-1000
windows and illustrates their use
on buildings. The features of
each are listed, along with addi-
tional options available. Draw-
ings show head, sill, and jamb
details of both styles. Discu
Aluminum Products Company.
Circle 203 on reader service card

Security glazing
Gard-Lite detention glass and Resist-Lite
bullet-resistant laminated glass
are described in an eight-page
brochure. Charts provide information
about thickness, composition, size, and weight.
Resist-Lite I.G. has the same
security features with added
insulation qualities for use where
solar control is important.
Buchman Industries.
Circle 204 on reader service card

Detention and security equip-
ment catalog lists doors, win-
dows, locks, hardware, furni-
ture, fittings, vents, light fixtures,
controls and surveillance equip-
ment, and accessories available.
Among products discussed is the
P2000 pneumatic door control
for energy-efficient operation of
cell doors that is practically
maintenance-free. Fries Correc-
tional Maintenance, Inc.
Circle 205 on reader service card

Detention windows and screens
with three degrees of security are
custom planned to meet
specific requirements. The window styles and levels of
security are discussed in a four-
page brochure. There are eight
standard finish colors available;
special colors can also be pro-
vided. The brochure includes
information about obtaining a
200-page design guide. The
William Bayley Company.
Circle 206 on reader service card

E-3 sliding door for minimum-
and medium-security facilities is
constructed of steel plate with
sound-deadening material.
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close, the door cannot be
slammed shut as a weapon.
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no temporary hiding space. A descriptive sheet illustrates
the door, explains its advantages
over other types of doors, and
provides detail drawings. Willo
Products.
Circle 207 on reader service card

Security fixtures
catalog covers plumbing fixtures for prisons
and other areas having potential
for abuse. The fixtures, shown
in an eight-page brochure, are
made from heavy-gauge stainless
steel and are designed to with-
stand impact, thermoshock, and
corrosion. Bradley Corp.
Circle 208 on reader service card

Lexgard® laminates double-
glazed security systems are
available in three grades: MPC
375 protects against shots from a .38 super automatic handgun;
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Class 4 rifle component material,
protecting against shots from a
30.06 rifle; and GC 938 is rated
Class G3, designed to defeat a
7.62 mm NATO round. The
products are described in a
six-page brochure. General
Electric Co.
Circle 209 on reader service card

Security washroom accessories
for detention facilities or high-
vandalism areas are fabricated
of satin-finish heavy-gauge
stainless steel. Accessories, de-
scribed and illustrated in a four-
page brochure, include framed
wall mirrors, toilet tissue holders,
soap dishes, toothbrush holders,
clothes hooks, and shelves. They
are designed to eliminate poten-
tial as weapons or suicide de-
vices. Tamperproof mounting
hardware is provided for each
item. Bradley Corp.
Circle 210 on reader service card

Bauer Sphinx security locks
for manual or electric operation of
individual doors or a series of
entrances/exits are described in
an eight-page brochure. De-
signed for protection against
tampering, the lock has a reset-
table double-bit mechanism that
is can be changed easily and offers
a number of possible arrange-
ments. Suitable for prisons,
detention centers, banks,
warehouses, and similar installa-
tions. Lori Corporation, Bauer
Lock Group.
Circle 211 on reader service card

Gold Medal cell padding,
described in a four-page brochure,
can be applied to floor, walls,
and doors for maximum safety.
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thane with fire-retardant addi-
tives, the padding is applied
in sheets bonded to fire-retard-
ant plywood. Gaps are filled
with padding in liquid form for a
seamless installation. The brochure provides material
descriptions, technical data,
installation information, and
precautions to be taken.
Marathon Engineering Corp.
Circle 212 on reader service card

Security and detention
equipment covered in an eight-page
brochure includes electronic
controls, doors and windows,
manual and electric locking
systems, and miscellaneous
furnishings and equipment.
The company, which designs,
manufactures, and supervises
installation of their products,
will provide sample specifica-
tions, drawings, and product
samples for testing. Certified
Control Systems, Inc.
Circle 213 on reader service card

Beginning this section are listings
related to the Technics article
about prison design, pages 93–99.

Progressive Architecture 3:84
107
Progressive Architecture 3:84

108

Fusion-bonded carpet for office contract and hospitality use is made from Du Pont Antron III nylon. Prismstiches pinstripes is a cut pile velvet in ten colors. Eyelet, a square dot on contrasting background, is available in four colors. Both can be provided in custom colors when a minimum yardage is ordered. Kempo.

Circle 102 on reader service card

Acoustical vision pans have excellent optical properties and sound barrier characteristics. They are intended for use between performance areas and control rooms in broadcasting and recording studios, performing arts centers, and research and industrial facilities. In sound transmission tests in accordance with ASTM E90-81, one double-glazed unit rated STC 54, equal to that of six-inch-thick concrete. All double-glazed units have nonparallel slotted panes to minimize glare. Overy Manufacturing Co.

Circle 103 on reader service card

GlásWá!l vertical, low-rise, all-glass wall system has Mullions and walls of tempered glass to withstand stresses caused by wind and dead loading. Mullions are attached and supported by stabilizing fins. As a floor-loaded system, GlásWá!l eliminates the need for glass suspension from above and requires no special structural steel members for hanging glass walls. The company offers design, fabrication, and installation services. W & W Glass Products Ltd.

Circle 104 on reader service card

The Haller System of modular furniture consists of chromed steel tubing framework, a connecting sphere, snap-in panels, and filing and storage units. They can be combined to custom tailor work stations to suit the task. As shown in the Seal Furniture and Systems show room, it is a versatile system that makes use of vertical space. As needs grow and change, modules can be added or reconfigured. Haller Systems.

Circle 105 on reader service card

Spectra-Glaze® Reflecto-Lite® pre-faced concrete masonry units provide a constantly changing image as the position of the light source changes. Designs in the face of the block are practically unlimited. For exterior or interior use, the blocks come in 60 standard colors, with custom colors also available. The Burns & Russell Co.

Circle 106 on reader service card

Door panels for System 2PLUS open plan office systems increase privacy and security. They can be used with any of the system's 78-inch-high panels, including those with integrated raceways. Finishes match work surface and storage component finishes. Panel Concepts, Inc.

Circle 107 on reader service card

Floor model planters, square with radiused corners, are offered in four sizes from 12 inches square and 8 inches high to 21 inches square and 20 inches high. The interiors are Teflon coated to allow planting directly in the containers. There are 13 colors and 5 metal finishes. The designer is Paul Mayen. Architectural Supplements, Inc.

Circle 108 on reader service card

Circle No. 345 on Reader Service Card

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Tapered roof insulation consists of rigid panels of polyisocyanurate foam core chemically bonded to asphalt/fiberglass or foil facers. It can be used to slope and insulate flat roofs, providing drainage and preventing deterioration caused by ponding water and reducing heating and cooling costs. It is compatible with conventional built-up roofing and is approved for most ballasted, adhered, and mechanically attached single-ply roofing. NRG Barriers.

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Option One open plan office systems and furniture consist of panels, lateral files, flipper door cabinets, and drawer pedestals. Components are assembled to reduce installation time. Cabinets, shelves, and tackboards attach to the wall panels. Pencil drawers 6" x 26" and pedestals attach below the desk top. Baked enamel finish colors are beige or charcoal. Amstore Corp.

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Security Bolt lockset Series 900 for commercial doors is a contemporary design that meets most barrier-free codes. It is constructed of cast bronze and stainless steel, and is offered in several architectural finishes. The removable core cylinder can be changed without removing the lock from the door. Russwin Div., Emhart Hardware.

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The removable core cylinder can be changed without removing the lock from the door. Russwin Div., Emhart Hardware.

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Energy-conscious design will be the focus of a set of feature articles that will challenge our assumptions about energy behavior of buildings. These articles will range from a speculative essay on the relationships between form and energy conservation to a portfolio of successful energy-related details. There will be a critical overview of the unique California energy-conserving State Office Buildings program, an investigation of why solar collectors were removed from a landmark energy building, and a Technics feature on the special problems of hot, humid climates—with ample illustration of solutions.

The Dallas Museum of Art, just completed to the designs of Edward Larrabee Barnes Associates, will be the subject of a major critical article. Conceived not as a monument, but as a village-like arrangement of galleries and courtyards, this museum represents extraordinary commitment to the art works on display and the comfort of visitors.

Four houses of outstanding architectural quality will be featured, as well, in this issue. Scattered across the U.S., they are quite diverse in appearance and atmosphere. What the editors see in all of them is exceptional skill in the handling of space and form, along with some careful thought about the nature of houses in particular.

P/A in May will explore the subject of computers and architecture from several points of view: the computer as a design tool, the environmental demands of computer installations, and the control of building systems by computer. Also in this issue will be a report on the fourth annual P/A International Furniture Competition and a special section on the program for NEOCON 16 in Chicago.
Commercial kitchen equipment catalog highlights the complete Vulcan line. The 16-page minicatalog includes gas, electric, and steam food service equipment and reach-in and walk-in coolers and freezers. Vulcan-Hart Corp. Circle 214 on reader service card

Clay shake roof tiles, ideal for fire-prone areas, are designed for new installations, although they can also be used to replace wood shakes. The four different widths produce random patterns, giving the appearance of a wood shake roof. The noninterlocking tiles are 18 inches long, 4, 6, 8, and 12 inches wide; a square weighs approximately 880 pounds. Colors are natural red or variegated browns and the tiles have a smooth or rough weathered finish. San Valle Tile Kiln. Circle 118 on reader service card

Lounge seating illustrated in color in an eight-page folder includes a tub style and several versions of tuxedo style seating. All are available as chairs, love seats, or sofas and have oak, walnut, or mahogany hardwood bases. One leather-covered tuxedo style is also available with polished chrome, satin brass, or antique bronze finish base. Brandrud Furniture, Inc. Circle 215 on reader service card

Flooring trim and accessories molded from long-wearing synthetic rubber are color coordinated for use with Nora flooring products. For stairs there are slip-resistant Steptread combined nosing-tread-riser, nosing, and angles. For use with flooring there are inner and outer angle coved corners, straight bases, and coved bases. Nora Flooring. Circle 119 on reader service card

Disc-O-Tile flooring tile and matching stair treads are now produced in slate and wine in addition to the seven colors already available. The 24-inch-square tiles have 5/8-inch-diameter raised discs for good traction. They are easy to clean and do not discolor or stain. R.C. Musson Rubber Co. Circle 120 on reader service card

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Building materials

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

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**Landscape Architects** with experience needed to fill positions in all phases of design activity and project management for progressive landscape architecture/urban and development planning firm. Send resume and work samples to: Emaly L. Shuman, Myrick-Newman-Dahlberg & Partners, Inc., 9400 North Central Expressway, Suite 1600, Dallas, Texas 75231.

**Rendering Artist**—Holiday Inns, Inc. is a highly respected international leader in the hospitality industry. Due to our continued expansion, we are seeking an accomplished professional to create both interior and exterior architectural renderings from concepts. A degree in Architecture or Art (or equivalent) coupled with 5 years commercial architectural rendering experience is required.

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**Senior Designer—Project Captain** opening in 5-7 person office located in Southern New England. Applicant must have professional background, 5-7 yrs. experience; capable of free-hand sketching, preparing working drawings and supervising production of others. Must be able to work with clients, have interest and experience in marketing. Work experience in many different types and sizes of projects for compatibility with firm’s varied nature and workload. Interested candidates are invited to submit resume/salary expectations to: Box 1361-427, Progressive Architecture.

**The Faculty of Architecture** of the Technical University of Nova Scotia, invites applications for a full time tenure track position. The Faculty regards the university as an institution with broad social and educational duties where members are privileged and responsible with high levels of support and initiative in the practice of their duties in teaching research and the general advancement of the university. The Program of the School of Architecture is organized in terms of four major areas: Design, Humanities, Technology and Professional Practice. In the present appointment the Faculty wishes to search for experience and interest in the area of Design. In addition to the immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. For particulars write to: Dr. Esry Banias—Dean, Faculty of Architecture, Technical University of Nova Scotia, P.O. Box 1000, Halifax, Nova Scotia, Canada, B3J 2X4.

**The School of Architecture** at the University of Virginia is seeking outstanding candidates for full-time tenure track and part-time positions in architecture. The candidates should be qualified to teach architectural design at both a graduate and an undergraduate level, as well as teach in another area of curriculum such as basic design, building technology, architectural theory, urban design theory and methodology. Qualifications shall include prior teaching experience with evidence of a developed didactic orientation, advanced professional experience, and prior success in research and/or scholarship. Please submit resumes and three letters of reference to: Chairman, Division of Architecture, University of Virginia, School of Architecture, Campbell Hall, Charlottesville, Virginia, 22903 by May 15, 1984. The University of Virginia practices equal opportunity in education and hiring.

**Yale University School of Architecture** seeks applications for open faculty position in architectural design. Description: Graduate level teaching position in architectural design beginning September, 1984. Emphasis on design guidance and criticism, with ability to lecture on architectural theory and history. Responsibilities: Teaching and administration. Qualifications: Advanced degree in architecture/equivalent professional education, practice and teaching. Candidates with a minimum of five years teaching/professional experience will be given preference. An internal candidate is included with the group of applicants. Salary and Rank: Visiting Critic or up to Adjunct Associate Professor with salary commensurate with qualifications. Application deadline: Applications postmarked by 26 March 1984. Applicants should send curriculum vitae, the names and addresses of references to: Martin D. Gehner, Chairman, Search Committee, School of Architecture, Yale University, 180 York Street, New Haven, CT 06511. Yale University is an Equal Opportunity/Affirmative Action Employer. Applications from women and minorities are welcome.

(Job mart continued on page 121)
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<thead>
<tr>
<th>PAD</th>
<th>THICKNESS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MOUNTING</td>
</tr>
<tr>
<td>Fiberglass Sealed in PVC</td>
<td>1 1/4&quot;</td>
</tr>
</tbody>
</table>

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Job Mart continued from page 118

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<table>
<thead>
<tr>
<th>Company Name</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>AllianceWall Corporation</td>
<td>31</td>
</tr>
<tr>
<td>Amoco Fabrics Company</td>
<td>55</td>
</tr>
<tr>
<td>Alfred Advertising Agency, Inc.</td>
<td>112</td>
</tr>
<tr>
<td>Assa, Inc.</td>
<td>112</td>
</tr>
<tr>
<td>The Jayme Organization, Inc.</td>
<td>C2</td>
</tr>
<tr>
<td>Azrock Floor Products</td>
<td>52</td>
</tr>
<tr>
<td>Boral &amp; Jacob, Inc.</td>
<td>52</td>
</tr>
<tr>
<td>Aztech International, Ltd.</td>
<td>52</td>
</tr>
<tr>
<td>Unified Arts</td>
<td>52</td>
</tr>
<tr>
<td>Berkley Marketing Companies—Zero Halfburton</td>
<td>50</td>
</tr>
<tr>
<td>Hicks &amp; Great, Inc.</td>
<td>50</td>
</tr>
<tr>
<td>Bilko Company</td>
<td>50</td>
</tr>
<tr>
<td>Designline Studio</td>
<td>50</td>
</tr>
<tr>
<td>Bradley Corporation</td>
<td>50</td>
</tr>
<tr>
<td>Stephan &amp; Brady, Inc.</td>
<td>50</td>
</tr>
<tr>
<td>Caltenno—Colorado, Inc.</td>
<td>15</td>
</tr>
<tr>
<td>Carlton Syntex Systems</td>
<td>42</td>
</tr>
<tr>
<td>Cramer, Inc.</td>
<td>42</td>
</tr>
<tr>
<td>Cheney Company</td>
<td>115</td>
</tr>
<tr>
<td>kluppenberg, Switzer &amp; Tsch, Inc.</td>
<td>115</td>
</tr>
<tr>
<td>Concept Systems, Inc.</td>
<td>4, 5</td>
</tr>
<tr>
<td>Brian J. Cannon Productions, Inc.</td>
<td>4, 5</td>
</tr>
<tr>
<td>Cotham Div., Enhardt Industries</td>
<td>16, 17</td>
</tr>
<tr>
<td>Mason &amp; Madison, Inc.</td>
<td>16, 17</td>
</tr>
<tr>
<td>Da-Line Screen Co., Inc.</td>
<td>119</td>
</tr>
<tr>
<td>Tri-State Advertising Co., Inc.</td>
<td>119</td>
</tr>
<tr>
<td>Design Search</td>
<td>48</td>
</tr>
<tr>
<td>Creative Services International</td>
<td>48</td>
</tr>
<tr>
<td>Dorma Door Controls, Inc.</td>
<td>40</td>
</tr>
<tr>
<td>Design</td>
<td>40</td>
</tr>
<tr>
<td>duPont Co.—Antron</td>
<td>38, 39</td>
</tr>
<tr>
<td>Balten, Barton, Dunsine &amp; Osborne, Inc.</td>
<td>38, 39</td>
</tr>
<tr>
<td>duPont Co.—Architectural Drafting Films</td>
<td>117</td>
</tr>
<tr>
<td>N.W. Ager, Inc.</td>
<td>117</td>
</tr>
<tr>
<td>duPont Co.—Celanese</td>
<td>12, 13</td>
</tr>
<tr>
<td>N.W. Ager, Inc.</td>
<td>12, 13</td>
</tr>
<tr>
<td>duPont Co.—Hypalon Roofing</td>
<td>32</td>
</tr>
<tr>
<td>N.W. Ager, Inc.</td>
<td>32</td>
</tr>
<tr>
<td>Extek Microsystems, Inc.</td>
<td>110</td>
</tr>
<tr>
<td>Edutainment Advertising &amp; Public Relations</td>
<td>110</td>
</tr>
<tr>
<td>Florida Tile, Div. of Sikes Corp.</td>
<td>35</td>
</tr>
<tr>
<td>Fry/Hammont/Barr, Inc.</td>
<td>35</td>
</tr>
<tr>
<td>Follainbee Steel Corp.</td>
<td>54</td>
</tr>
<tr>
<td>Group Marketing &amp; Communications, Inc.</td>
<td>54</td>
</tr>
<tr>
<td>Forms &amp; Surfaces</td>
<td>6</td>
</tr>
<tr>
<td>Starroll Beauty Associates</td>
<td>6</td>
</tr>
<tr>
<td>Four Seasons Solar Products Corp.</td>
<td>108</td>
</tr>
<tr>
<td>Four Seasons Advertising</td>
<td>108</td>
</tr>
<tr>
<td>G.E. LEXAN Sheet Products</td>
<td>18</td>
</tr>
<tr>
<td>R.T. Blass, Inc.</td>
<td>18</td>
</tr>
<tr>
<td>Haller Systems</td>
<td>25</td>
</tr>
<tr>
<td>Bass &amp; Associates, Inc.</td>
<td>25</td>
</tr>
<tr>
<td>Hamilton Industries</td>
<td>37</td>
</tr>
<tr>
<td>Marketing Group Inc.</td>
<td>37</td>
</tr>
<tr>
<td>Hickman, W.P. Co.</td>
<td>30</td>
</tr>
<tr>
<td>John H. Rosen Advertising, Inc.</td>
<td>30</td>
</tr>
<tr>
<td>Hope’s Architectural Products</td>
<td>105</td>
</tr>
<tr>
<td>Moog Advertising, Inc.</td>
<td>105</td>
</tr>
<tr>
<td>Interior Arts, Inc.</td>
<td>44</td>
</tr>
<tr>
<td>Pietroli Hall &amp; Hill</td>
<td>44</td>
</tr>
<tr>
<td>Italian Tile Center</td>
<td>24</td>
</tr>
<tr>
<td>JG Furniture Systems</td>
<td>47</td>
</tr>
<tr>
<td>Karastan Rug Mills</td>
<td>26, 27</td>
</tr>
<tr>
<td>Ally and Gargano Advertising</td>
<td>26, 27</td>
</tr>
<tr>
<td>KDI Paragons, Inc.</td>
<td>115</td>
</tr>
<tr>
<td>Lloyd S. Howard Associates, Inc.</td>
<td>115</td>
</tr>
<tr>
<td>Keuffel &amp; Esser/Kratos</td>
<td>109</td>
</tr>
<tr>
<td>Dick Wayne &amp; Company, Inc.</td>
<td>109</td>
</tr>
<tr>
<td>Kirsch Company</td>
<td>29</td>
</tr>
<tr>
<td>D’Arcy-MacManus &amp; Masius</td>
<td>29</td>
</tr>
<tr>
<td>Laminators Safety Glass Association</td>
<td>36</td>
</tr>
<tr>
<td>Chief Fargason Advertising</td>
<td>36</td>
</tr>
<tr>
<td>Lees Carpets, Burlington Industries, Inc.</td>
<td>2</td>
</tr>
<tr>
<td>Wayne Associates</td>
<td>2</td>
</tr>
<tr>
<td>Levelor Lorenz</td>
<td>49</td>
</tr>
<tr>
<td>Muller Jordan Weiss</td>
<td>49</td>
</tr>
<tr>
<td>Longfellow</td>
<td>1</td>
</tr>
<tr>
<td>Hayes, Davidson, Inc.</td>
<td>1</td>
</tr>
<tr>
<td>Masonite Corp., Central Hardboard Div.</td>
<td>105</td>
</tr>
<tr>
<td>Armstrong Wainscoting, Inc.</td>
<td>105</td>
</tr>
<tr>
<td>The Meyer Company</td>
<td>108</td>
</tr>
<tr>
<td>The Meyer Advertising Co.</td>
<td>108</td>
</tr>
<tr>
<td>Molenco</td>
<td>111</td>
</tr>
<tr>
<td>Monsanto Polymer Products Co.</td>
<td>53</td>
</tr>
<tr>
<td>Monsanto Advertising &amp; Promotion Services</td>
<td>53</td>
</tr>
<tr>
<td>Nevanier Corporation</td>
<td>92</td>
</tr>
<tr>
<td>Lord, Sullivan &amp; Tozer, Inc.</td>
<td>92</td>
</tr>
<tr>
<td>North American Philips Lighting</td>
<td>8, 9</td>
</tr>
<tr>
<td>Gianetto &amp; Meredith, Inc.</td>
<td>8, 9</td>
</tr>
<tr>
<td>Olympic, A Div. of the Clorox Co.</td>
<td>C4</td>
</tr>
<tr>
<td>Young &amp; Rubicam, Inc.</td>
<td>C4</td>
</tr>
<tr>
<td>Peerless Electric Company</td>
<td>1</td>
</tr>
<tr>
<td>Hayes, Davidson, Inc.</td>
<td>1</td>
</tr>
<tr>
<td>Prestressed Concrete Institute</td>
<td>43</td>
</tr>
<tr>
<td>The Delos Company, Ltd.</td>
<td>43</td>
</tr>
<tr>
<td>Saddlebrook</td>
<td>120, 121</td>
</tr>
<tr>
<td>Sargent, Div. of Kidde, Inc.</td>
<td>11</td>
</tr>
<tr>
<td>Adams, Richard &amp; Mason, Inc.</td>
<td>11</td>
</tr>
<tr>
<td>Sierracin/TransTech</td>
<td>91</td>
</tr>
<tr>
<td>Wood Advertising, Inc.</td>
<td>91</td>
</tr>
<tr>
<td>Simplex Ceiling Corp.</td>
<td>119</td>
</tr>
<tr>
<td>Lechm Associates</td>
<td>119</td>
</tr>
<tr>
<td>Smith, Elgin G., Division</td>
<td>33</td>
</tr>
<tr>
<td>Cyclopa Corporation</td>
<td>33</td>
</tr>
<tr>
<td>W.S. Hill Company</td>
<td>33</td>
</tr>
<tr>
<td>Southern Steel Company</td>
<td>100</td>
</tr>
<tr>
<td>Corporate Graphics</td>
<td>100</td>
</tr>
<tr>
<td>Sterberg Lanterns</td>
<td>110</td>
</tr>
<tr>
<td>Jacobson Communications, Inc.</td>
<td>110</td>
</tr>
<tr>
<td>Sun System Prefabricated Solar Greenhouses, Inc.</td>
<td>119</td>
</tr>
<tr>
<td>Nephews Advertising, Inc.</td>
<td>119</td>
</tr>
<tr>
<td>Trimble House Corporation</td>
<td>106</td>
</tr>
<tr>
<td>Mull Agency</td>
<td>106</td>
</tr>
<tr>
<td>The Viking Corporation</td>
<td>C3</td>
</tr>
<tr>
<td>Advertising Bureau, Inc.</td>
<td>C3</td>
</tr>
<tr>
<td>Villeroys &amp; Boyd</td>
<td>22, 23</td>
</tr>
<tr>
<td>William B. Johns &amp; Partners, Ltd.</td>
<td>22, 23</td>
</tr>
<tr>
<td>Vindicator Corporation</td>
<td>104</td>
</tr>
<tr>
<td>Wood-Mode Cabinetry</td>
<td>56</td>
</tr>
<tr>
<td>Folz-Westinger, Inc.</td>
<td>56</td>
</tr>
<tr>
<td>Zero International, Inc.</td>
<td>14</td>
</tr>
<tr>
<td>Lawrence, Legters &amp; O'Brien, Inc.</td>
<td>14</td>
</tr>
</tbody>
</table>

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