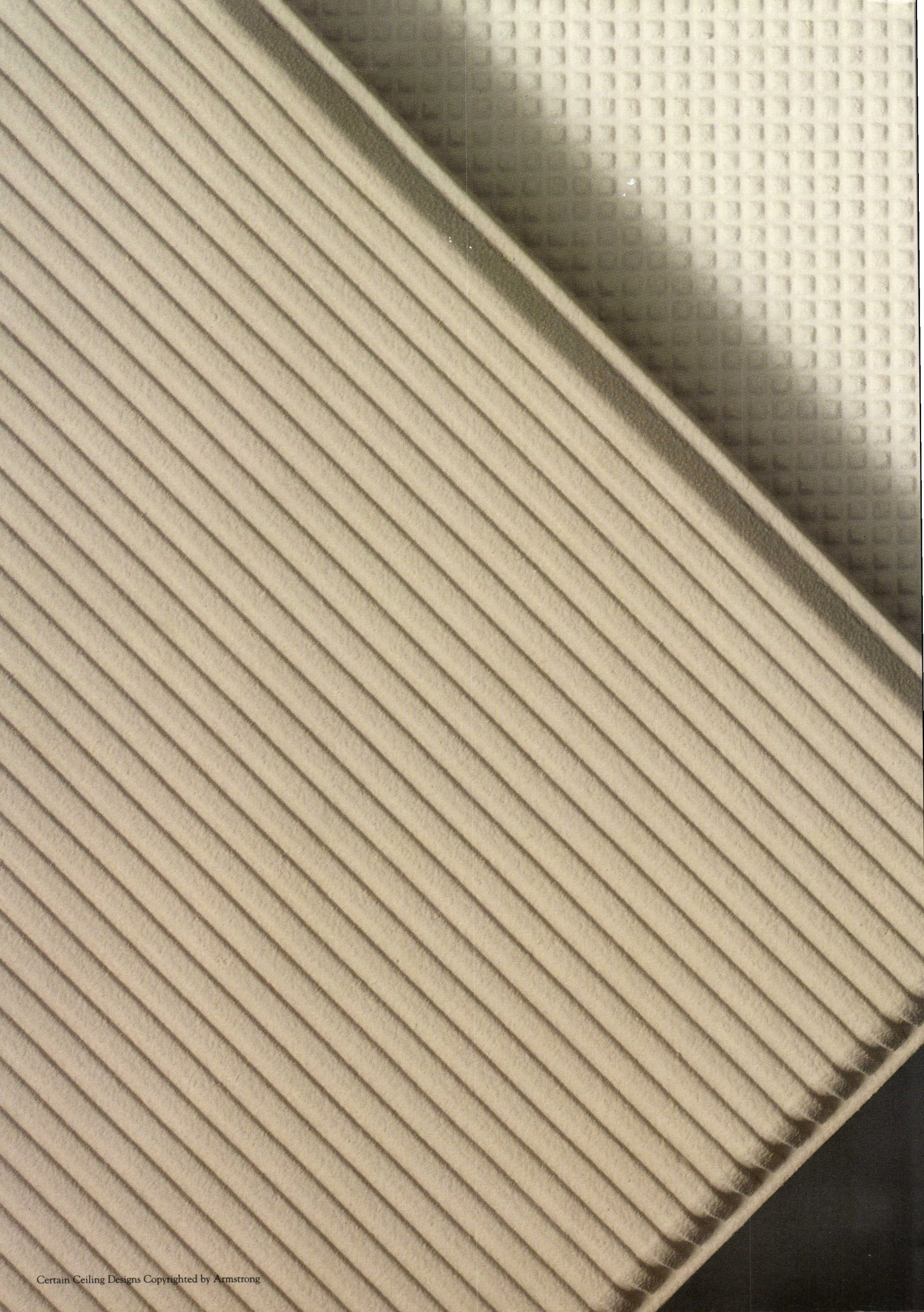
ARCHITECTURAL RECORD

Business Design Engineering
A McGraw-Hill Publication, Seven Dollars
January 1987



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INTELSAT—the global telecommunication cooperative's—dramatic new Washington, D.C. headquarters is the result of an international design competition which included a score of respected architectural firms. Clear anodized Tech Wall aluminum panels play a major role (100,000 square feet) in this remarkable architectural statement.

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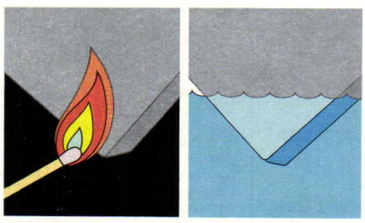
Proven in numerous installations throughout the world, Tech Wall's features and benefits are unmatched by its look alike competitors, many of which are thin-skinned composites. Water



can't hurt Tech Wall, it's non-flammable, and it will never delaminate because Tech Wall panels are solid aluminum.

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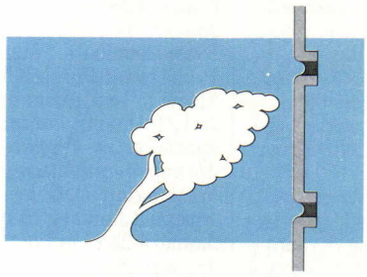
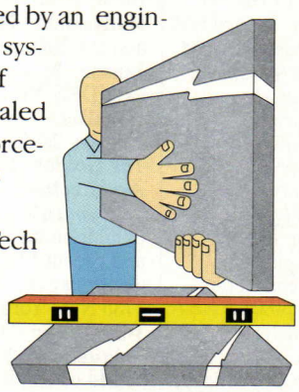
Tech Wall's superiority is a matter of record. It's the only system we know of that's been designed, tested and field proven to withstand the most severe wind-loading conditions. (In fact a Tech Wall project was built to handle typhoons.)



Tech Wall's patented and proven fastening system has been engineered to accommodate maximum thermal movement; condensation and weepage are controlled within the system.

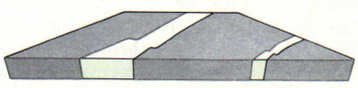
And superior flatness is assured by an engineered system of concealed reinforcements along with Tech Wall's



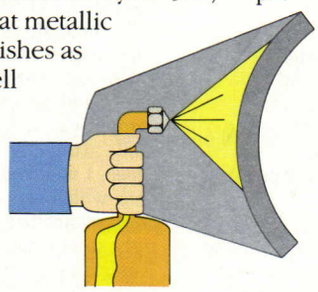
panel edge design. Tech Wall also lends itself beautifully to ultra-smooth contouring and transitional bends.

MORE COLORS, BETTER FINISHES

Unlike composites, Tech Wall panels are formed and contoured *before* finishing.



This additional step eliminates the cracking, crazing and micro-splitting of finish films inherent in bending pre-coated materials. Tech Wall offers a greater choice of finishes too. Besides our superior, in house anodizing, we offer 20 Kynar 500® triple coat metallic finishes as well



as 20 Kynar 500® fluoropolymer coatings. Custom colors and other finishes are also available. Panel-to-panel color consistency is computer controlled.

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THE C/S GROUP

Circle 2 on inquiry card

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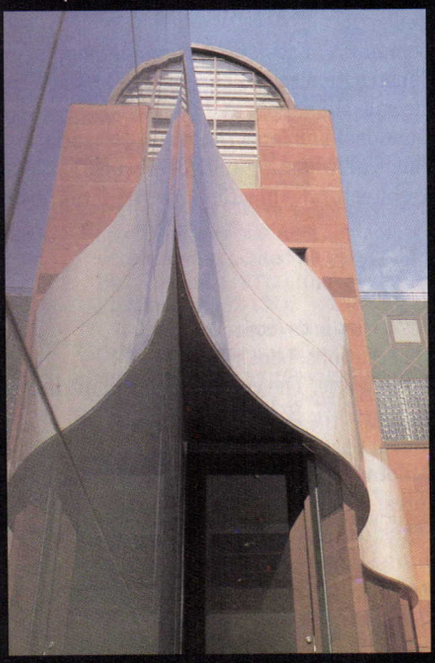
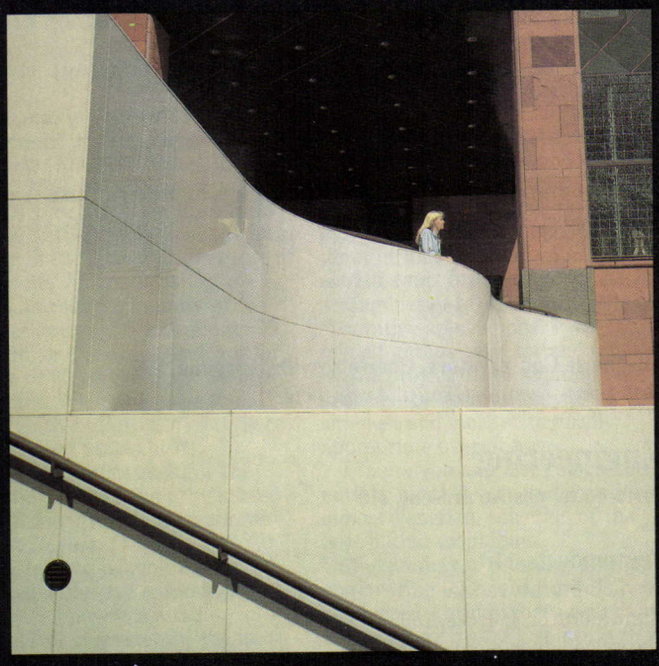
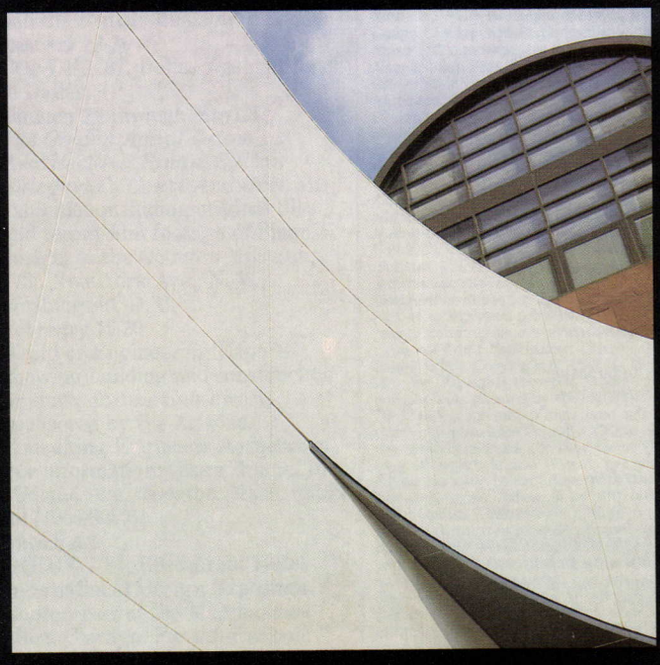
Crystallized Glass Panels

F+S

The new Museum of Contemporary Art in Los Angeles is a fine example of the brilliance of Japanese architect Irata Isozaki; eclectic, wonderfully detailed and full of surprises. . .and the Neoparium Crystallized Glass cladding in the courtyard and lobby may be the most delightful surprise of all. Neoparium's clean, sparkling, hard polished surface is in dramatic contrast to the other materials employed and its sweeping curves, crisp walls and sophisticated geometry lend magic to this delightful building.







Neoparium Crystallized Glass is available in two thicknesses: 8mm (⅜") and 15 mm (⅝"). Its surface is harder than granite and its weather resistance is superior to all natural stones. Neoparium Crystallized Glass is made in white, beige, grays and other colors. Let Neoparium lend magic to your next project.

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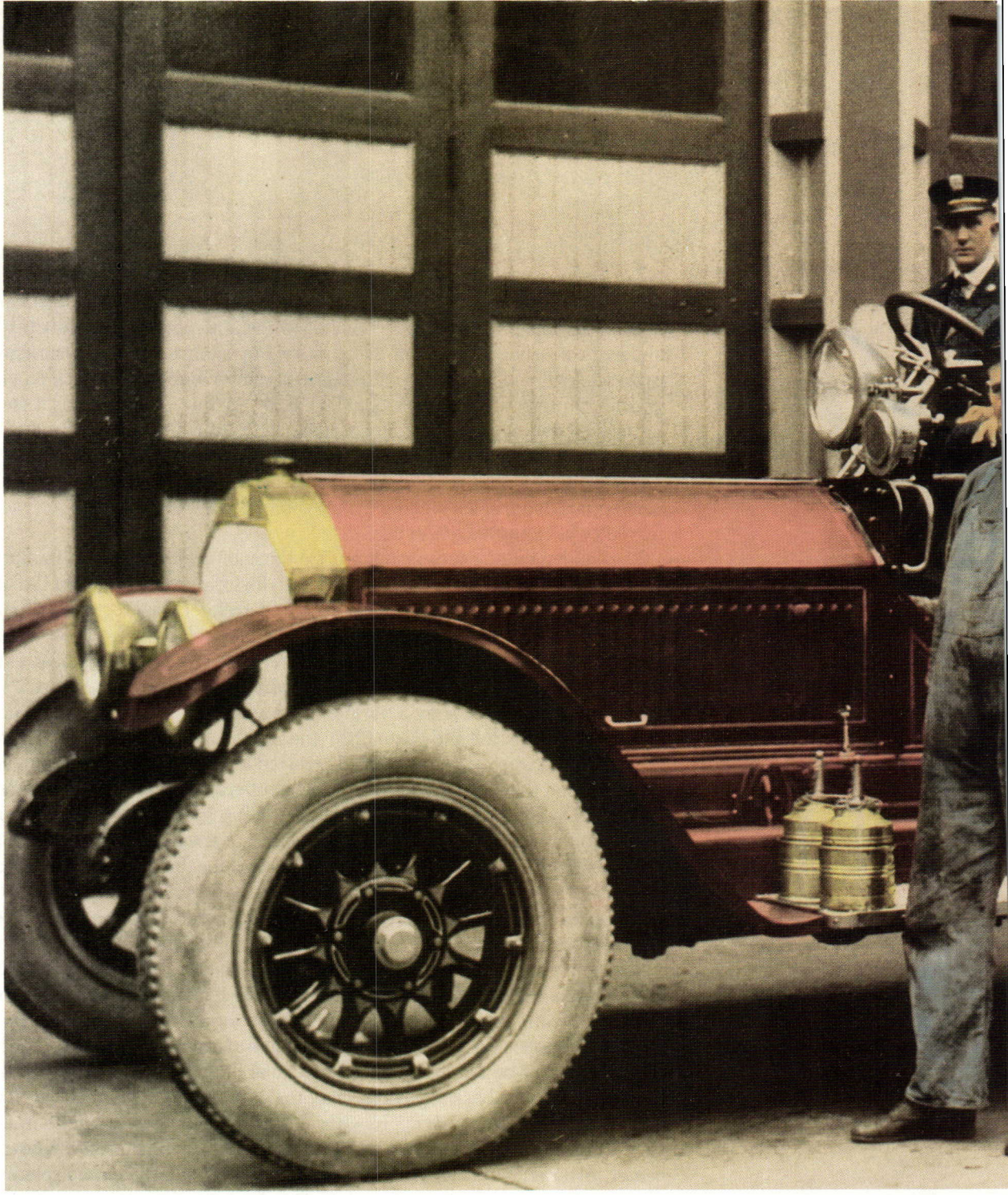
Circle No. 5

Equal time

Some of you will recall that in a recent editorial explaining how we perceive our critical role, I wrote: "RECORD . . . critically evaluates projects we deem to be worthy of such effort, namely buildings or urban schemes of great public importance, or those that aspire to High Art." In this issue you will find a critical text by RECORD editor Deborah Dietsch on just such a project: Washington Harbour in Washington, D. C. by Arthur Cotton Moore Associates (pages 84-93). Both as a building and as an urban scheme, it is of considerable, if not great public importance, and architect Moore, speaking and writing in its support, leaves no doubt that he, as principal designer, has aspired to High Art. Moreover, the Washington community finds the office, residential condo, and shopping center complex controversial, so much so that the local media fervently keep the debate going.

The fundamental issues in dispute are those of urban planning (should such a "gargantuan" complex have been built right there next to historic Georgetown on the bank of the Potomac, or would a park have been better instead?); and architectural form (did Moore's Postmodernism get out of hand?). Dietsch's critique, on balance, takes sides with the project's opponents, but architect Moore's viewpoint is also of interest. The following has been excerpted from an article Moore wrote for *The Washington Post* in which he makes his case: " . . . while no one has ever been pilloried for producing a boring building in Washington, the buildings most beloved here, such as the Cairo, the Old Post Office, the Smithsonian Castle, and the Library of Congress, have shared two characteristics—they all received terrible reviews by architectural critics at their openings and they all were idiosyncratic, exuberant, overdone foreground designs on foreground sites . . . . Obviously, Washington Harbour is a foreground site demanding a foreground design . . . . I would offer the view that part of the success of the place is due to [its] puzzling but obviously intriguing architectural richness . . . . Moreover, it is important to note that we were dealing with block-long facades due to the elaborate street pattern which confines one's cone of vision to the theme of each facade. Within that theme for each facade, there is great consistency, yet each street offers a surprise and invention to keep the project fresh and interesting . . . .

"Since practically every shape and motif has been used over the last 4,000 years of architectural history, or can be casually labeled as a derivative of such and such a style, how, one might ask, is Washington Harbour new? Newness in architecture comes in unique combinations, different juxtapositions, original compositions of known elements . . . . [The project] attempts a synthesis out of antagonistic movements in architecture. In the details, the clearly modern is combined with the basically traditional; the soft and highly detailed area is set against the spare and hard. The very formal approach and the informal picturesque character can be seen joined in the formal classical colonnade, which is part of an asymmetrical composition including an off-center tower and non-centered bays between the regularly spaced columns . . . . Washington Harbour borrows from two of modern architecture's major themes: its emphasis on progress and originality and its emphasis on dramatic three-dimensional massing made possible by advances in structural engineering . . . . Postmodernism, in contrast, reintroduced the ornament, detail, and anthropomorphic aspects of traditional architecture to provide a feeling of comfort and human scale, although this has been generally a rather flat treatment on rather flat boxes. The Harbour's vigorous massing and dramatic shaping, embellished by ornament and detail that emphasize entrances, windows , cornices, and so on, attempt a synthesis of these antagonistic architectural positions . . . . Finally there are the connections . . . . In a way, the streets, walks, promenades, parks, and paths will weave together all the loose ends in this part of the city. Come on down and judge Washington Harbour for yourself." *M. F. S.*



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CAD suppliers face their problems

CAD suppliers and researchers met in a recent two-day symposium and produced proposals that could fundamentally change the industry's products. Sponsors were the Massachusetts Institute of Technology's Computer Resources Laboratory and consultants Graphic Systems Inc. Suppliers, including sponsors Calcomp Corporation, T & W Systems, SKOK, Autodesk, McDonnell Douglas Corporation, Numonics Corporation, and Computervision, expressed concern with the large investment in time, expertise, and money just to keep up with competitors' constantly updated drafting and production capabilities—functions the companies felt were already at a basically mature state of development. There was discussion of instead directing research and development toward greater software flexibility (by, for instance, more customization for particular users and better interface capabilities between all manufacturers' systems) and on better capabilities for design.

Architectural design, it was felt, was a computer field in its infancy because of the complex way design is carried out, involving pluralistic, often-indirect levels of thought and imagery. Dr. Charles Eastman, executive vice president and chief scientist of Formtek, Inc., noted the problems of working from a single image on a screen, such as a three-dimensional solid model, when models are only one of the images—among, for instance, plans, elevations, and large-scale detail drawings—that architects require. (IBM promises to help this situation by its new system, developed with design-builders Stone and Webster, that will produce plans and sections directly from a model.)

McGraw-Hill vice president Joseph Kasputys discussed his company's efforts to serve the burgeoning market for electronic databases. Capabilites under research include making a large pool of information available at an affordable cost and enabling selective access. Dr. John Boose, a scientist in learning technologies at Boeing Computer Services, presented a study of knowledge-based systems and their ability to solve some parts of the design process; and Patrick Purcell and Frank Miller of MIT talked about Computer Resource Laboratory's work on the application of knowledge-based systems in design and links between CAD and such means of visual communications as laser technology.

Future symposia are planned. For more information, contact Maura Belliveau at Graphic Systems, Inc., 180 Franklin Street, Cambridge, Mass. 02139 (617/492-1148).

Survey verifies interior-design firms as more profitable

The first survey of financial statistics on interior-design firms verifies what has been suspected all along: Interior-design firms, however you measure the figures, are more profitable. The survey, co-sponsored by consultants Birnberg & Associates and *Interior Design* magazine, and endorsed by the ASID and IBD, finds that the designers' median 1986 profit before tax and distributions was 8.51 percent of total revenues vs. 7.86 for architectural and engineering practices. On net revenues, the figures were 11.42 vs. 9.2.

One important factor was the lower cost of liability insurance for interiors firms: 1.24 percent of total revenues vs. 1.57. But the architects and engineers had about the same labor costs and lower overheads. A problem architects and engineers share with interior designers is the long period between completing work and collecting payment for it. The average period from completion to even sending out a bill is 26 days. And when this period is coupled with the average 55-day period it then takes the client to pay, it can easily be seen why accounts receivable tie up over half of the average firm's assets. For more information, contact Birnberg & Associates, 1227 West Wrightwood Street, Chicago, Illinois 60614 (312/664-2300).

Construction-cost guides introduced

A five-volume guide to help architects and engineers accurately estimate the cost of construction has been introduced by the Dodge Cost Systems Division of McGraw-Hill Information Systems Company. Listing current costs of 12,000 different building materials and 22 building trades, the guides are broken down into broad estimates of different types of construction and service systems for use during schematic design; unit-cost data comparing different cities and locales; square-foot costs; heavy-construction costs; and remodeling costs. Special sections cover toxic-waste disposal, asbestos removal, and equipment replacement in renovations. For more information, contact Chris Day, Dodge Cost System Division, P.O. Box 28, Princeton, N. J. 09542 (800/257-5295 or 609/426-7300).

AIA gives tax reform mixed reviews

For architects, the bad news about the recently enacted tax-reform legislation is that, for the near term, there will be less work. Notes AIA president Donald J. Hackl, "It would not be accurate to say that the building industry and our profession has won right across the board"—a wry understatement of the widely shared view that the industry took it on the chin.

The good news, says Hackl, is that good design is likely to be more in demand. "In the closing weeks of last year, there was an enormous rush by speculative developers to get projects underway to qualify for tax-sheltered income," he continues. "This produced an enormous surplus of new buildings developed for the wrong reasons." And it showed. "In all likelihood," he adds, "tax reform will take out of the marketplace the highly leveraged, compromised, highly questionable designs."

In areas of AIA concern other than business, Hackl thinks the profession has not come off too badly under tax reform. "We were successful in a couple of major areas such as low-income housing and historic preservation," he says. In 1986, the AIA made a major effort in heightening public sensitivity to better housing for the poor, and he believes the fact that tax breaks for low-income housing were kept largely intact reflects that effort.

Similarly, tax credits for historic preservation, "an issue that has been on our books for several years," have been saved in the new tax laws. Overall, he adds, "We're very proud of these accomplishments."

A tax specialist, meanwhile, thinks that a form of legal structure typical for extremely small architecture firms, the so-called "subchapter S" corporations, will attract a lot of positive interest under tax reform. Most AIA-member firms currently operate under that setup.

George E. L. Barber, executive director of Price Waterhouse's Consumer Financial Institute, told the AIA last month that this particular type of organization is likely to grow in popularity. CFI has prepared a tax-reform impact-management report for AIA members. Barber says it is important to realize that, "For the first time in recent history, individuals' tax rates will be lower than corporation rates—28 percent for individuals vs. 34 percent for corporations by 1988. The new law will allow firms to pass on profits at a lower than corporate rate, making subchapter firms more and more popular in the years ahead."
Peter Hoffmann, World News, Washington, D. C.

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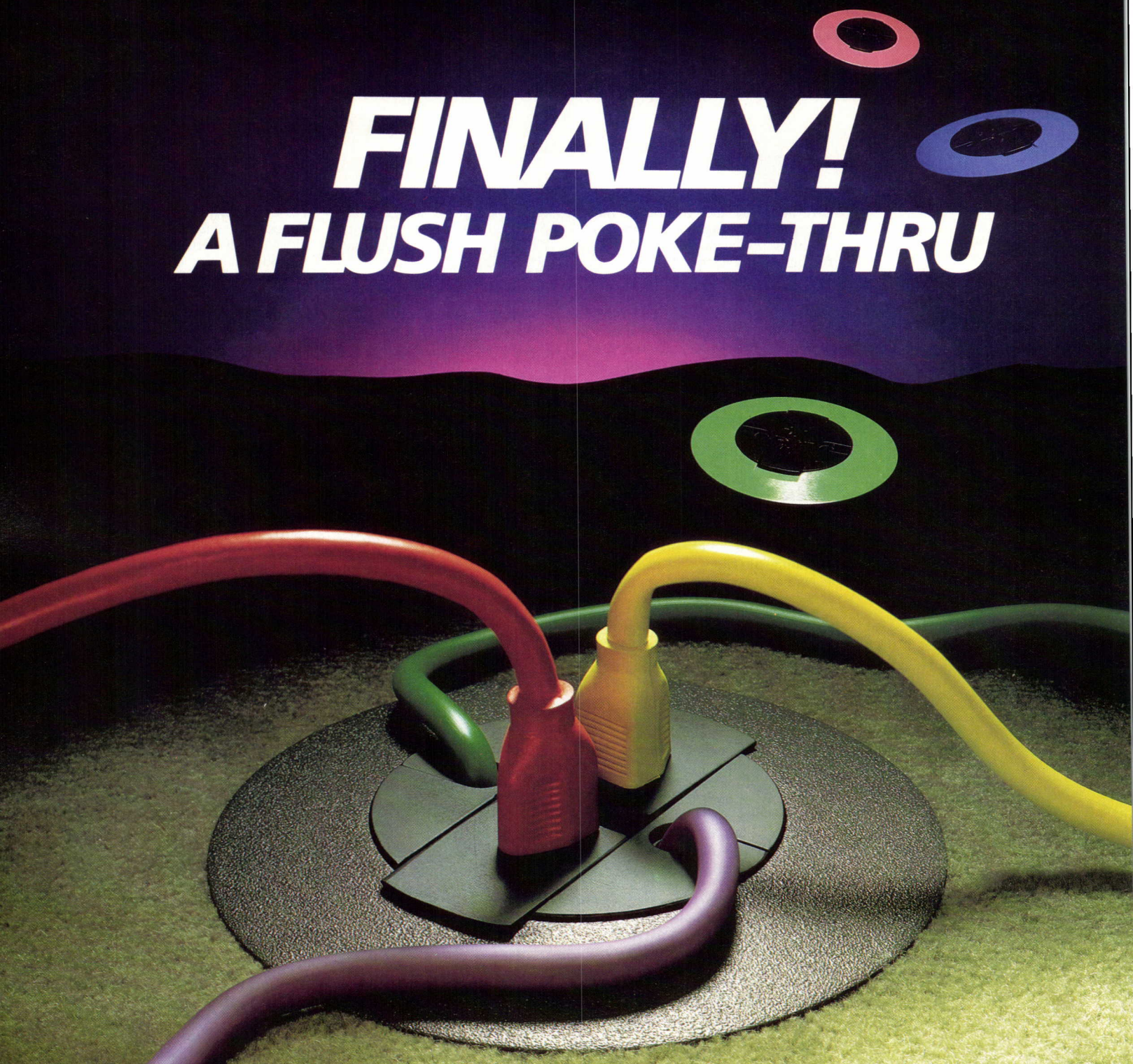

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Computers: In facility management, there are opportunities and pitfalls for architects

By Eric Teicholz and Michael Sena

The traditional role of the architect as project leader is being challenged by facility managers hired by the client as coordinators (RECORD, May, 1985, page 51). On the positive side, they can provide better information in a timely manner. On the negative side, they are viewed by many architects as weakening their leadership role and producing design compromises.

In addition to changing traditional building-design processes, facility managers are causing a re-evaluation of contract documents. For instance, the requirement for as-built drawings is not new. But, under facility managers, the original construction documents, simply marked up to reflect changes during construction, may not be enough. A clean set of record drawings may be required *plus* a detailed space-utilization report of conditions at the time the building is occupied.

What clients want from this is information that will help them with the growing maze of such accounting practices as "cost-center" budgeting, departmental charge-backs for space and furniture, equipment inventories for depreciation, and asset management. Faced with the task of producing such information, which many facility managers view as hopelessly difficult without a major commitment of their own, they at least can start with the correct information from its source, i.e., the architect.

This one new requirement alone, the alteration of design drawings to show subsequent changes, may well be enough to make architects without computers want to rethink their position.

Here is how the clients' facility managers will use automation in-house and put pressure on architects to use it as well

In order to manage the abundance of factual information and figures and, to a lesser extent, graphic data (e.g., floor plans), facility managers are increasingly turning to automated procedures. A recent survey by computer consultants Graphic Systems, Inc. reveals that over 80 percent of managers use some form of automation.

Mr. Teicholz is president of Graphic Systems, Inc. in Cambridge, Mass., a consulting firm that publishes a newsletter, Computer Aided Facility Management. *He is an architect and past professor of architecture and associate director of computer graphics at Harvard University's Graduate School of Design. Michael Sena is an architect and director of GSI. His expertise includes computer-graphics applications in facility management, mapping, and architecture.*

The applications they have automated the most include space-needs analysis, space allocation, and, significantly for architects, design and drafting. The least automated include personnel forecasting, maintenance functions, real-estate management, and asset management.

There is a clear trend toward the integration of functions previously performed manually or as islands of automation into new comprehensive systems. A second trend is an increasing awareness of the need for a facility database. The consensus is that the database should at least show floor plans and information about the occupants and their use of the facility. The latter might include:

- Identification by name, job description, and telephone number;
- The characteristics of individuals' spaces;
- The grouping of spaces into administrative units.

By linking occupant data (or attributes) to a specific physical location, computers are used to generate both graphic and alphanumeric reports. Another advantage of having both plans and attributes linked is that changes made to one are automatically reflected in the other. For example, alterations made to partition locations or the addition of new staff to a division would mean the updating of both employee counts and building plans without having to cross-reference documents.

What is important in this for architects is that the client may expect the delivery of a facility database in a form compatible with his computer system. It may be mandatory in some instances. Certain government agencies already stipulate the use of CAD as a precondition to being considered for contract awards. The private sector will increasingly make automation a requirement, either explicitly or implicitly. A recent survey by Sweet's, for example, indicates that 15 percent of all clients insist on the use of CAD. Of that group, over 50 percent insist on the use of a particular system.

At present, there is a certain reluctance to make such demands because the client could become dependent on one design firm. Nevertheless, as data transfer between different CAD systems becomes more feasible and more organizations implement an integrated facility-management approach, architects will find that the pressure to provide a particular database will increase. Although no clear guidelines have, as yet, been developed in the private sector to establish the value of, and therefore the compensation, for the creation of such databases, they are inevitable.

The need to automate is another incentive for architects, when appropriate, to perform facility management functions themselves

Design firms may want to turn new demands into opportunity by offering facility management as a service to clients that either lack in-house departments or have insufficient ones. This will not only increase revenues, but give such firms a competitive edge in attracting new design commissions.

What specific services in this field are architects particularly well qualified to offer? Here are a few:

- Space programming;
- Activity modeling;
- Space-standards development;
- Stack-and-block diagramming;
- Space-optimization planning;
- Utilization-of-existing-space analysis;
- Furniture, equipment, and building-systems inventories;
- As-built drawings;
- Engineering-systems analysis.

Still, to be successful as a facility manager, the design professional must develop skills beyond those previously required. To help, degree programs are being introduced by academic institutions.

And, there are several other issues. The first, and most important, is recognizing the wide diversity in requirements of different types of clients. For example, space-utilization data takes a very different form in hospitals than it does in factories. Hospitals' facility costs are a basic factor in their government reimbursement formulae. Manufacturing organizations, on the other hand, use space utilization accounting for internal budgeting or for rent apportionment. Thus, the key to offering facility-management services is to match your firm's skills and experience to the prospective client's needs—as you would in marketing standard architectural services.

Another issue is knowing the characteristics of a client organization that is likely to contract outside services. They include:

- The client's financial position;
- The size of the facility to be managed;
- The size of the in-house facility-management staff;
- The present use of space standards and inventory control;
- The churn rate (or percentage of total space altered per year);
- The amount of design being performed in-house.

A last issue is that of compatibility of your firm's computer system to the client's. If he has at least a partial facility-management department, he will, especially if you are directly involved in his management, expect you to provide digital data that is readily transferrable. It is not necessary for your equipment to be identical to the prospective client's. What is essential is that your data is either compatible with the client's system or can be converted to a format easily read by it.

There are two approaches that can be taken in working with client organizations that have already automated. One is to offer services that augment the client's own capabilities. Another is to go beyond those capabilities into new areas.

Here is what the GSI survey shows you will be up against when working with clients' systems

- *Mainframes:* Because mainframe systems have both a large data-handling and storage capacity, it is possible to keep an entire facility's database on-line for accounting, inventory, and/or space allocation purposes. Most clients using mainframes have written their own programs or acquired specialized software.

Generally, clients with mainframes have already automated space-allocation reporting, construction management, furniture and equipment management and, to a lesser degree, asset management. Few reported using mainframes for planning functions such as personnel forecasting, space-needs analysis, design and drafting, or for maintenance and real-estate management.

- *Personal computers and word processors:* Depending on the type of system selected (i.e., manufacturer, size of memory, amount of storage, peripheral devices used), PCs offer both the least expensive and most flexible type of automation for facility management. The turning point in their application to facility management was the development of powerful software packages for spreadsheet analyses, database management, and word processing. This allowed general-purpose and simple-to-use software to be applied to accounting, inventory, specification writing, office communciation, and construction and project management.

PC and word-processor users also reported using their systems for construction and physical-asset management, although to a more limited degree than mainframe users. They have, however, begun to use these systems for planning functions, including personnel forecasting and space-needs analysis, as well as for space-allocation reporting.

- *Computer-aided drafting systems:* These have extremely limited or no attribute-database manipulation capabilities. They

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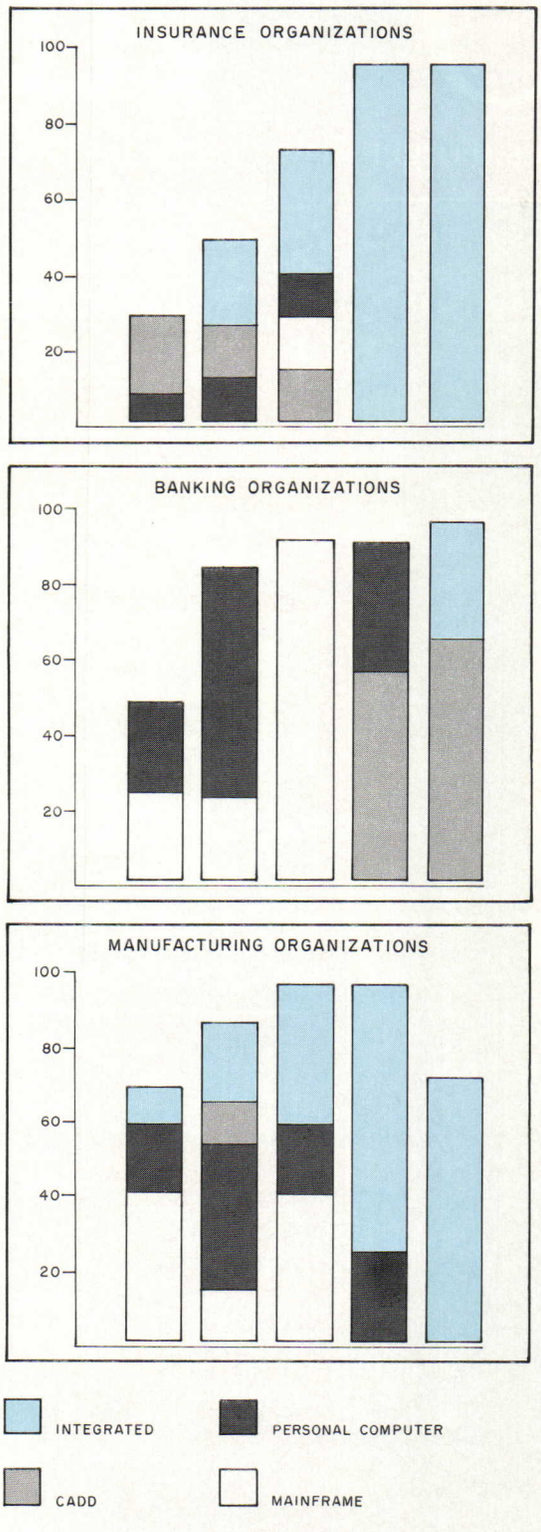
Architects hoping to enter facility management should know how much automation different categories of client organizations are likely to have in-house and the forms that their automation might take. In the charts below, the computer characteristics of three major client groups, the insurance industry, banks, and manufacturing, are shown by size of facility—the smallest, at less than 500,000 square feet, is shown on the left and the size ascending to over 3.5 million square feet on the right.



seem to be fertile ground for architects because CAD drafting systems do not presently play a central role in facility-management automation. Those groups that do have CAD have purchased them to either decrease turn-around time for design and production drafting or to stabilize personnel needs. Limited use is made for space-needs analysis and furniture and equipment analysis.

There are several services which an architectural firm could offer CAD users. The most obvious is assistance in producing drawings of an organization's current facilities. Typically, facility-management departments are not adequately staffed to manage such long-range projects. Another potential service is the creation of a symbol library for standard furniture, movable partitions, or specialized equipment.

• *Integrated systems:* These combine CAD, database manipulation, and application-specific operations to produce drawings, reports, and numerical calculations on a single system. Attributes are attached to graphics and both can be manipulated independently. Such systems can perform most functions required of a facility manager.

It might appear that clients with their own integrated systems would have little need for outside services. In fact, the opposite appears to be the case. Because these systems are capable of handling the broadest range of functions, organizations that have them are usually attempting to fully automate their activities. In many cases, the staffing requirements necessary to realize this objective exceed the limits of the facility management departments. Faced with this situation, facility managers will look to outside services to meet peak demand or to provide services that are beyond the limits of in-house staff.

For those of you who have not automated, there is still a significantly large number of non-automated client organizations to make the offering of facility-management services interesting. However, it might now be best to consider acquiring a system that can serve both your in-house needs and those of facility management.

But you must not enter facility management thinking that there will be no competition

There is a growing list of architectural and engineering firms, as well as CAD service bureaus, that have computer systems and managers in facility mangement on line. Many of these firms compete for contracts on a national basis. Nevertheless, your firm may have an advantage if it is local or if it can show prospective clients that it can provide cost-competitive services.

If you decide to enter the facility-management-services business, there are two trends developing that could significantly shorten your business-opportunity window. The first is the growing tendency to bring facility expertise in-house. This trend will increase in proportion to the rate of automation and means that more of the small to medium architectural and space-planning work will be performed by clients' own facility-management departments. Facility managers want the project control as well as the cost and scheduling efficiencies that they believe they can obtain with an in-house professional staff.

The second trend is for client organizations to either convert to integrated systems from their present automation systems, or to become first-time users of automated equipment through the purchase of integrated systems. As stated earlier, integrated systems users do tend to purchase outside services. But the design firm offering facility-management services must be prepared for clients' automation or their changing of systems by staying in the lead in its own use of automation.

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Circle 16 on inquiry card

Management: Joint ventures or associations; do they work?

By James Falick

Every architect knows that a joint venture between two separate firms can be risky business. It has been said that the age of the prima-donna architect is over. But I think that's wrong. Most of us still like to have the spotlight on our firm alone.

If ours is a local firm and we decide to set up a joint venture with a national firm, we are concerned about our image in the community. Will we be considered second-rate? Will we be seen as only the errand runners? How do we continue our separate identity?

There are risks involved for the national firm, as well. It is usually the local firm that has a closer relationship with the client. Sometimes a local firm with a diverse practice has been working with a client for years, and the national firm is only brought in because the project at hand is so large that the client feels that more specialized experience is needed.

But, because of its preexisting relationship, if the local firm wants to make the national firm look bad as work proceeds, this can easily be done. All of us make mistakes. If the local firm, instead of resolving them without client involvement, blames them on the national firm, the client's trust of the national firm can be quickly undermined and that of the local firm strengthened.

We have all heard horror stories about joint venturing. Sometimes two firms agree in advance on a fee split and then one of the firms ends up doing all or most of the work. Sometimes one firm is very involved in the beginning, while the front-end money is there, and then fades away towards the end. Perhaps the worst eventuality, for a local firm, takes place when the national firm sets up a local office to service a joint project and then decides to feed that office more local business and keep it going. Suddenly, the national firm is in that locale permanently and competing with the local associate for its bread and butter.

With all of these pitfalls in mind, why does anyone consider joint venturing in the first place?

We may arrive at joint ventures by a process of elimination

When firms look for ways to increase their business, there are only so many ways to do it:

- A firm can decide to expand either the number of its specialties (building types) or the number of territories in which it markets its expertise. But, when dollar volume, and hence income, is declining, expansion is often a frighteningly expensive prospect. If the expansion doesn't work, the firm is much worse off than before.
- Another alternative is for a firm to simply declare that it's in a certain new market. We who own the firm say to ourselves we are bright, we are talented, we have done beautiful buildings for other people. For example, if we have a track record in health care, we therefore feel we are qualified to do high-tech research parks. It may, nevertheless, be difficult to convince a new client that we are qualified to produce a project with no track record of its type.
- A third approach is to hire the people with the expertise that will put us in that new market. But this expertise is often hard to transfer and to mold into a salable package because, after all, the actual projects were done by other firms. This approach can simply result in having more people on board and more mouths to feed but not necessarily any more work.
- A fourth method, in reality, an extension of the previous, is to buy a firm with expertise in whatever market we are trying to enter. But, for most architectural firms, this is not financially realistic.
- So we arrive at the fifth alternative, and that is the joint venture or association. (The difference between the two is that the joint venture is a legal entity in which two firms join together and set up a separate corporation to manage a given project. An association is a looser arrangement whereby, technically speaking, one firm is working for the other firm for the duration of the project.)

Now, let me say right up front, that, if a firm enters a joint venture or association exclusively for the purpose of increasing cash flow, they will hate the confinement. The worst joint ventures and associations are the ones put together only for the sake of getting money at that moment.

The best reasons for an inexperienced firm to go into a joint venture or association are to get knowledge of a new field and to develop relationships and references that will enable it to enter that market as full-fledged experts with credentials. The best reason for a large experienced firm is to broaden its client base—especially if the building type for which the firm is known is not built that often in the firm's own region.

There are also some very good reasons why clients may look for amalgamated design firms. Often, although he has a large complicated project, a client does not relish slighting local firms by entirely cutting them out in favor of a national one. He also worries about who will be his contact on a day-to-day basis. Later on, will he have to deal with the national firm's overhead for every minor renovation or addition? Yet, he *wants* the thought processes and the technical expertise of a national firm. With an association or joint venture, he can have it all.

A large project in Montgomery, Ala., St. Margaret's Hospital was the result of the collaboration of the author's firm and local architects Pearson Humpheries Jones and Associates.

Here's how one firm makes combining talents with another work

Let's identify some principles my firm, the Falick Klein Partnership, has evolved over the years that make association, which our principals prefer, work for us:

- Because of our reputation for association, firms in various localities will often make the first contact and suggest working together on a given project. Our rule is that the first firm that contacts us is the firm we will go with—if we go after the job at all. This may violate all the textbook rules of association that say to research all potential partners and make your own choice. But, if another firm brings you a lead, do not get a reputation for taking advantage of good faith by pursuing that lead independently.
- On the other hand, if we know of a project and seek an association, but have not had the time to do our homework on an appropriate firm, we will not take one off the street just to be able to say we have a local associate. We will, instead, inform a potential client that we are going to find a local associate and pitch the project on that basis.
- Selecting associates has been particularly important to us in landing government projects. Here we are often looking for the right community connections and the selection has to be very careful.
- We have found that, in most cases, a 50/50 split, in both the division of labor and fees, works best—but only if it makes sense for the type of project and the capabilities of the two firms.
- We are often asked how we can tell in advance which associations will work and which will not—before we get committed to a long-term project with a firm that is not cooperative nor compatible. Sometimes it's easy to tell. Recently, we promoted a project in New England and held preliminary discussions with a local firm of our respective capabilities. That firm's partners wanted the details of who would do exactly what far beyond a scope that could be determined until we knew more about the project. So we backed out. If they were that difficult in the initial stages, things weren't going to improve.
- When a project scope is adequately determined, we do spend a lot of time with any local associate reaching an understanding of how the two firms will communicate and how our relationship will work. An association on especially highly technical projects, like health-care facilities which we specialize in, simply is not viable without good communications. We get a consensus on what will be done at every stage of design and construction, and identify one spokesman as a focus of responsibility for a given job. An added bonus is that we have answers for the client when he asks how this relationship will work.
- We do not, as a rule, recommend or engage in shotgun marriages in which the client selects the two firms and insists that they work together. We have been involved in a couple of relationships like this and would suggest that they be avoided.

If everything is done right, the relationship between two firms can be its own reward. In 1968, we started design work on a childrens' hospital in Louisville with a local firm. The project lasted until about 1973, was successfully completed, and then we had little or no contact with the other firm until recently, when we and the local firm were rehired to do some major additional work at the same hospital.

We arrived on the job and found that all of our old relationships were still intact, after more than 10 years. It felt like a class reunion. What that meant to us was, that, on this job at least, our performance had been successful in the most personal sense.

Mr. Falick is the president of The Falick Klein Partnership, Inc. in Houston, architects specializing in health care.

Circle 17 on inquiry card

Finance:
Adjusting to tax reform will slow real growth in the first half of the year

By Phillip E. Kidd

One purpose of the 1986 Tax Reform Act is to encourage individuals and businesses to base their investment, savings, and consumption decisions on economic factors rather than on tax avoidance. It will take years before the success of this initiative can be evaluated. Moreover, tax reform will generate considerable consternation and confusion in the immediate future, as consumers and industries begin adjusting their spending behavior to the new tax code. That uncertainty will inhibit domestic investment and consumption in the next six months, eroding the economy's present modest rate of advance.

The current economic ascent is now in its fiftieth month, making it older than all but two of the nine post World War II expansions. Since the middle of 1985, however, the economy has consistently underperformed expectations by increasing at only a 2- to 2.5-percent real rate. One significant result of that low growth is the continued abatement of inflation and inflationary psychology.

Remarkably, for an expansion of this duration, there is little evidence of shortages in the economy that could re-ignite inflationary pressures this year. Operating capacity is less than 80 percent, providing ample machinery and buildings to support higher production. Labor is abundant because business's cost-cutting efforts, mergers, and acquisitions steadily replenish the job market with semi-skilled and skilled workers. Material prices, even oil, are very low, indicating adequate supplies for boosting output. Although our savings rate is too low and corporate, personal, and government borrowings are too high, foreigners still appear eager to lend us sufficent cash to support domestic consumption and investment. Generally, enough resources and money are available to sustain the present 2- to 2.5-percent real growth, while holding inflation under 2.5 percent this year.

Although auspicious for the inflation outlook, these underutilized resources almost guarantee no faster growth than the present modest pace. At this juncture, no group of industries seems capable of generating a dramatic surge in output that would galvanize the rest of the economy and, in time, fully employ these resources. The oil industry is still adjusting to the fall in oil prices during 1986. Agriculture, although bottoming out, is struggling against a slump in food prices and world competition from overseas. Construction is slipping as residential building levels off and nonresidential building weakens because of the downturn in offices. Consumer goods and hi-technology industries are experiencing smaller sales increases as imports continue to grab a domestic-market share. Export industries remain a hope, but poor world growth and resistance to U. S. goods in many markets abroad are, so far, limiting the gains in exports.

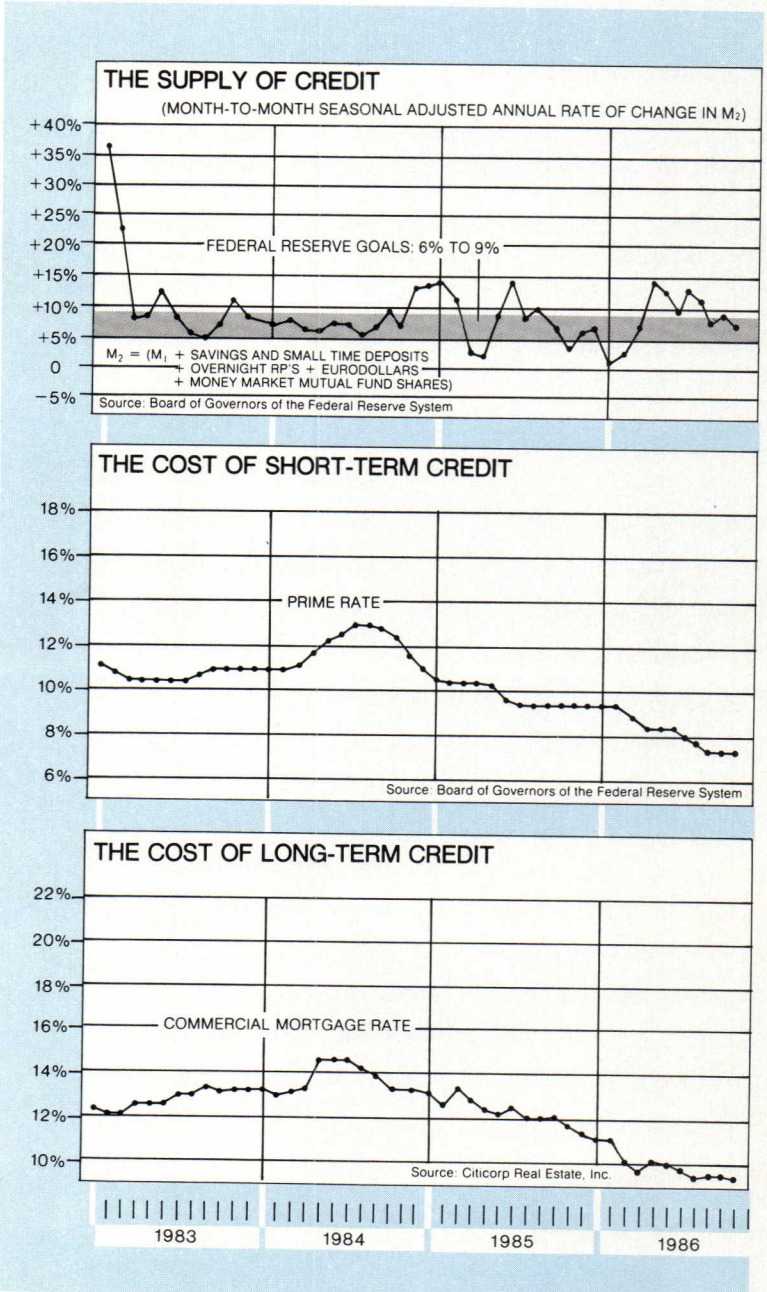
A continued modest economic expansion combined with the absence of widespread inflationary pressures will provide significant flexibility for monetary policy. The Federal Reserve can wait to see how the economy is performing before determining whether to tighten or ease. That maneuverability will be absolutely essential in mitigating any disruptions to the economy from adjustments to tax reform in the first half of this year.

The 1986 Tax Reform Act is so broad in scope that all working or retired Americans and all businesses are affected. Unfortunately retirees, wage earners and companies will not know the actual impact on their 1987 earnings until 16 months from now, on April 15, 1988. In the short-run, taxpayers will over react to any easily recognized negatives in the tax revision, while underestimating any longer-term benefits of the tax rewrite.

Businesses will immediately lose important deductions, such as favorable depreciation schedules and investment-tax credits, but will not benefit from a lower maximum corporate-tax rate until July 1. Consequently, most companies will pay more taxes. Normally, they would pass such increases along to consumers through higher prices. However, with foreign goods providing stiff competition, many businesses will absorb some or all of their larger tax bills, diminishing their profits. Smaller profits this year will hurt investment, which is a major stimulant to the economy.

Meanwhile, some consumers, who have believed that tax reform was a tax cut for them, will have second thoughts. Across the nation, employees will soon be filling out their new W-4 withholding forms, receiving their first realistic glimpse of what the loss of specific deductions actually means to them. Simultaneously, widely quoted financial writers will be warning that individuals should be cautious in taking deductions because underwithholding could lead to additional tax penalties when the 1987 return is filed. Already jittery about their poor savings and mounting debt, consumers are likely to postpone purchasing major items, save, or overwithhold. Consequently, consumer spending will slow for three or four months, or until consumers are satisfied that their paychecks reflect proper withholdings and real gains from tax-rate cuts.

In a persistently underperforming economy, the negative impact of tax reform on consumer spending in the near-term and investment spending throughout the year will soon turn the present modest rate of advance into minimal growth or none. As evidence of this weakening appears, the Federal Reserve will aggressively ease monetary policy. With money plentiful, savings improving moderately, and economic activity sluggish, interest rates will tumble with short-term rates slipping below 5 percent and fixed-rate home mortgages drooping toward 8.5 percent by spring. Such attractive rates will sustain housing built for sale and retail building, especially in strong house-building markets, at their current vigorous pace. However, lower interest rates can not shorten the length or depth of adjustment both these building types face in 1987. Their improvement depends on a vigorously expanding economy, something that is not in the outlook for the first half of 1987.



Mr. Kidd is a prominent economic consultant and former director of economic research for the McGraw-Hill Information Systems Company.

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Architectural education: Accreditation criteria revive some standards, tighten others

In its on-going quest to strike a reasonable balance between liberal education aims and professional necessities, the National Architectural Accrediting Board has evolved some new criteria for judging the schools

By John M. Maudlin-Jeronimo and Peter Hoffmann

After a two-year hiatus, a new version of the National Architectural Accrediting Board's *Criteria and Procedures* was published again in December, 1986. Like so many other things in life, it represents a compromise between opposing forces—the tug-of-war of ideas over what education is supposed to mean: specialization and preparation for a career in (in our case) architecture, versus the view that university education ought to lay the foundation for a life-long liberal education process.

The approach to revising NAAB's *Criteria and Procedures*—which took four years—was to some extent shaped by three recent studies with those contradictory messages. Two of them ("Involvement in Learning: Realizing the Potential of American Higher Education" by the National Institute of Education; and "To Reclaim a Legacy: A Report on the Humanities in Higher Education," by the National Endowment of the Humanities) seemed to imply that the professional accreditation process to some extent mitigates *against* that concept of a liberal arts/general education foundation.

The third report, by the American Institute of Architects (AIA), addressed long-range planning issues and took the opposite tack: it questioned the quality of recent graduates of accredited architecture programs, and their skills, abilities, and preparedness for entry-level jobs in the profession.

The revision process started in 1982 with a special 11-member committee, mostly of past presidents of the organizations that constitute NAAB—the AIA, the National Council of Architectural Registration Boards (NCARB), the Association of Collegiate Schools of Architecture (ACSA), and the American Institute of Architecture Students (AIAS). The basic idea was to evaluate the program not so much in program goals and physical facilities but in terms of what education specialists like to call "outcomes"—what (and how well) students have learned of the profession's basic skills and knowledge as they enter the profession.

The results of this first go-around of shifting the accreditation process to such a performance-criteria approach were tested quickly in seven architectural schools in 1982. The response was mostly positive.

Copies of the 1983 revision of our accreditation procedures, the result of committee work and testing by seven schools, were sent to other professional accreditation groups, and since then at least one other organization, the American Society of Interior Designers (ASID), has revised its accrediting procedures drawing largely on our model.

One other association said in response, "I'm sure we have more to learn from your experience, than you from us." A third said, "We are most envious of your thorough Achievement Oriented Performance Criteria, for which we have nothing comparable."

In 1983, NAAB published the first revision, which was revised once more in 1984. Finally, in late summer 1986, a "user studies group" of architectural school administrators was held, asking for further suggestions—mostly in the area of evaluation of their curricula outcomes.

These final comments were incorporated in the new *Criteria and Procedures* released in December 1986.

Six new criteria are set

Thus the process has evolved from an assessment by NAAB of how well a program (NAAB accredits *programs*, not schools) carries out and meets its stated goals, missions, and objectives, into an evaluation of six broad criteria relevant to architectural education. They are:

- The program must be in an institution accredited by the recognized institutional accreditation body in that region.
- The institution provides for a *general education* requirement either for admission to the program or for its completion. A minimum of 20 percent of the program's total hours must be satisfied by general education, liberal arts, and humanities study.
- The institution provides evidence that the objectives of NAAB's perspectives on architectural education are met.
- The institution provides evidence that all students who receive a first, professional degree in architecture have satisfied the *achievement-oriented performance criteria* listed below.
- The institution offers one or more of the four recognized types of programs: a five-year Bachelor of Architecture; a Bachelor of Architecture for individuals with a prior degree; a Master of Architecture (four-year undergraduate plus two-year graduate study); and Master of Architecture for individuals with another undergraduate degree.
- The institution must guarantee the program has sufficient quality and quantity resources to ensure the program's continued accreditablity.

The "achievement-oriented performance criteria" cover the four broad categories of *context* (history, human behavior, and the environment); *design* (process of an architectural project, including significant design and esthetic theories, and their relevance to architecture); *technology* (structural systems, environmental control, construction materials and assembly, safety, and accessability); and *practice* (the profession's relation to society and the organization and management of providing professional services).

These new criteria issued last December represent the latest phase of an ongoing evolution virtually assured of further changes in the future, as set down in its bylaws promulgated almost 50 years ago when NAAB was founded. The origin and need for accreditation go back much farther though, having their beginning in the architectural registration act established in 1897 by the Illinois legislature.

The process is nonprescriptive

NAAB is *not* concerned with telling schools how to teach or with *prescriptive* curricula—whether a student has to complete two rather than one course in mechanics, or three rather than two courses in statics. It doesn't evaluate a school's program in terms of square footage, library volumes, student/faculty ratio or number of Ph.D.s on the campus.

Rather, NAAB evaluates "outcomes": entry-level qualifications should broadly state that a student is able to design a simple architectural system; whether he absorbs that knowledge in a course of study taught in a classroom or in a design studio is the school's responsibility.

The problem with this approach in the past was that, in order to avoid prescription, the pre-1982 criteria became almost impossible to evaluate because both the school and NAAB typically spent most of their time in the review process trying to agree on some common definitions. It became clear that some changes had to be made, but this was not easy. Some aspects that originally one thought one could do away with have been reinstated, and others have been modified to quite some extent.

This ebb-and-flow situation is illustrated by one of the changes that evolved. The 1982 edition included a section dealing with four "Accreditation Perspectives" that drew both on the broad humanistic concerns of a university education and its professional components. Stressing that while an accrediting agency seeks to assess the results of education, "it should not tell educators how to use these components," these perspectives attempted to relate accreditation to entry into professional practice; to the academic environment; to society's evolving concept of architecture; and to its role as a part of individual and professional development.

This section was deleted in the 1983 edition because of a desire to move to more specificity in the criteria. Now, in the 1986 edition, they have been reinstated, because they state in broad terms the fundamental goals and ideals of American professional education in architecture, and partly because they reflect the different, at times even divergent, interests of the four organizations of the NAAB: the AIA, NCARB, ACSA and AIAS.

The 1986 edition contains another significant change which nicely illustrates the shift away from judging what goes into the making of an architect to the product—the capabilities of the student.

The difference is already evident in the wording: the 1982 version contained a section dealing with criteria for "program evaluation," which said what an accredited program should do for the student: develop capabilities in problem recognition; capabilities in critical evaluation of alternative choices; awareness of and responsibility for the public welfare; responsiveness to other disciplines relating to architecture; ability to recognize present concepts, emerging trends, and long-range potentials in architecture.

In 1983, the above "program evaluation" was changed to "performance-based criteria," subtly shifting emphasis from what the program should do for the student to what the graduating student should encompass: be aware of basic building types; understand the significant purposes of building; understand the ordering principles, strategies, and ideas architects use to bring a building's elements together; be able to organize concepts and relate a project to its larger context; be able to integrate all aspects of the analysis within this framework.

In 1986, these performance criteria were further refined and were made part of the conditions for accredition, as outlined above.

Given the concerns that have been voiced over the quality of architectural education, and given the growing complexities of the profession and the humanistic, legal, ecological, political and economic issues surrounding it, the choice for architectural education standards is clear: either move up, or fold the tents.

John M. Maudlin-Jeronimo, AIA, is Executive Director of the National Architectural Accrediting Board. Peter Hoffmann is Correspondent of McGraw-Hill World News, Washington, D.C.

commission. Entry deadline is Feb. 28. Contact Mark Hewitt, Music Hall/Theater Design Competition,

as it relates to the human/machine interface." Students of industrial design and recent college graduates

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News briefs

Benjamin Thompson & Associates has been named the winner of the 1987 AIA architectural firm award, given to a firm that has "consistently produced distinguished architecture for a period of at least 10 years."

Arthur Erickson Architects has been selected to design a new city hall in Fresno, Calif. Two local firms—Allen Lew & William Patnaude and Edwin S. Darden Associates—are joint-venture architects.

The first AIA national convention to be held over a weekend has been scheduled for June 19-22 in Orlando, Fla. The weekend format was devised to enable more architects to attend the convention while spending less time away from their offices.

The Aga Khan has funded the establishment of a Unit for Housing and Urbanization at the Harvard Graduate School of Design. A grant of over $500,000 will be used to inaugurate the program for an initial three-year period beginning this month. The unit will address the issue of housing in developing nations, especially those with large Islamic populations.

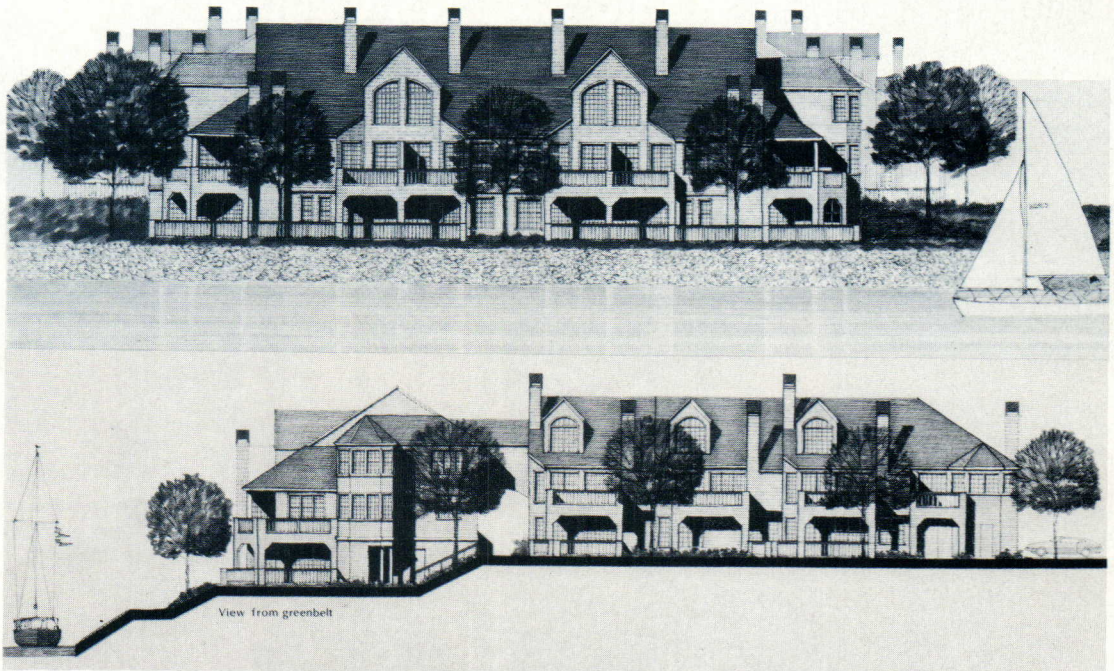
The 16th meeting of the International Union of Architects (UIA) will be held at Brighton, England, from July 13-17. The theme of this year's congress is "Shelter and Cities—Building Tomorrow's World." For information, contact the UIA Congress Secretariat, 72 Fielding Rd., Chiswick, London W4 1DB, England.

Architect Barton Myers and urban planner Jane Jacobs are among the eight recipients of the first annual Toronto Arts Awards, given to honor "work that has been creative, sustained, and intelligent."

Cooper, Eckstut Associates, the New York architecture and urban-design firm, has split. Stanton Eckstut has joined with The Ehrenkrantz Group to form The Ehrenkrantz Group and Eckstut. Alexander Cooper has established his own firm, dubbed Alexander Cooper + Partners.

Pereira Associates has been selected to design Ewa City, a new town planned for a 6,000-acre site 14 miles west of downtown Honolulu. Upon completion in 2035, the city will have 15,000 housing units accommodating 50,000 people, six million square feet of commercial space, a civic center, a regional park, and an amphitheater situated in the cone of an extinct volcano.

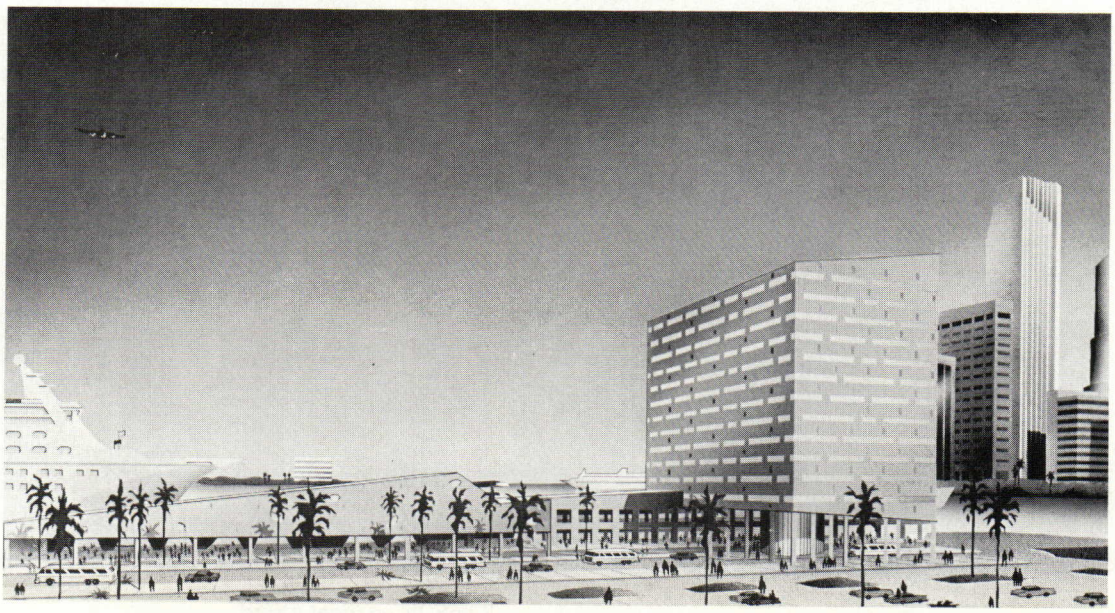
342 condos, riv vu



Ever since the mid 19th century, the railroad tracks hugging the eastern bank of the Hudson River have enabled passengers traveling between New York and Albany to enjoy continuous riverfront views. Those same tracks, however, have also blocked off much of the river's edge to residential development. At the village of Croton-on-Hudson, 50 miles north of the river's mouth, the railroad veers inland, freeing 26 acres of riverfront property for a planned 342-unit condominium complex. Dubbed Half Moon Bay after the ship that Henry Hudson sailed up the river in 1609, the project will be situated at the Hudson's widest point and will include 94.5 underwater acres to accommodate a yacht club. The development was designed by Fisher-Friedman Associates and will consist of 24 multifamily building clusters, each 2 1/2 stories high, whose gable windows, hipped roofs, and clapboard siding are meant to convey "the ambiance of a resort," according to the project's promoters. Perhaps more interesting than the architecture, though, is the developer's plan to create a series of manmade lagoons that will afford even the most landlocked of units an all-important view of the waterfront.

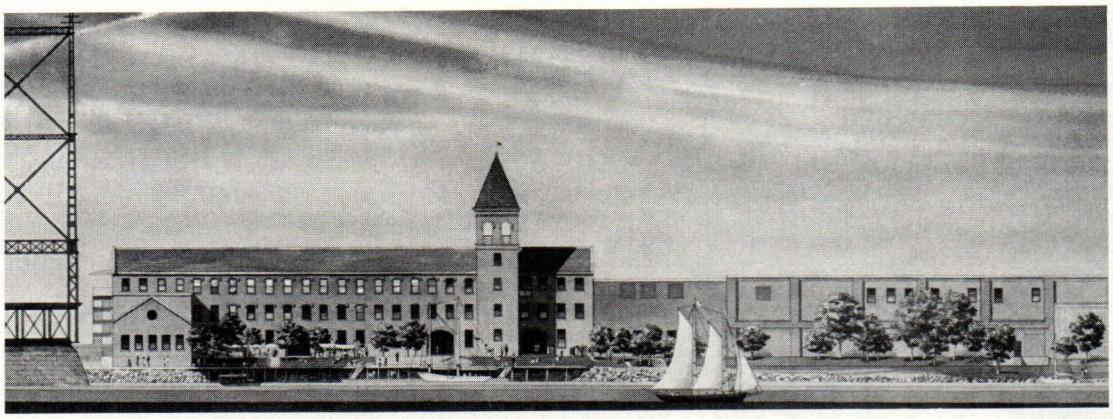
Harbor lights

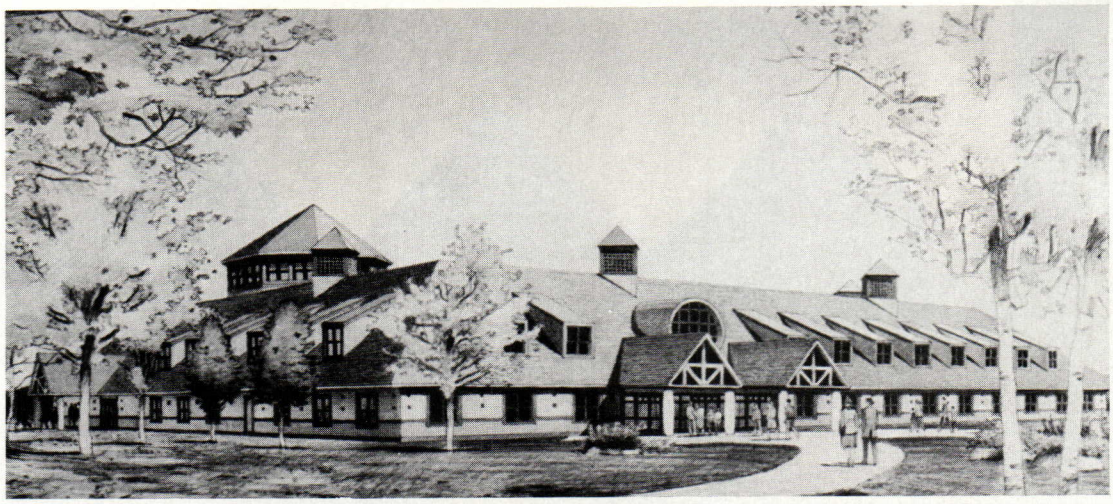
"The idea is to give the port a presence on the skyline," says Arquitectonica International's Bernardo Fort-Brescia, commenting on his firm's design for a new mixed-use complex at what Miami boosters like to call "The Cruise Capital of the World." That presence will be a 13-story office tower—trapezoidal in elevation—along with a series of low-rise structures housing two passenger-ship terminals and restaurant, retail, and warehouse facilities. Clad in silver and aqua ceramic tile and punctuated by elliptical, square, and rectangular windows, the project is meant, according to Fort-Brescia, to exhibit the character of a small-scale, villagelike cluster of buildings when seen by land, or a monolithic, 1,200-foot-long "monumental canvas" when viewed from the deck of an approaching vessel.



In ke ping with the New England context: Two rojects by Graham Gund Architects

A pair o tourist-oriented projects by Grah n Gund Architects reveals one firm solution to the problem of devel ing new exhibition facilities n historically sensitive sites. Al g the Norwalk River shorefr in Connecticut, Gund is converti a cluster of late 19th- and earl 20th-century industrial building nto the 60,000-square-foot Norwall Maritime Center (top photo), a omplex comprising an aquariu that will interpret the marine e of nearby Long Island Sound, a naritime museum, a theater, nd retail and restaurant spaces. e project's components will be c ganized around a courtyar pening onto the river. Meanwhi e, work is nearing completi on a 48,000-square-foot informat n center in Plymouth, Mass. (bottom photo), that will accomm date visitors to Plimoth Plantation, the 20th-century reconstruction of a c. 1627 Pilgrim village. Clad in a combination of horizontal and vertical tongue-and-groove siding and topped by an enormous cedar-shake roof that purposely reflects both the primitive quality of adjacent reconstructed buildings and the rolling topography of the landscape, the center is intended "to respect its site and historical setting without mimicry or caricature," according to the architects.





Conference report: The AIA takes a new look at 'America's sunporch'

One of my earliest childhood memories dates back to a balmy south Florida night in February 1958. My mother piled my brother, sister, and me into a rented, pink-and-black Buick and drove us south from my grandparents' house in Hollywood to ogle the new resorts along Collins Avenue in Miami Beach. Our ultimate destination, of course, was the Fontainebleau, whose curving profile was so famous that no sign was needed, where we would valet-park the car, marvel at Morris Lapidus's fantastically luxe lobbies, and finish the evening with sundaes at one of the hotel's French provincial ice-cream parlors. We almost never went south of the Fontainebleau into the bleak Art Deco district, and we certainly avoided the mainland cities of Miami and Coral Gables.

Nearly 30 years later—it was this past November—I actually stayed in a Miami Beach hotel—it was the Eden Roc—and was struck by how Miami's world has turned upside down. The occasion of my visit was a well-organized conference, sponsored by the design committee of the AIA, that investigated "The Fantasy Architecture of Miami." What quickly became clear to the 150 architects attending the three-day event was how fickle one's fantasies can be: like the tailfins on

our rented Buick, the '50s dream of a Lapidus-designed Versailles-by-the-sea has turned into an eerie nightmare of premature physical decay and planned obsolescence. Meanwhile, down the beach the Deco district is struggling to regain respectability through on-again, off-again restoration, while the real building action seems to have shifted across Biscayne Bay into the once-maligned city of Miami.

Conference organizers planned a series of excursions and symposiums that addressed both the Miami of the distant past—the vernacular houses of the city's pre-railroad era, the Mediterranean Revival architecture of the early 1900s, and the streamlined Moderne buildings of the 30s—and, to a lesser degree, the city of today, with its television-induced imagery of drug money, fast cars, and Arquitectonica-designed condos. Addressing conferees at the Barnacle House, a rare wood-frame survivor of the 19th century, local historian Arva Parks engagingly described efforts early in this century to promote Miami through such sobriquets as "America's sunporch," "where summer spends the winter," and "The Magic City." A boat trip to Vizcaya, the early 20th-century version of a 16th-century Venetian palazzo that architect Charles Moore described as "a rich stew of memories," illustrated how early Miami settlers "created a fiction of inherited tradition," according to *Boston Globe* architecture critic Robert Campbell, in the absence of any real history. A bus tour of the French, Chinese, and Dutch South African "theme" villages in George Merrick's planned suburb of Coral Gables demonstrated how the richly evocative, middle-class fantasies of the 1920s are the antithesis of the coolly aloof, abstract fantasies of the '80s, exemplified by Arquitectonica's Spear House.

Throughout the conference reality intruded on fantasy—or, if it didn't, it should have. For example, a new ordinance in Coral Gables meant to reward developers for incorporating Mediterranean Revival details into new building projects seems to be leading to stucco-clad, tile-roofed commercial behemoths (see page 41). A trip through Art Deco South Beach revealed an uneasy mix of the poor and well-to-do; the ultimate success of this well-publicized restoration is by no means assured. Moreover, as sociologist Nathan Glazer pointed out, the conference pretty much concentrated on Anglo-Saxon and Jewish Miami, avoiding the enormous Latin and Black presence that characterizes the city today. Finally, there was no mention of Miami's new rail mass-transit system and its apparent failure to lure commuters from their cars.

In the end, any thoughtful examination of Miami's past cannot ignore the sociological and physical problems of Miami's present. As the mouse seen racing across a guest room at the decaying Eden Roc suggests, it will never be 1958 again. It is a fantasy to believe otherwise. *P. M. S.*

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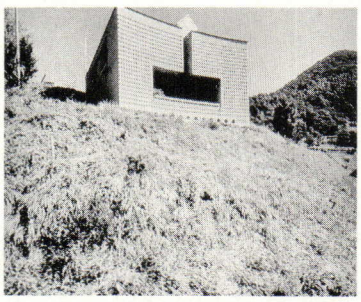
The return of humanism: Mario Botta at MOMA

An exhibition of the work of Swiss architect Mario Botta—his first major American show—is on view at the Museum of Modern Art through February 10. Organized by Stuart Wrede, a curator in the museum's Department of Architecture and Design, the review of the 43-year-old architect's work to date includes photographs, models, and original drawings of 20 projects, built and unbuilt, conceived since the early 1970s.

The show is the second in a series of five exhibitions examining current architectural trends sponsored at the museum by the Gerald D. Hines Interests. The first, held in the summer of 1985, dealt with the work of Leon Krier and Ricardo Bofill [RECORD, August 1985, page 77], whose very different approaches to architecture had at least one thing in common: both adamantly rejected the *ethos* of



Modern architecture for the sake of the historicizing fancies of Postmodernism. By contrast, the work of Mario Botta is presented as extending—perhaps even qualifying—yet essentially continuing the tradition of classical Modernism.

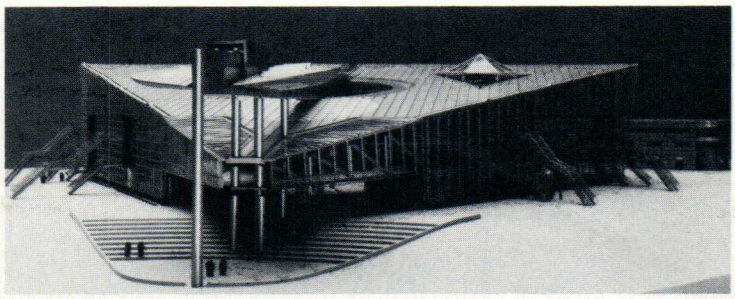
The figures that Botta credits with influencing him most are Carlo Scarpa, his thesis critic at architecture school in Venice, and Le Corbusier and Louis Kahn, the masters with whom he apprenticed during the 1960s and whose architectural vocabulary Botta has most obviously assimilated into his own work. As with Kahn and Le Corbusier, there is an engaging humanistic impulse that stands at the core of Botta's architecture. As he put it in an interview included in the exhibition catalog, "There must also exist in the city large, ample spaces in which history, memory, dreams, imagination, and poetry can be linked and which are not dedicated to strictly functional uses. I believe this is an ethical problem: to make man the center of interest in the organization of space and not simply to utilize him as an instrument. . . . In this sense, architecture is more an ethical than an esthetic phenomenon."

Botta first came to prominence in the early '70s with a series of

Continued on page 161

A discourse of symbols: The recent work of Architecture Studio

Architecture Studio comprises four men in their 40s, trained and based in Paris, who construct theory, buildings, and reputation in the anarchic Postmodernism of contemporary architecture. A recent exhibit of their work in Bordeaux offered evidence of fruitful effort—and clues to possible architectures of the future. A scheduled tour of the exhibition will include stops in Barcelona, Lisbon, and London.



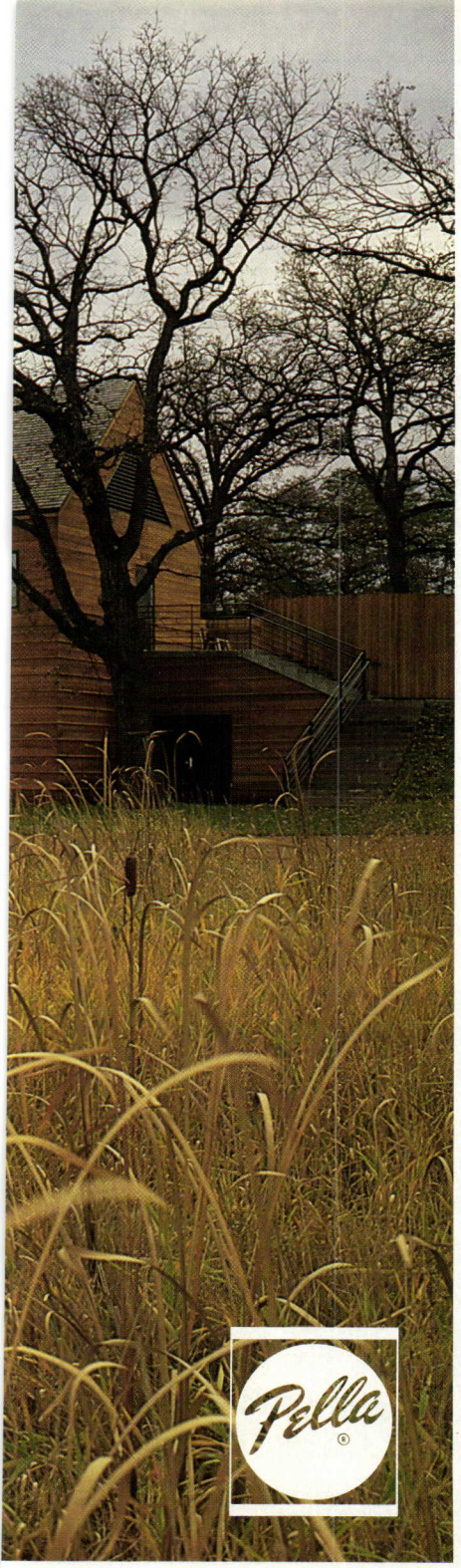
Architecture Studio counts scarcely 30 buildings in nearly 15 years. Its design experience has come primarily through 132 entries to *concours*, the inevitable French competitions for commissions. Forced to concentrate on meaning as much as materials, AS explores the relations between structure and culture—the building as bridge between form and symbol, use and understanding. "First we define the concepts . . . in a collaborative synthesis of ideas based on rigorous analysis. The project is determined before it is drawn." The resulting structures are dense, charged, and expressive.

Thus, contextuality describes contradiction as often as unity, and legibility sacrifices transparency for a multiple layering of meaning. Screens, a rich palette, simple materials eclectically employed, and a wide range of symbolic cues recur throughout AS's work. In a 1983 Parisian apartment building on rue de Domrémy, for example, a gridded concrete screen maintains alignment between street and facade, coolly deferential. Protected behind it, the true building wall is a vivid interaction of texture and color, articulating the diversity of floor plans expressively rather than formally. Mediating between social decorum and individual intimacy, the screen creates an active relation between building and passerby, deflecting or admitting visual penetration as the approach moves from tangential to engaged. At a hospital in Montmorillon (1981), AS combines monumentality of line and form with delicate columns and warm earthy colors, appropriately authoritative yet still accessible. And a grade school on the rue Mouraud in Paris is at once graceful and playful: A restrained facade conceals a vibrant inner courtyard, where oversize column bases serve as both object lesson and playground refuge.

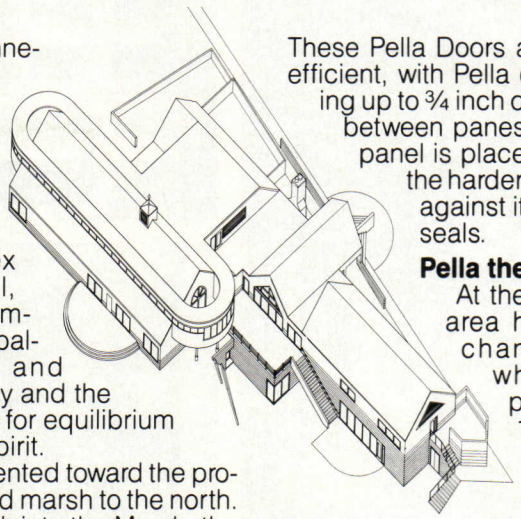
AS's two most important projects—the Institut du Monde Arabe in Paris (in association with Jean Nouvel and others) and the Lycée du Futur in Poitiers (photo above)—are currently under construction. Both are glass and metal structures, primarily sculptural, utilizing reflective skins and simple geometric shapes to make dramatic statements about form. Despite their bold harmonies—and, in Poitiers, impressive metaphorical power—they seem less complex and engaging than AS's smaller successes. Time will tell if the firm can achieve that intensity with greater visibility and higher risks. Certainly, they will have the chance to try. *Thomas Matthews*

No virtue goes with size

Developed by George Merrick during the 1920s, the Miami suburb of Coral Gables is among the finest planned communities in the country—an oasis of sanity amid the South Florida megalopolis. One of the town's most important '20s landmarks—the gracious Colonnade Building—is about to be restored as the centerpiece of a new downtown complex that will comprise an 11-story office tower, a five-story hotel, and a ground-floor retail galleria centering around an existing 50-foot-high rotunda. If the project's precast concrete facades and red-tile roofs are apt references to Coral Gables' Mediterranean Revival context, its scale seems overblown in the relation to the Colonnade Building. Architects are Spillis Candela & Partners.



The Marsh finds a center of balance on a challenging site. And Pella Windows and Doors prove physically fit.



The Marsh™ in Minnetonka, Minnesota, is called "A Center for Balance and Fitness." And everything about the building reflects this theme. In this unusually complex project, Hammel, Green and Abrahamson have created a balance of action and reflection, the solitary and the communal, a center for equilibrium of body, mind and spirit.

The building is oriented toward the protected view of a broad marsh to the north. The moment you walk into the Marsh, the feeling is one of calm, warmth and healing rest. You sense the openness and serenity of the marsh through soaring custom triangular Pella Windows and Pella Sliding Glass Doors. The feeling is carried out by deliberate residential scale and shapes, as well as by the carefully thought-out lighting, acoustics, colors and materials. So, indoors, no less than the warm wood beauty of Pella would do.

A major shaper of the building was the site, wedged between a busy thoroughfare and the marsh below, and dotted with mature oaks. HGA designed the building around an existing house which was later razed to make room for the volleyball court. The site also had to accommodate an outdoor running track and a children's play area.

The indoor running track, which lends such character to the exterior, was actually added late in the program. A ribbon of Pella Awning Windows at eye level gives the relatively narrow track the feel of an outdoor space, especially with the windows open. As for maintenance, Pella Awning and Casement Windows at the Marsh are easily washed from indoors.

Pella doors used as windows.

Exercise studios have 3000 square feet of spring-cushioned floors. And here, Pella Sliding Glass Doors are used rather than windows, to let in as much light and breeze as possible. An exercise bar mounted across these doors neatly redefines their function and provides safety.

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Pella thermal control.

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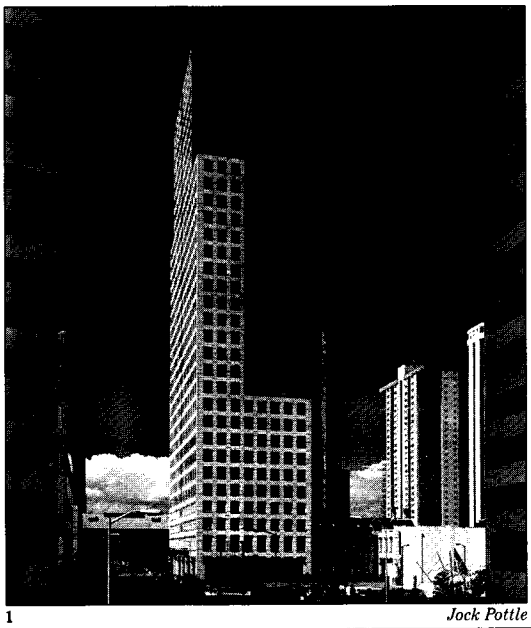
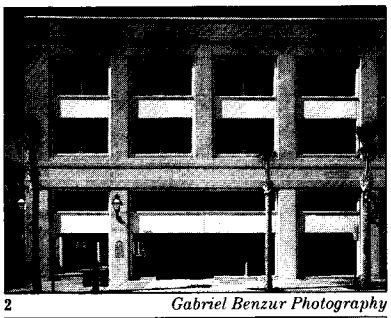
Design awards/competitions: Portland Cement Association 1986 Concrete Building Awards

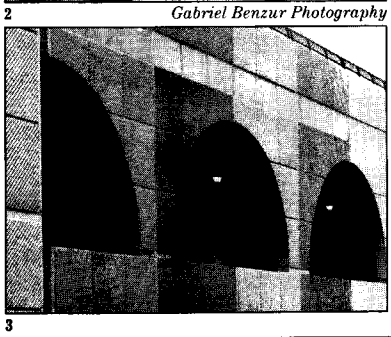
Six completed buildings constructed primarily of concrete were recently honored in the biennial design awards program sponsored by the Portland Cement Association. This year's winning projects were selected from 98 competition entries by jurors William J. LeMessurier, principal structural engineer for LeMessurier Consultants in Cambridge, Mass.; Harold Roth, partner of Roth and Moore Architects in New Haven, Conn.; Susana Torre, partner-in-charge of design at Wank Adams Slavin Associates in New York City; and Paul M. Sachner, senior editor of RECORD.



1 *Jock Pottle*



2 *Gabriel Benzur Photography*



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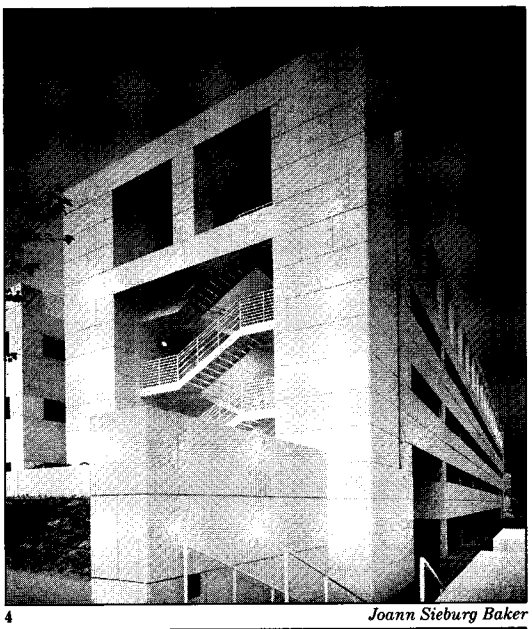
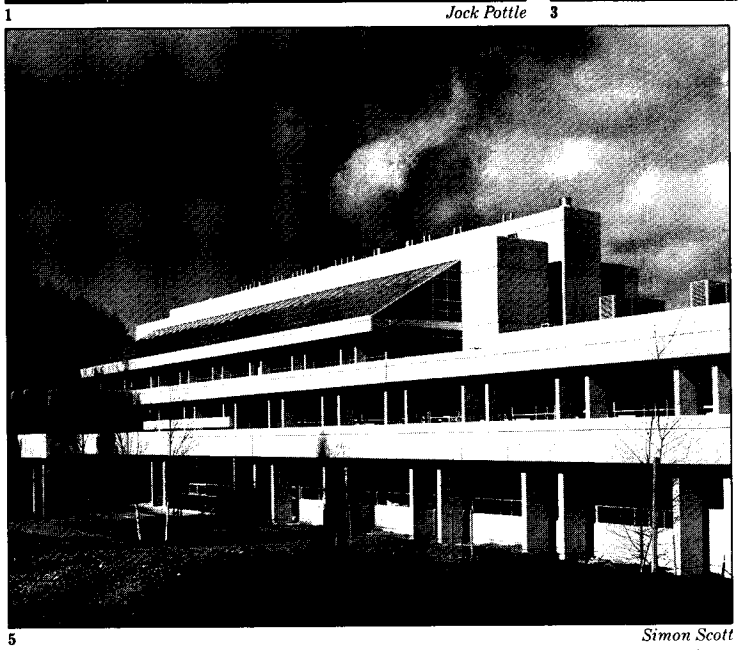


4 *Joann Sieburg Baker*



5 *Simon Scott*

6

1. Tabor Center Office Tower, Denver, Colorado; Kohn Pedersen Fox Associates, Architects (RECORD, September 1985, pages 126-135). Originally intended to be clad in stone, this 32-story office tower was ultimately sheathed in a combination of green reflective glass and buff-colored reinforced concrete. The jurors particularly admired the way that the architects embellished the concrete with red granite panels attached with stainless-steel bolts. "Beautifully crafted and elegantly detailed," they concluded. "One of the richest examples anywhere of refined cast-in-place concrete."

2. Charleston Waterfront Garages, Charleston, South Carolina; Sasaki Associates, Architects. The jury called a pair of stucco-clad, concrete-framed parking garages located in this historic city's wharf and warehouse district "architecture that is very much in the spirit of Charleston. The architects have dealt successfully with the issue of historic context, which is an especially difficult problem with garages. The scale is beautifully handled, and ground-floor shops will enliven the street."

3. North River Water Pollution Control Project, New York City; Tippetts Abbett McCarthy Stratton and Feld Kaminetzky & Cohen, Architects and Structural Engineers. A major sewage-treatment plant on the west side of Manhattan rests on 2,300 caissons that extend through the floor of the Hudson River. Built entirely of precast and cast-in-place concrete, the project exhibits, in the jury's words, "a robust expression of a utilitarian facility. The concrete is especially rich-looking at this large scale, and its ribbed texture creates a nice play of light and shadow."

4. Charlotte-Mecklenburg Government Center Garage, Charlotte, North Carolina; J. N. Pease Associates, Architects. Erected exclusively of precast concrete components, this 1,036-car garage was designed as an integral part of Charlotte's municipal government complex. By scoring the precast into rectangular panels, the architects expressed the project's 3.5-foot design module while diminishing the structure's apparent mass. The jury dubbed the building "a strong piece of sculpture for downtown Charlotte."

5. Pulp and Paper Research Institute of Canada, Vancouver, British Columbia; Thompson Berwick Pratt & Partners, Architects. Located in a heavily wooded Vancouver park, this office and research center was designed around a linear, shed-roofed atrium. Exposed reinforced concrete—tinted pale pink and lightly sandblasted—was specified, according to the architects, "to offer an economy of means and purity of expression suited to the forest setting." The jury admired the structure's "volumetric qualities, attainable only in concrete."

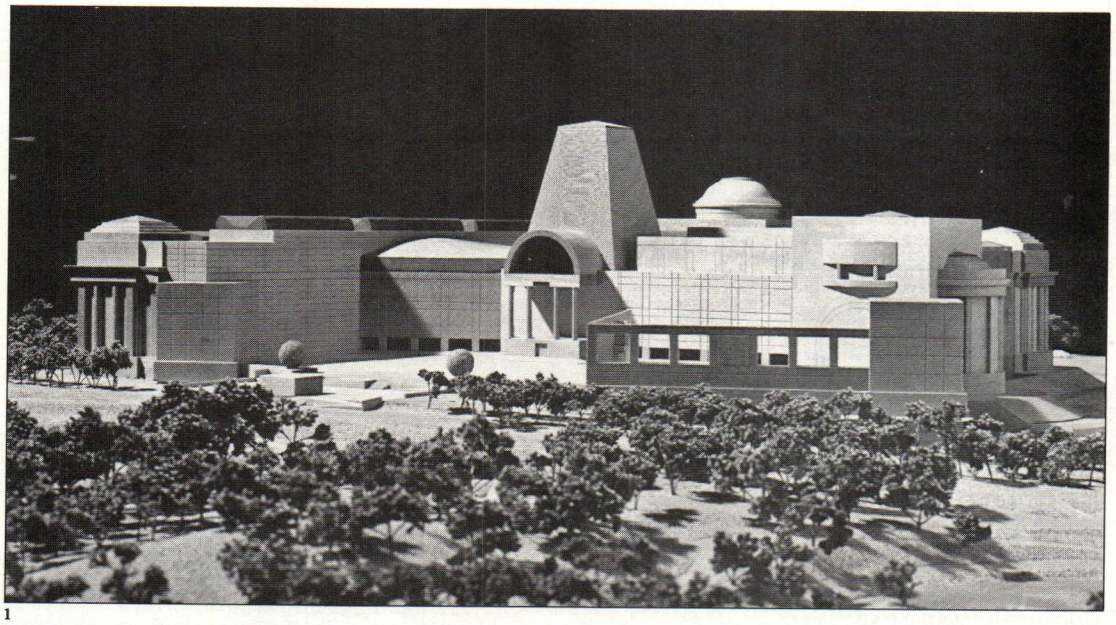
6. Roundhouse Plaza, San Francisco, California; Daniel, Mann, Johnson & Mendenhall, Architects. This office and retail project comprised the rehabilitation of two early 20th-century concrete buildings once associated with San Francisco's trolley system and the erection of a new four-story structure (shown) whose concrete framing and cementitious coating harmonize with the existing architecture. The jury called the ensemble "a handsome mixed-use complex, very much in context with the urban fabric of San Francisco."

Brooklyn Museum Master Plan Design Competition

An architectural team comprising Arata Isozaki and Associates and James Stewart Polshek and Partners has been named the winner of a competition to renovate and expand the Brooklyn Museum, a landmark Beaux-Arts structure designed by McKim, Mead and White in 1893. The Isozaki/Polshek proposal was chosen over four other competition finalists by a panel consisting of professional jurors Klaus Herdeg (chairman), Phyllis Lambert, and James Stirling, and museum representatives Alistair B. Martin, Robert S. Rubin, Jeffrey Keil, and Robert T. Buck.

In his comments on the jury's deliberations, chairman Klaus Herdeg called the Isozaki/Polshek proposal (photo 1) "an inspired scheme that most jurors feel is vastly superior to the other four finalists, if not in a class by itself. We felt that the winning design is the one that most respects the intentions of the original McKim, Mead and White plan, yet translates it with a 20th-century vocabulary into the 21st century." Herdeg's remarks echo the architects' stated intentions, which indicated a desire "to create a monument not to the synthesis of old and new architecture but to the evolution of new architecture from the old—an architecture of the 21st century derived from that of the 19th." Toward that end, Isozaki and Polshek selected a limestone-sheathed obelisk—an ancient architectural form interpreted abstractly—as the centerpiece of their proposal. In addition to providing the museum with a highly visible physical presence in this relatively low-rise section of Brooklyn, the 150-foot-tall obelisk will also symbolize the museum's outstanding Egyptian collections and, more pragmatically, it will house a new skylighted Great Hall meant to evoke the unbuilt domed rotunda of McKim, Mead and White's original plan. New museum galleries designed around two sculpture courts will provide a unified new south facade facing the Brooklyn Botanic Gardens. McKim, Mead and White's main facade along Eastern Parkway, severely mutilated in 1934 by the removal of a monumental staircase, will be restored, returning the museum's main entrance from current street-level portals to the original lobby on the *piano nobile*.

Among the four other competition finalists, three elected to develop contextual schemes that allude rather literally to the existing museum. The team of Atkin, Voith & Associates and Rothzeid Kaiserman Thomson & Bee came up with a symmetrical plan characterized by a long colonnade and terraces leading down to the Botanic Gardens (2). Kohn Pedersen Fox Associates' design (3), with its freestanding pavilions and classically articulated gallery wings, relates not only to McKim, Mead and White's museum but also to the firm's current historicist work. Skidmore, Owings & Merrill, working with Studio Four/The Vitetta Group, devised a broad semicircular colonnade framing an elliptical courtyard (4). Voorsanger & Mills, however, took the opposite tack—a decidedly non-monumental proposal featuring two narrow wings set perpendicular to the main museum (5).



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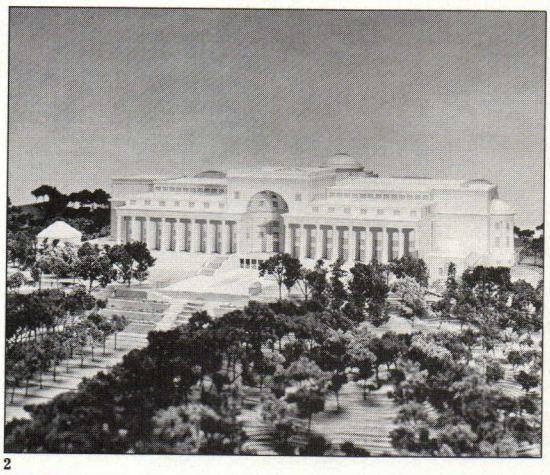

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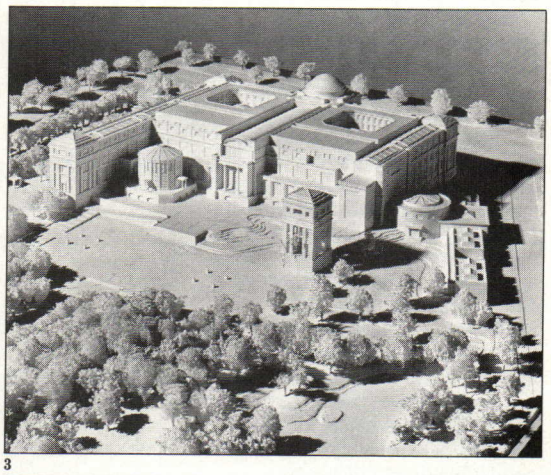

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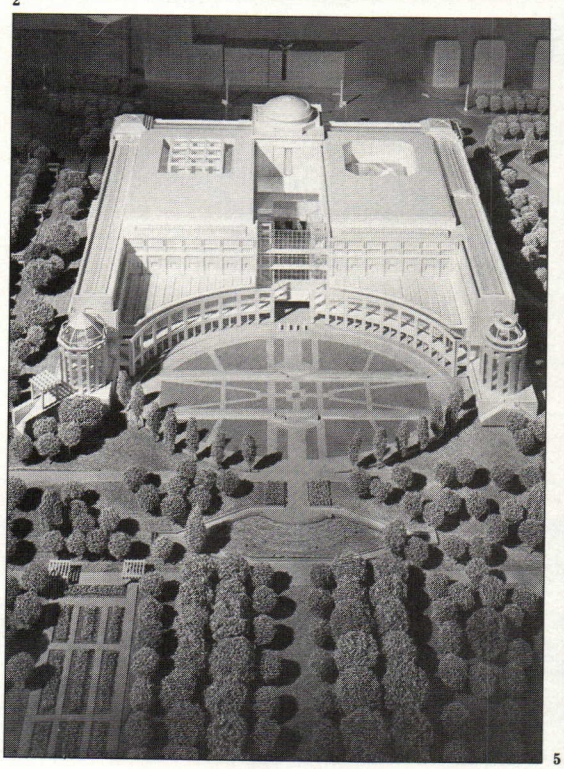

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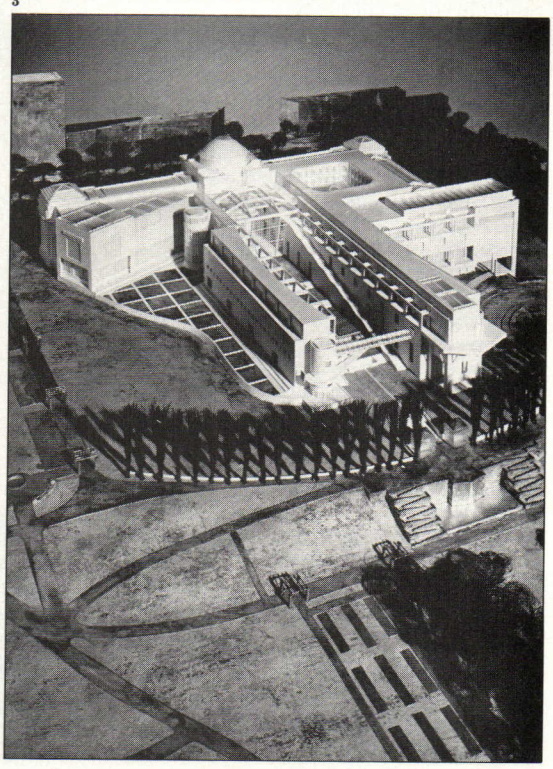

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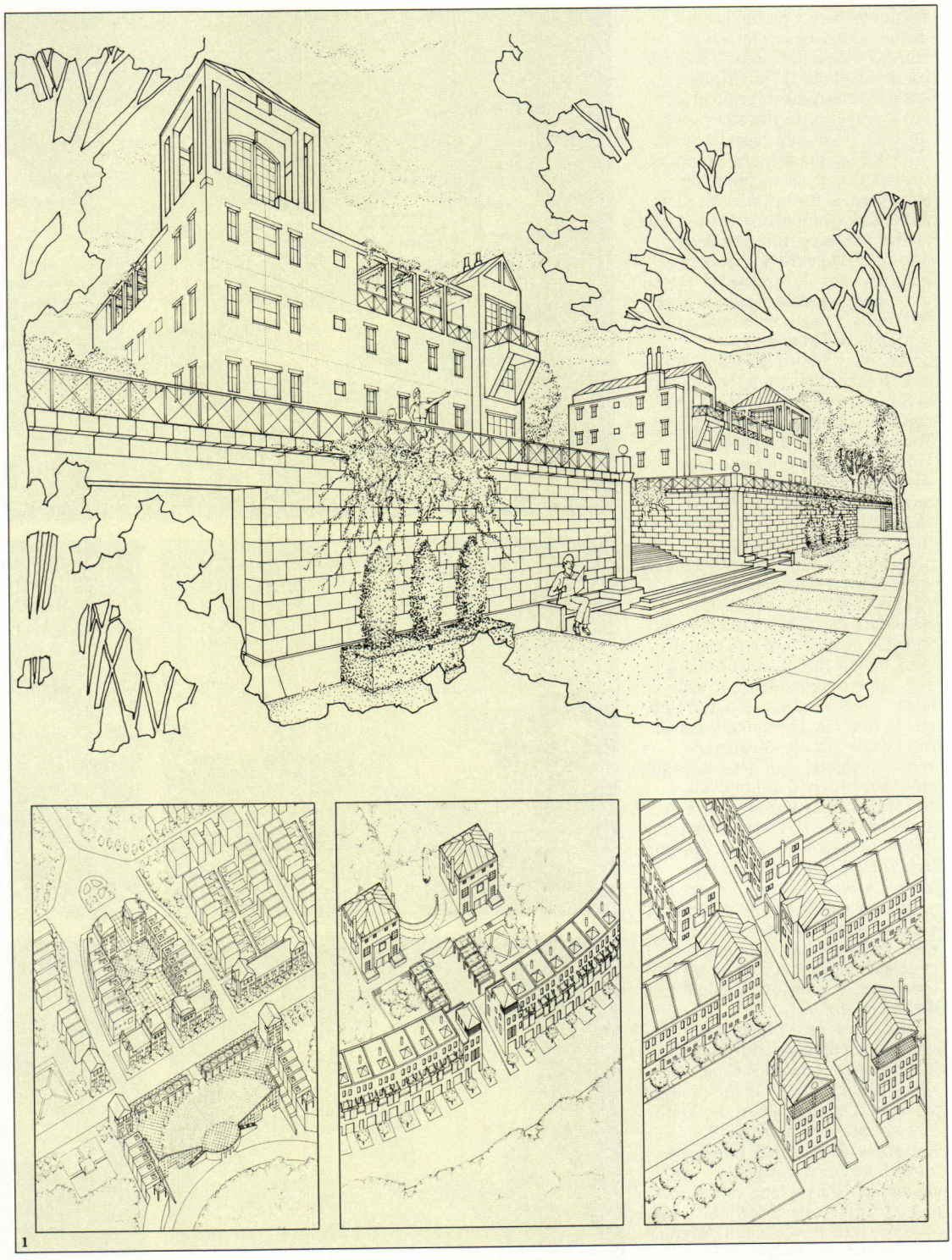
Coldspring/Cylburn Arboretum Design Competition

Schwartz-Kinnard Architects of Princeton, N. J., has triumphed over 36 other firms in a national competition to develop a 300-acre wooded site in the Coldspring New Town section of Baltimore. Located eight miles north of Baltimore Inner Harbor adjacent to the city's Cylburn Arboretum and Botanical Gardens, Coldspring was begun 10 years ago with the completion of 250 housing units designed by Moshe Safdie. The city intends to use Schwartz-Kinnard's winning scheme as a guideline for completing development of the area with 1,000 new residential units.

Jurors for the Baltimore competition, which was sponsored by the city's Neighborhood Progress Administration and the Department of Recreation and Parks, included architects Stanley I. Hallet (chairman), John A. Bower, Jr., Elizabeth Plater-Zyberk, and Donald Stull, and landscape architects Ilze Jones and Harry W. Porter, Jr. In addition to premiating the Schwartz-Kinnard scheme, the jury awarded second place to Nelson, Byrd, Payton and Christenson of Charlottesville, Va.; a special merit award to Thomas Spain of Coral Gables, Fla.; and honorable mention citations to Cho, Wilks and Benn of Baltimore; Ayers/Saint of Baltimore; The Delta Group/MSL Associates of Philadelphia; and Team Ten of Urbana, Ill.

1. Premiated design: Schwartz-Kinnard Architects
Commenting on the jury's deliberations, chairman Stanley Hallet observed that the jurors were most impressed by those competition submissions that "returned to the old organizing principles of street and walkway, of front yard and porch, of back yard and privacy." Schwartz-Kinnard's proposal—with its hierarchy of public, semipublic, and private spaces and its conscious mix of freestanding, duplex, and multifamily residential units—was, in the jury's words, "a complex but effortless scheme whose English and Italian echoes seem appropriate to this time and place. Highly ordered, it is possibly the most complete statement in the competition." Included in the plan is a series of four L-shaped structures grouped to form a quadrangle (top drawing); a public square and amphitheater (small drawing near right); crescent housing overlooking adjacent forests (middle right); and traditional row houses set along a wide boulevard and narrow side streets (far right). The project's faintly Italianate architecture, sheathed in a combination of stucco, brick, and rusticated stone, bears some resemblance to Schwartz-Kinnard's winning design for the Hillside Trust Housing Competition in Cincinnati (RECORD, November 1985, pages 76-77).

2. Second-place: Nelson, Byrd, Payton and Christenson
Continuous front porches along traditional tree-lined streets characterize the runner-up submission (bottom drawing right), which the jury called "a comfortable, beautiful scheme that is graciously wedded to the site. [The architects] have paid careful attention to detail, facade, shape, and rhythm."



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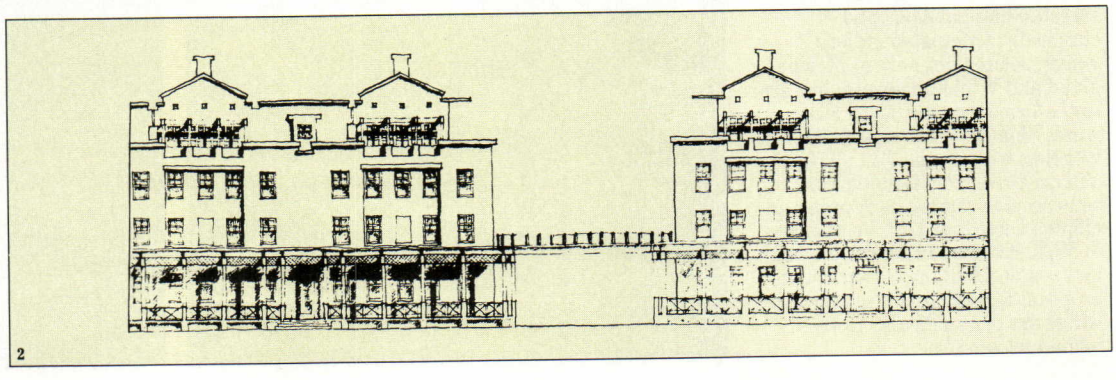
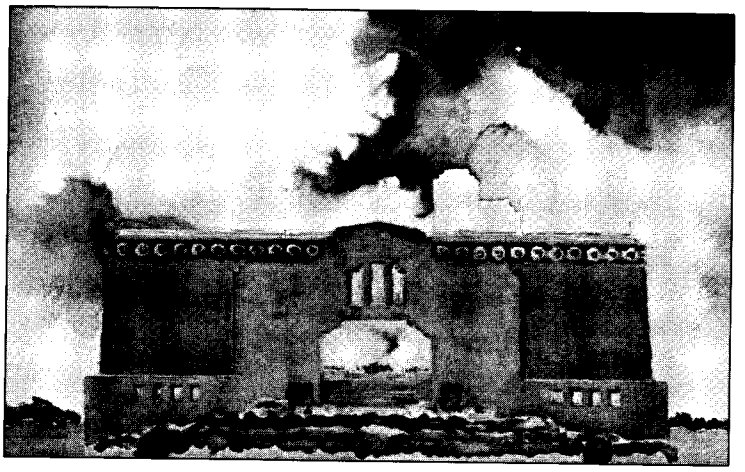
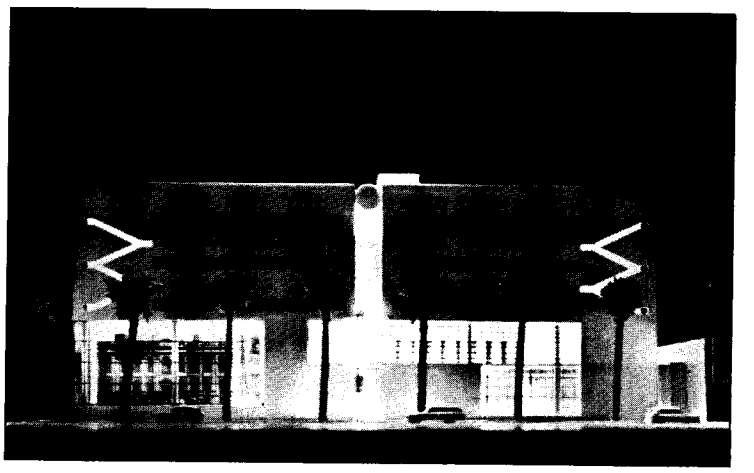


2

Competition to expand the College of Architecture and Environmental Design at Arizona State University

The Hillier Group has won a national competition to design an $11.5-million, 100,000-square-foot addition to the College of Architecture and Environmental Design at Arizona State University in Tempe. A jury comprising Joseph Esherick (chairman), Jack B. Kinsinger, Tim McGinty, Lee Overmyer, and Roger Schluntz selected the Princeton, N. J., firm over 25 other competition entrants, including finalists Hammond Beeby and Babka of Chicago, and the team of Coover Saemisch Anderson Architects of Mesa, Ariz., and Hoover Berg Desmond of Denver.

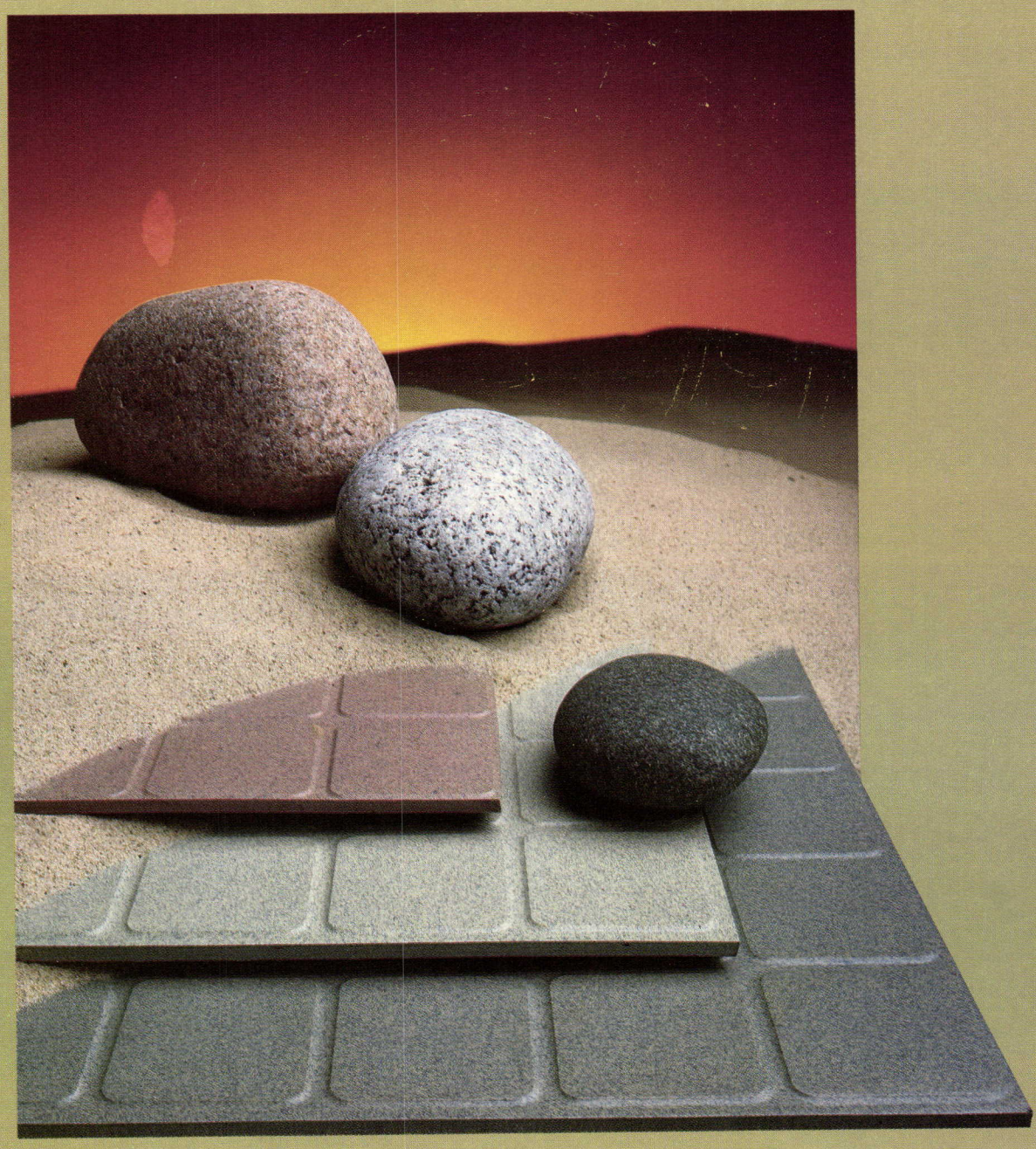




Like ASU's existing school of architecture—a raked-concrete Modernist structure erected in 1969—the proposed addition will rise three stories, nearly filling its site (top drawing). In describing his winning scheme, Alan Chimacoff, director of design at The Hillier Group, indicated that he conceived the new architecture school around the dual concepts of "learning" and "community." To express the former, he established a principal ground-floor axis that leads directly from a new pedestrian mall along Krueger Street, through the building's main entrance, and into the architecture library. "The immediate confrontation of the library," observes Chimacoff, "emphasizes its primacy, symbolically and practically, as the repository of classified knowledge, the basis of all structured learning." Chimacoff underscored the school's communal function by incorporating two courts—one indoor, one outdoor—stacked above each other at the building center. "The courts reveal the building's concentric, multilayered organization," he points out, "and create places of community, learning, and discourse." The gently vaulted lower court will function as a lobby for seminar rooms and an auditorium, as a café, and as an informal gallery for student work. The upper-level outdoor court will open onto faculty offices, studios, and lecture rooms. The scheme's other major element—a three-story research tower spanning the Krueger Street mall—will connect the new building with ASU's existing facility. In addition to its functional aspects, the tower is also meant to "stand as a symbol of the uncommon aspiration of this school of architecture," says Chimacoff.

Although The Hillier Group's winning design exhibits some features that relate to the indigenous architecture and idiosyncratic climate of the desert Southwest—namely, scored stucco facades, glazed tile trim, a two-story redwood loggia, and small attic windows that mimic the rough-hewn vigas of ancient pueblos—those allusions are relatively mild-mannered compared to the more overtly historicist elements of Hammond Beeby and Babka's entry (above left). The Chicago firm's runner-up submission does not ape any specific architectural progenitor, but instead seems to be an amalgam of several regional influences, including Spanish Mission architecture (especially the Alamo), the work of Frank Lloyd Wright, and nearby Indian pueblos. A U-shaped design organized around a long courtyard, the building features battered walls clad in a combination of plain, scored, and rock-faced concrete block; a glazed band of giant saguaro flowers and fruit that encircles the structure "as would a frieze of classical medallions;" and interior ornamentation based on the "softer oasis themes of doves, flowering vines, and ribbons." The other runner-up proposal (above right), submitted by the locally based firm of Coover Saemisch Anderson in joint venture with Hoover Berg Desmond of Denver, appears, ironically, the least regional of the three finalists. Dramatically presented with an illuminated model that depicts a glow of nighttime activity through broad display windows, this scheme, if built, would have vividly revealed to the university community the 24-hour-a-day schedule that students of architecture often must endure.

CREATED TO WITHSTAND THE TIDES OF TIME AND MAN



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The Metropolis of Tomorrow, by Hugh Ferriss; essay by Carol Willis. Princeton, N. J.: Princeton Architectural Press, 1986, $35.

Reviewed by Scott Gutterman

The re-publication of a long out-of-print book is always an occasion for celebrating, especially when the book is as influential as Hugh Ferriss's *The Metropolis of Tomorrow*. First published in 1929 just before the stock-market crash, it is the perfect summation of a decade of intoxicating growth. Skyscrapers blossomed in an atmosphere of giddy humanism: the city of God, a place of harmonious human activity and upward striving, somehow seemed within man's reach during the '20s. Ferriss brought his considerable gifts as an architectural delineator and imaginative theorist to the task of "inventing" this city of the future.

The Metropolis of Tomorrow, published when Ferriss was at the height of his financial and creative powers, is divided into three sections: "Cities of Today," a chronicling of 18 major buildings of the time (Holabird & Root's Chicago Board of Trade and William Van Alen's then-unfinished Chrysler Building, to name two examples); "Projected Trends," which predicts such futuristic developments as apartment buildings on bridges, overhead trafficways, and, perhaps more presciently, "a reversion to past styles;" and "An Imaginary Metropolis," a Corbusian recasting of the city into a radially planned, compartmentalized place, complete with a science zone, a business zone, and an art zone (but, oddly, without housing, school, or hospital zones). Ferriss's text is a largely forgettable period piece, written in a style that might be called "hyperbolic humanism." Typically, the author introduces us to the city by describing the clearing away of some Dawn-of-Creation-type mist.

Yet despite flaws in the original text, some of which make it seem more quaint than persuasive, *The Metropolis of Tomorrow* is unquestionably a significant achievement. In his own time, Ferriss played a key transitional role in civic planning. His drawings were widely praised by the architectural press of the day (only Lewis Mumford, who favored regional planning and de-centralization, sounded a dissenting note), and while many of his schemes proved impracticable, all were imbued with a sense of the city as a place of pure possibility. His dramatic use of chiaroscuro (Ferriss drew mainly with charcoal) and his profound sense of sculptural form make his drawings lasting artistic achievements. No less important, he was one of the first to respond enthusiastically to New York's recently enacted 1916 zoning laws. His four-stage drawing of the "Evolution of the Back-Step Building" helped architects conceive of civic space as a block to be thought of collectively and sculpted appropriately, rather than as a place of unlimited vertical development.

Carol Willis's scholarly essay is a fine addition to Ferriss's original text. As curator of the exhibition "Hugh Ferriss: Metropolis" (the occasion that provided the impetus for this book's re-publication), Willis offers both esthetic and historical insights into Ferriss's work. She traces the development of the artist's philosophy, quoting from several articles he published on the practice of rendering. Ferriss often wrote of the need to go beyond the accurate rendering of details in order to discover, in his words, "the Truth about the Building." For Ferriss, this truth lay in the sheer power a building derives from its "Mass in Space." Willis notes that this line of thought left Ferriss at odds with the growing generation of architects, led by Le Corbusier, "whose buildings featured spatial volumes, bounded not by heavy walls, but by visually weightless, screenlike planes." Despite the fact that he continued to receive formal recognition for his achievements, Ferriss emerges as a somewhat naïve and pathetic figure, swept away by the rising tide of Modernism. It is to Willis's credit that, in her conclusion, she restores dignity not to his drawings, which never lost their power to impress, but to his ideas and to his mission of imagining and realizing greatness in American civic architecture.

Unfortunately, one technical problem—the hazy reproduction of Ferriss's drawings—detracts from the volume's overall quality. Although Willis mentions that Ferriss sometimes covered his work with a sealer that caused the paper to yellow, anyone who takes the opportunity to see Ferriss's original work on its exhibition tour will immediately note their far greater clarity. For a publishing venture whose primary mission is to present the artist's work in its original context, this is a serious drawback. Nonetheless, the Princeton Architectural Press should be applauded for rescuing this book and making it available to a wide audience. Ultimately, it outstrips its period mannerisms and endures for its artistic merit and for its abiding faith in the power of architecture.

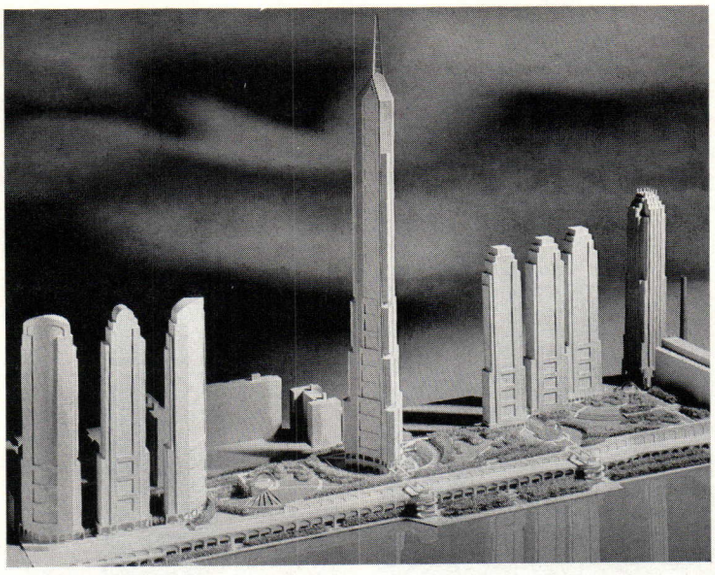
Scott Gutterman is a freelance writer specializing in art and architecture.

"Please believe me, sir! This is not a commissioned sculpture! It is a temporary pile of construction modules."

renowned Chicago architect Daniel Burnham, produced even more outrageous statistics: "The world's tallest building, but Frank W. Woolworth was hot on its trail. Woolworth, founder of the five-and-world's tallest buildings, with the Woolworth Building solidly in control of the title. The mighty trio the city's collective mind, and theories, discussions, and proposals surfaced regularly. Early 1923 saw

Top this one:
The continuing saga of the tallest

Observations continued



The most recent proposal to erect the world's tallest building is Donald Trump's Television City, a mixed-use Manhattan megaproject designed by Helmut Jahn that would include a 1,670-foot-high, 150-story tower.

the publication of a hypothetical, 1,000-foot-high skyscraper designed by Helmle and Corbett, and by the end of that year the possibility of 2,000 feet was being publicly discussed.

The following year, an 88-story project was announced not for New York, but rather for Mussolini's Rome. Mario Palanti, "the noted Italo-Argentine architect," proposed a 1,100-foot-high pyramid, 1,000 feet broad at its base, containing "4,500 rooms, 100 large halls, a huge theatre, a gymnasium for the training of Olympic athletes and a concert hall. It is planned as the centre of Roman culture and athletic life." Its statistics were compared with those of Cologne Cathedral, the Eiffel Tower, and the Woolworth Building, whose "vertical lines" it was said to imitate. New York responded in 1926 with an even taller, but equally imaginary project—the 110-story, 1,200-foot-high Larkin Building, proposed for West 42nd Street. Announced in December by developer John Larkin, it inspired a burst of discussion in the national and international press. News of the Larkin Building continued throughout the decade, as one problem after another stalled the project. When last heard from in April 1929, it was awaiting final fire-insurance rates.

Predictions for 100-story buildings continued throughout the mid- and late-1920s. It was only in 1928, however, that New York saw the beginning of the whirlwind of proposals that resulted in the erection of, first, the Chrysler Building and, second, the Empire State, both of which finally surpassed not only the Woolworth Building but also the Eiffel Tower and the 1,000-foot mark—just in time for the Great Depression to render such projects pointless.

The drama began with yet another wishful project: the Reynolds Building. Announced in the summer of 1928, this was to be a speculative office tower built for state-senator-turned-developer William Reynolds. The "final sketch" published in the August issue of *American Architect* showed the structure "to be 67 stories high rising 808 feet above the street and . . . surmounted by a glass dome, which, when lighted from within, will give the effect of a great jeweled sphere."

Designed by William Van Alen, the Reynolds Building was billed, naturally, as the "world's tallest." Reynolds became sidetracked somewhere along the line, but two months later along came Walter P. Chrysler, who bought from Reynolds the site, the project, and the architect. Chrysler was a self-made man, an engineer who had risen to head the nation's second largest automobile manufacturer. In 1928 he had consolidated his company by acquiring Dodge Brothers. His position, in short, was not unlike Frank Woolworth's in 1910.

Chrysler's version of Reynolds's project moved along nicely at 808 feet for several months, but soon got caught in a round of one-upsmanship that forced up its height by several hundred feet. In April 1929, it was announced that the new Bank of Manhattan headquarters on Wall Street would become the world's tallest building. Salt in the wound: the architect of the Bank of Manhattan was to be H. Craig Severance, William Van Alen's former partner.

Now New York's major builders began to throw their hats into the ring. Robert W. Goelet, scion of one of the city's oldest land-owning families, announced his own intentions to nip Chrysler's aspirations in the bud with an 80-story skyscraper on a site directly across the street. A. E. Lefcourt then announced *his* intention to build the world's tallest building—a 1,050-foot skyscraper in Times Square—while Fred F. French began hatching plans to construct an 83-story, 1,100-foot-high tower on Sixth Avenue at 43rd Street. Watching from the wings, Metropolitan Life apparently felt the itch to recapture its former glory and announced tentative plans to raise its newest 32-story addition to a full 100 stories. All these plans (in what the *Real Estate Record and Guide* referred to as "the autumnal epidemic of world's tallest buildings") paled beside the "premature" announcement that realtor Charles F. Noyes was planning a 150-story skyscraper to span two full blocks of lower Broadway, while skyscraper builder William A. Starrett defended the structural feasibility of 200 stories. As the competition reached its full height, however, the stock market crashed, taking with it all but the most solidly planned towers. With the field cleared, the Chrysler and the Bank of Manhattan began their battle in earnest.

October of 1929 had found the Chrysler Building's announced height as 68 stories and 808 feet, with the Bank of Manhattan heading for 840 feet. Soon Chrysler was rumored to be working toward a new height of 925 feet; the Bank of Manhattan, in what had become a very public rivalry, in turn aimed for 927 feet. Determined not to be beaten, Chrysler and Van Alen arranged the public-relations coup of the decade. A 185-foot metal spire, weighing 27 tons, was designed to raise the skyscraper's height well beyond anything the Bank of Manhattan could dream of. In Van Alen's words: "It was manifestly impossible to assemble this structure and hoist it as a unit from the ground, and equally impossible to hoist it in sections and place them as such in their final positions. Besides, it would be more spectacular, for publicity value, to have this cloud-piercing needle appear unexpectedly." The spire, made and delivered in five sections, was secretly assembled inside the building. Once it was readied, and attached to a derrick, "the signal was given, and the spire gradually emerged from the top of the dome like a butterfly from its cocoon, and in about 90 minutes was securely riveted in position, the highest piece of stationary steel in the world."

What was in it for Chrysler? He built the Chrysler Building as a strictly personal venture, without involving his corporation. He once claimed that he did it so that his sons would have "something to be responsible for," and his son Walter, Jr. did become president of the building. He claimed, disingenuously, that a trip to Paris had inspired him and that he had "said to the architects: 'Make this building higher than the Eiffel Tower.' "

The tallest building in the world, which bore his name, served principally as a symbol of the Chrysler Corporation, and of Walter Chrysler. It is instructive that the customary observatory at the top of the building had on permanent display, enclosed in a glass case, the workman's tools with which Walter Chrysler began his career.

The building, in short, was an advertisement. Was this a secret? Hardly. While the race with the Bank of Manhattan progressed, one of the many feature articles published on the subject of tall buildings observed that "if the race itself is a competition in advertising, so, in a manner of speaking, have been all the competitions in tall buildings from the time when Pharaoh vied with Pharaoh, matching tomb against tomb, to the pious rivalry of the cathedral builders, each seeking to raise a pointed arch or spire nearer to God."

The public avidly followed the competition in skyscraper heights. In 1930 the *New York Sun* published a list of the 50 tallest buildings in New York, arranged by height, and shortly afterward the architectural journal *Pencil Points* reprinted it, noting that "interest in the heights of New York skyscrapers does not seem to abate, if we may judge by the inquiries concerning them received in this office." A cartoon in the same issue showed an architect with a rendering of a pointed skyscraper and a caption reading: "You see, this spike runs down the entire length of the building and if anyone builds a taller building, we can jack up the spike and still be the tallest!"

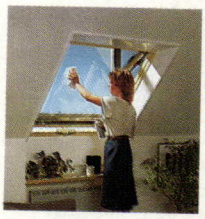
The Chrysler Building unfortunately had no such spike, and its brief, 18-month reign as the world's tallest building ended with the topping out of the Empire State Building in 1931. The height of the Empire State was purely a public-relations gimmick. Unlike its predecessors, the Empire State wasn't a corporate headquarters or a personal symbol. Nor was it an attempt by an established developer or builder to enter the fray. Rather, it was a strictly speculative venture by an industrialist, John Jacob Raskob of General Motors, who tried everything he could think of to draw publicity to his building. He used the site of the old Waldorf-Astoria Hotel, he hired former New York governor Al Smith to be the company's president, and he went higher than Chrysler. His strategy was an aggressive advertising campaign to market the Empire State Building as the world's tallest building, headed by the world's most popular former politician and located on the world's most prestigious site.

Raskob initially planned an 86-story office building, 1,050 feet tall or just four feet higher than the Chrysler Building. According to rental manager Hamilton Weber, "Raskob was worried that Walter Chrysler would pull a trick—like hiding a rod in the spire and then sticking it up at the last minute." Raskob's architects, Shreve, Lamb & Harmon, therefore designed the addition of an enormous structure above, intended to be a mooring mast for dirigibles—more public relations—thereby raising the building's height to 1,250 feet. The

What's the difference between a roof window and a skylight?

Model TPS top-hung roof window

Model VS ventilating skylight



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mooring mast, housing only an elevator and a spiral staircase, was figured as the equivalent of 14 stories which, added to the 86 office floors, produced 100; Raskob threw in the two basement levels to arrive at 102 stories, a figure that the Empire State Building, somewhat fraudulently, claims to this day. In 1930 architect R. H. Shreve wrote in ARCHITECTURAL RECORD that very tall office buildings did not make economic sense unless advertising value was factored in. The economics made more sense than he knew: during the Depression that followed, only the fees collected by the building's observatory kept his skyscraper solvent.

Skyscraper construction continued into the Depression as pre-Depression projects like the Empire State Building and Rockefeller Center went ahead as planned. Late in 1930, architect Francisco Mujica announced plans for a 100-story building. Optimism about skyscrapers, however, gradually waned. True, Raymond Hood discussed 7,000-foot buildings in 1932, and in 1937 a prediction was made of 2,000-foot buildings by 1960. That same year, moreover, the Kremlin issued an announcement that Moscow would soon build the world's tallest structure. The word in the press about super-tall buildings, however, was that their "day is over," and in 1942, Harvey Wiley Corbett, who had proposed but never built several 100-story towers, predicted the disuse of skyscrapers altogether. With the end of World War II, office-building construction began again, but low, bulky structures became the norm. Skyscrapers appeared to be relics of a bygone age.

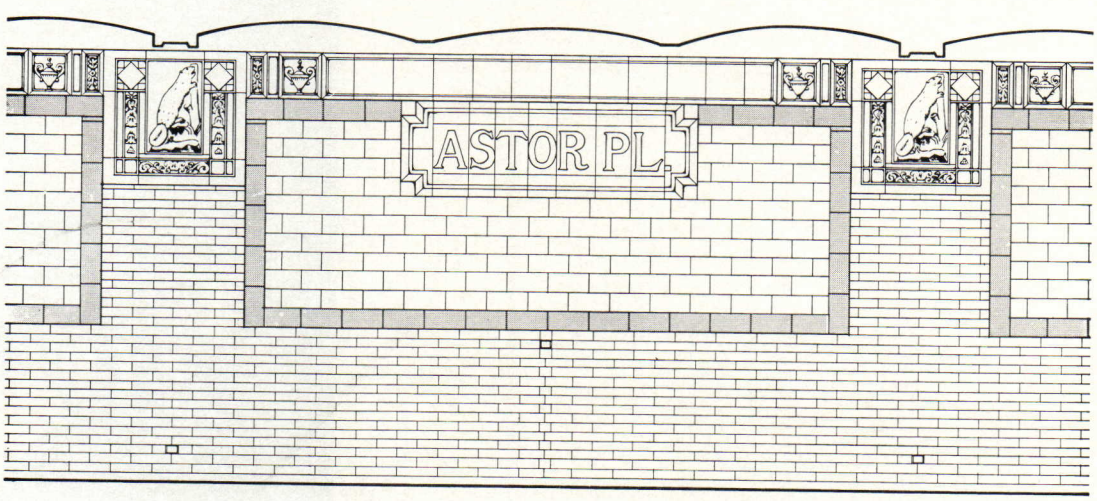
While the Empire State Building reigned serenely through the decades, a challenge flared momentarily in the Midwest. Frank Lloyd Wright unveiled a proposal for a "Mile-High Office Tower," in Chicago, to be christened "The Illinois." In 1956, exactly 100 years after Bogardus first announced that his cast-iron structural technique would enable buildings to rise for miles, Wright proferred his own structural rationale concerning the tripod form joined to "new principles of cantilever-steel in suspension."

Where had Chicago been all this time? The Second City possessed the only other important collection of late 19th- and early 20th-century skyscrapers in America. In 1892, Burnham & Root's Masonic Hall there briefly claimed the distinction of "tallest office building," but the city had then seen the "tallest" potential of its towers stunted by a succession of municipally imposed height restrictions of the kind often discussed, but never adopted, in New York. These were gradually lifted during the 1920s, and in 1928 Chicago entered the race with a proposed 75-story skyscraper to be called the Crane Building. The Crane never materialized, however, nor did Wright's Mile-High Tower, and Chicago's challenge to New York had to be postponed.

The Empire State Building kept its title until the 1960s, when the Port Authority of New York and New Jersey commissioned Minoru Yamasaki to design the 110-story twin towers of the World Trade Center. The Port Authority claimed that its program of 10 million square feet of office space, combined with Yamasaki's desire to put as much of it as possible up in the air to create an enormous open plaza, led to the towers' height. Nevertheless, Guy Tozzoli, the man who developed the project, admits to a "marketing bent," and it is curious that the towers' height of 1,350 feet is just 100 feet taller than the Empire State Building. Lawrence Wien, chief owner of the Empire State Building, took the approaching loss of prestige poorly and actually sued to stop the twin towers. After he lost and construction of the World Trade Center began, Wien retained Shreve, Lamb & Harmon to study the situation. In 1972 the firm proposed to recapture the title by adding 11 stories to the Empire State, and a number of possible designs were published, including one that squared off the romantic spire into a box remarkably like Yamasaki's towers. Even while the twin towers were still under construction, however, the Sears Company in Chicago announced its intentions to build the Sears Tower—curiously, at 1,450 feet, just 100 feet taller than the World Trade Center. Some cynically pointed to Chicago's supposed "second-city" complex about New York; it didn't help that Mayor Daley took it upon himself to boast that Chicago would soon have even a 250-story building. Yamasaki pronounced himself unperturbed by the loss of the ever-ephemeral title, wisely recognizing that another rush was on. The 1973 recession momentarily ended the madness, but it has resurfaced in the 1980s, with talk of 135- and 150-story buildings, and claims far exceeding them. Whatever the coming years bring, it will be useful to recall the lessons this curious history has to teach us. Despite all the hoopla, only major corporate figures have been able to pull it off—never a lone architect or, Mr. Trump take note, a lone builder. All attempts have been part of concentrated spurts of building—1908-13, 1928-31, and 1966-73—so that most of the title-holders have worn the crown for only a few months. Finally, despite the disinterested rationales that may be offered, there has been and continues to be only one motive for constructing the "world's tallest building": public relations at the highest levels.

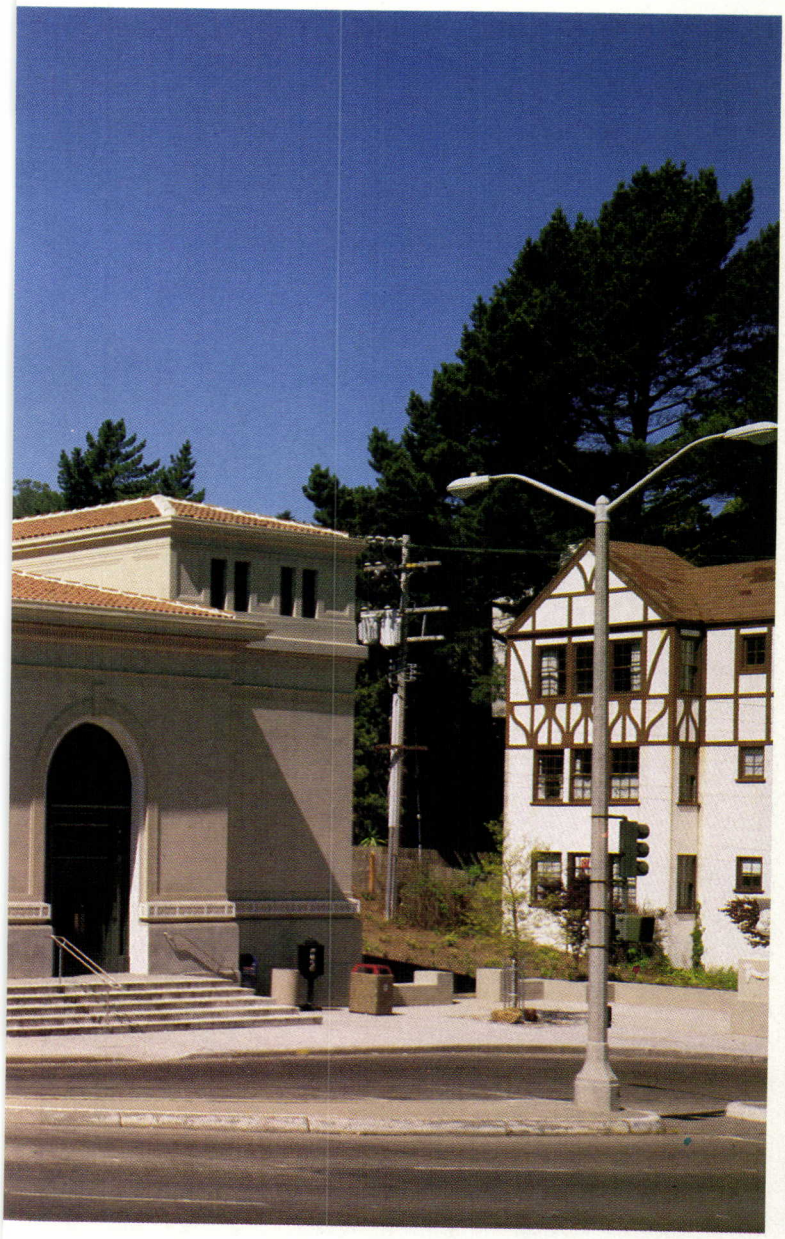
In transit

When it comes to moving earthlings from place to place on their home planet, what could be more advanced than an "intermodal transportation complex"? Architects Ellenzweig, Moore and Associates apply this impressive phrase to their new Alewife subway-and-bus-station-cum-garage in Cambridge, Massachusetts (pages 72-75). The locution has the ring of space-age scientific jargon and, indeed, the ingenious layout and bright display of contemporary art and technology at Alewife satisfy popular notions of up-to-date efficiency and dazzle. Basically, though, the whole scheme addresses a question that has nagged urbanists and transit planners for several generations: how can we separate Americans from their automobiles? The groundbreaking last September for a federally financed subway in Los Angeles, spiritual capital of car culture, attests to undying optimism that an amicable divorce between man and steering wheel is still possible, if attractive alternatives are available. On the other hand, relatively unenthusiastic public response to a rail transit system recently completed in Miami might seem to justify a more pessimistic outlook—and curtailment of federal support for such projects. Debate over the economic and social viability of mass transit drags on, as congested freeways, gridlocked streets, and pollution beset urban and suburban communities everywhere. All four projects illustrated here are in cities with long-established public transit systems and traditionally dense downtown centers. In such places, luring commuters out of the driver's seat is often less of a problem than persuading middle-class citizens that they need not risk their safety, property, and peace of mind every time they descend into a subway station; the poor, of course, usually have no choice. San Francisco's Forest Hill Station and New York's Astor Place Station harken back to a bygone era when streetcars and subways were the pride of any progressive metropolis, and architecture for transportation was as richly embellished (*not* with graffiti) as any civic monument. At each of these early 20th-century stations, preservation (or reconstruction) of earlier amenities enhances the quality of latter-day improvements. The Alewife and Suffolk Downs stations, both new facilities in greater Boston, confront the tough challenges of the modern city head on, without reference to erstwhile gentility. These buildings possess their own forceful character—rather glitzy, maybe, at Alewife and dour at Suffolk Downs, but worthy nonetheless of joining the old line of stations that made a transit ride seem worth the fare. *Douglas Brenner*



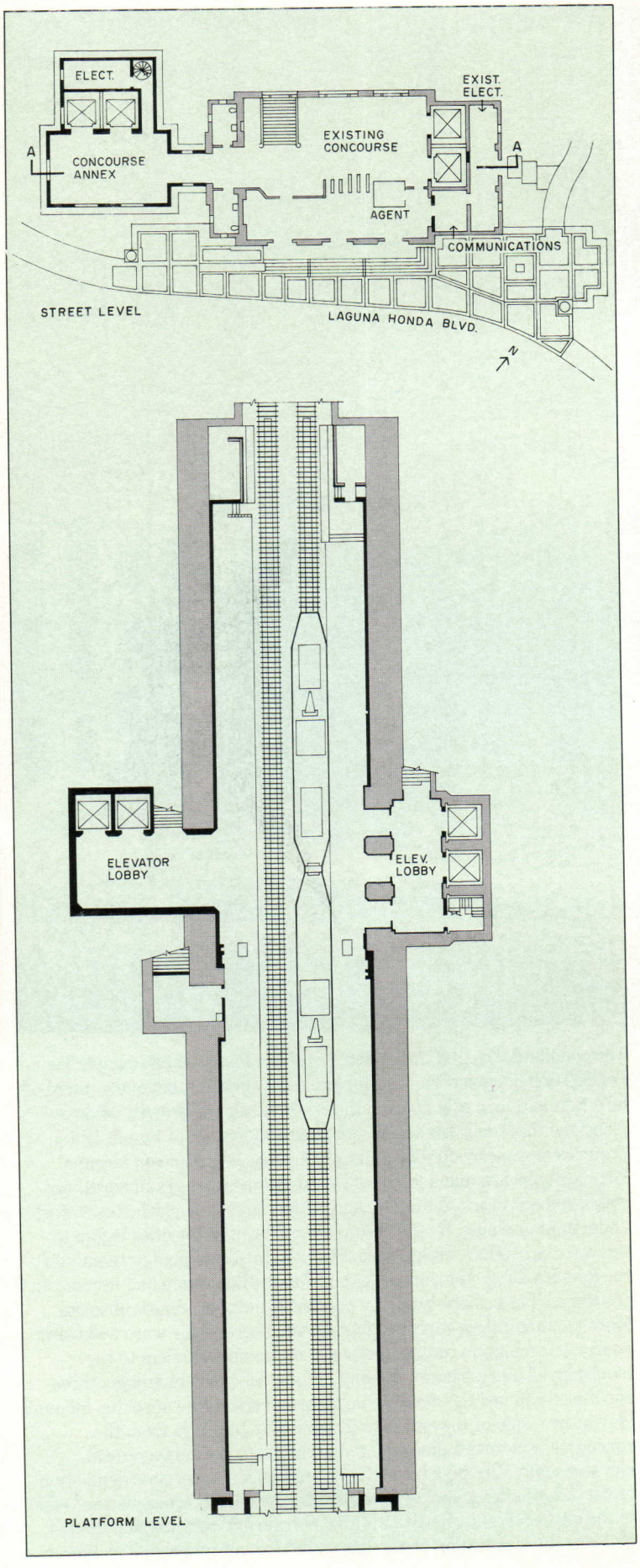
Forest Hill Station
San Francisco, California
Esherick Homsey Dodge and Davis
and Rutherford & Chekene,
Joint-Venture Architects

Cut and recover

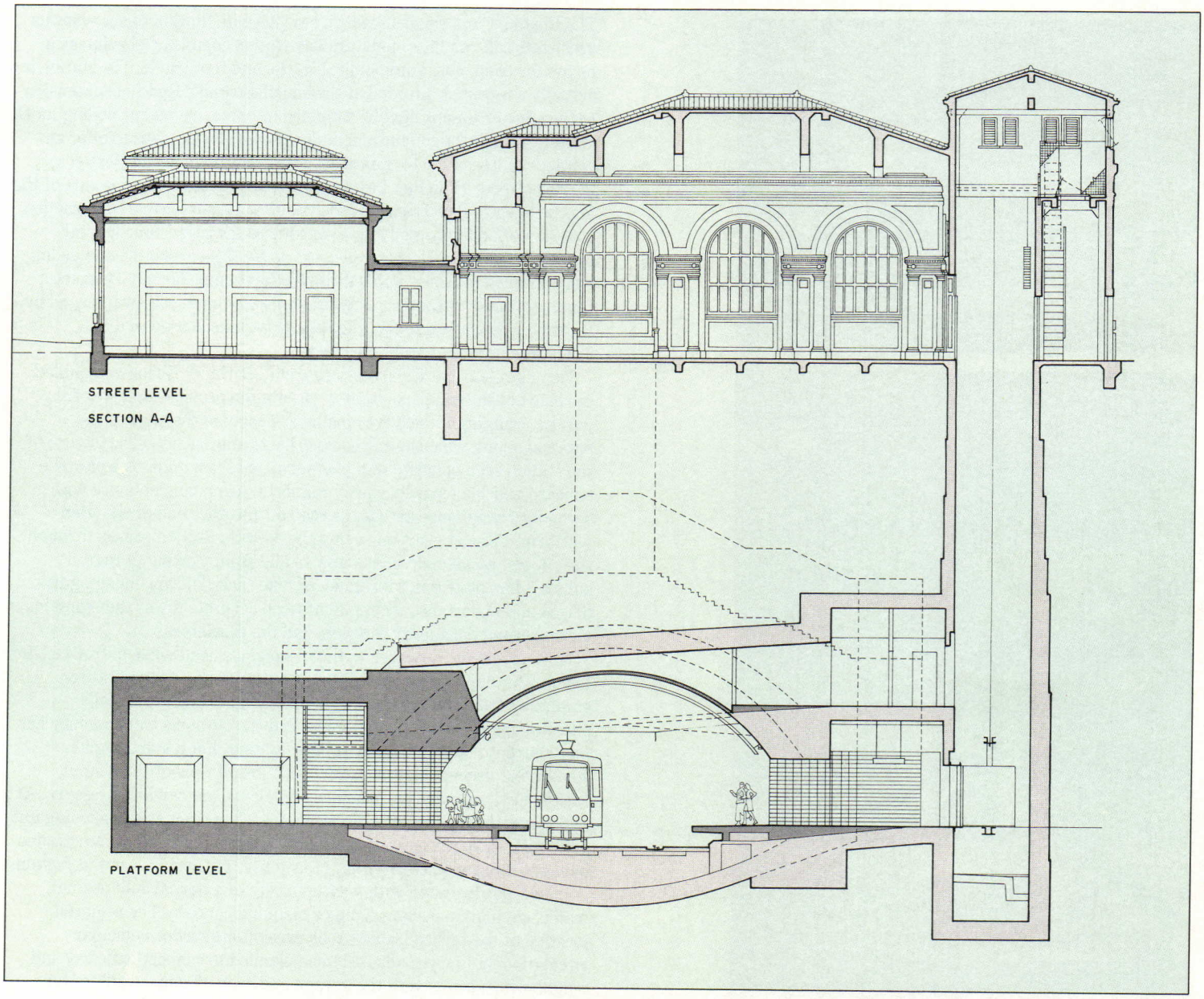


The completion in 1917 of the San Francisco Municipal Railway's Twin Peaks Tunnel opened the way for rapid development beyond a range of hills that had formerly blocked the city's westward growth. Midway along the three-mile tunnel, the planned subdivision of Forest Hill acquired a properly dignified station. A classical arcade on Laguna Honda Boulevard and a lofty concourse composed a grand portal for stairs and elevators serving in- and outbound trolley platforms 60 feet underground. Sadly, by the 1970s, when transit authorities began to renovate old MUNI streetcar lines in the process of linking them into the new BART system, once-elegant Forest Hill station had become an embarrassment: shabby and, by present standards, almost obsolete. More troubling than superficial grime and decrepitude were awkward, poorly lit circulation routes that posed impassible barriers to the handicapped and a hazard to many others. All of the building's three elevators adjoined the outbound platform, leaving the opposite, inbound (downtown) side of the tracks accessible only by stairs from the concourse or across a dim, isolated overpass to the subterranean elevator lobby. Preliminary MUNI plans called for possible demolition of the extant station and replacement by a modern facility better keyed to the site's current role as a multilevel train and bus junction. Forest Hill was the last station on the line slated for improvements, however, and when its turn finally came, revised budget priorities allowed only "minimal" upgrading—an outcome that pleased local champions of the existing neighborhood landmark (the station has been nominated for the National Register). There are few external signs of the $6-million reconstruction designed by joint-venture architects Esherick Homsey Dodge and Davis and Rutherford & Chekene, whose task strikes the casual observer as little more than a careful refurbishment. Above ground, the 1926 station house remained largely intact, except for the discreet addition of a similarly scaled pavilion decorated with casts of period ornament (at left in large photo above and through the archway in photo right). Inside the concourse, turnstiles, the ticket booth, lighting, and signs are obviously modern without detracting from the Old-World grandeur of the hall; new code-height Roman-grille railings repeat original mullion patterns, and a new color scheme subtly highlights repaired marble trim and plaster moldings. The most impressive alteration—and the reason for a 40-month construction schedule—happened largely underground: without interrupting commuter service, the architects dug down 70 feet and cut into the tunnel vault to insert elevators and lobbies for inbound passengers and eliminate the troublesome crossover (the new pavilion houses the upper lobby and mechanical equipment). Details follow overleaf. *D.B.*

The concrete tunnel segment below this station was originally constructed as cut-and-cover. Recent excavations for elevator shafts, subterranean lobby, and access through the tunnel wall required temporary shoring to offset uneven loads on arched vaults normally under uniform compression. With midspan supports in place and horizontally braced soldier piles driven around the site perimeter, it was possible to remove existing stairs on the southwest flank, reinforce foundations, and insert the concrete box of the elevator lobby (at left in plans; top photo left). The visual logic of in- and outbound lobbies facing each other across the tracks and the available area for an on-grade pavilion determined the geometry of the elevators. Concrete jambs and a massive 9- by 12-ft header beam frame the new 20-ft-wide opening



onto the platform; penetration of the 9-ft deep tunnel wall took 10 days. Throughout this operation, temporary stairs to an existing (later demolished) concrete bridge under the vault allowed passengers to reach the inbound platform. In the final layout, rerouted stairways on both sides of the tracks coordinate with elevators to simplify all circulation. Ceramic-tile walls, aluminum ceiling panels, and cove-lighting brighten and unify the interior. Platforms were raised 18 in. to reach the floor level of new light-rail trains. Ridged industrial tile at the platform edge prevents slips and forms a tactile warning for the blind. Acoustic insulation in the crevice between the platforms and the rails, and above the perforated ceiling, absorbs most vehicle noise. New ventilation shafts rise at either end of the station.

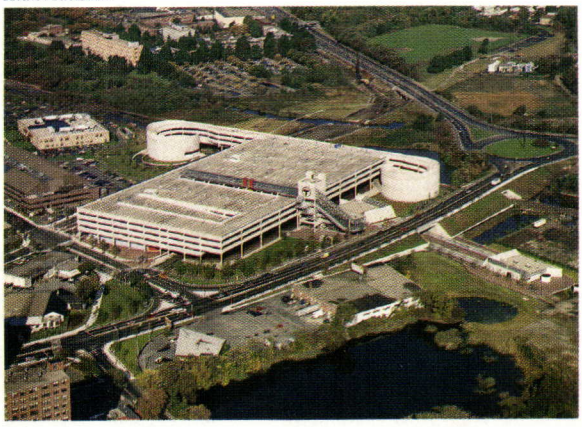


Forest Hill Station
San Francisco, California
Owner:
San Francisco Municipal Railway (MUNI Metro)—San Francisco Public Utilities Commission Utilities Engineering Bureau, MUNI Projects Division, owner's representative; James Wallsten and Dave Soulof, architects-in-charge
Architects/engineers:
Esherick Homsey Dodge and Davis and Rutherford & Chekene, A Joint Venture—Peter Dodge (EHDD) and Peter Bank (R&C), principals-in-charge; Joram Altman, Sylvain Bournhonesque, project architects; Peter Revelli, project engineer
Landscape architect:
CHNMB—Satoru Nishita
Mechanical/electrical engineer:
Hayakawa Associates—Zia Dairkee
Consultants:
J. Paul Oppenheim (cost estimation); Charles M. Salter Associates (acoustics); Hesselberg, Keesee & Associates (elevators)
Contractors:
Hugh R. Anton (Phase I); S.J. Amoroso Construction, Inc. (Phase II)

Alewife Station and Garage
Cambridge, Massachusetts
Ellenzweig, Moore and
Associates, Inc., Architects

Interfacing cars and trains

Alan MacLean



The Boston/Cambridge subway's new Alewife Station forms what its architects call "an intermodal transportation complex," serving as a nexus for train, bus, automobile, bicycle, and foot traffic. The station is actually a terminal, situated at the end of Boston's Red Line extension to the edge of Cambridge. Its intended purpose, beyond providing quick efficient transit for commuters to downtown Boston, was to offer an attractive alternative to the use of private automobiles in Boston's narrow streets. (The Red Line extension constitutes only one part of the Massachusetts Bay Transportation Authority's extensive construction program of additions and improvements to the cities' four-line rail system, known familiarly to its users as *the T* [see also the succeeding story]. Funds for these public-transit efforts came largely from the Commonwealth's trade-in of federal highway money, a swap urged by Boston's appalled citizenry when the government proposed an interstate highway within the city.)

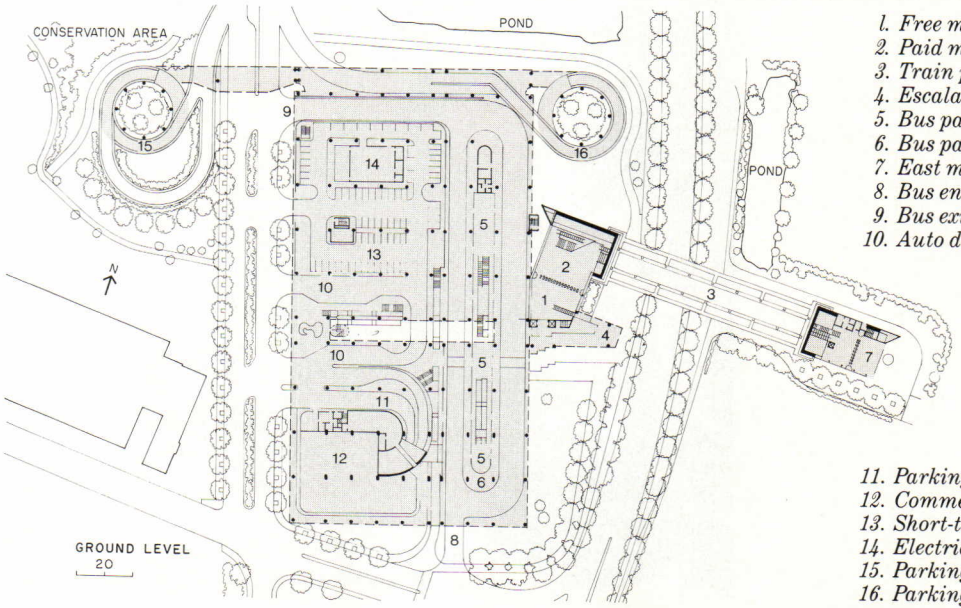
To make clear the T's invitation, architect Harry Ellenzweig pulled the heart of the complex—that is, the station proper—outside of the garage, bringing its relative smallness nearly to the edge of the parkway along which most people drive to approach it. (The picture of the station seen opposite was photographed from under the parkway, beneath which a paved pathway connects the main headhouse with a secondary headhouse across the road at the other end of the train platform.) Almost everyone using the Alewife Station passes through this projecting element on his way to and from parking garage, subway, bus platform, taxi stand, or bike rack. The appendage gains height and importance from a reinforced concrete tower that contains elevators and machinery for them and the escalators.

More arresting, however, is the steep glass headhouse in front of the tower. The sloping top, its shape derived from the incline of three escalators from the garage, supports skylights and glass walls surrounding the central mezzanine. But the station's transparency has more purpose than low-cost daytime lighting. For a start, it gives commuters descending the escalators a grand view of the distant Boston skyline and of the nearby countryside and wildlife preserve. At nighttime, the big, brightly lit headhouse should act as a beckoning and a promise—Ellenzweig rather proudly reports that some suburbanites have already switched from cars to subway for evenings out in Boston.

In so large a station with such a variety of external and internal traffic, circulation became a major planning concern. The required location of the railroad tracks took care of one sort of vehicular circulation, but new roads had to be planned to connect parkway and neighboring streets with the garage and drop-off zone—and to leave undisturbed the adjacent conservation area. Automobiles using the garage enter by one spiral ramp and exit by another, the pair flanking one end of the complex; the exit ramp was designed to empty the 2,000-car garage in an hour and a half. On the interior, a major circulation problem was to offer pedestrians a clearly legible choice of routes to either the subway or the bus platform. Ellenzweig, who grew up in New York City, remembered the overhead green and red light bulbs that guide travelers on the Grand Central/Times Square subway shuttle. At Alewife, he hung even more visible metal banners overhead—yellow equals Boston buses and red the Red Line.

Most important, if the station were to continue attracting users after initial experimentation, the facility should not suggest a dark forbidding cavern. The high daylit mezzanine and the clerestory over the subway track dispel gloom. The garage, in addition to having low pipe railings around the perimeter to allow views out, is bisected into reasonably sized parts by a tall daylit atrium decorated with red-painted vent stacks for the bus platform (at left).

An abundance of murals, statues, bronze floor tiles, and sculptured benches further brightens the environment inside and out. These works were commissioned by Arts on the Line, a federally funded program organized by the MBTA and the Cambridge Arts Council. *G. A.*

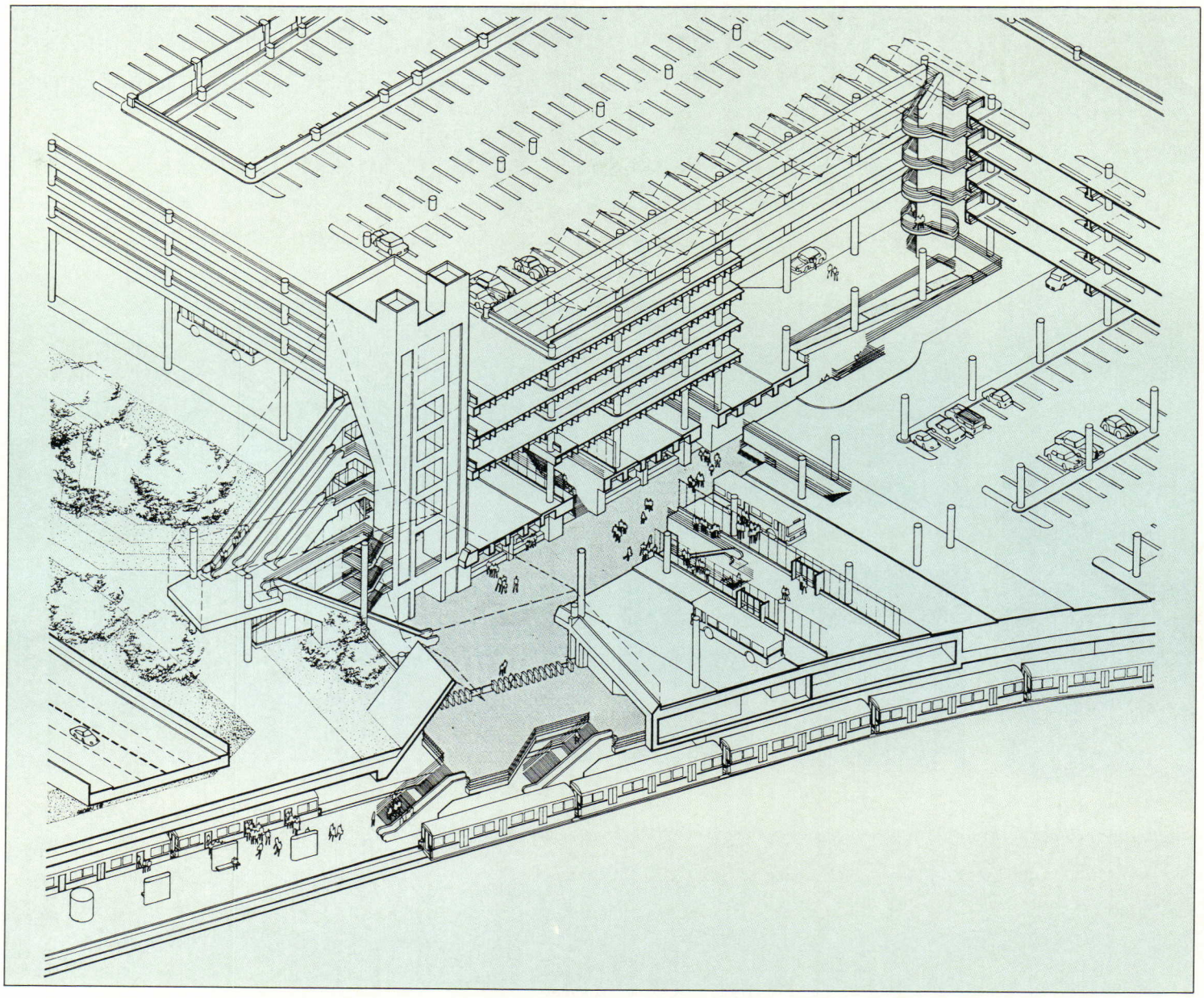


1. *Free mezzanine*
2. *Paid mezzanine*
3. *Train passenger platform*
4. *Escalator lobby*
5. *Bus passenger waiting area*
6. *Bus passenger platform*
7. *East mezzanine*
8. *Bus entry*
9. *Bus exit*
10. *Auto drop-off*
11. *Parking ramp*
12. *Commercial*
13. *Short-term parking*
14. *Electrical substation*
15. *Parking entry drum ramp*
16. *Parking exit drum ramp*

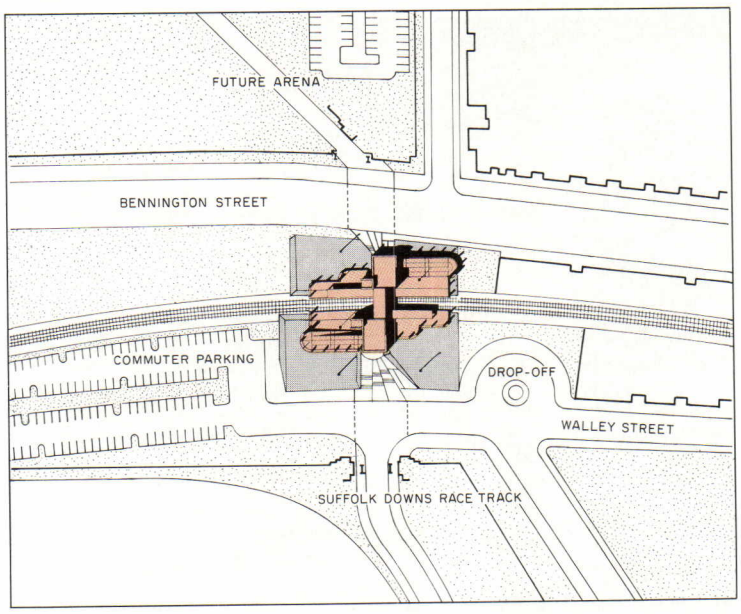
From each of the parking garage's top three levels, a separate escalator feeds a single landing (this page at bottom), which in turn feeds an escalator to the central free mezzanine and subway turnstiles (directly below and axonometric opposite). From the mezzanine, a wide opening leads to an atrium bisecting the garage; the corridor within offers stairs to the bus platform and passage to the drop-off area. Apart from products of the generous arts program, architect Ellenzweig had to rely mostly on durable, affordable materials to evoke a "grand station" instead of a "dreary subway station and scary parking garage": lacy white-painted steel trusses, open stainless-steel railings, earth-colored quarry tile and granite flooring—and, of course, daylight. The 1-million-square-foot complex cost $85 million.

Alewife Station and Garage
Cambridge, Massachusetts
Owner:
Massachusetts Bay Transportation Authority
Architects:
Ellenzweig, Moore and Associates, Inc.—Harry Ellenzweig, principal in charge of design; Leslie Moore, partner in charge of construction; Randall Imai, Gary Gwon, William Sloan, Miller Day Malcolm, Jon

Keller, project team
Engineers:
Sverdrup Corporation (mechanical/electrical/civil/structural for station); Le Messurier/SCI (structural for garage); Goldberg-Zoino & Associates, Inc. (soils)
Consultants:
Mason & Frey (landscape); Norman A. Abend (parking and traffic); Camp, Dresser & McKee, Inc. (hydrology); Cambridge Acoustical Associates, Inc. (acoustics and vibration); James Guy (specifications); Howard Brandston Lighting Design, Inc. (lighting); John J. Pepper Corporation (cathodic protection); Edison Parking (parking—operations); Allan Davis Associates, Inc. (parking—design); Toshihiro Katayama (graphic arts)
General contractors:
Perini Corporation (tunnels and structures); J. F. White Contracting Company (roadways and landscaping)



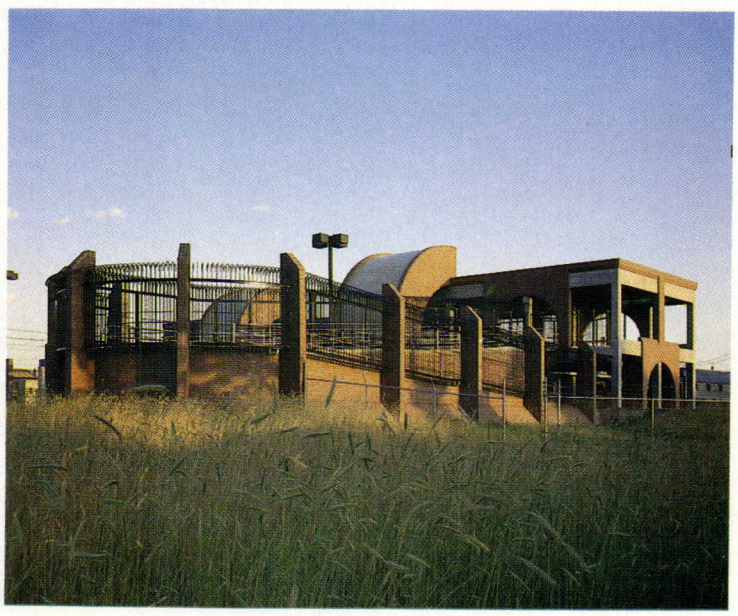

TO ALL TRAINS
TO ALL TRAINS
TO ALL TRAINS


FUTURE ARENA
BENNINGTON STREET
COMMUTER PARKING
DROP-OFF
WALLEY STREET
SUFFOLK DOWNS RACE TRACK

A transparent fortress

Suffolk Downs Station
Boston, Massachusetts
Lozano, White and Associates, Inc., Architects

Richard Bonarrigo photos



One seldom gets to apply such aggressive, human adjectives as *tough* and *street-smart* to inanimate building. Indeed, for the Suffolk Downs stop on Boston's Blue Line, the transit authority had simply asked for a more neutral-sounding *security.* As well they might. Though quite peaceable people use the station daily to go into downtown Boston's government center or out to the beach and dog racing, the district is known as a high-crime area, and the heavy timber station that preceded this one had been torched.

Architect Eduardo Lozano characterizes the replacement station as "a transparent fortress." The fortress aspect, consisting of sturdy (nonflammable) concrete pavilions, brick battlements, and high iron paling, is clearly meant to repel invaders and to assure the innocent of safe haven once they reach the inside. More important to the station's security than impervious materials, however, is its transparency. Because the transit authority could afford only one manned toll booth at the station, its occupant must be able to see passengers throughout the station and on both sides of the tracks. Further, the police wanted visibility into the station from squad cars patroling the area after dark. For the passenger, this transparency, both external and internal, allows him to see around corners, so to speak, and to detect ahead of time any possible danger.

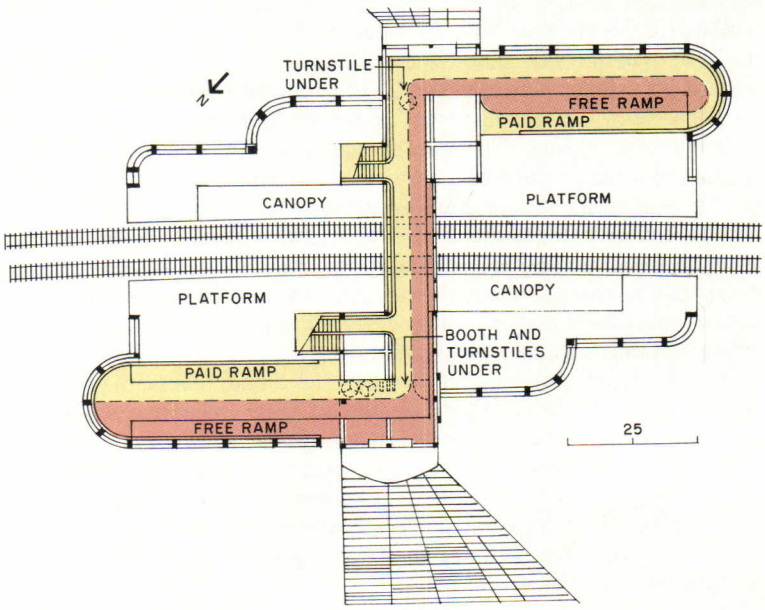
The single change booth, in company with the necessary ramps for the handicapped, had basic implications for the station's circulation and hence for its very form. The booth commands the entry/exit for Walley Street (photograph and site plan opposite), and thus serves passengers needing the drop-off area, the parking lot, or the shuttle buses for Suffolk Downs horse racing. Passengers entering from Bennington Street without correct change must somehow get safely across the tracks to the booth, which they do by crossing a blue steel bridge (top right). At the same time, however, passengers who have not paid their fares must not be allowed access to the hooded stairways, the platform, or the trains. To establish double circulation, Lozano divided the bridge into paid and free halves, separating the two routes with a fence of tall iron railings. The ramps, which unpaid passengers must use to reach the bridge, are similarly divided (see plan overleaf). (When a projected sports arena opens on the other side of Bennington Street, the authority intends to install another change booth in that pavilion.) Using the tracks as the major axis and the bridge as a cross axis, the architect disposed the same elements—pavilions, platforms, canopies, and ramps—on either side in a reversed symmetry. A pair of covered stairways, which connect the bridge with each platform, could not comply with this symmetry, however, since they can have access only to the same side—that is, the paid side—of the bridge.

Whatever his and the authority's concerns for security, Lozano had no desire to design a cell block. Though adequately covered against foul weather, the station is so open and the distinction between inside and out deliberately left so ambiguous that the architect calls the structure "a proxy for a building." The overall shape of the facility derives from the ramps, which, because of the way they stretch out on either side, inevitably dominate the structure. Drawing on recollections of medieval fortified churches, the architect cased the ramps with brick, battering the walls to discourage climbers and surmounting the buttressed ramparts with iron palisades. The ramparts, the extended buttresses, and the palisades simultaneously encircle and define the building's volume and reinforce the transparent fortress analogy.

Medieval architecture also inspired the brick arches that mark entries and the ends of ramps and stairways, though these arches may not be exactly referential—Lozano confides that he just likes arches.

Despite the station's tough demeanor and a budget ($2.5 million) that precluded ornament, the texture of brick and the striped shadows that fall from the fence across the ramps offer the eye an abundance of little treats. On a bright day, even the nonhandicapped can be observed using the ramp as a promenade. *G. A.*

The station employs three materials, arranged in a hierarchy theorized by architect Lozano. In the middle, "neutral" concrete defines the passenger pavilions and supports all other parts of the station. On the outside and at significant points within, brick arches, cornices, and walls provide warmer texture and color to evoke solid building without actually enclosing the space. Between the pavilions, a prebuilt steel bridge echoes the metallic technology of the railroad. A passenger on the Bennington Street side of the station may, if he has the correct change, enter through the turnstile and await the train in the concrete pavilion (below left). Otherwise, he must walk up the ramp, cross the bridge, and walk down the opposing ramp to reach the station's only change booth. After he has entered the turnstile, he may use



the stairways, both of which serve the paid aisle on the bridge. Stainless-steel handrails, which stand free of the masonry, weave through ramps, bridge, and stairs (below right). The rails are provided in two heights: 33 inches for wheelchair users, 42 inches for the ambulatory.

Suffolk Downs Station
Boston, Massachusetts
Owner:
Massachusetts Bay Transportation Authority
Architects:
Lozano, White and Associates, Inc.—Eduardo E. Lozano, partner-in-charge; Michael A. Baskin, project manager; Madhukar Deshmuk, job captain
Engineers:
Le Messurier Associates/SCI (structural); R. G. Vanderweil Engineers, Inc. (mechanical/electrical); McPhail Associates, Inc. (geotechnical); Civil-Site/SCI (civil)
Consultants:
Todisco Associates (specifications); William Lam Associates, Inc. (lighting)
General contractor:
Peabody Construction Company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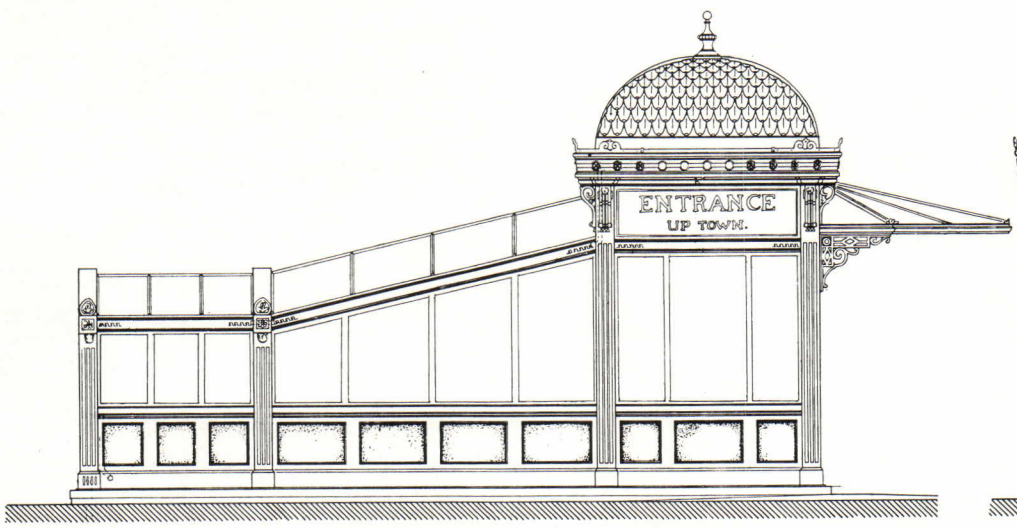
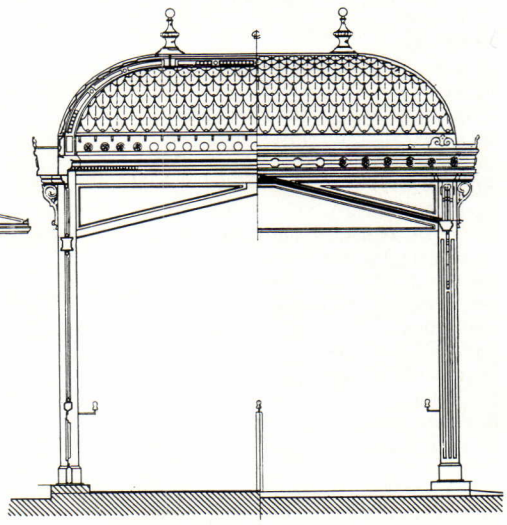

ENTRANCE
UP TOWN.



Eager beaver

Astor Place Station
New York City
Prentice & Chan, Ohlhausen,
Architects

When New York City built its first subway line in lower Manhattan at the turn of the century, people still took for granted the propriety of exuberant Victorian ornament. The Interboro Rapid Transit Company—more immediately recognizable to natives as the IRT, though the city now owns the line—thus almost as a matter of course gave the urban landscape a series of sprightly glass and cast-iron headhouses to protect stairs leading to the modern wonder within. The subterranean stations for the wonderful subway were themselves ornamented with colored mosaics and bas reliefs. Riders of the IRT admired these charming, old-fashioned, if decrepit, features as late as the early 1950s. Then the Department of Highways tore down the little kiosks, having decided, not unreasonably but most regrettably, that they were too expensive to repair and were traffic hazards to boot. The platform ornament was left to deferred maintenance.

By the 1980s, fashion had taken still another turn. The New York City Landmarks Commission had declared the original IRT stations bona fide landmarks, at least those remaining portions below ground. Around the Astor Place stop, located on a traffic island across the street from the Cooper Union (opposite), the neighbors pressed for restoration and improvements. They formed the Committee for Astor Place, raising seed money for the restoration and pressuring the federal Culture Station Program and the New York City Transit Authority for funds.

Architects Prentice & Chan, Ohlhausen received the commission to design restorations and improvements for the platforms. But at this point, a lucky series of happenstances converged. The construction bid for the design came in considerably under budget but was rejected on a technicality. And Rolf Ohlhausen, who had studied architecture at the Cooper Union, remembered the old kiosk fondly. Perhaps regarding the funds left over from the low bid as found money, he concluded that there was budget enough not only for refurbished platforms but for a proper kiosk as well. Moreover, he had, as a student, photographed the Astor Place Station from the roof of a nearby building. In the absence of drawings from the original architects, Heins and La Farge, this photograph became the firm's first, and supremely informative, research document.

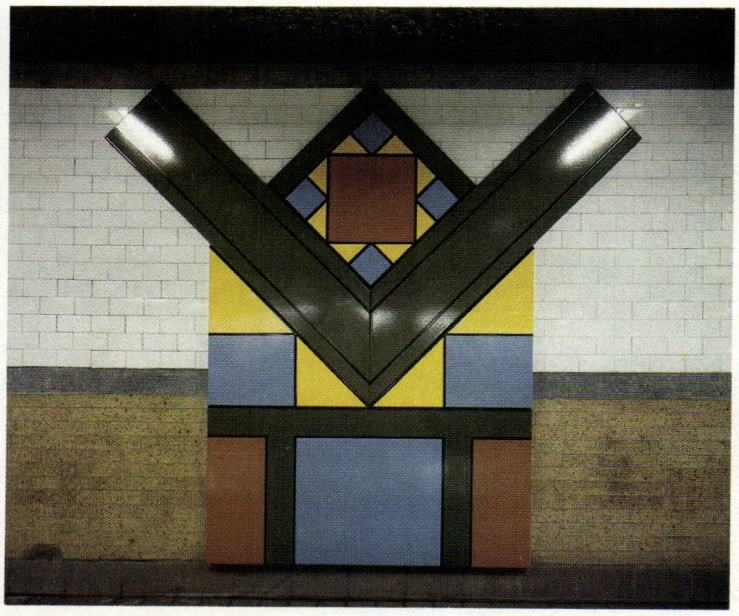
Though the concept of *improvement* has lately become suspect, materials and techniques not available in 1904 allowed some changes at Astor Place that fall within that description. The only change immediately noticeable to users who remember the old headhouses is the glazing for the new one. Originally, translucent glass embedding chicken wire ensured against shattering but unavoidably weakened the daylight on the stairs, especially when the windows grew grimy. (The uncovered brick cheek walls that surround most New York subway openings, of course, exclude even more light.) The new kiosks have walls of clear tempered glass, which not only admit abundant light but allow passengers unclouded observation.

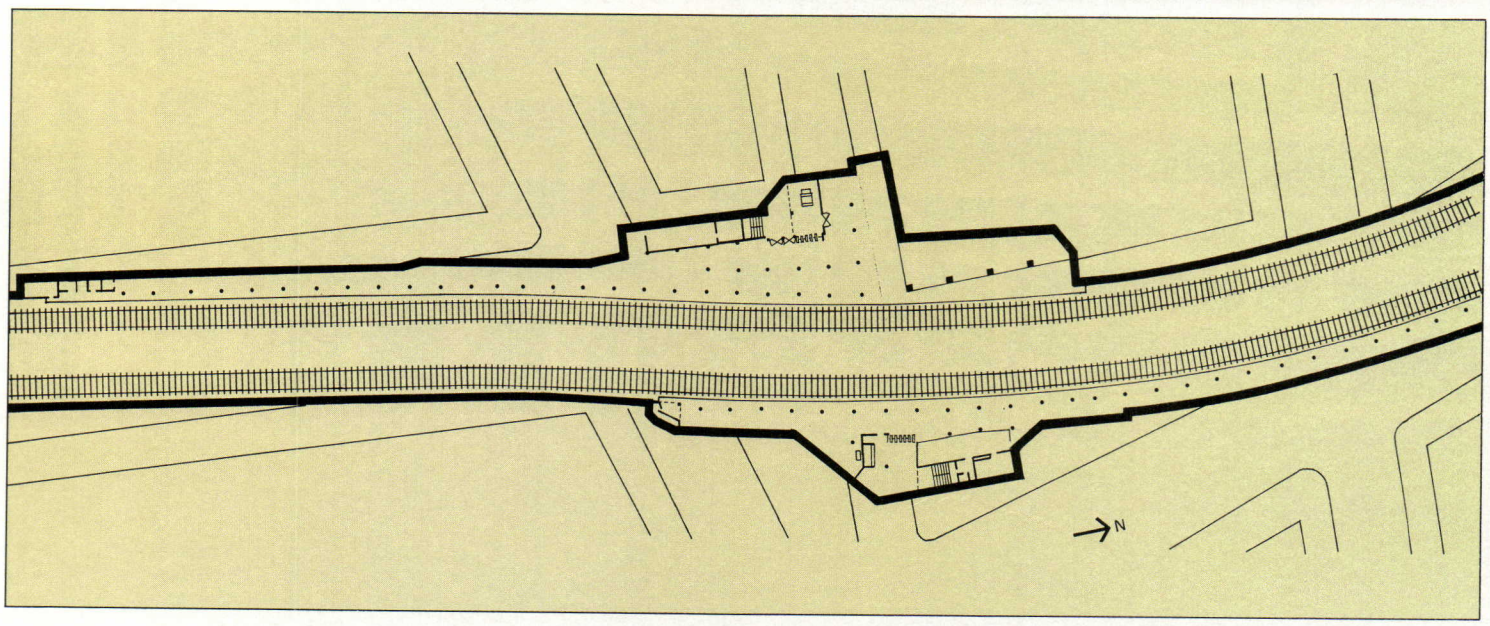
The architects were fortunate enough to find a heap of discarded pieces of the original bulbous roof, complete with its distinctive calf's tongue pattern. Here, though, the late 20th century again provided some advances in technique: instead of being bolted together in the field, the 30-piece roof was shop-welded and dropped into place as a whole. The 1980s also provided light-weight steel framing. Models for cast-iron finials, corbels, and cornices appeared in old books of Beaux Arts ornament, but the textured side panels proved a puzzle. Ohlhausen's photograph vaguely showed a pattern and the firm wasted some time trying to design one, until the fabricator pointed out a traditional, simple solution: broken walnut shells scattered on the floor of the mold.

Loving attention to the kiosk did not distract the architects from their first duty, which was to renew the station at platform level. This work included repairing the faïence bas reliefs—beavers commemorating the source of John Jacob Astor's fortune—and new sculptured murals by Milton Glaser (see following pages). *G. A.*

In its 1950s "improvements" of the Astor Place Station, New York City's transit authority extended the passenger platforms along the tracks with concrete fingers in each direction (directly below and plan opposite). The new walls were covered with long expanses of shiny white ceramic tile, featureless except for plaques identifying the stop, and the same material formed square jackets around the cast-iron columns. The ceiling, darkened with dirt, had also acquired a lot of uncongenial conduits. In addition to repairing the faïence beavers and the ceramic mosaic borders (top left), cleaning the ceiling, taming the conduits, and repairing the textured plaster soffits, the architects stripped the cast-iron columns and painted them with Victorian-like colors (bottom). The '50s walls were resurfaced with brick compatible

with the old iron-spot brick. Around the turnstile areas, the architects surfaced the walls with perforated metal panels, partly for acoustic diminishment of the subway's screeching din, partly to screen visible (and continuing) marks made by invading rainwater. (The architects' assignment did not include repairs to the infrastructure.) Geometric porcelain-enamel murals by the graphic artist Milton Glaser (top right) are displayed variously against old brick, both glazed white and iron-spot brown, or against new white porcelain enamel. (The artist's efforts to incorporate a new beaver in these murals were rejected by the authority as too reminiscent of the loathsome rat.) Concrete floors are newly paved with ceramic tile. Refurbishment and reconstruction cost $3.3 million.





Astor Place Station
New York City
Owner:
New York City Transit Authority
Architects:
Prentice & Chan, Ohlhausen—Rolf Ohlhausen, partner-in-charge; Perry Hall, project architect; Kit Bryant, Joan Serrapica, Mark O'Leary, design team.
Engineers:
Robert Silman (structural); Lehr Associates (mechanical/electrical); Howard Brandston (lighting design)
Consultants:
Scott Howell (cast iron fabrication); Milton Glaser Associates (graphic murals)
Contractors:
Warshaw Associates (general); Robinson Iron Corp. (cast iron fabricators)

Cooking with history

Washington Harbour
Washington, D.C.
Arthur Cotton Moore/Associates,
Architects

Washington is a city of great monuments but not of great architecture. It is a place where buildings defer to vistas and parks, where the riverfront is maintained as virgin territory, and where new construction is limited by height restrictions and scrutinized by advisory boards. So when ambitious foreground architecture is attempted in place of reticent background building, the result is bound to strike a nerve in almost everyone who views it. Such is the case with Washington Harbour, a grandiose complex of high-priced condos, offices, shops, and restaurants built smack on the edge of the Potomac in historic Georgetown. From the unveiling of its design by Arthur Cotton Moore seven years ago, the four-building ensemble, complete with lighthouse and yacht basin, was said to resemble "Disneyland" and "an echo of the 1964 World's Fair." Now finished, its bizarre juxtaposition of styles and proportions has inspired local architects to nickname the mixed-use development the "Martian Embassy." And a readers' poll conducted by the *Washingtonian* magazine last year concluded that Washington Harbour has achieved the dubious distinction as the city's best *and* worst building. The public controversy that has surrounded the design since its inception prompted architect Moore to publicly argue his defense in the columns of *The Washington Post* last September. "Washington is a half-city, all Apollonian and no Dionysian, of riches but too little richness," he wrote, explaining that his Harbour was intended to breathe some life into the capital's inanimate cityscape. "It is a foreground site that demanded a foreground design," he continued, comparing its unabashedly ad hoc eclecticism to "a great bouillabaisse."

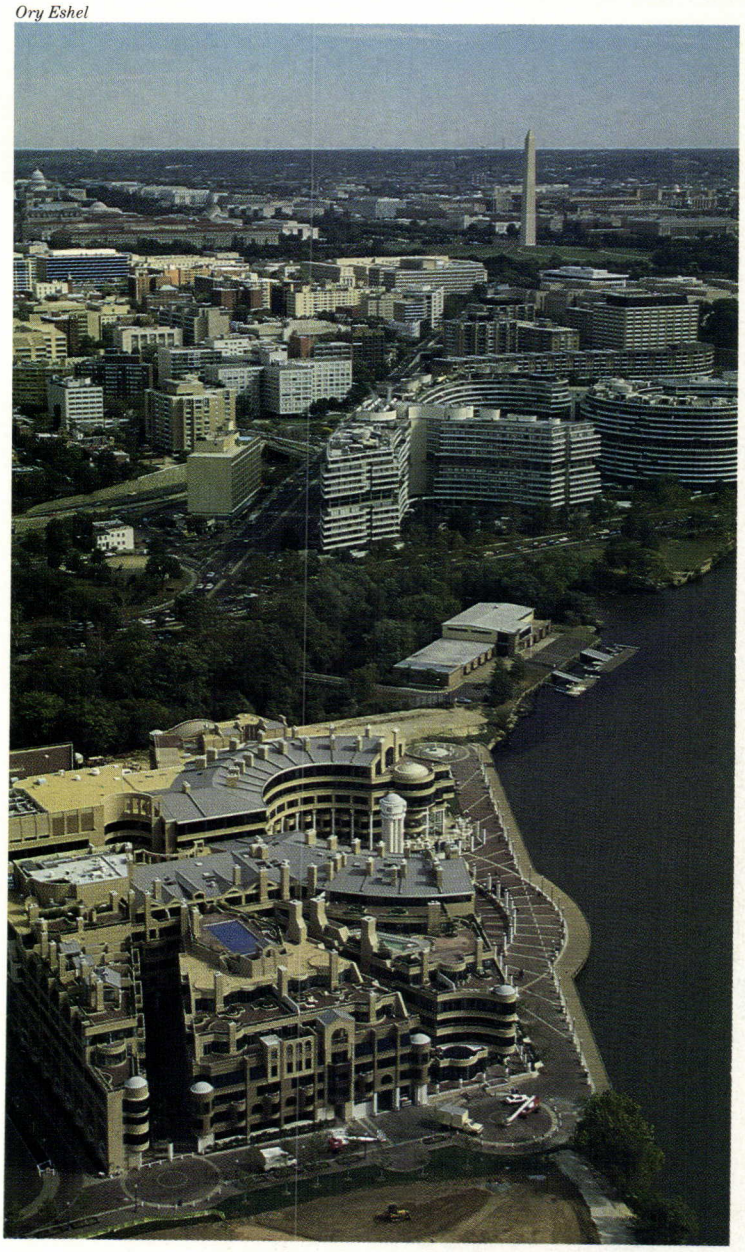
Just where Moore got his recipe is anyone's guess. On the surface, Washington Harbour's axial plan and elliptical plaza appear to be inspired by Spanish architect Ricardo Bofill's vast housing schemes outside Paris (RECORD, January 1986, pages 130-141), but lack their consistent neoclassical rigor. Instead, the smorgasbord of chimneys, oriel and strip windows, arches, columns, and domes that spices up the building's prominent profile creates the impression of a Watergate in Postmodern drag, another curving complex of riverfront condos to be inhabited by the city's elite (aerial photo and site plan, opposite page). The ostentation of the new exclusive enclave not surprisingly managed to turn off the reserved rich of Georgetown, who began voicing their opposition in hearings before the Fine Arts Commission when Washington Harbour was first reviewed in 1980. Established by Congress in 1910 and originally headed by the City Beautiful architect, Daniel Burnham, the six-member Fine Arts Commission continues to serve as the esthetic overseer of government buildings, parks, monuments, and, since 1950, all of Georgetown. Its hearing of Moore's proposed design began routinely with the gentle suggestion of a few minor changes in scale and height. The review, however, soon escalated into a political battle, as community activists began arguing for the incorporation of the prominent waterfront property as part of the city's continuous park system bordering the Potomac shoreline. Moore defended the right to transform the land into a private development by pointing out, "There are already enough parks for the whole of Washington to picnic in simultaneously." But the commission was loath to agree and, persuaded by the mounting public outcry against the project, uncharacteristically rejected Washington Harbour's revised design in 1981. After more hearings, a proposed Congressional bill to transfer ownership of the land to the National Park Service, and lawsuits over the ecological hazards of building on the Potomac floodplain, the 6.25-acre project finally gained approval from the mayor's historic preservation officer, and construction began in 1983.

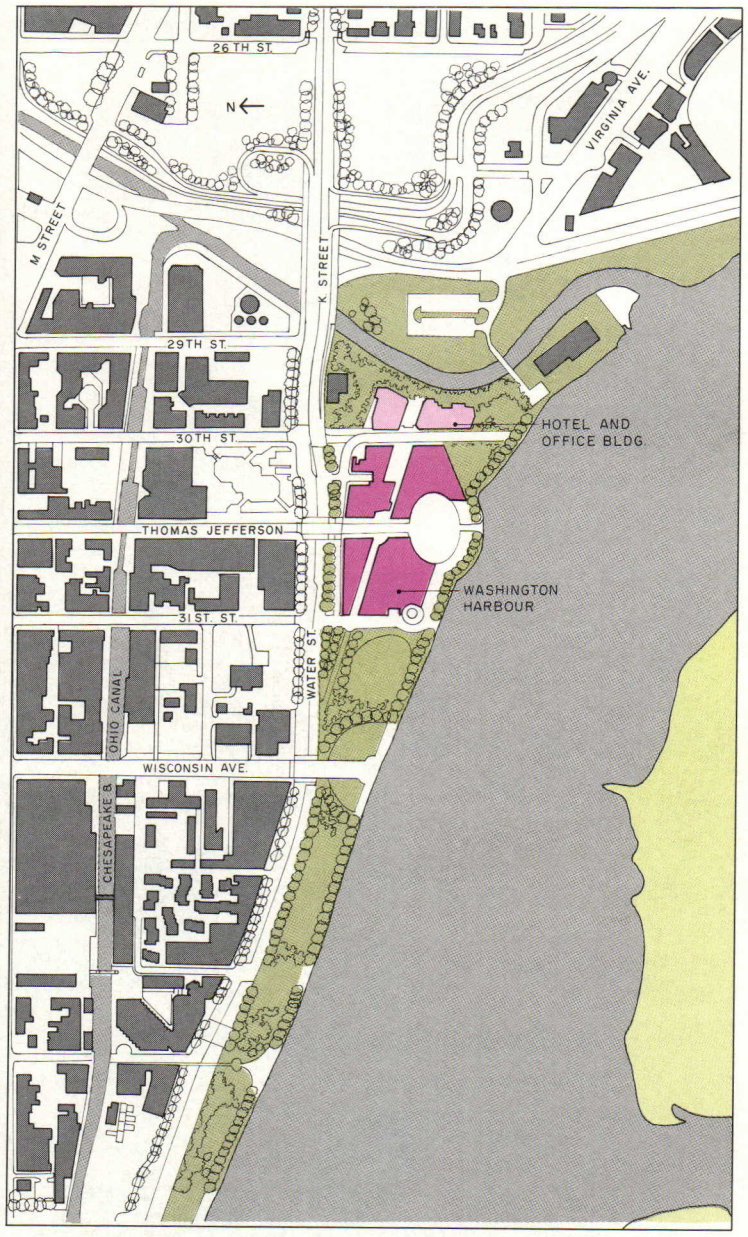
Unlike many of his local colleagues who have retreated into the realms of residential or institutional building, Moore has always concentrated his talents on speculative construction in a city that, until recently, has not favored commercial development. Over the past two decades, he has built his practice largely on renovations, urban infill, and adaptive re-use, especially in Georgetown, where projects such as Canal Square, CFC Square, and the Corcoran (RECORD, October 1986, pages 96-99) have earned him a reputation as a red brick contextualist. At Washington Harbour, however, any sign of sensitivity to the adjacent historic district is confined to the organization of the site. By extending the surrounding street grid to the Potomac's edge on what used to be an industrial no-man's land, Moore has created a strong public connection from upper Georgetown to the waterfront that echoes L'Enfant's original plan (opposite page). The residential and office halves of the complex are bisected by Thomas Jefferson Street, now transformed into a tree-lined allée that descends to a huge fountain and a wooden boardwalk jutting out over the Potomac. Diagonally slicing through the site is a more intimate pedestrian "mews," intended to continue the angle of Virginia Avenue through a park at the western boundary of the site to the foot of Wisconsin Avenue. From the east, the mews will link the second phase of the project, a $60 million hotel and office complex on 30th Street, to a linear park along Rock Creek (model photo bottom right, opposite page).

Walking out from under the Whitehurst Freeway and down Washington Harbour's grand axis to the edge of the river is like taking a trip down the yellow brick road with strange encounters along the way: potbellied bay windows, a forest of columns with bent metal capitals, the gingerbread of ersatz Victorian ironwork sprouting from every setback and balcony, and a curious concrete lighthouse that presides over the elliptical plaza like a sci-fi wizard. (Appropriately, one of the Harbour's principal commercial tenants is the glitzy Potomac restaurant, owned by Warner LeRoy, son of the Wizard of Oz movie producer, Mervin LeRoy.) As if to underscore the incongruity of every detail on each of the 23 facades, Moore and his associates are apt to refer to them by their pet names: "Son of Mews" for the Virginia Avenue pedestrian extension, a variation on the architect's nearby Georgetown Mews facade, the "Delta Queen" for the riverboat-inspired eastern facade, the "Palazzo del Exhaust-o" for the mechanical room that services the development's restaurants, "R2-D2" for the domed turret at the corner of the amphitheater, the "Enterprise" for the flying spaceshiplike form that crowns the opposite corner. In short, Washington Harbour represents the dark side of Postmodern eclecticism, a conspicuous consumption of the past without regard to stylistic or historical consistency. In comparing his design formula to a recipe for bouillabaisse, Moore argues, "Details such as salt, pepper, or lemon juice taken alone are too much. It is the completed taste from combined flavoring that is satisfying." But at Washington Harbour, there is no melding of ingredients to satisfy, and once consumed, the food for thought leaves a funny aftertaste.

Unlike Postmodernism's more sophisticated progenitors, Moore continues to employ the flattened vocabulary of the Modern spec box, although he tries to embellish the box's surfaces with sculptural and decorative ornamentation. The result is an uncomfortable confrontation between economy and history that veers into kitsch. No matter how finely an element is rendered (such as the exquisitely carved Richardsonian arch and corbeled chimneys on page 92), it ends up being subsumed by the horizontal brick bands and clumsy strip windows that dominate the development's every twist and turn. The architect is quick to defend this formal disparity as "playful" and appropriate to the Harbour's site, and commercial and recreational activities. "It's a place where you don't need another serious building," he maintains. But looking at its overwrought profile, you suspect that Washington Harbour's mannerist imagery is all too apparently aimed at competing with the neoclassical monuments along the Potomac. In trying to make "great" architecture, Moore ultimately has failed to redress Washington's urban imbalance of power.
Deborah K. Dietsch

Ory Eshel

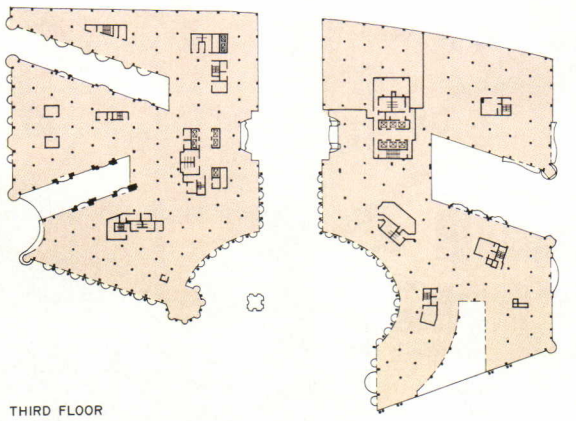




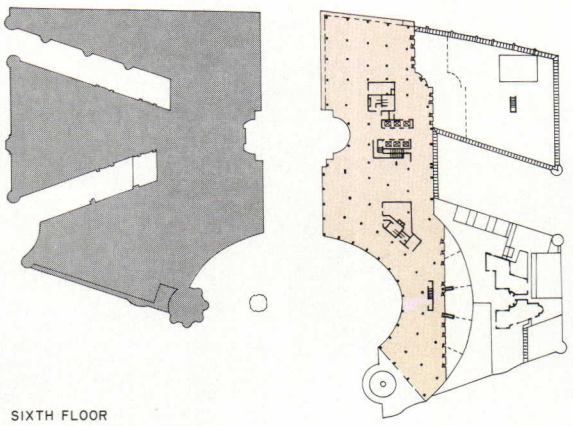
Located to the northwest of the Watergate complex (photo above) in Georgetown, Washington Harbour is one of the only private developments in the city to occupy the Potomac riverfront. Architect Arthur Cotton Moore has integrated his design into its surroundings by continuing 30th and 31st Streets to the river, and by elaborating the extension of Thomas Jefferson Street down the center as a grand promenade (plan). A narrow boardwalk along the waterfront connects these streets, creating a pedestrian link between the 12-acre public park to the west of the site, an existing boathouse to the east, and the jogging and bicycle paths along the Potomac that lead to the Kennedy Center. The second phase of the project will comprise a 95-room hotel and 100,000 square-foot office building linked by a conservatory/lobby on 30th Street (right photo).

Mark Lohman Photography

Washington Harbour's functional mix is organized into two irregularly shaped blocks. Both contain underground parking garages, and stores and restaurants on the lower floors, while the upper floors of the western half are divided into condos and the upper floors of the eastern half are divided into offices (plans). The centerpiece of the complex is a colonnaded elliptical plaza with a fountain that is bordered by a wooden dock at the edge of the Potomac (opposite page). Originally designed to incorporate a café in its base, the domed lighthouse/tower in the fountain now includes a platform for concerts, but serves primarily as a compositional device. "It stands as an important vertical counterpoint to the horizontality of the buildings and balances the asymmetry of the plaza," asserts Moore.



THIRD FLOOR



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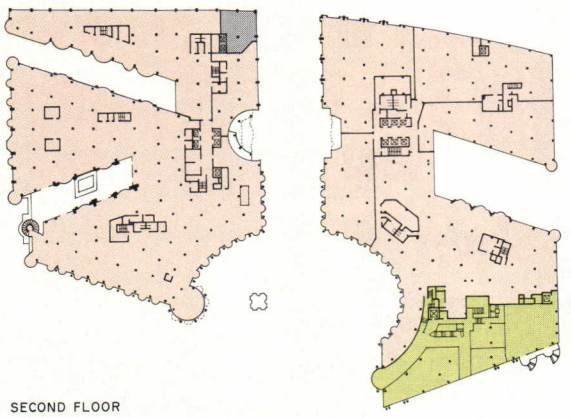

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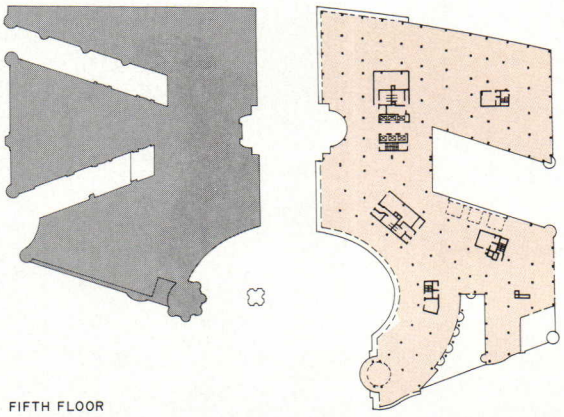
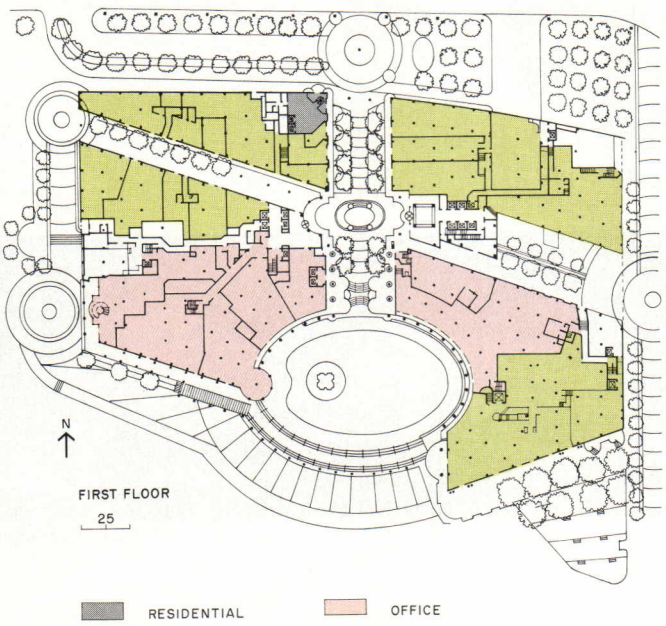
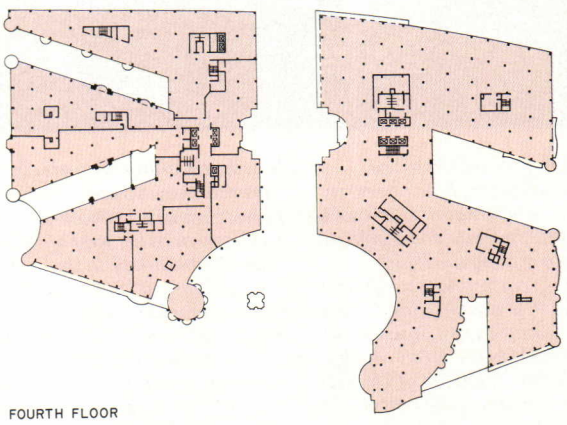


FIFTH FLOOR



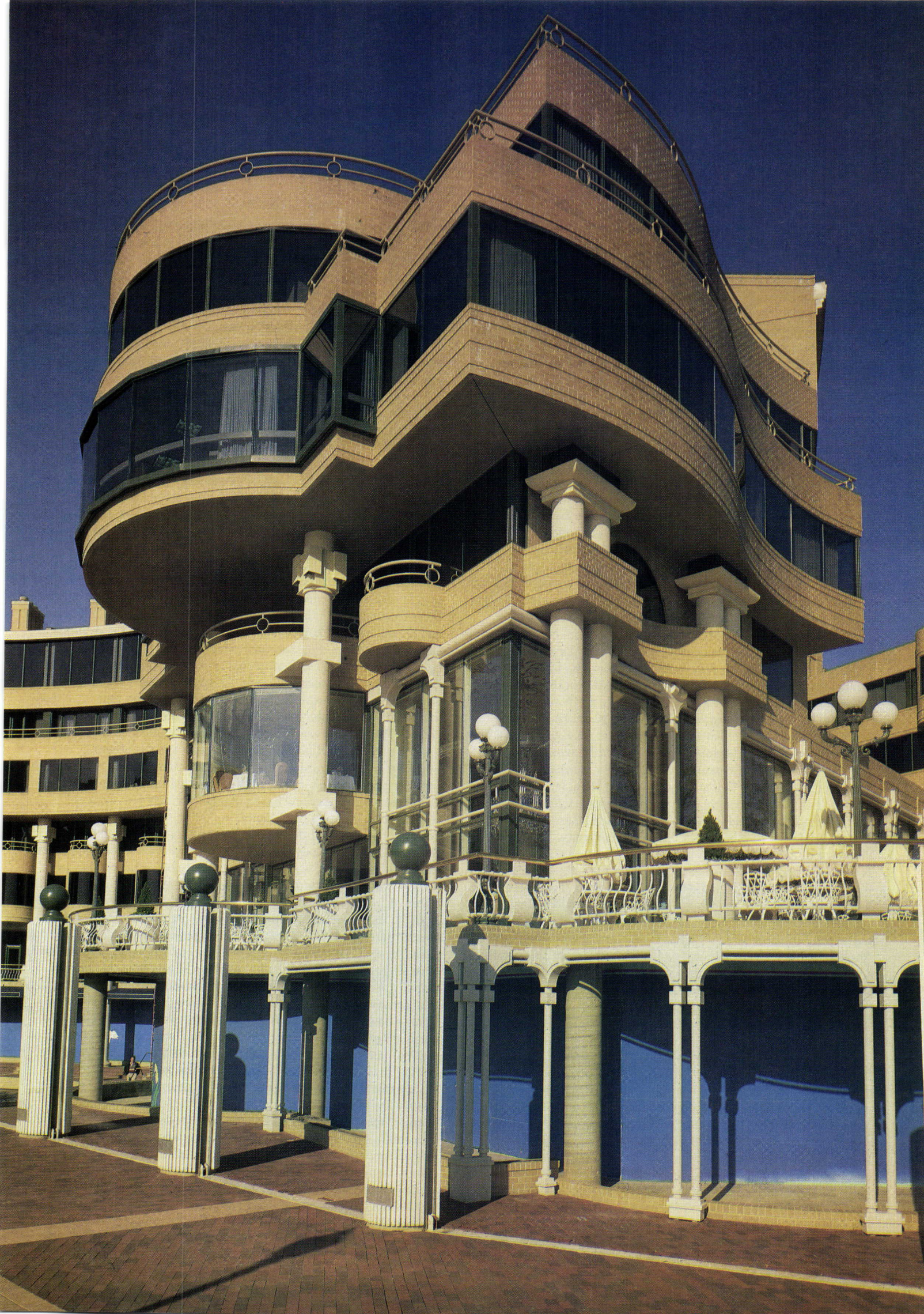


FOURTH FLOOR

Arthur Cotton Moore explains that he approached the design of Washington Harbour as a "mini-city, a collection of buildings rather than a monolithic structure." To impart the ad hoc, picturesque quality of a townscape built up over time, each facade along the five newly created streets of the development is composed according to a different theme. A portion of the east elevation along 30th Street, whimsically nicknamed the "Delta Queen" by the architect, is decorated with a bowed window, corner turrets, and a grille-covered arch at its rusticated base to look like a Mississippi steamboat, an image supportive of the Harbour's nautical theme (top left). In contrast, the facade around the corner framing the passageway between the office blocks is treated more conservatively with projecting bays and corbeled brick arches—elements that are sympathetic to the vocabulary of Georgetown's Victorian rowhouses (bottom left). The canopied main entrance to Washington Harbour's office building, located at the juncture of the central promenade and angled side streets (opposite page), summarizes the uneasy juxtaposition of Modern and Postmodern elements that Moore claims achieves "a sort of Hegelian synthesis out of antagonistic movements in architecture." The dialectic between stripped down surfaces and carved ornamentation, however, is restated throughout the complex in the same light-colored materials. Tan brick and limestone— a departure from the architect's signature red brick palette—were chosen so that Washington Harbour's prominent riverfront profile would harmonize with the city's neoclassical monuments sited further down the Potomac. "The materials help to create a transition between the red brick of Georgetown and the white Federal City," notes the architect. At the pedestrian level, the limestone collar bench planters, and the ribbed granite, bluestone trim, ceramic tile, and slotted French drains that decorate sidewalks and fountains, were designed by landscape architects EDAW to humanize the scale of the Harbour's streetscape (bottom left and opposite page).

The view toward the eastern corner of the Harbour's colonnaded plaza dramatizes the exaggerated elliptical forms and awkward proportions that diminish the project's skillful site planning and bold massing (opposite page). Dubbed "The Enterprise" by the architects, the brick-enclosed upper stories of the corner are precariously perched above the steel and glass pavilion of the lower floors like a spaceship ready to lift off on its next mission. "We do what are no-nos in Postmodernism such as strip windows," admits Moore who is quick to point out that Washington Harbour, despite its prominent location, "is still a K Street office building." In the plaza, globe-topped columns serve the practical purpose of supporting retractable floodgates around the perimeter of the building (opposite page). When isolated, elements such as the limestone Richardsonian arch (top left)—inspired by Moore's renovation of Washington's Old Post Office—and the corbeled brick chimneys (bottom left) reveal a sensitive eye for detail but, unfortunately, they remain submerged within the building's collision of disparate architectural forms.

Washington Harbour
Washington, D. C.
Owner:
Washington Harbour Associates, a joint venture of Western Development Corporation, CSX Resources, Inc., and KanAm Realty, Inc.
Architects:
Arthur Cotton Moore/Associates P.C.—Arthur Cotton Moore, principal; Barry R. Habib, project manager; James R. Berkon, project team leader; Kenneth F. Simmons, Ory Eshel, Elissa Levin Kellett, project team
Interior designers:
Intradesign—Lou Cataffo; Carol Schwartz Funk Interior Design, Inc.
Landscape architects:
EDAW (landscape)
Engineers:
Tadjer-Cohen Associates (structural); Glassman-LeReche & Associates (mechanical/electrical); Ben Dyer Associates (civil); Sverdrup and Parcel (flood)
General contractor:
George Hyman Construction Co.



A call for affirmative action: The 1986 winners of the Aga Khan Award for Architecture

Now that the Aga Khan Award for Architecture has been in existence for almost 10 years, its ambitions and goals have become widely known in both the Muslim and Western worlds of architecture. Its importance continues to increase, while its conception and methodology remain unique. Founded in 1977, the Award granted its first set of prizes in 1980. This first cycle of the Award revealed that the art and science of architecture were being assessed in important new ways. Amazingly, none of the prizes went exclusively to individual architect/creators for jury-approved works of architectural art. Instead the Awards were classified by the Master Jury within a remarkable set of categories: Social Premises for Future Architectural Development; Search for Consistency with Historical Context; Search for Preservation of Traditional Heritage; Restoration; Search for Contemporary Use of Traditional Language; Search for Innovation; and Search for Appropriate Building Systems.

This first Master Jury applied appropriately rigorous standards in its selection process within the categories thus defined, but was careful not to exclude somewhat flawed efforts which nevertheless represented a valuable search or direction. Fifteen projects from 12 countries were selected to share half a million dollars in prizes. And, for the first time ever in the history of architectural prizes, a grand assortment of people who help make architecture were honored, 55 in all, including architects, clients, government agents, preservationists, carpenters, and masons. In reporting the Award, the Italian architectural magazine *Domus*, getting the point, put one of the prize-winning master masons, the octogenarian Alladin Moustafa from Egypt, on its cover. In this first Award cycle, projects by Western architects were among the winners, but noticeably in the minority.

Three years later, in the second Award cycle, a new set of jurors elected to follow the pattern set by the first jury, making similar awards totaling half a million dollars within the same categories. The members of this year's Master Jury for the third Award cycle were selected, like their predecessors, by the Award Chairman, the Aga Khan, and his Steering Committee comprising Mohammed Arkoun, Professor of Islamic Thought, Sorbonne; Charles Correa, architect from Bombay; Hasan-Uddin Khan, architect and editor of *Mimar*; Oleg Grabar, Professor of Islamic Art, Harvard University; William Porter, Professor of Architecture and Planning, Massachusetts Institute of Technology; and Dr. Ismail Seregeldin, architect and planner for the World Bank. Representing a rich mix of attitudes and interests which, it was hoped, would be reflected in its Award choices, the Master Jury included its Chairman, Soedjatmoko, a development specialist from Indonesia; Professor Mahdi Elmandjra, economist from Morocco; Abdelwahed El-Wakil, architect from Egypt; Professor Hans Hollein, architect and designer from Austria; Zahir Ud-Deen Khwaja, architect and planner from Pakistan; Professor Ronald Lewcock, Australian architect and restoration specialist; Professor Fumihiko Maki, architect from Japan; Mehmet Doruk Pamir, architect from Turkey; and Robert Venturi, architect from the U.S.A.

This jury reduced the number of awards granted to six (pages 96-105), three being noncontroversial awards to the excellent projects opposite: the Dar Lamane Housing Community in Casablanca (1); the restoration of al-Aqsa Mosque in Jerusalem (2); and the conservation of Mostar Old Town in Yugoslavia (3). Two of the remaining three awards went to architecture without architects, the first a mud mosque in Niger for its use of traditional language (page 101); the second a mosque in Pakistan honored as an expression of popular taste (page 101). And an award went to a 20-year-old structure in Istanbul considered by the Jury to be: "One of the most refined examples of contextual architecture in the international modern movement" (page 100). It was clear to the Award watchers who attended the 1986 Award ceremony and symposium last November in Marrakesh, Morocco, that the current Master Jury had done more than dispense this cycle's half a million dollars to fewer recipients. More importantly, they had delivered a challenging new message. Two categories for which Western architects had heretofore made significant contributions: "Search for Innovation" and "Search for Appropriate Building Systems" were excluded, along with the Western buildings which might have been included in one or another of them, most notably the Sher-E-Bangla Nagar Capitol Complex in Dhaka, Bangladesh, by Louis Kahn. Indeed, no work by Western architects was premiated and all awards to architects went to those who were building in their own countries. The message: Muslim architecture is better if the Muslims do it themselves.

For the first time the Master Jury decisions were not unanimous, dissenting Jury members Mehmet Doruk Pamir and Hans Hollein arguing that this year's narrowed focus disserved the Award, making it appear folkloric, exclusively craft-oriented, anti-technological and anti-Western (see William J.R. Curtis's article in this issue, pages 104-105, and the dissenting juror's statements, opposite page). Reportedly, not all the members of the Award Steering Committee agree with the Master Jury choices, but having selected the Jury, they stand by the majority decision. The Steering Committee did, however, take pains to state that: "At no time has the Award tried to endorse a particular 'style,' nor has it taken a position on an ideological plane that would exclude any dimension of this multifaceted search .... The Award has sought to create a *space of freedom* where intellectual debate among those concerned with the built environment could proceed unhindered and uninhibited, dedicated to the purpose of enriching the dialogue, exchanging experiences, and furthering the pursuit of excellence and the search for appropriate solutions." Further making their points, the Aga Khan and his Steering Committee gave for the second time the Chairman's Award, established to honor achievements that fall outside the scope of the Master Jury's mandate. (The first recipient in 1980 was Hassan Fathy.) This year's recipient is the distinguished Iraqi architect, teacher and critic, Rifat Chadirji. In the words of the Steering Committee: "The Award salutes his lifetime commitment to the search for an authentic architectural regionalism that synthesizes key elements of modernity and the traditional heritage into works of excellence and universal relevance."

To me, the efforts of this year's Master Jury (considered by many at the Marrakesh ceremony and symposium to be black sheep) appear to be a form of affirmative action, an attempt to begin the redressing of some of the grievances of the Muslim developing world. This Jury has stated plainly that architectural culture is best renewed by those who share it. To this end they applied a critical screen to the work of the West through which Western projects considered inauthentic could not pass. The criteria: 1. To what extent is the building expressive or failing to be expressive of a new vitality in the architecture of the Islamic world? 2. Could the building generate significant responses to stimulate local creativity even if it is the work of a foreign architect, and thus point to new directions in design? 3. Will the solution adopted have a stimulating effect on identity formation? 4. Does the building reveal a sense of purpose, social responsibility, and conviction underlying its design? 5. Is the claim that it has a functional solution truly sustainable? 6. Is the attempt of the architecture to respond to the Islamic environment merely pompous and self-conscious? 7. Is the building out of scale with its environment, or does the handling of elements within the building produce a character that is arrogant and insensitive to the context in which it is placed? 8. Is the building likely to induce alienation because of the difference between the image of the architecture and the expectations about the environment of the inhabitants of the area?

The critical screen for local or regional nominations was, by contrast, and as the Awards indicate, quite indulgent. By means of this deliberate inconsistency the Master Jury focused its argument, shaking things up and bringing into the open issues that need to be debated. For

It requires both intellectual faith and courage to push forward diversity of thought, rather than try to fit every idea into a given concept. Only then can we explore honestly and meaningfully the complex range of issues involving the relationship of architecture to technology, to society and to faith, and gain insight into the immense variety of solutions towards achieving a rewarding environment. Aga Khan

those who don't like the results, comfort can be found in the fact that the 1986 Award cycle is merely an episode. There will be a new Master Jury and a new set of Awards in 1989. *Mildred F. Schmertz*

Mehmet Doruk Pamir's dissent:
The majority position of the Jury is a premeditated and clearly articulated defense of a severely limited set of options within the entire spectrum of possibilities which the Award might recognize. There is a romantic bias toward traditionalism, historicism, and the vernacular. This reflects at least one dominant strain within the architectural discourse in Europe and America during the last decade. But the obvious question arises as to whether or not this one-dimensional message is a sufficient response to the complexities facing architects in the developing world. Most notably lacking is recognition of those projects which engage in the search for answers to the kind of technological issues which still face architects in regions where modern technical development cannot be taken for granted. Also curious was the tendency to suppress the creative hand of the architect through the predominance of Awards to projects which involved a minimum of "design" concerns, at least in the strictest sense of self-conscious creative endeavor. Indeed, the projects seem to suppress these issues, relying on craft, folk-art, and historic replication or preservation for esthetic interest.

For the large-scale projects, which are also well represented, the "lumpen" esthetics of the marketplace of "kitsch" predominate. This is not to discount the sociological interest inherent in these projects, but again, for the architect as a professional there is a conspicuous absence of an esthetic realm which one would hope is as important in the developing world as it is everywhere else.

The bias of the Jury did not accrue from a lack of endeavor. Projects were rejected which even by global standards represent major advances in high-rise design, for example, or in industrial prefabrication, and all involving creative transformation of regional building imperatives, while aspiring toward technological development. Beyond the polemical nature of the Jury's criteria lay a kind of professional discourse which is irrelevant to the high purpose of the Award. That the Sher-E-Bangla Nagar Capitol Complex in Dhaka should be excluded based on insufficient user evaluation does not succeed in shadowing the less overt criteria, having to do, among other things, with the "prestige" of fashion. That the project is a masterpiece in the eyes of world architects can hardly be changed by the Jury's decision. But its exclusion does raise questions about the Jury's criteria which unfortunately are destined to remain obtuse. The minority representation can take some reassurance from the hope that the next Award cycle will address some of the problems of balance and avoid fluctuations from one polemic to another, aspiring to an even range of criteria within all cycles.

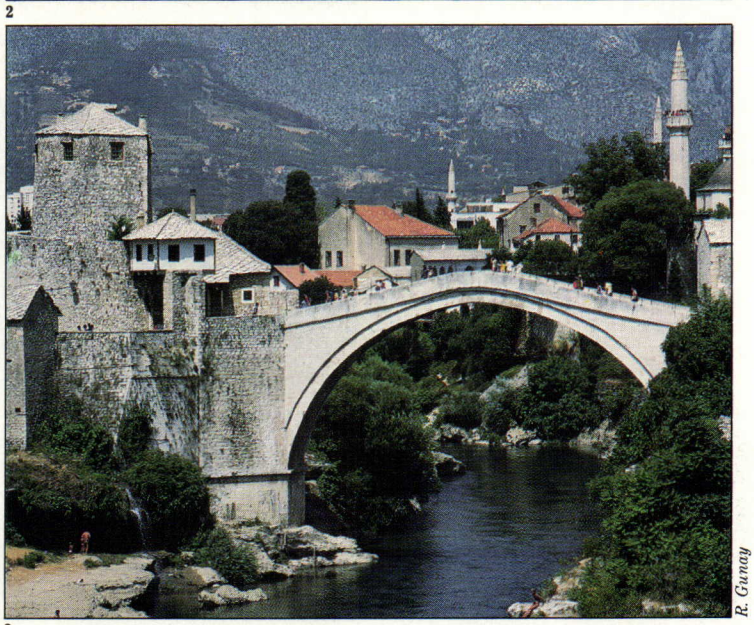
Professor Hans Hollein's dissent:
The result of the judging does not reflect the opinion of a specific minority of Jury members. It is clearly accepted that, in a democratic process, the majority wins. However, pluralistic tendencies are manifested in the fact that not one but several Awards are attributed. An outsider would assume that the distribution to many diverse projects would reflect these pluralistic tendencies. The appointment of jurors of different persuasions seems to take care of having advocates for various opinions and secure such honoring of projects of different attitudes. This was not the case. Projects of unquestionable superior architectural merit and quality—such as the Sher-E-Bangla Nagar Capitol Complex in Dhaka— have been voted out because of a constant bias of the majority of the Jury. In the light of history this judgment will be reversed. To the aims of the Aga Khan Award for Architecture, a judgment against architecture is a disservice.


C. Lignon

1


J. Bétant

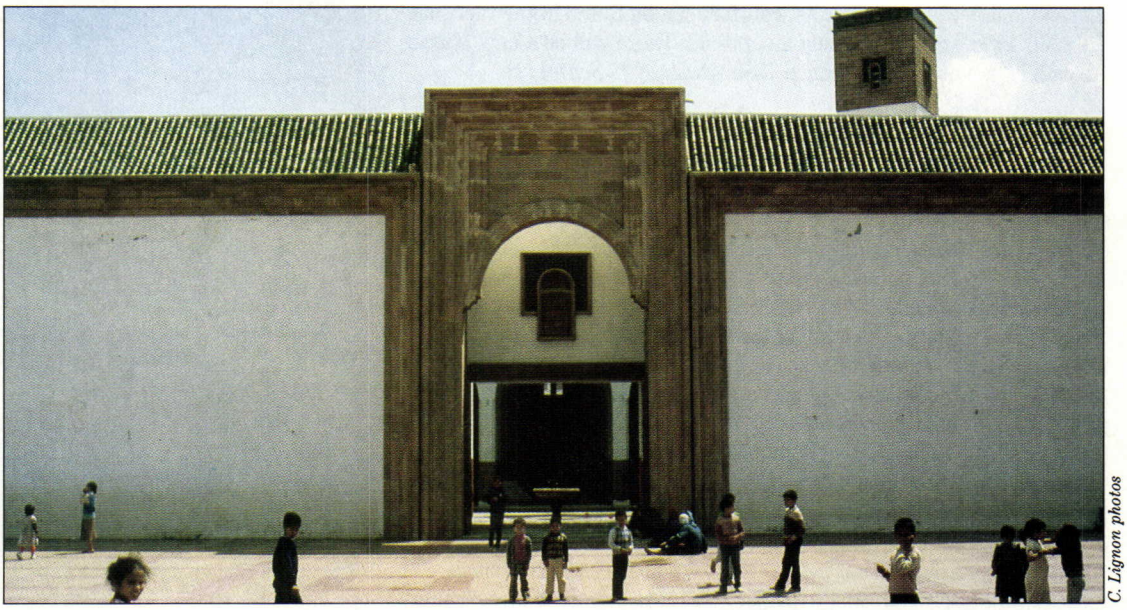
2


R. Gunay

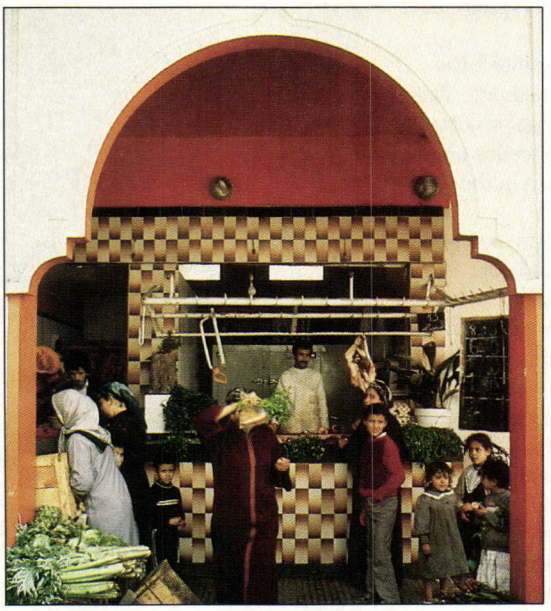
3

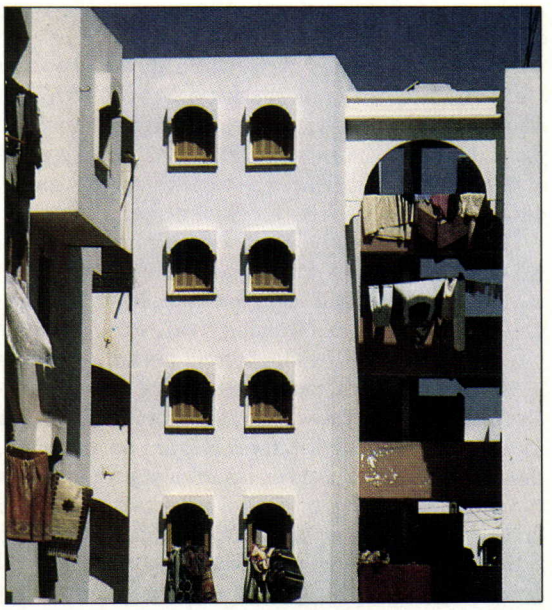
Dar Lamane Housing Community
Casablanca, Morocco

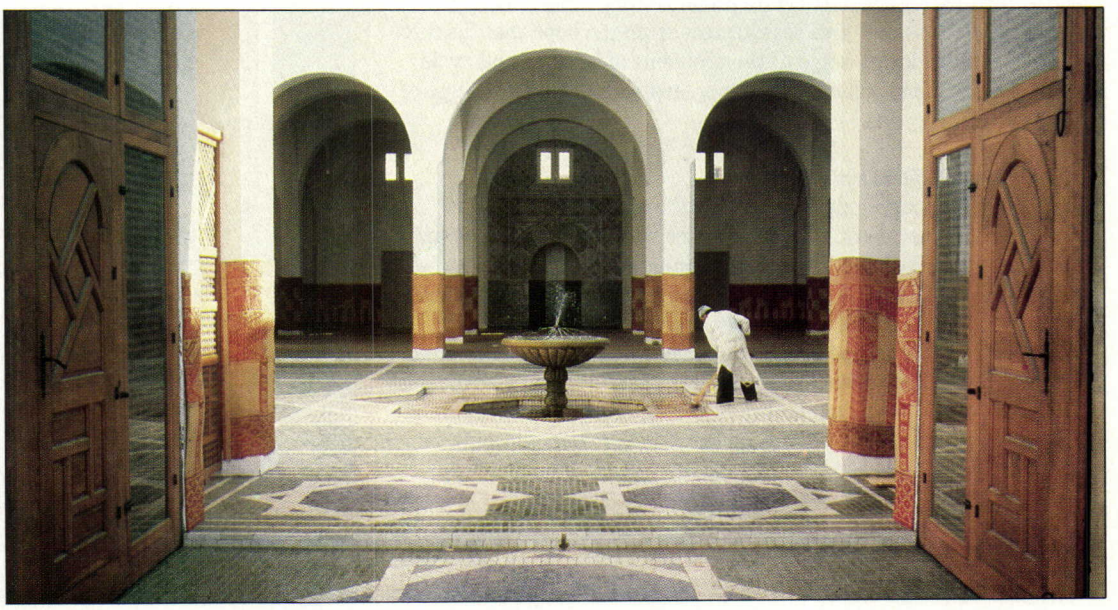
Completed: June 1963.
Client: Compagnie Générale Immobilière, Rabat; (M'Fadel Lahlou, President; Abderrahman Amarani, Director General; Mohamed Bastos, Secretary General).
Architects: Abderrahim Charai and Abdelaziz Lazrak, Casablanca
Consultant: Promoconsult (O. Bennani).



C. Lignon photos







Master Jury citation:
At the time of its construction, "Dar Lamane" was the largest single public housing project ever attempted in Morocco.

. . .

The project deserves praise not only because of its record low cost, (approximately $9 per square foot), its extremely short time of construction (30 months), and the size of the project (over 4,000 housing units), but because of the authenticity of its driving ideas and the persistence of the designer, the manager, and the client to work within a well defined cultural framework.

In many ways the physical organization of Dar Lamane represents an innovative approach to planning. Gateways mark the entrances to the shopping streets, and link the clusters of housing; their introduction is a brilliant device to provide a sense of territoriality, which is fundamental to the success of a housing project. Even more important is that the gateway embodies many layers of meanings and functions that are deeply rooted in the Moroccan culture. The tremendously rich mix of public, semipublic, and private activities around the gateway, and through it, makes a threshold to the cluster, a mark of separate territory, a sign for housing and domesticity, and a symbol for the quarter.

. . .

The scheme presents a great variety of options in the arrangement of the housing units to the point where no two unit plans are identical. This has been made possible through an intelligent combination of design methodology, construction materials, and techniques. The use of computer technology has helped to reduce the cost. . . as well as. . . the time of building.

. . .

[The one-sixth share of the $500,000 purse ($83,333) was divided as follows: The greater part of the prize money will be used for community projects, to benefit the residents. Remuneration also was made to the two architects, the three representatives of the client, and the consultant.]

The restoration of al-Aqsa Mosque al-Haram al-Sharif, Jerusalem

Completed: September, 1983
Client: The al-Aqsa Mosque and the Dome of the Rock Restoration Committee, Amman, Jordan.
Restoration: Isam Awwad, resident architect, Jerusalem, and The International Centre for the Conservation and Restoration of Monuments (ICCROM), Cevat Erder, director; Bernard Feilden, former director; Paul Schwartzbaum, chief conservator, restorer.

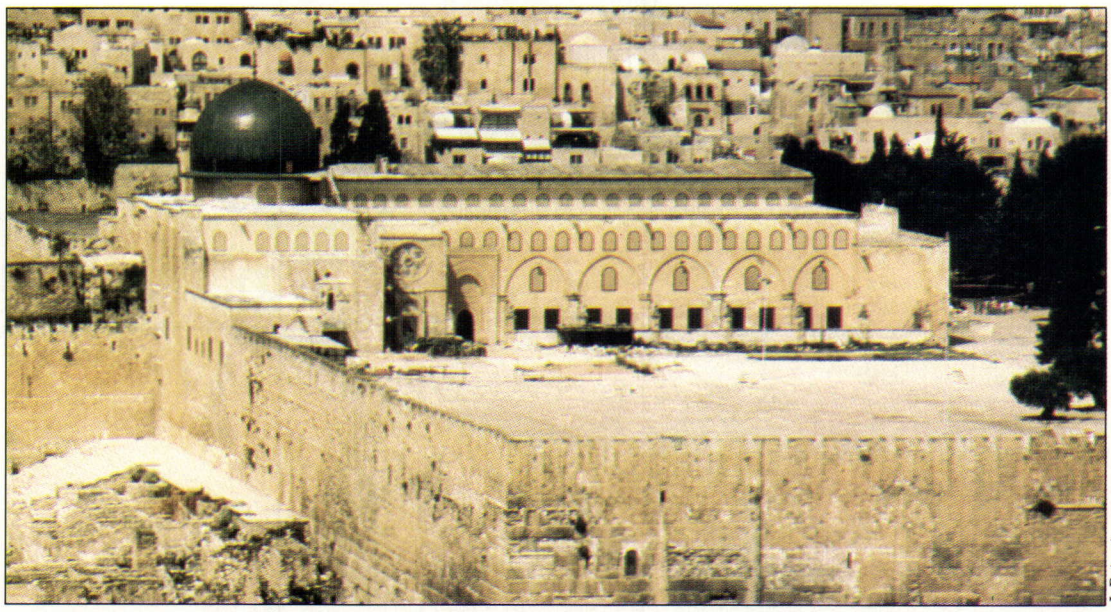
Master Jury citation:
The award is made for the high quality of the conservation work on this mosque and in the al-Haram al-Sharif generally. Until recently the state of this, one of the three most important monuments of Islam, was a sorry one. Extensive alterations took place in the 1950s and 1960s in the name of "restoration," which only resulted in the creation of adverse conditions.

Following explosions and fire in the mosque in 1969, which severely damaged the 14th-century paintings and the timber construction of the inner dome, together with the aluminum external cladding, the al-Aqsa Mosque and Dome of the Rock Restoration Committee undertook, with the continuous assistance and involvement of ICCROM in Rome, a program of extensive conservation . . . beginning with the damaged dome and its paintings.

From the purely technical point of view—taking into consideration the methodology, analytical precision, structural and constructional features, and criteria related to the principles of scientific restoration—most of the works which were done and which are being done are of very high quality (including the exterior works, mosaics, masonry work, windows, etc.). The ribbed outer covering of the dome was replaced in lead to match the original. The restoration of the inner decoration of the dome is exceptional and esthetically satisfying.

In the course of conservation it was possible to bring to light the original painted decorations of the dome which were hidden under newer layers and which at the beginning seemed to be irreparably lost. . . The missing paintings were executed using the "tratteggio" technique, a complete and exact reconstruction using fine vertical lines to distinguish reconstructed areas from original ones. . . .

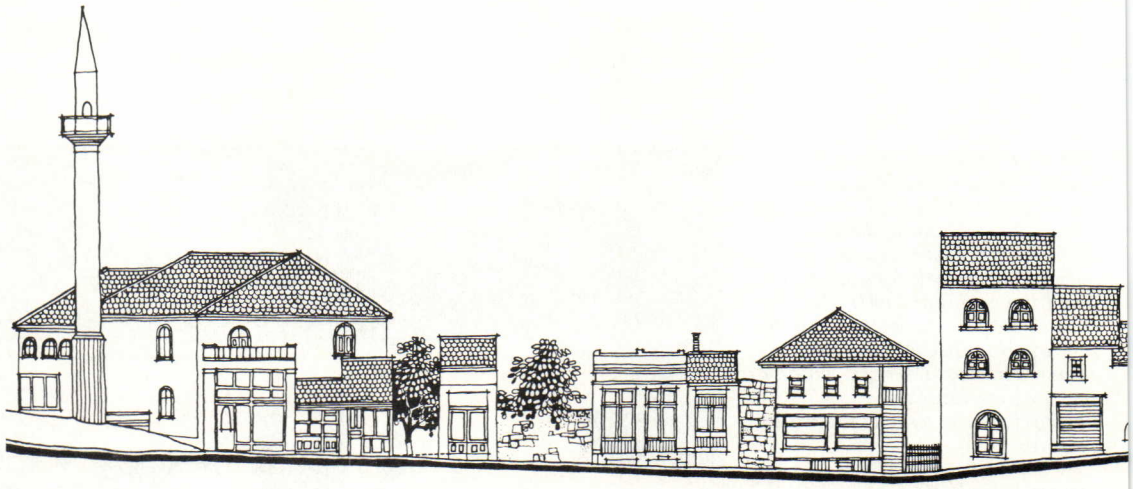
[This project's share of the prize money is intended for the continuation of repairs to and maintenance of the mosque. Remuneration also was made to ICCROM to encourage its restoration training program.]



J. Betant

J. Betant

Conservation of Mostar Old Town
Mostar, Yugoslavia



Completed: 1978, and ongoing.
Client: The Community of Mostar.
Conservator: Stari-Grad Mostar (Dzihad Pasic, director: Amir Pasic, assistant director).

Master Jury citation:
The award is made for the remarkably conceived and realized conservation of the entire 16th-century center of this historic town. Mostar is approximately 90 miles northwest of Dubrovnik on the Dalmatian coast, in the Republic of Herzegovina.

It originated as a small settlement some 500 years ago with a suspension bridge ("Mostari" means bridge keeper) and a few houses. Its main period of expansion dates from after the arrival of the Ottomans and their building of a permanent bridge across the Neretva River between the years 1557-1566. From this time, a thriving business center and town developed around this focal crossing point. It continued to flourish throughout the 17th-century, by which time the town comprised over a thousand houses.

The community of Mostar founded Stari-Grad in 1977 as a work organization set up to deal specifically with the restoration and preservation of the old town; the initiative was entirely taken by one man, Dzihad Pasic, formerly a government inspector of monuments, who prepared all the documentation and who is still its director.

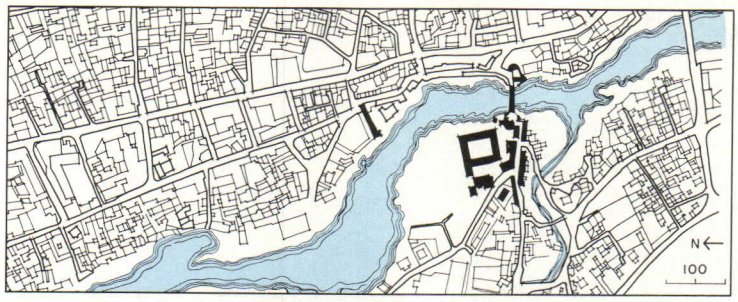
Stari-Grad is a semi-autonomous organization approved and subsidized by the Ministry for the Protection of Monuments and Nature of the Republic of Herzegovina . . . [Its objectives have been so well met that] even in the off season with no tourists, the level of activity is striking. The long waiting list for . . . shops and offices indicates that the old town center is again commercially viable and alive.

The varied aspects of this restoration project, with many different types of buildings, from the central bridge, shops, and private houses to public mosques, have been handled in an exemplary manner. All the restorations fit well into the general atmosphere of the old town and its homogenous appearance is not disturbed; nothing is overdone or touristic.

. . .

[The major portion of this project's prize money is intended to finance the ongoing conservation activities of Stari-Grad Mostar; remuneration also was made to the director and the assistant director of the organization.]

R. Gunay photos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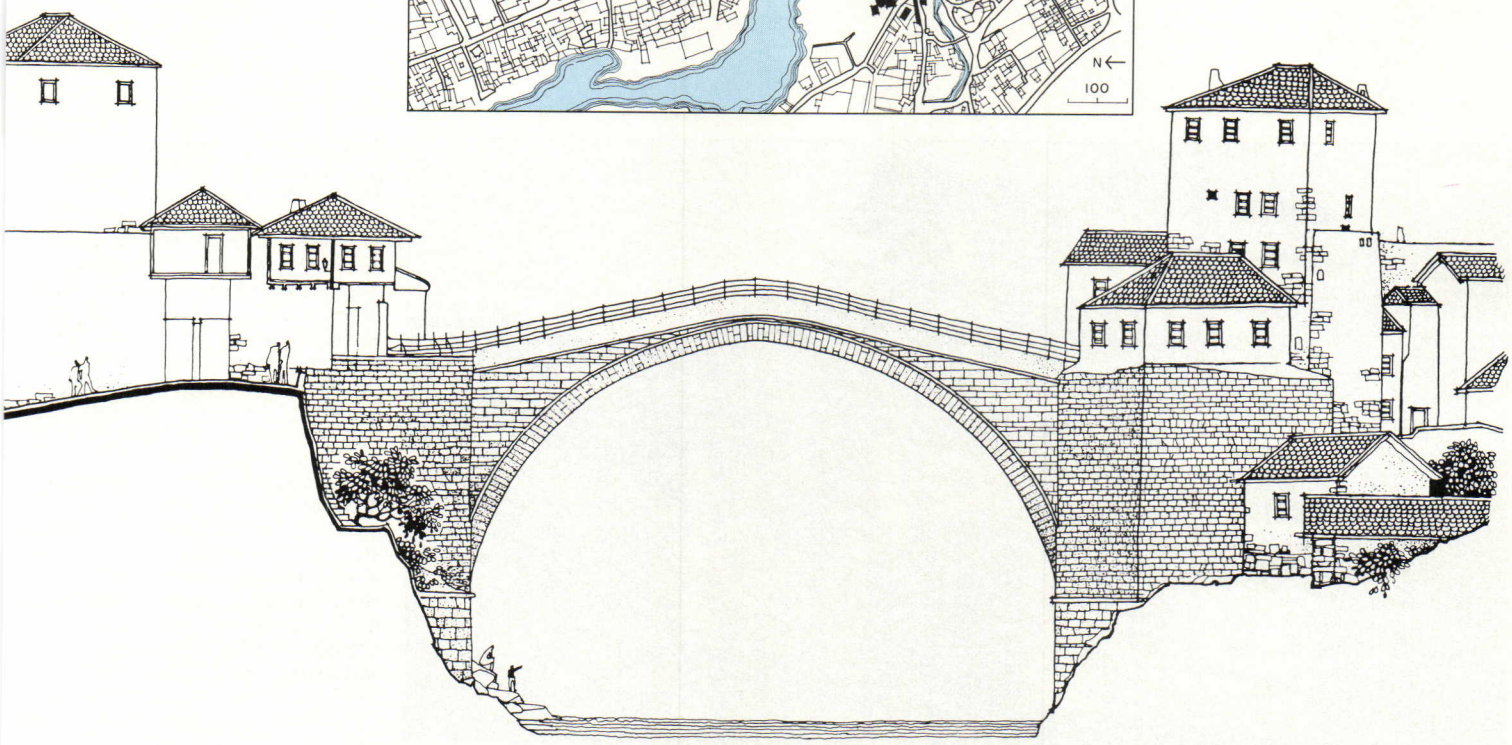
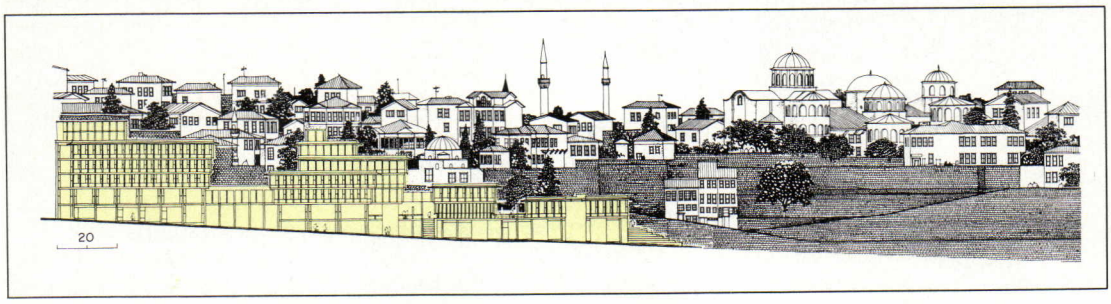


Social Security Complex
Istanbul, Turkey

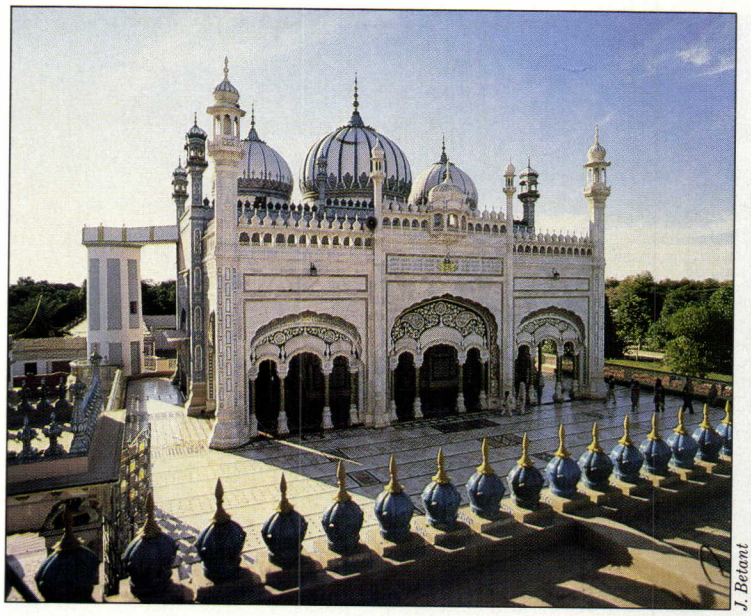


Social Security Complex
[In the words of the Master Jury:] This building must be one of the earliest and most refined examples of contextual architecture in the international Modern movement—its modulated forms, its scale and rhythms and proportions—deriving as much from its exterior setting as from its interior determinants. At the time of its design 20 years ago, the way to do an office building was to create a pure slab that dominated its setting. [In contrast this] building acts as a link between the dense and complex quarter containing traditional, small wooden structures on the hill above and the open-spatial configuration of contemporary buildings along a modern boulevard below . . . . Completed in 1970, the architect was Sedad Hakki Eldem, who received the greater proportion of the prize money. Remuneration was also made to E. Erkunt and O. Günsoy (structural engineers), J. Kansun (electrical engineer) and A. T. Tokgoz (mechanical engineer).]

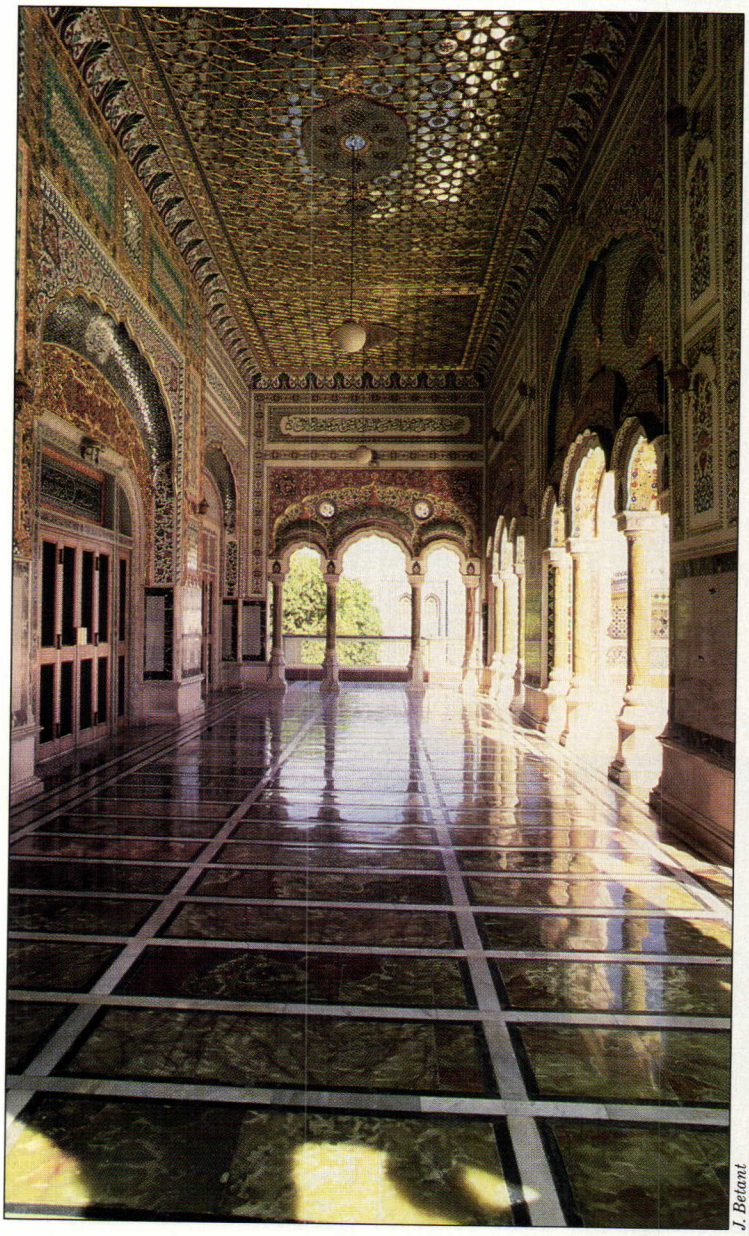
Bhong Mosque
[Completed in 1982, this mosque is the result of 50 years' work by its patron/designer Rais Ghazi Mohammad. According to the Master Jury citation: the mosque is] a significant attempt by a single individual to create a local center of learning and building crafts . . . [Bhong] enshrines and epitomizes the "popular" taste in Pakistan with all its vigor, pride, tension and sentiment. Its use—and misuse—of signs and symbols express appropriate growing pains in transition, and yet may prove significant for the future . . . [The major portion of the prize money is intended to encourage the regional crafts evident in the mosque; remuneration also was made to the son of the deceased patron for the continuing development of the mosque complex.]

Yaama Mosque
[Completed in 1982 for the religious community of Yaama by the master mason Falké Barmou, the mosque was a collective undertaking involving the community. Cited the Master Jury:] The Yaama Mosque is a vibrant expression of the total act of building . . . . There is a manifest will to use traditional techniques in a creative manner, to experiment with them and to achieve results that induce a new awareness of their possibilities. [Two-thirds of the prize money was bestowed upon the religious community of Yaama, for projects of community interest, such as the establishment of a madrasa or the maintenance of the mosque; one-third of the money went to the master mason.]

Bhong Mosque
Pakistan

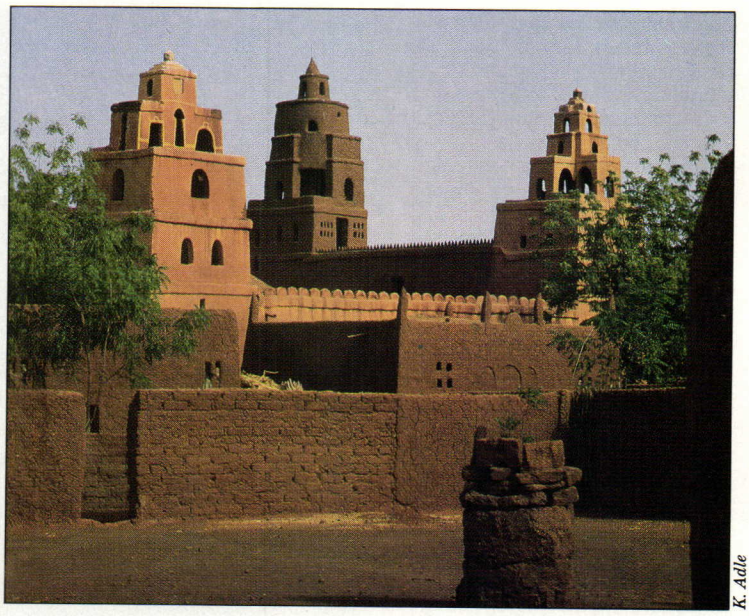


J. Betant

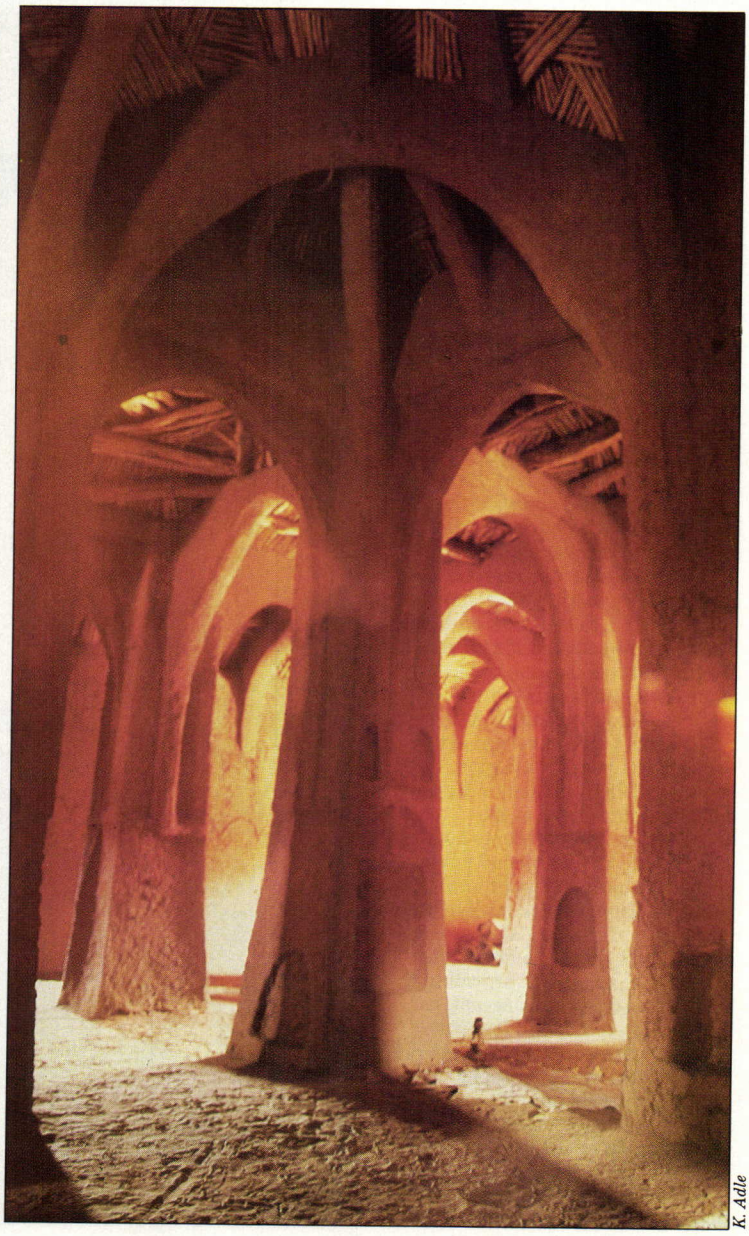


J. Betant

Yaama Mosque
Niger



K. Adle



K. Adle

Honorable mentions

The honorable mentions did not receive Master Jury citations. The Historic Sites Development in Istanbul, Turkey (1,2,3), begun in 1974 and ongoing, is the work of the Touring and Automobile Association of Turkey acting as both clients and planners. Among the buildings undergoing restoration are many of the 19th- and 20th-century kiosks and pavilions situated in the royal parks along the Bosphorus and the remaining old residential districts. In 1979, the Association, under the direction of Celik Gülersoy, signed an agreement with the city for lease of specific buildings and parks to restore, furnish, and put them to profitable use.

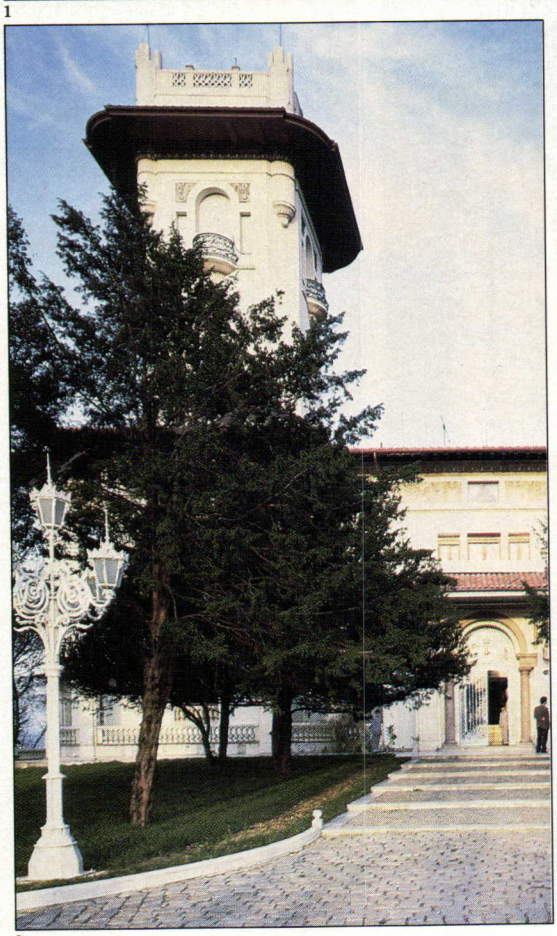
Shushtar New Town in Shushtar, Iran, (4) an ongoing development, completed phase I in 1977. In 1978 the work was broken off because of the political unrest, and the architectural firm, D.A.Z., headed by Kamran Diba, completely restructured. Although the project's current state of completion is unknown, it received favorable attention from the Jury for its skillful adaptation of traditional planning and construction methods.

Following Indonesia's establishment of its Kampung Improvement Program in 1969, the city of Surabaya proceeded to upgrade its low-income neighborhoods. Of these, the Master Jury found the Kampung Kebalen project (5) to be a model for cooperation among international, municipal, community, and university organizations. In a six-month period, and working with an extremely limited budget, the groups managed to provide the settlement area with essential services and infrastructure.

The Säid Naum Mosque in Jakarta, Indonesia (6, 7), completed in March 1977, is the work of Atelier Enam, Architects and Planners. The Jury found this mosque to be innovative, yet faithful to the region's indigenous architecture.

The Ismailiyya Development Projects in Ismailiyya, Egypt, (8, 9) begun in 1978, represent a critically important departure in the development of low-income housing in Egypt. It has channeled public housing subsidies toward local initiative. The projects involve the upgrading of existing settlements in addition to the construction of extensions. Instead of providing a totally designed environment, a gridiron of streets and lots with services was established. After the initial phase, which required government donation of land, the process is intended to be self-sustaining from land sales revenue. The planners were Culpin Planning, London (David Allen, project partner).

1



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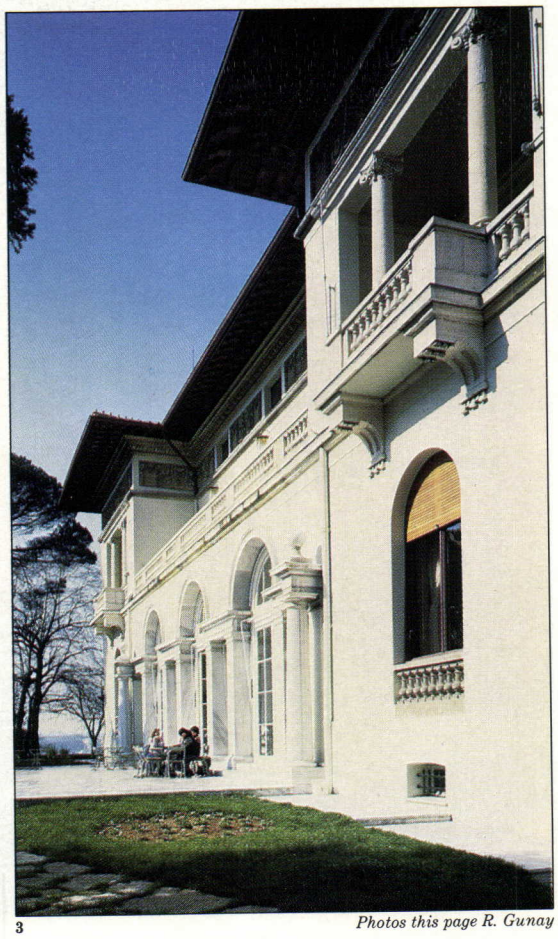

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Photos this page R. Gunay

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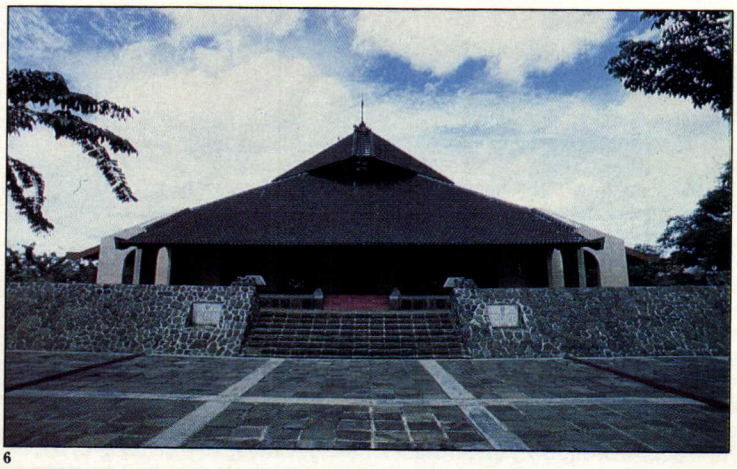

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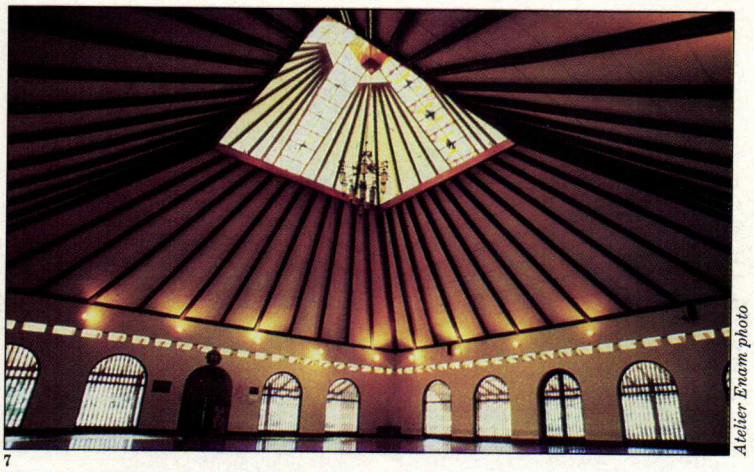

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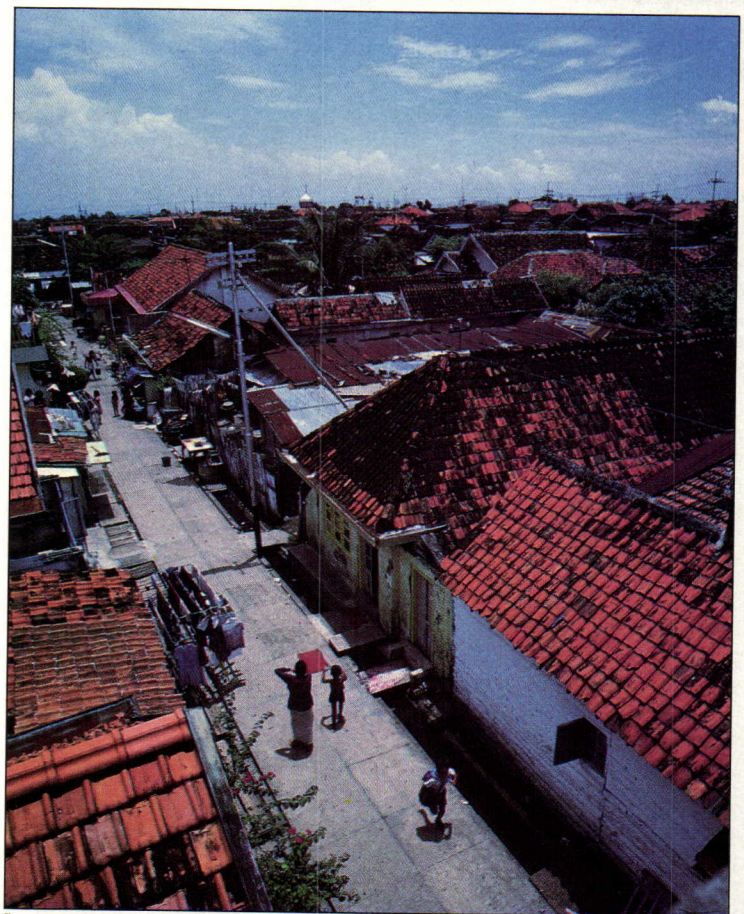
Atelier Enam photo



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K. Adle

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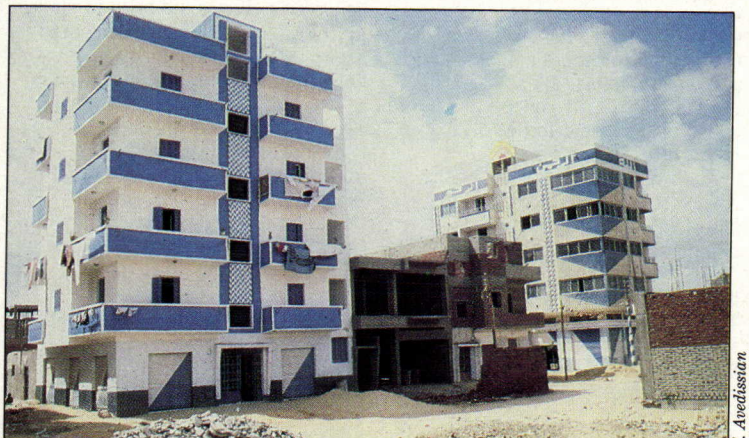
C. Avedissian



9

C. Avedissian

The Aga Khan Award for Architecture 1986: "Third-world myths and first-world fashions": a critical view

Architectural historian William J. R. Curtis ("Modern Architecture Since 1900" and "Le Corbusier: Ideas and Forms"), disturbed by the 1986 Master Jury's choice of winners, wrote the following critique in Marrakesh, while the debate raged. Among his questions: Why didn't such buildings as Louis Kahn's Capitol Complex in Dhaka, Bangladesh (1), or Henning Larsen's Ministry of Foreign Affairs in Riyadh (2,3), or Gordon Bunshaft of SOM's National Commercial Bank in Jeddah (4) get awards, while the folkloric (5, 6) or the no longer controversial (7) did?

By William J. R. Curtis

The Aga Khan Award for Architecture is more than just a prize that is given every three years for distinguished architecture in Islamic countries. It is also an evolving enquiry which has as its aim an authentic built environment for the Muslim world. The homogenization or deracination which stems from facile imitation of occidental models is rejected. So too is the false remedy of a shallow imitation of the local past. There is no rigid dogma or formula for style, and the quest includes a wide range of viewpoints which are reflected in publications, conferences, and exhibitions as well as the triennial Award itself. Political manipulation is also avoided and the seminars are intended to supply a "space of freedom" outside rigid orthodoxies. Some of the questions addressed—especially those to do with cultural identity, regionalism, and the transformation of tradition—are relevant to other parts of the developing world. To the extent that the Award is able to touch on issues of universal architectural value, it may also make a contribution to a more equable view of world problems. After all, critical discourse still centers on Western Europe, Japan, and the U. S.

There are many risks. Traditionalism may degenerate into a facile play with images of the past which lack lasting substance. Post-colonial nervousness over continuing Western influence may close the door on valid architectural signposts towards an authentic regionalism. Horror at mass industrialization and urbanization may prompt a retreat into a pretty peasantism that soothes the souls of alienated intellectuals but provides few solutions to the unprecedented problems of modernization. The world is rampant with political dogmas ready to dictate the terms of "Islamic identity," reducing architecture to the level of state propaganda. Well-meaning populists are sometimes willing to cast away all esthetic standards so long as buildings "communicate" to the largest number. Doctrinaire stances against "Modernism" unwittingly promote a *kitsch* which pretends to express local culture, but which actually reflects the cheap historicizing antics of Post-modernism in the West.

The previous two cycles of the Award (1980, 1983) managed to sidestep these pitfalls and also to demonstrate that it is possible to be diverse without throwing a sense of architectural quality to the winds. The "Islamic world" is vast, spanning the distance from Morocco to Manila and embracing traditional rural societies (like those in sub-Saharan Africa and Northern Yemen) as well as societies that rely on high technology and major economic interchange with the West (e.g. Saudi Arabia). To confront too limited a range of building types or to propose too narrow a range of options would make no sense in these circumstances. The past cycles of the Award have attempted to embrace the enormous range of issues, climates, peoples. Recognition has been given to peasant builders in mud and timber, and to the work of modern international firms working in steel, concrete, or fabric in tension (e.g. the Hajj Terminal by SOM).

How do the 1986 Awards look against this background and those general aims? It is striking that only six schemes were chosen for prizes and that two of these were preservation schemes and two others mosques, leaving only two additional slots to handle the whole range of remaining building types. Of these, one was a recent housing project, the other a building conceived over fifteen years ago. The innocent observer is bound to get the impression that the Jury majority felt that contemporary experimentation into specifically *modern* building problems had thrown up almost nothing of value in the entire Muslim world during the past decade or so. Either that, or else there were other machinations at work, such as a *passeist* ideological bent.

The al-Aqsa Mosque restoration (in Jerusalem) and the conservation of Mostar Old Town (in Yugoslavia) were both exemplary schemes of preservation. Sedad Eldem's Social Security Complex in Istanbul (7) was indeed a fine contextualist solution responding to multiple scales in the setting, fusing the logic of concrete construction with a grammar abstracted from both the wooden vernacular and Ottoman monumental examples. By contrast, the worthy social intentions behind the enormous Dar Lamane Housing project for Morocco found only diagrammatic expression in the themes of precincts and gates: the coating in precast Moroccan decorative clichés did little to make up for a lack of three-dimensional articulation of the transition between public and private worlds.

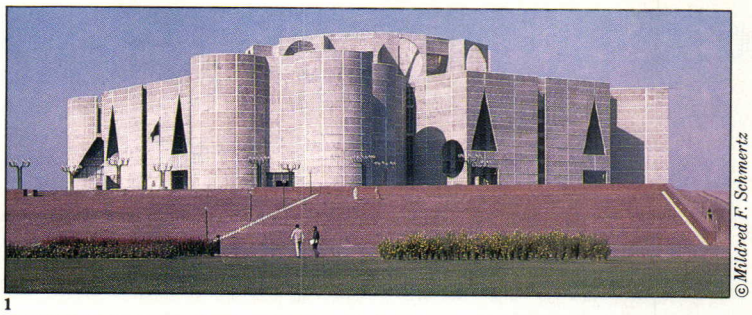
The Master Jury report on the Yaama Mosque in Niger (6) rhapsodized as if mud had an automatic sanctity, the key themes being "craftsmanship" and "community expression." One of the admirable features of the Aga Khan Awards has been its commitment to the continuing vitality of rural vernaculars. The Yaama Mosque certainly has its moments in section and interior space, though some would claim that the gratuitously picturesque additions to the towers detracted from the stern beauty of the earliest stages of the realization.

The Bhong Mosque in Pakistan (5) obviously reflected a majority decision to enter the murky area of popular expression. One is reminded that Robert Venturi was a member of this jury, and that he has demonstrated his own notions of mosque architecture in his entry for the Great Mosque competition for Baghdad a few years back: a "decorated shed" on a vast scale which has been described as a "supermarket plastered in Islamic quotations lifted from history books." To be sure there is now a market (in the Middle East in particular) for concoctions of whitewashed arches, domes, and superficially applied ornaments, but one wonders what the idea was of promoting a solution like the Bhong Mosque that is really nothing more than a hackneyed formula coated in the sentimental perfume of orientalist *kitsch*? Surely the aim ought to be to reinvigorate the past at a deep level by transforming it into vigorous forms for the present, not to reduce history to the consumption of clichés. Behind the populist rhetoric there lurked a refusal to deal with the problem of an architecture of real depth or longevity. Postmodernist fashion thus pushed its way towards a flabby contract with myths of Islamic identity.

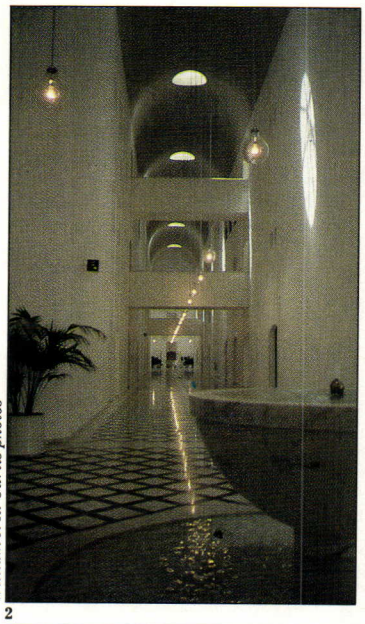
Of course the Jury could always have claimed that there was nothing stronger to choose from, but the message transmitted by these choices as a whole was a depressing one to many observers who flocked to Marrakesh for the Awards Ceremony. Then one read with astonishment that the Dhaka Parliament Complex in Bangladesh by Louis Kahn (1) had not made the cut. Why did the Jury bother to mention the fact in the report unless they felt bad about this exclusion? And for those who might try to claim that this extraordinary building lacked links to the Islamic past, it could easily be demonstrated that Kahn had penetrated history at a deep level, in this instance receiving inspiration from both Eastern and Western monumental examples, even touching upon both Bengali Islamic and earlier Buddhist centralized prototypes. Kahn's building transcends the trivialities of passing fashions and deals with a timeless core of architectural values. To have included a toy like the Bhong Mosque and to have excluded a masterwork is to have revealed a value system that verges on the anti-architectural altogether. Thankfully a minority of the Jury protested strongly. The Turkish architect, Doruk Pamir, claimed that the whole procedure suggested a premeditated decision in some quarters to exclude any examples that could be vaguely construed as Modernist, and that there was both a refusal to confront issues of modernization as well as a retreat into trendy vernacularism and historical revivalism. Hans Hollein put it bluntly: how could it possibly serve the purposes of the Award to vote against Architecture?

Many architects in the Muslim world turn to the Aga Khan Awards for architectural exemplars. From this cycle they can learn that high architecture does not matter and that *kitsch* is okay. With the exception of Eldem's Social Security Complex in Istanbul and (possibly) the Yaama Mosque in Niger, the buildings chosen have relatively few lessons of a generic nature to teach. Some recent buildings that will surely be seminal in search for an authentic fusion of old and new mysteriously did not achieve recognition. One thinks of Gordon Bunshaft's National Commercial Bank in Jeddah (4) which attempts to fuse regional principles for dealing with climate with a radical re-examination of the anatomy of the skyscraper. Or—a very strange omission as it too "communicates" on many levels of reference but over a core of valid architectural principles—of Henning Larsen's extraordinary Ministry of Foreign Affairs in Riyadh (2,3). This building synthesizes modern and traditional, regional and pan-Islamic in a most convincing expression of the enclosed institution's aims. Far from being ignored or trivialized, tradition is entered on many levels, then transformed into a clear statement of contemporary Saudi aspiration by a rich spatial imagination.

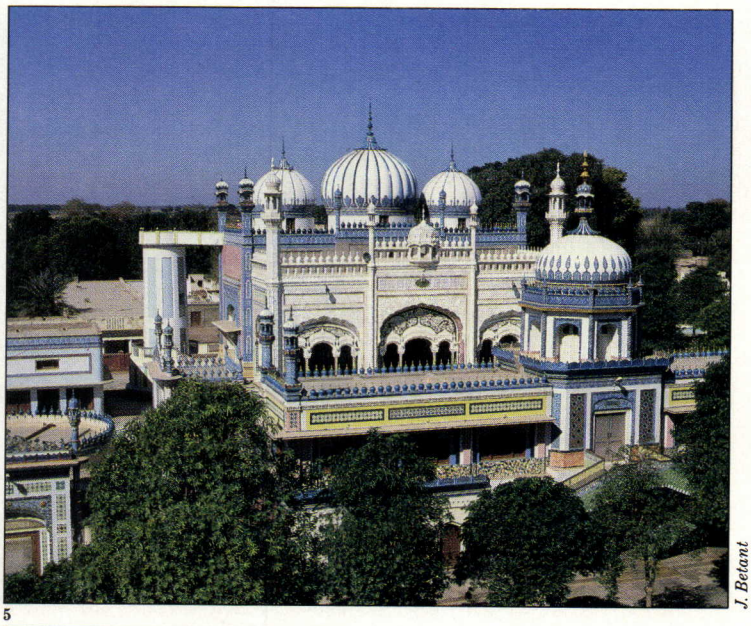
It is fine to reward high quality preservation and even to encourage the continuation of dying rural traditions, but this willful avoidance of both lasting architectural values and the varying demands of modernization is liable to place the Aga Khan Award in a marginal position, which it does not deserve. By turning its back on so many of the pressing needs of the present and future and by allowing the problem of tradition to regress to a trivial level, the majority jury decisions of the 1986 cycle transmit the message that the higher realms of architectural expression are not important to the evolving Islamic world. The worthy purposes of the Aga Khan Award will continue, but must now distance themselves from biases which reflect only too clearly—and this is the sad irony—values and fashions that are currently being spawned in the architectural boudoirs of the West.



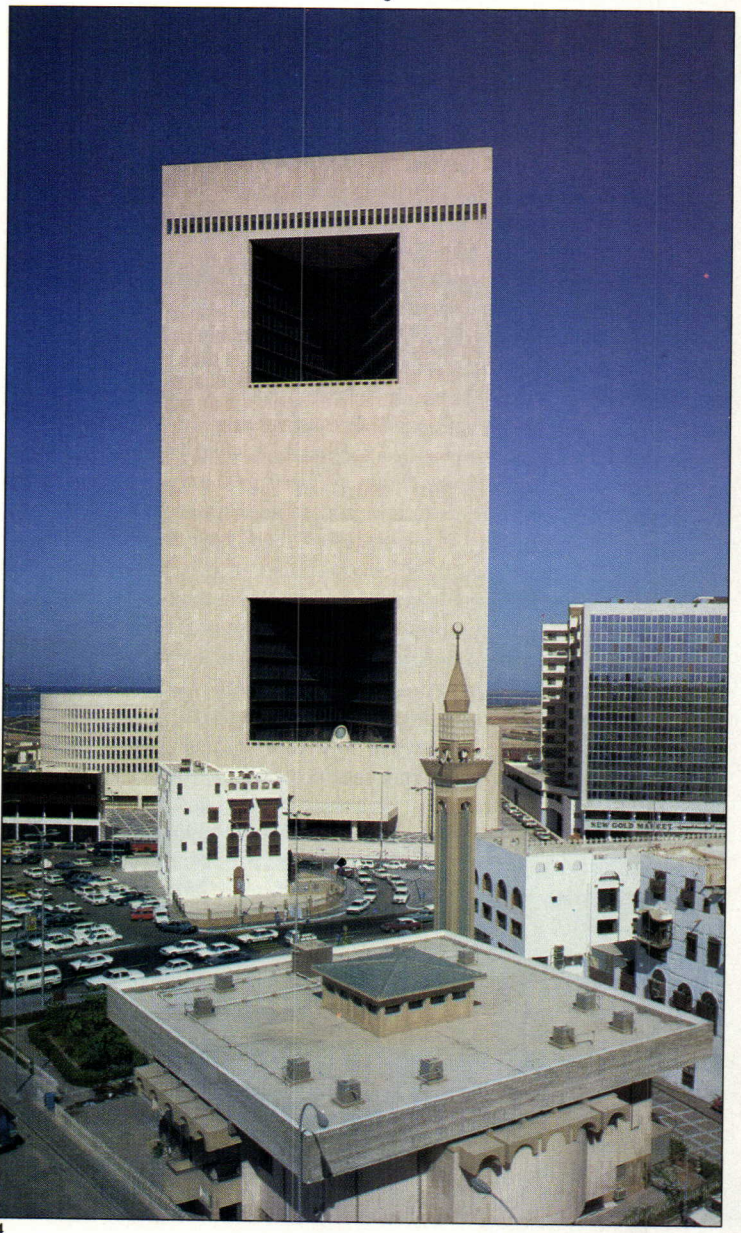
1 ©Mildred F. Schmertz



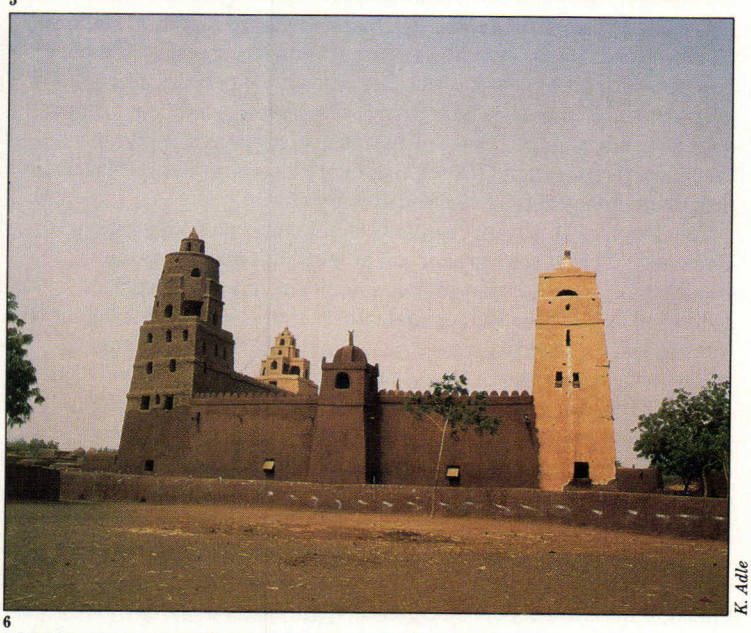
2 3 William J. R. Curtis photos



5 J. Betant



4 Greg Murphey



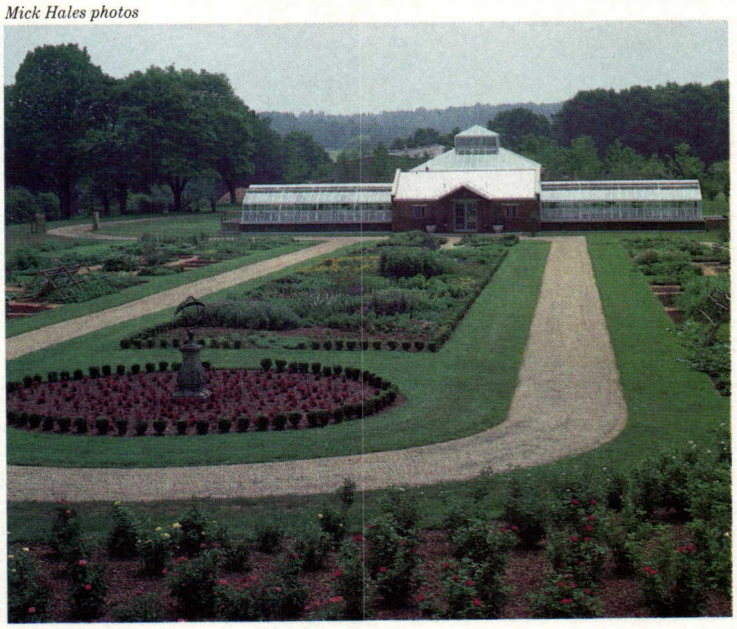
6 K. Adle

7 A. Dundar

Plain and fancy

Albemarle Conservatory
Charlottesville, Virginia
Tamarkin Techler Group,
Architects

Mick Hales photos



"Mother's house" has become shorthand for those early translations from works on paper to built works that for so many architects have been the springboard to real-world recognition—and commissions. With good reason. Relatively straightforward programs, indulgent if not doting clients, and the luxury of few competing demands on time and talent are fertile ground for the focused study and free experiment that transmute intent to fully realized architecture.

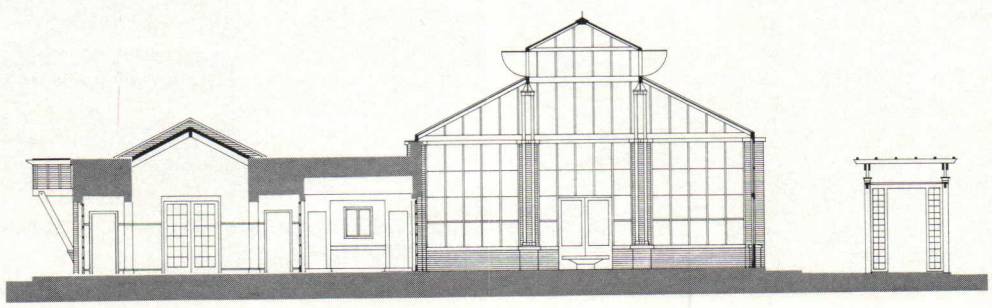
The fledgling Tamarkin Techler Group found a similarly benign climate for its first commission, not at home but on a 5,000-acre gentleman's estate in the softly undulant Virginia countryside shadowed by the Blue Ridge mountains. On the recommendation of the estate's master planner, landscape architect Morgan Wheelock, the young architects were commissioned to design a "delicious folly" as adjunct to the whimsically formal, Italianate garden Wheelock proposed for growing cutting flowers and "kitchen truck" (photo above). But as the program ripened, the brief evolved to the improbable conjoining of the folly (now a conservatory) with greenhouses and potting sheds, and a tennis court complete with kibitzing pavilion.

The overlapping of work and play, they found, characterizes an establishment whose continual stream of guests is entertained by, among other diversions, horse-and-carriage tours of high points on the busy, up-to-the-minute model farm that underpins the enterprise. The new complex was seen as a fitting destination for such outings, where visitors (*pace* Marie Antoinette) might stroll through the lush garden and admire the greenhouses' latest crops of orchids and herbs before settling to elevenses in the Palm House or a fast set of tennis.

Though the estate centers on an imposing neo-Georgian Colonial "squire's house," its drives meander through fields dotted with lesser dwellings and outbuildings in the distinctive vernacular of the region, and it was to these Tamarkin and Techler turned for their primary cues. Most immediately, the nearby Ellerslie House, an old brick manor fronting the garden site, generated the axis carried from the garden through the new building and originated the parentheses closed by its central workroom and outspread greenhouses. The conservatory's squared cage and the tennis court's finespun cedar-latticed pergola and enclosure, which joins with the greenhouse wing to frame a formal forecourt at the conservatory entry, complete a parti (plan overleaf) that merges such workaday spaces as propagation and forcing rooms with the playful elegance of the folly via a linking passage appropriately containing a well-equipped servery.

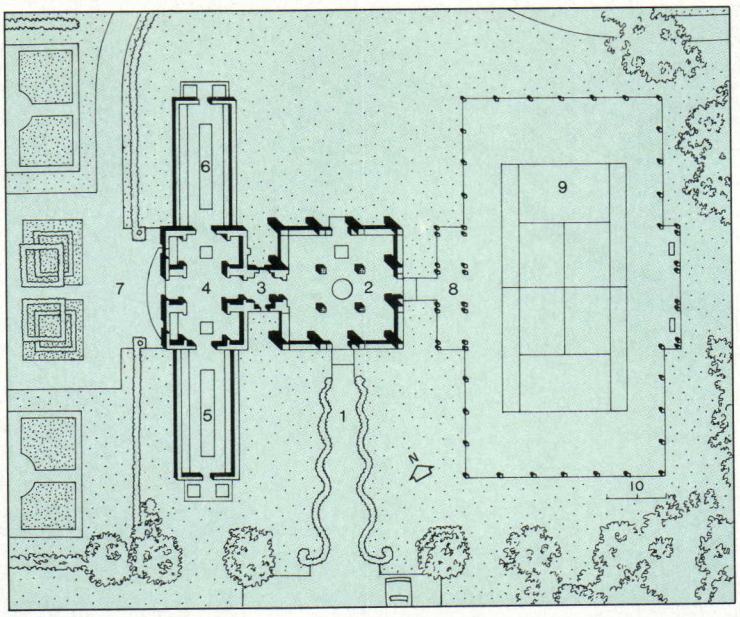
Though contrast is the underlying theme of the project, it is played pianissimo, without loss of clarity or continuity. Despite the inherent formality of the symmetrically biaxial plan, the early decision to use the luminous local molded brick seen throughout the estate suggested the simple, sturdy forms, lightened by delicate glass and aluminum infill, that lend the complex an ambience both earthbound and ethereal. On the garden facade, the contrast is expressed lineally through the transparent greenhouse wings flanking the central mass which, with its rosy brick, standing-seam roof, and casual gabled portico, freely translates the vernacular of the estate's "other" farm buildings. The note of duality heightens, though, in the conservatory, where the designers cleared the airy space of the clutter of cross-braced trusses, instead floating the 40- by 40-foot pyramidal glass roof on brick-clad piers cantilevered from foundation and grade beams and tied by a strong inset cornice that squares the frames around the gridded glass openings. Inside, the supplementary supports beneath the 30-foot-high cupola—four see-through groups of four tube columns barely visible among the greenery—revert from the vocabulary of the masonry structure to the complementary language of glass and metal.

Given a first building with "a wonderful site, a wonderful program, and a wonderful budget," Tamarkin says, "our biggest problem was showing restraint." The problem was surmounted. *Margaret Gaskie*



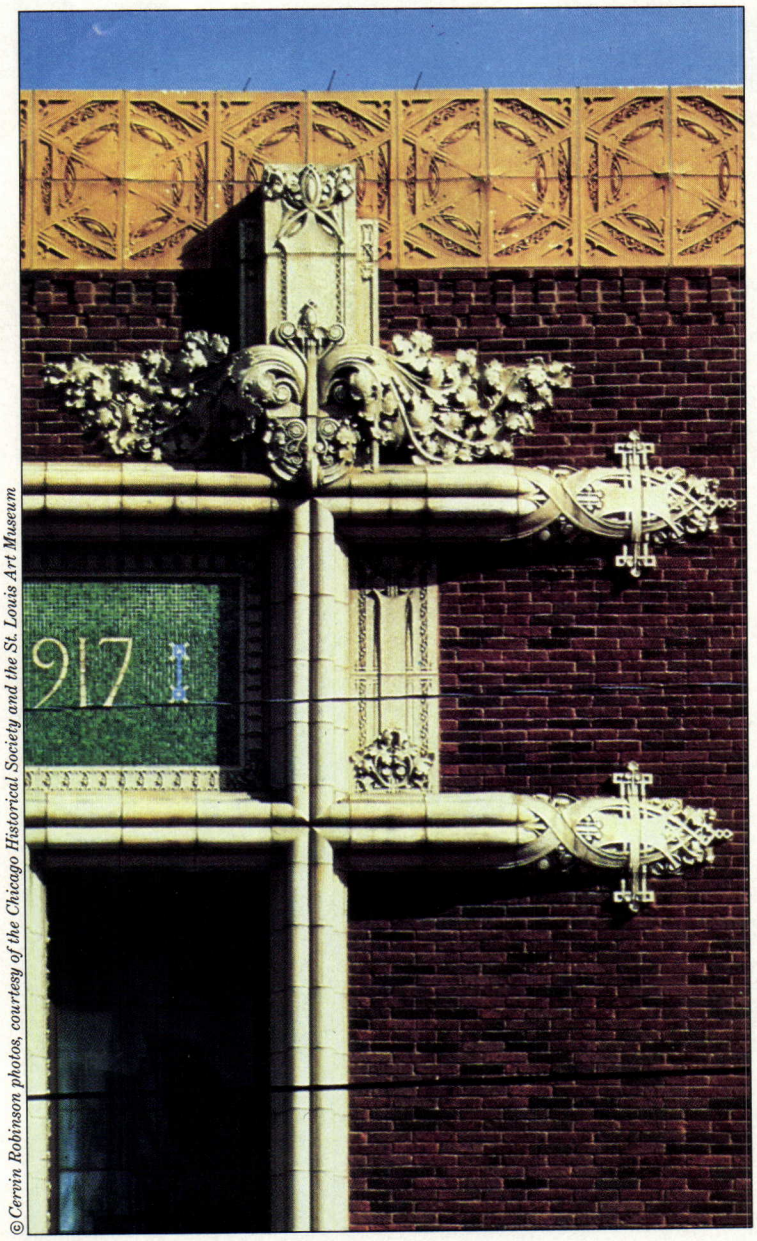
Staunchly refusing the indulgence of a budget that "would have let us use polished granite," Tamarkin and Techler echoed in the conservatory complex the homely forms and materials—notably handsome molded brick meticulously placed by local craftsmen—suggested by the farm's existing buildings. The kinship is most evident in the workbuilding centered on the garden facade, where a simple porch with rough-trimmed wooden braces springing from corbeled brick brackets introduces a traditional gabled standing-seam metal roof—albeit rendered in stainless steel instead of galvanized metal. The harmony of the structure with its pervasive glass and aluminum infill, however, derives not from vernacular echoes but from sophisticated detailing. For the greenhouses, standard components were only slightly modified to give cleaner lines. But for the conservatory, painstakingly combined framing sections unearthed from dusty catalogs form just the right profiles; the roof perches on the point supports of conical capitals that bundle the quadrupled tube columns; and "candlelight" glows from lanterns composed, like the building's other lighting fixtures, from an architect-designed kit-of-parts. (Tamarkin and Techler also designed the furnishings and cabinetry.) To provide visual flow and actual separation between major spaces, French doors are used throughout, while the peaked height of the workbuilding's gable is emphasized by replacing truss beams with slender tie rods.

Albemarle Conservatory
Charlottesville, Virginia
Architects:
Tamarkin Techler Group—Cary Tamarkin and Timothy Techler, partners-in-charge and project designers
Landscape architects:
Morgan Wheelock, Inc.—Morgan Wheelock Jr., Keith LeBlanc, Peter Cummin, project team
Engineers:
Brian Eaton (structural); Kenneth E. Denny (electrical/lighting)
Consultants:
Lord & Burnham, Inc. (greenhouse fabrication); Custom Metalcraft, Inc. (lighting fixture fabrication); Gaston & Wyatt, Inc. (woodworking)
General contractor:
Robert E. Lee & Son, Inc.



1. *Entry court*
2. *Conservatory*
3. *Servery*
4. *Workroom*
5. *Propagation room*
6. *Forcing room*
7. *Garden*
8. *Pergola*
9. *Tennis court*

Terra cotta: past to present



©Cervin Robinson photos, courtesy of the Chicago Historical Society and the St. Louis Art Museum

Terra cotta means burnt earth. Strictly speaking, a common red brick is a terra cotta unit. However, when terra cotta is mentioned, the images that come to most minds are of colorfully glazed, or warm earthen unglazed tile, often patterned with ornamental figures in relief. Louis Sullivan's terra cotta designs (illustrated here and on the facing page) are preeminent. Sullivan's career roughly corresponded to the heyday of terra cotta in North America that spanned from the 1880s through the 1920s. Some historians attribute the rapid growth in terra cotta's popularity to its fire-proofing characteristics—the great Chicago fire clearly demonstrated that cast iron, steel, and even stone could not resist such disasters so well as "burnt earth." Mechanization was a factor too. During the bullish building era at the turn of the century, stone masons were scarce and costly. Terra cotta could be manufactured in the shape of ashlar block and fired with glazes that simulated the colors and textures of natural stone. For those who have walked through cities and small towns without observing any terra cotta, the number of buildings thought to be stone but are in fact terra cotta may be startling. In New York City, for example, nearly one in three buildings is terra cotta.

The demise of terra cotta as a popular architectural material is a familiar story; Modernism perferred a minimalist palette of steel, glass, and exposed concrete, despising ornamentation. Today there are only two major terra cotta manufacturing plants in operation, while in the 1920s there were more than 48. Indications of a resurgence in the use of terra cotta is a more recent, though equally familiar story; in the last decade color, pattern, and ornamentation have increasingly regained popularity with designers. Taft Architects, the Zimmer Gunsul Frasca Partnership, and Hardy Holzman Pfeiffer Associates are among the noted architectural firms that have used terra cotta with imagination, and to great effect. Importantly too, the field of historic preservation has kept an interest in terra cotta alive, and lately has significantly contributed to our understanding of sound construction detailing for the material. In one respect, it is difficult to understand why architects were persuaded to lose touch with terra cotta. It is possibly the most sensual construction material available to the designer. Frank Lloyd Wright found the material to be ". . . in the hands of the architect what wax was in the hands of the sculptor."

To heighten awareness of terra cotta, both among design professionals and with the public at large, the National Building Museum in Washington, D. C., recently sponsored a competition for the creation of new modular terra cotta designs. Support for the competition, and for the public exhibition that followed, came from

Architects' renewed interest in color, pattern, and ornamentation has brought about a terra cotta revival. On the following pages are eight systems developed to demonstrate the material's design potential, including two created by Hardy Holzman Pfeiffer Associates for its addition to the Los Angeles County Museum of Fine Arts (pages 112-113). The remaining six are the winning entries in the National Building Museum's Contemporary Terra Cotta Competition (pages 114-115). A sampling from the exhibition, "Louis Sullivan: the function of ornament," organized by the Chicago Historical Society, is shown below and on the facing page.

Ludowici Celadon Company, Inc., a major producer of the material. The competition, which was largely conceived by Gary Matt of Channel Marketing, Inc., was unusual in three respects. First, it was concerned not with the design of a single building, but with a set of parts that could be incorporated into many kinds of buildings. Second, the six jurors—Robert Venturi, James Wines, Stanley Tigerman, Robert Frasca, the team juror Taft Architects, and Hugh Hardy—were not to decide as a committee on a group of winning designs, but instead were each, as individuals, requested to select a single entry. Lastly, each juror was asked to produce a drawing illustrating an application of the terra cotta system they chose (as an example, see Venturi's drawing on page 114). A total of 110 entries were received from architects, sculptors, students, industrial designers, and ceramicists. All six winning designs (pages 114-117) hint at the range of possibilities afforded by the plasticity of clay and the opportunity for color and texture in glazing. In technical complexity, which is, of course, ultimately reflected in the cost of a unit, the winning entries ranged from the labor-intensive, hand-pressed, hand-painted decorative pieces of Terry Brown (page 114) to the simple, extruded modular tile of Giorgio Zigliotto (page 117). Ludowici Celedon has manufactured mock-ups of the winners and will commercially produce some, if not all.

Two contemporary tile systems that have gone into full production are presented on pages 112-113. These terra cotta units were developed in the office of architects Hardy Holzman Pfeiffer Associates for their addition to the Los Angeles County Museum of Art (LACMA). Produced by Gladding, McBean & Co., they represent a site-specific, building-specific approach to the design of a finish material. Developing units that are unique to a particular building is more within the tradition of terra cotta than the specification of a proprietary product. Even though, in the past, all the manufacturers of architectural terra cotta offered standard pieces, these pieces very often served as the point of departure for an architect's one-of-a-kind improvisation. This is percisely how the terra cotta system Hardy Holzman Pfeiffer used in LACMA's facade came about. The profile of the horizontal banding is derived from several standard extrusions of the manufacturer. Once combined, the architects desired a deeper shadow within the unit, and therefore, worked out the appreciable cut-back in the center of the tile. They also introduced the stacked tiers of half rounds to the profile to further enrich the play of highlight and shadow on the glazed surface. Terra cotta manufacturers welcome the opportunity to develop original designs with architects, making terra cotta one of the few truly craftsmanlike materials eminently available. *Darl Rastorfer*

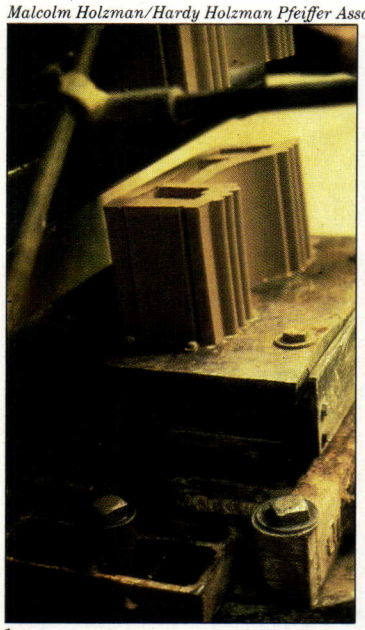
Four photographic details from Sullivan's Midwestern banks illustrate his mastery of terra cotta's plasticity. The building are, clockwise from upper left, and identified by their original names: People's Savings and Loan Association, Sidney, Ohio (1917-1918); National Farmers Bank, Owatonna, Minn. (1906-1908); Merchants National Bank, Grinnell, Iowa (1914); Farmers and Merchants Union Bank, Columbus, Wis. (1919-1920). Though made as production pieces, these terra cotta units required extensive hand-carving after removal from the press.

Two tile systems by Hardy Holzman Pfeiffer Associates

Hardy Holzman Pfeiffer Associates' addition to the Los Angeles County Museum of Art is the firm's third major commission for which it developed a terra cotta system (the L. A. Public Library, now under restoration and extension, will be the fourth). The museum addition has, in fact, two terra cotta systems: a banding profile for the facade (photo below); and cladding for the columns in the entrance hall (opposite page).

The horizontal trim unit is a derivative of several standard sections made by the California manufacturer, Gladding, McBean & Co. Working in partnership with the factory, the architects introduced to the composition of standard sections a deep slice and tiers of half rounds (opposite page, top drawing). The slice, of course, was developed so that a deep shadow would be cast within the surface of the glazed tile. The half

Malcolm Holzman/Hardy Holzman Pfeiffer Associates photos except as noted



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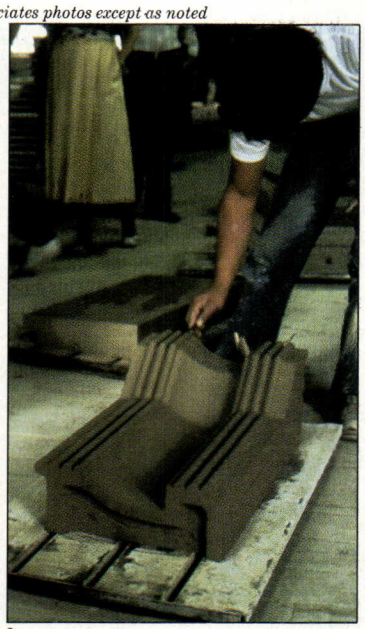

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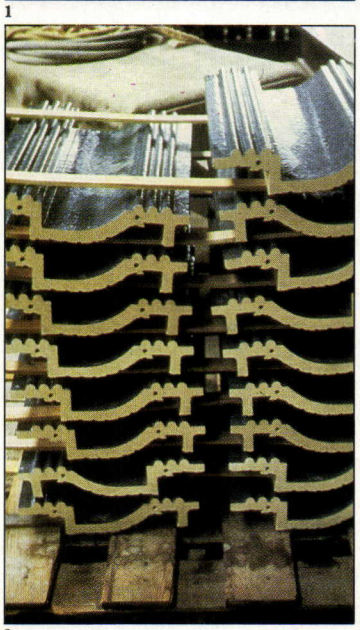

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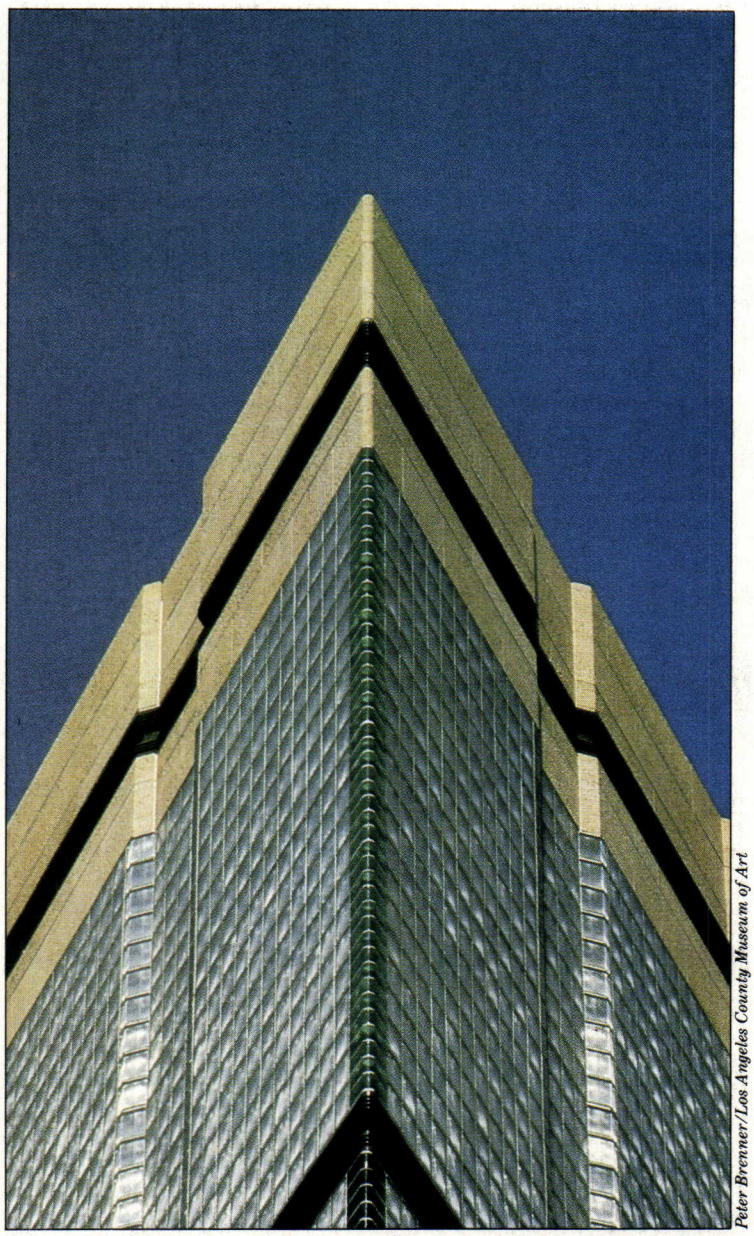
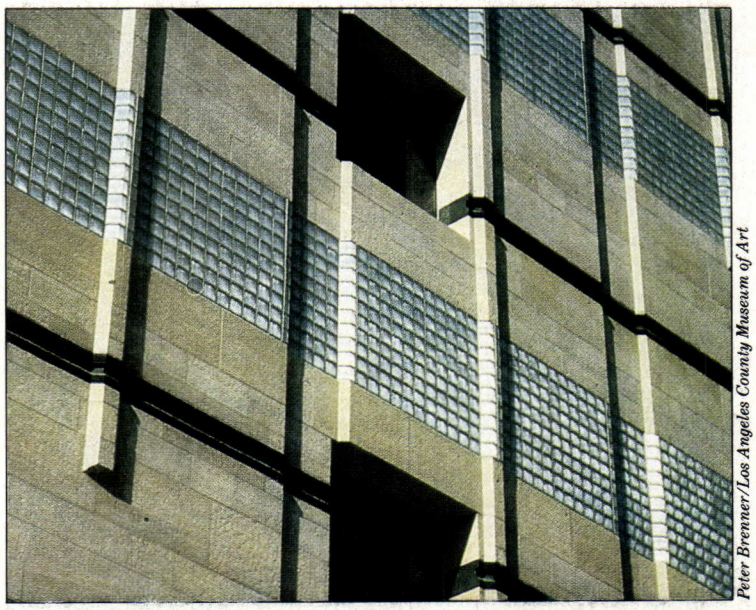
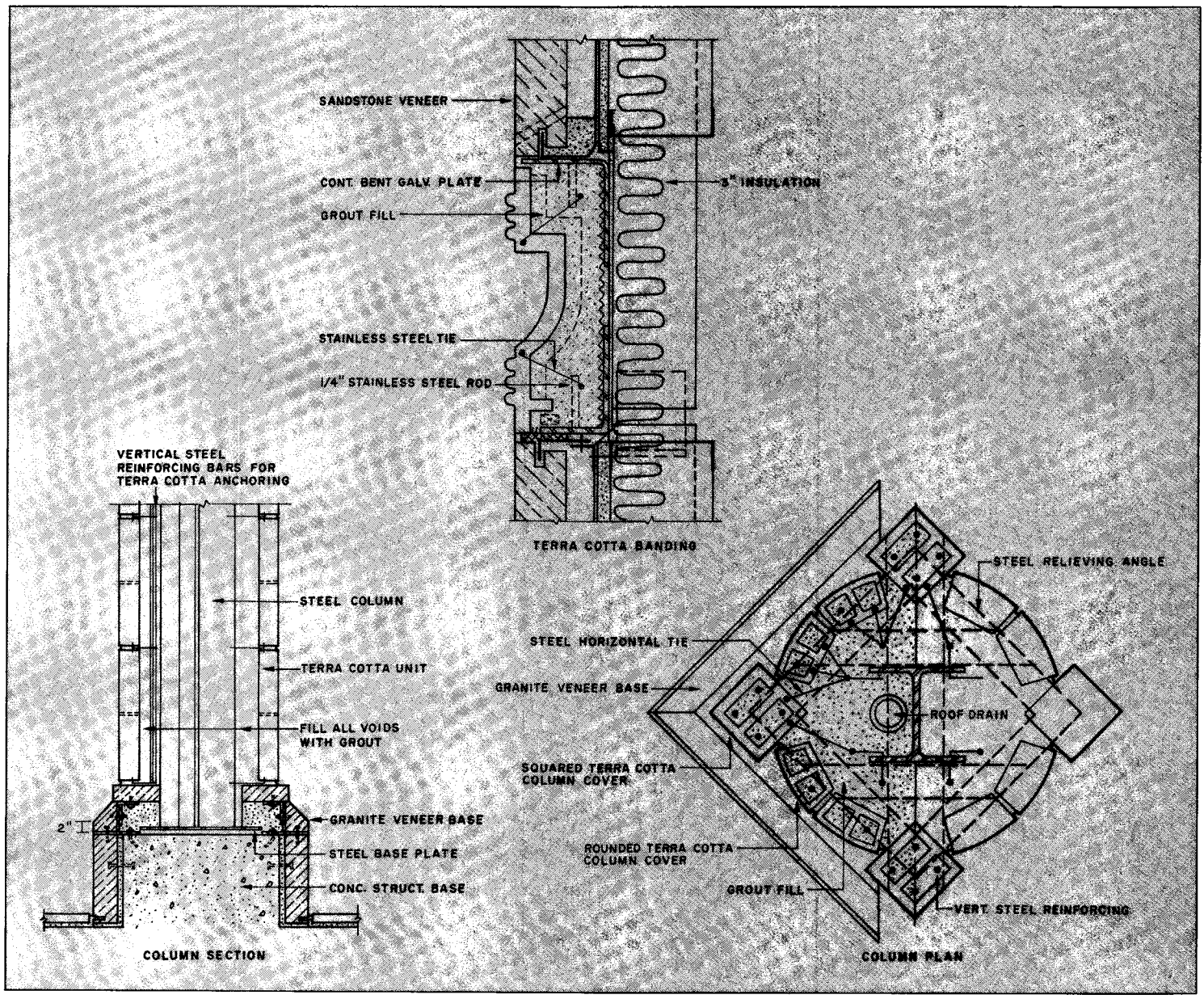


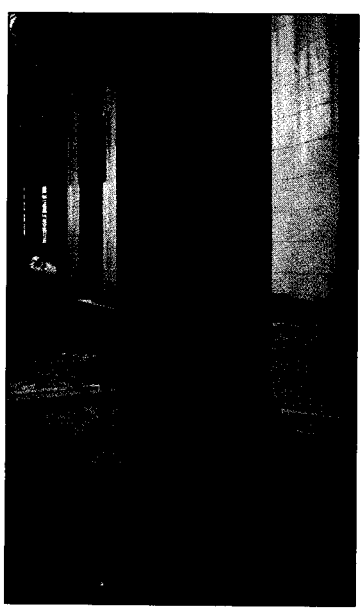
Peter Brenner/Los Angeles County Museum of Art



Peter Brenner/Los Angeles County Museum of Art

rounds throw bands of highlight. (Along with color, the opportunity to develop, and economically produce, a profile for the animation of light is what draws the firm to terra cotta.) The standard tile for the system is made by extrusion (opposite page, photo 1). The special pieces needed to turn corners are hand-pressed in molds, and hand-finished (photos 2 and 4). The color of the tiles' glaze was developed with respect to the other facade materials (opposite page, bottom right photo). The glaze, used also on the column pieces, is a mottled combination of three colors (photo 3 shows a rack of glazed tiles emerging from the kiln). The column cladding system (photo this page) incorporates two extruded sections: a fluted piece which continues the four corners of the stone veneer base; and the rounded profile that fills between.

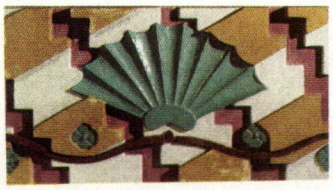


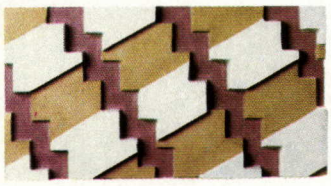


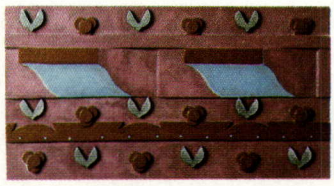
The Robert O. Anderson Building at the Los Angeles County Museum of Art
Los Angeles, California
Owner:
The county of Los Angeles
Architects:
Hardy Holzman Pfeiffer Associates—Norman Pfeiffer, partner-in-charge; Victor Gong, administrative partner; Pamela Loeffelman, Stephen Johnson, Neil Dixon, Jonathan Strauss, Harris Feinn, Hilda Lowenberg, Setrak O'hannessian, architectural team
General contractor:
Turner Construction Company
Terra cotta installation:
R&R/Hatch Masonry in joint jenture
Terra cotta manufacturer:
Gladding, McBean & Co.—Tom Sawyer, project coordinator

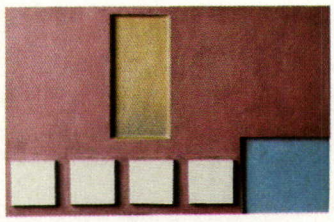
The Terry Brown tile system

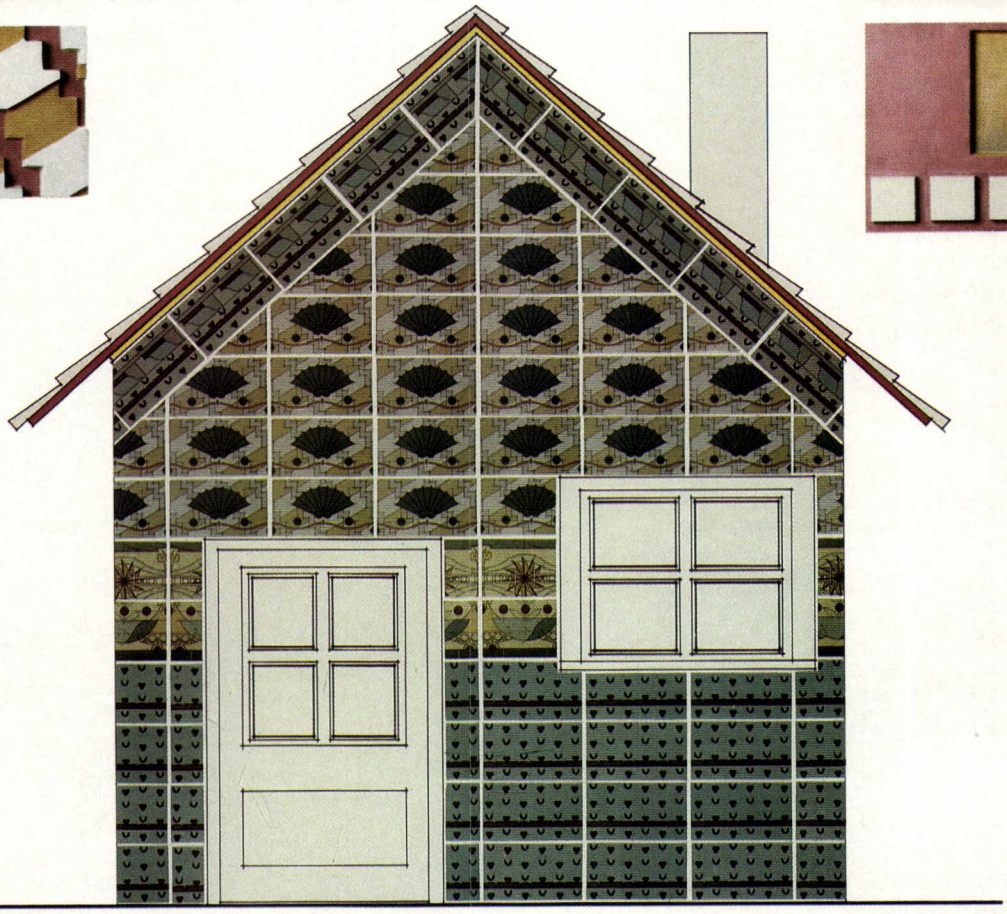
Terry Brown's winning entry in the National Building Museums's competition was selected by juror Robert Venturi. Terry Brown has his own practice in Cincinnati. The six tiles that comprise the entry were designed by Brown in advance of the competition, several as elements for house commissions. Brown contends that it is difficult, and perhaps inappropriate, to design ornament in the abstract. This view stems from his adherence to the principles of organic architecture which hold that all levels of design, from the general to the specific, follow from a single, formal convention. Thus, in organic composition, ornamental tiles are part of the geometric "text" to a building. Of the six terra cotta units entered in the competition, four are considered by Brown to be "pure ornament," i.e., organic because they are truly integral to the buildings for which they were designed. These tiles include the two modules with fan-shaped motifs seen in the photo top left, and in the horizontal band intersecting the window and door of Venturi, Rauch, and Scott Brown's design application of the tiles (rendering below); the stepped-diagonal tile (lower left); and the "seed, gem, and bracket" tile (top right). The other two tiles (lower right, and the "seed, gem, and band" illustrated at the base of the VRSB scheme) were not designed in conjunction with the architecture of a specific building. They could, however, be the basis for generating an organic composition. In manufacturing the tile, a hand-pressed technique was used for the fan-shaped units. A machine press was used for all others. All patterns require hand-painting.







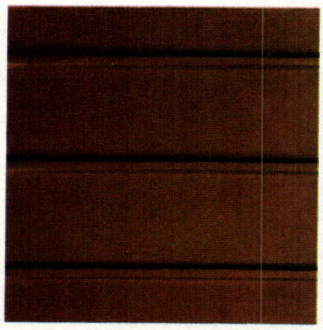


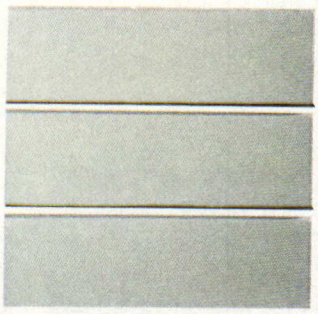


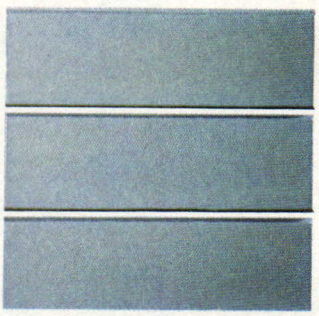
Tommy Thompson photos, except as noted

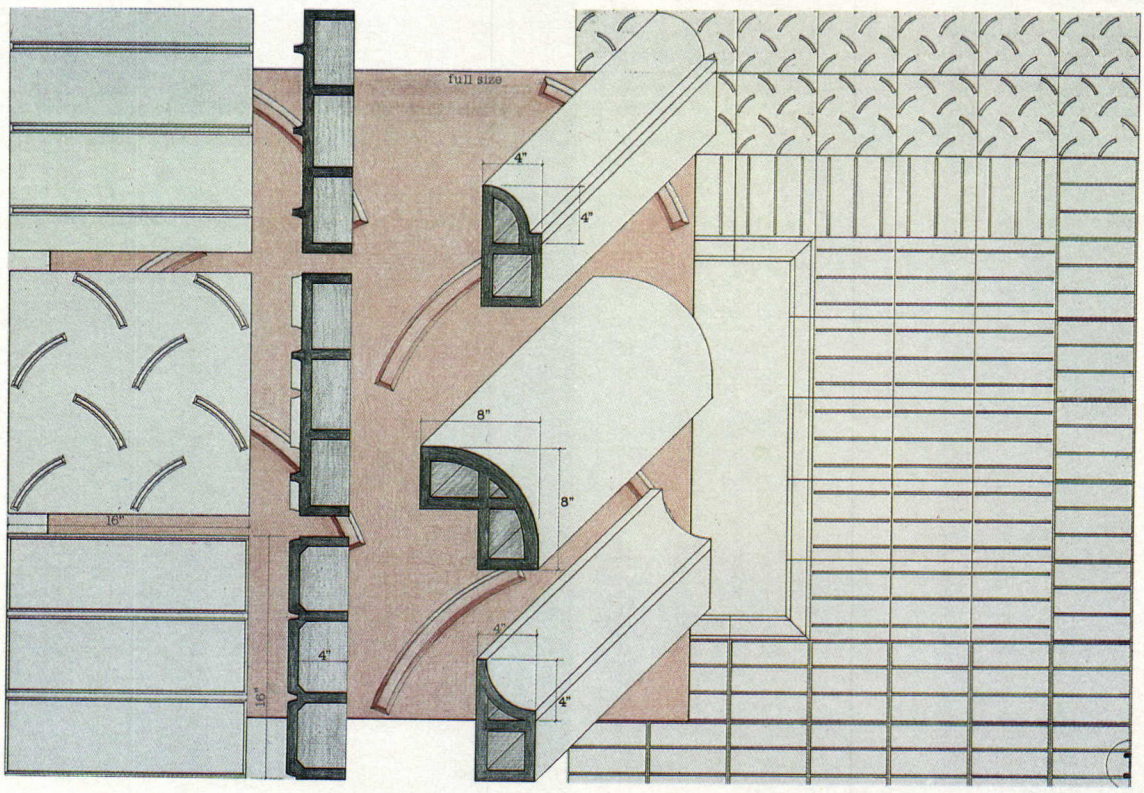
Carl E. Vogtmann tile system

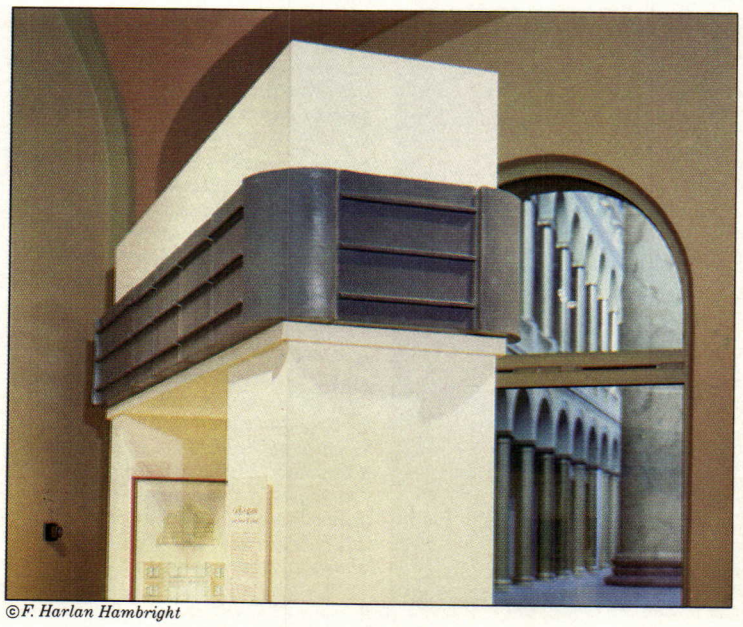
Architect Carl E. Vogtmann's tiles were selected in the contemporary terra cotta tile competition by partners John J. Casbarian, Danny Samuels, and Robert H. Timme of Taft Architects. The six-piece system, with three field and three corner pieces, are dimensionally compatible with standard brick and block. The field units are 16-in. square, and the trim tiles are 4- by 16-in. on the face. Two of the three field units—the negative and positive-ribbed pieces—are designed for extrusion manufacture. The third field piece, sporting a repeated pattern of raised arcs, must be made with a machine-press. The three trim pieces (axonometric figures in drawing below) are extruded. Vogtmann's intention for the system is for highly repetitive applications, such as use in fast-food outlets. Another likely application of the system is decorative banding within veneer walls, and as trim around windows and door openings. A combination of the tiles (photo below) was assembled for the exhibition at the National Building Museum in Washington, D. C., "Ornamental Architecture Reborn: a new terra cotta vocabulary." The exhibition showcased mock-ups of the Vogtmann tile, along with the other five competition winners, all manufactured by the major supporter for the competition, Ludowici Celadon Company, Inc.





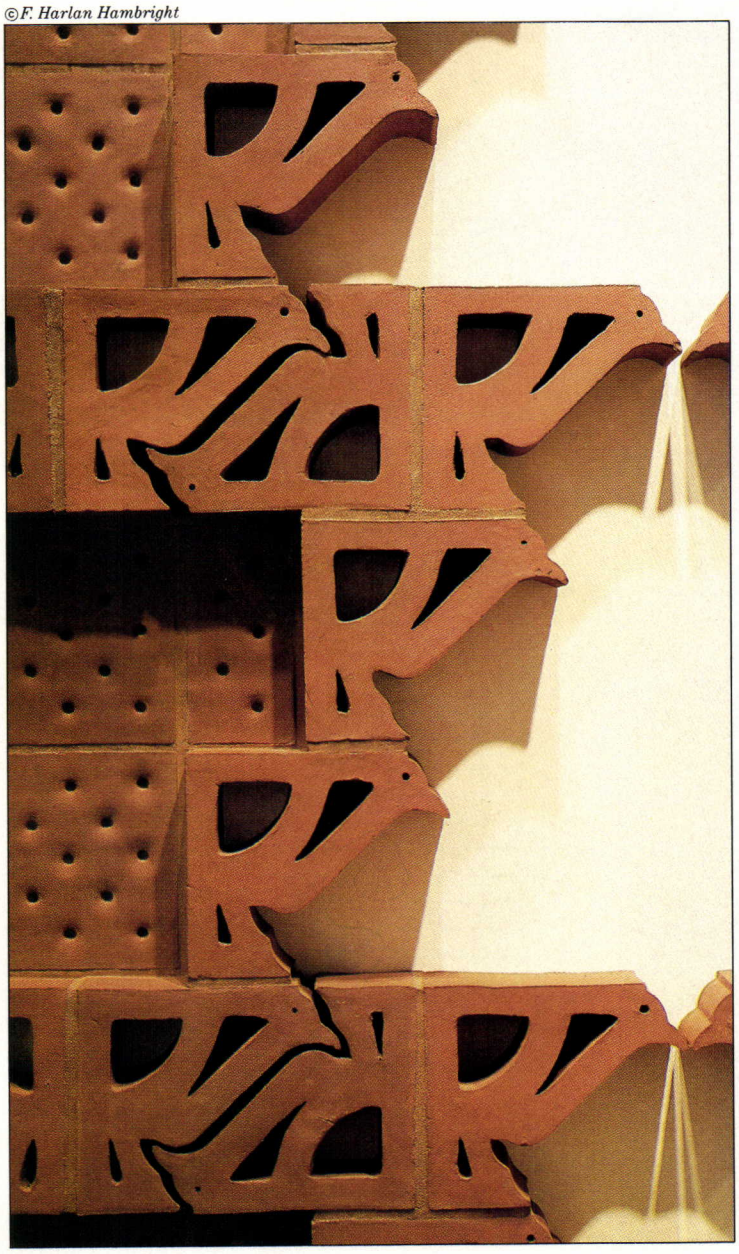




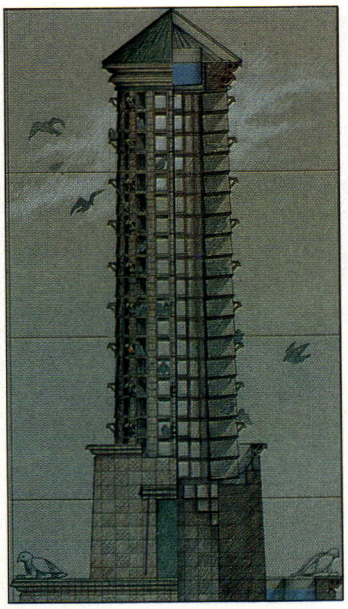


©F. Harlan Hambright

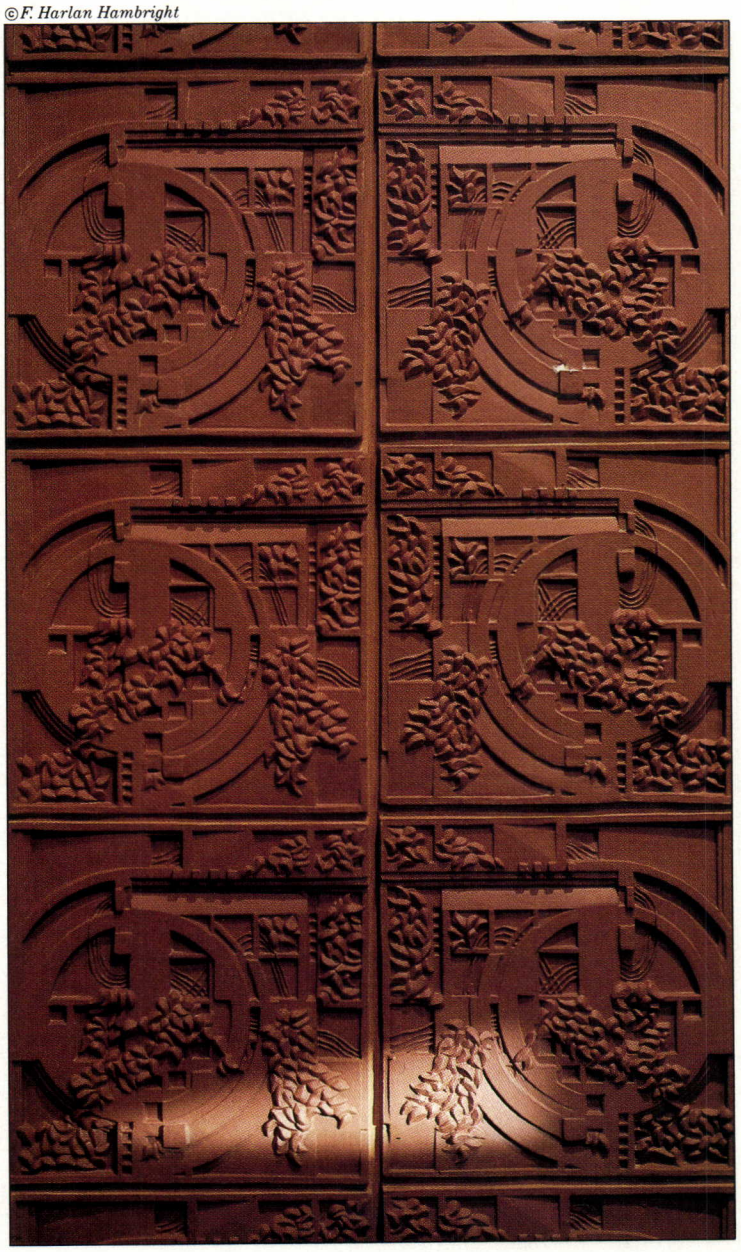
The Peter J. Fortier "pigeon" tile system



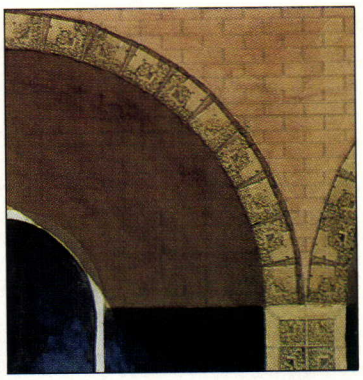
This system was considered by many to be the most surprising and delightful response to the competition. Selected as a winner by Stanley Tigerman, the pigeon can be arranged in an interlocking system for window and door surrounds and for decorative grilles, or, when laid side by side, forms cornices (as illustrated in Fortier's design for a pigeon tower at right), or a transitional element that allows a 4-in. plane change in masonry walls. A square "cracker" tile (partially visible above at left) serves as the field tile for the system. The pigeons are manufactured by extrusion, the crackers are machine-pressed. Both are meant to be unglazed. Fortier, whose background includes work with ceramics, is an architect and a member of the Metairie, Louisiana, firm of Clements, Blanchard, & Holmes.



The H. Stow Chapman "honeysuckle" tile system



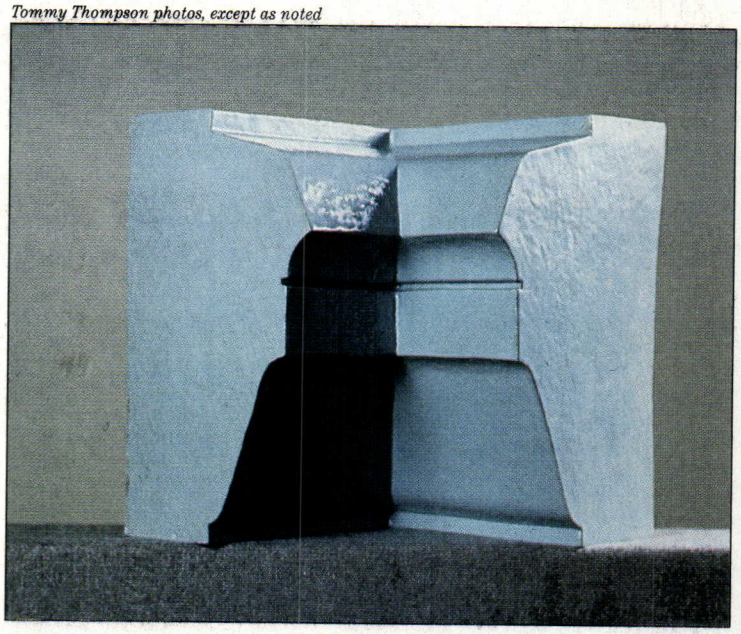
Like the "pigeon" tile, H. Stow Chapman's "honeysuckle" tile is designed to be unglazed. There are two square units to Chapman's system, one is 7 5/8-in. and the other is 15 5/8-in. These dimensions are compatible with standard brick and block modules. Chapman took inspiration for the hand-pressed tile from the decorative work of Sullivan, Wright, and from Art Nouveau. Like Sullivan, who derived much of his decorative pattern from indigenous natural forms such as an oak leaf, Chapman took his cues from the honeysuckle, a ubiquitous vine in Louisville, Kentucky, where he lives and practices architecture as a principal in the firm Grossman, Chapman, Kingsley Architects. The "honeysuckle" tile was selected by juror James Wines, president of SITE Projects, Inc. (Detail at right shows an arch application.)

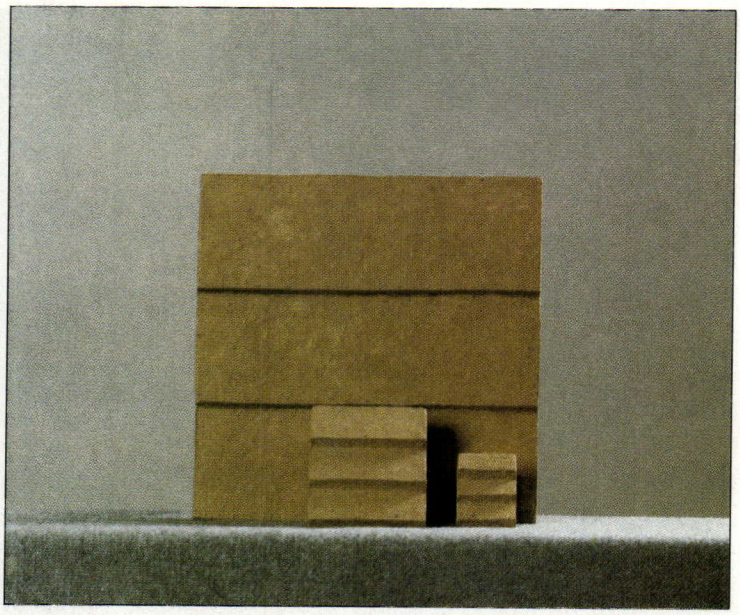


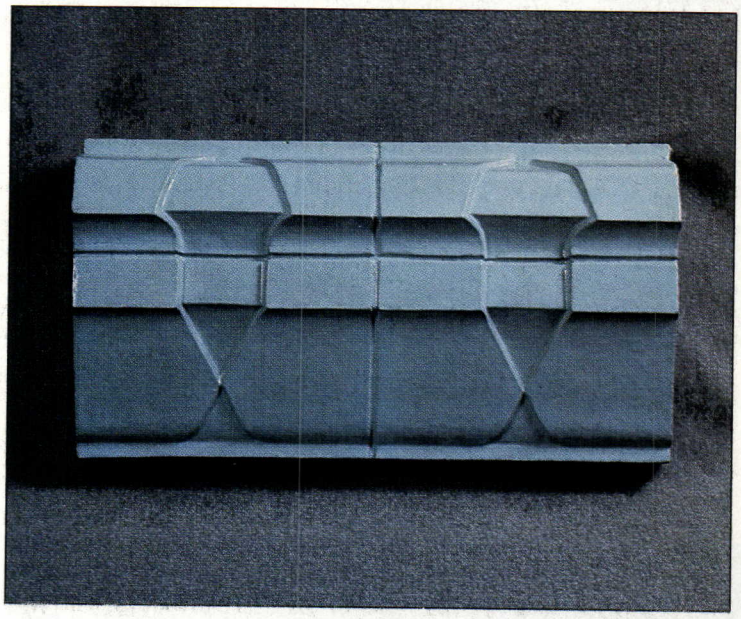
The Eric Grazley tile system

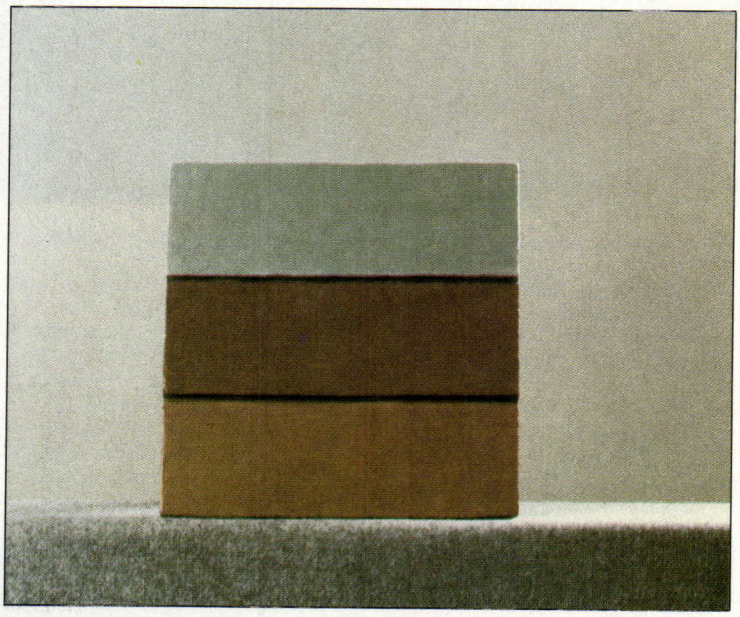
The Giorgio M. Zigliotto "La Scala" tile system

Tommy Thompson photos, except as noted









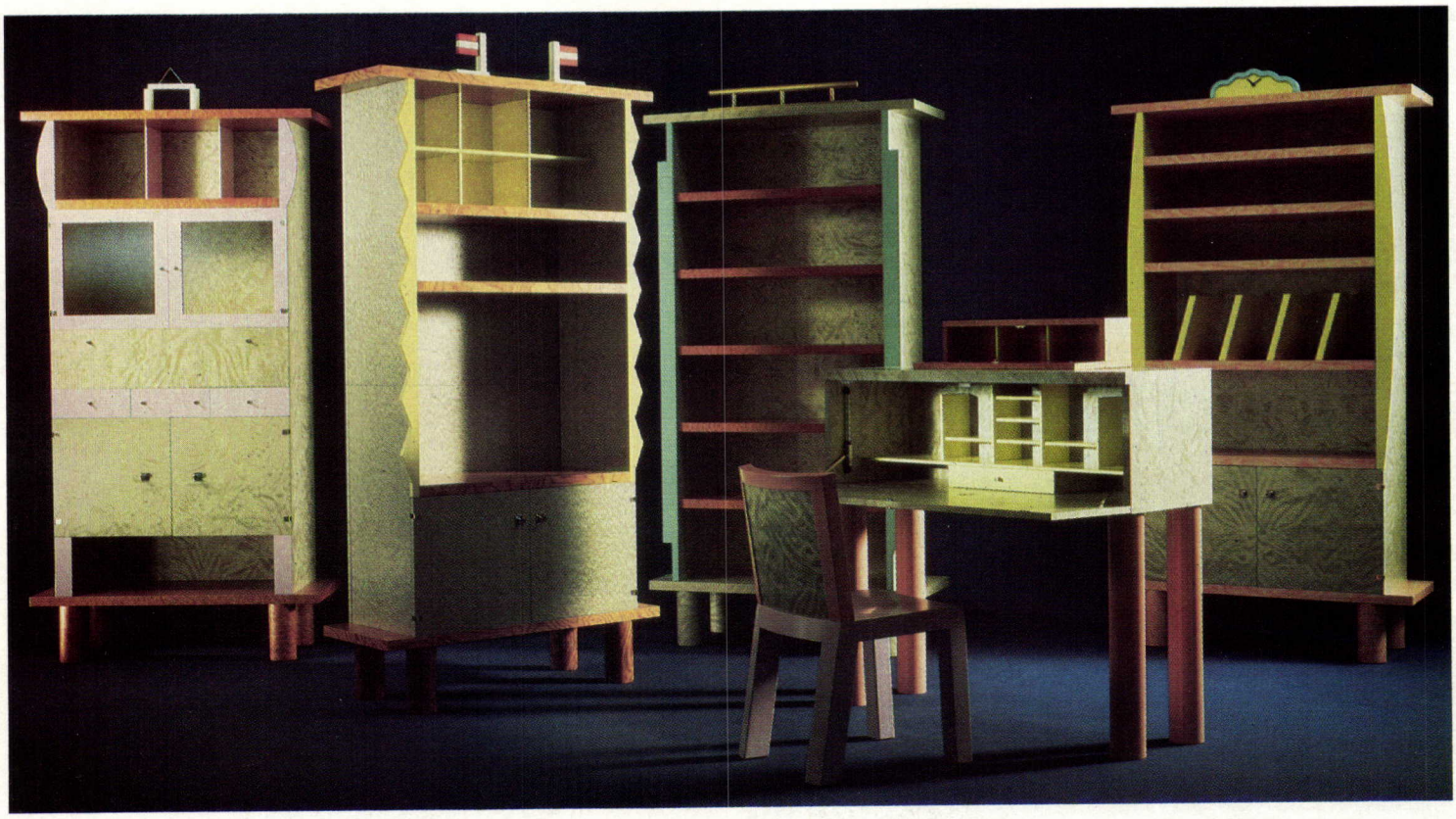
From among the 110 terra cotta designs submitted for the competition, Robert J. Frasca, of Zimmer Gunsul Frasca Partnership, selected Eric Grazley's six-tile system. Coincidentally, both competitor and juror practice in Portland, Oregon, a city whose numerous terra cotta structures have provoked discussions toward creating a terra cotta district. Grazley, partner in the firm Grazley, Plowman Architects, conceived the system for use as trim. The system includes field sections, corner pieces, and column bases for use with stone or brick masonry. Units can be cut in half to form window heads and sills. The units are manufactured with a mechanical press and given a glossy glaze so that the facets will catch the light. The tile installation at right is from the National Building Museum's exhibition.

©F. Harlan Hambright

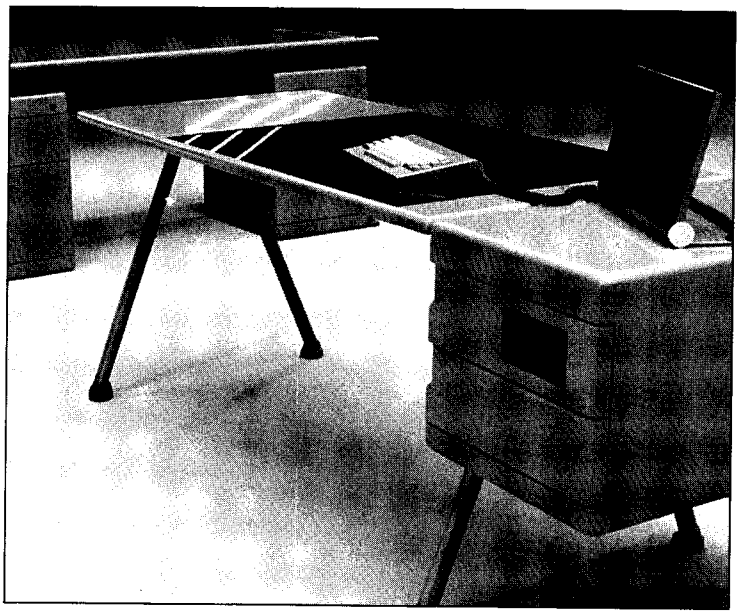
Giorgio M. Zigliotto's "La Scala" tile is equally appropriate for interior and exterior installation. The designer suggests that the design could be used as a roofing element as well. Chosen in the competition by juror Hugh Hardy of Hardy Holzman Pfeiffer Associates, the tiles comprise a five-unit system. All are equally thick and have three strata. Tile sizes are 3/4-, 1 1/2-, 3-, 6-, and 12-in. square. Tiles can be glazed and/or unglazed. They were designed with economy of production in mind—the tiles are manufactured by a simple extrusion process—which enhances their commercial availability. Zigliotto contends that terra cotta has a place in contemporary design, and should be reintegrated into the architectural mainstream, not regarded merely as a material for ornamentation.

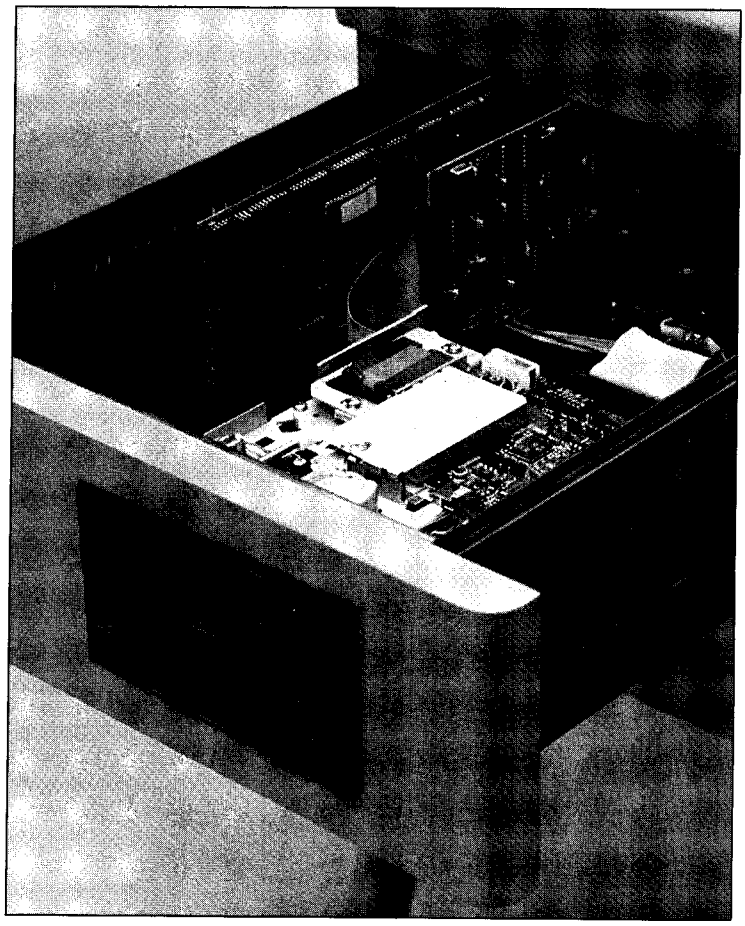
New products

For more information, circle item numbers on Reader Service Card

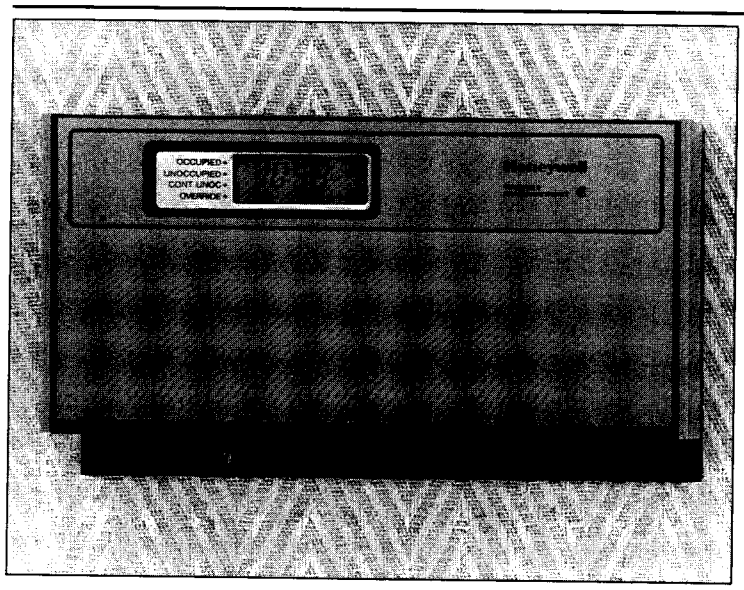


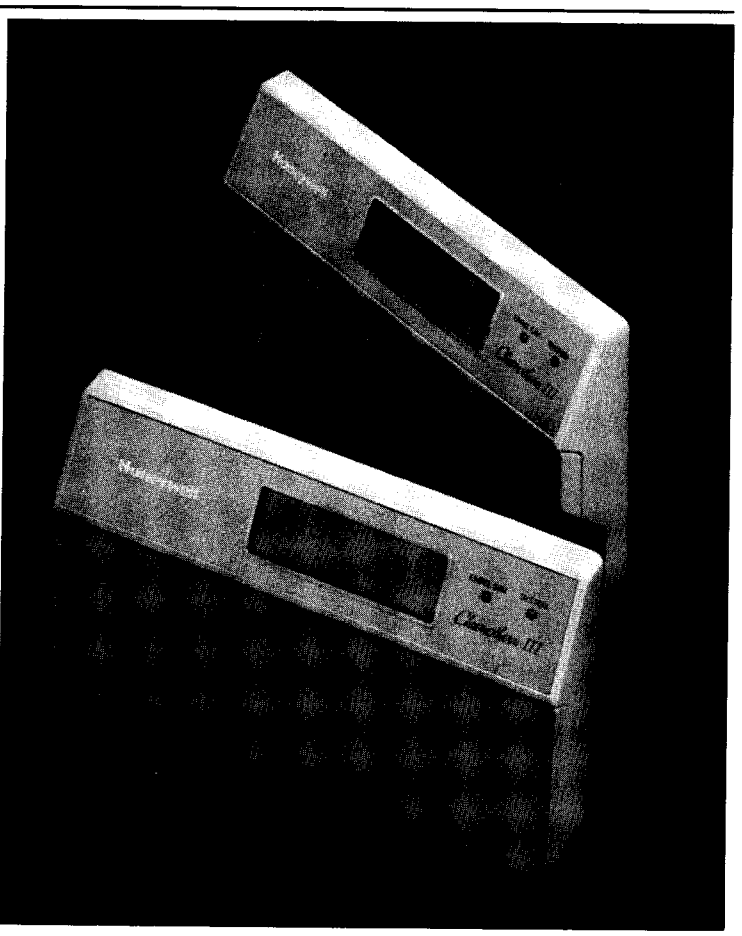
The new domestic landscape
After seven years, the bloom may be off the rose of Memphis, but Ettore Sottsass, the acknowledged mastermind behind the avant-garde Milan-based design consortium, has cultivated a new hybrid—not as defiantly festive as Memphis, perhaps, but certainly more saleable. The 16-piece furniture collection—called *Donau*—draws its inspiration, according to Sottsass and his co-designer Marco Zanini, from "the Austrian tradition, Biedermeier, and the Viennese," while continuing Sottsass Associati's signature experiments with forms, colors, and materials. Manufactured in Austria by Leitner Interior Design, the residential series includes a coordinated line of tables, chairs, and beds, as well as a complete line of casegoods (from bookcases and bars to cupboards and commodes) intended "for those who prefer a stylistic collage, for those who are in tune with the evolution of the rapport between man and the home." Each piece is made from an assemblage of dyed reconstituted wood veneers with brightly lacquered trim, which is meant to restore "richness" to the stripped-down domestic landscape. The *Donau* collection is available in three color ranges—traditional light, traditional dark, and modern—and the massive casegoods come with a variety of sprightly "top decorations"—from digital clocks and flags to trees and 24k gold leaf bars—that must be specified. Leitner Interior Design, available through Furniture of the Twentieth Century, New York City, and Grace Designs, Dallas.
Charles K. Gandee
Circle 300 on reader service card





Prototype desk offers a new approach to desk-top computers
A prototype for a free-standing desk, equipped with an integrated IBM PC XT computer clone (above), has been developed by Haworth. The central processing unit that powers the computer is housed in a 6-in. boxed drawer inside the desk (right) that also offers space for disk storage. The electroluminescent flat-panel graphic display measures 14-in.-wide by 1-in.-thick and can be positioned anywhere on the work surface. The display and keyboard can be unplugged and stored in the desk. The desk top may be specified in a variety of materials, including marble, granite, leather, and laminates and is supported by a tubular trestle base. Haworth, Inc., Holland, Mich.
Circle 301 on reader service card

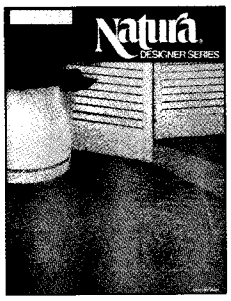




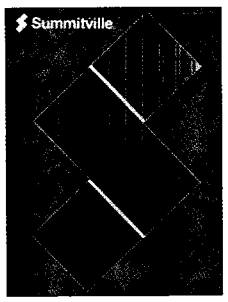
"Smart" thermostats aid temperature control
The *Chronotherm III* family of precision-engineered, programmable thermostats includes two single-piece configurable systems that are intended for commercial applications, and offer 7-day programming with a series of setpoints. The units may be used with heat-pump or conventional hvac equipment. Three residential units allow users to set a different schedule for weekdays, Saturday, and Sunday, or each day of the week, as well as four different time periods and temperatures within each schedule. The series features *Adaptive Intelligent Recovery*, which is said to ensure efficient recovery from the energy-savings period. Honeywell, Inc., Minneapolis.
Circle 302 on reader service card

Product literature

For more information, circle item numbers on Reader Service Card

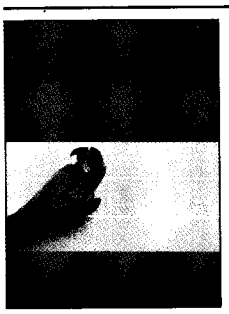


Tile
A series of fact sheets is available describing the manufacturer's line of tile products, including the *Designer* and *Luster* series. The fact sheets contain product descriptions, a chart with product standards and information, color variations, and recommended uses. Florida Tile Sikes Corp., Lakeland, Fla.
Circle 400 on reader service card



Ceramic tile collection
A 36-page color catalog features a selection of the manufacturer's ceramic tiling products intended for both interior and exterior applications. The catalog provides photographs of typical applications, available color options, shapes and sizes, and product specifications. Summitville Tiles, Inc., Summitville, Ohio.
Circle 401 on reader service card

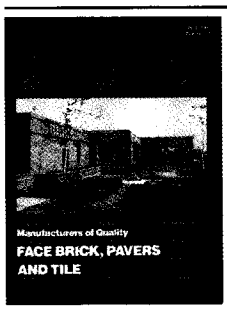
Quarry tile
Unglazed quarry tile is featured in a 4-page brochure that includes product information, descriptions of available sizes and shapes, and test results. Specifications for exterior roof decks, patios, walkways, and pool-deck applications are also featured. Metropolitan Ceramics, Div. of Metropolitan Industries, Inc., Canton, Ohio.
Circle 402 on reader service card



Tile
A 28-page color catalog reviews the manufacturer's line of tile products. Included in the literature are the *Bravo, Concourse, Carolina Colony, Maya, Grand Prix, Applause,* and *Watercolor Mattes* series. Product descriptions, sizes, shapes, and colors are reviewed. Mid-State Tile Co., Lexington, N. C.
Circle 403 on reader service card

Ceramic floor tile
A 4-page color brochure features the *Impressions* series of 8- by 8-in. ceramic floor tile. Intended for residential and light commercial applications, the tile may be used on both walls and floors. The brochure includes photographs of typical applications and coordinating backsplash and counter-top accents. Wenczel Tile Co., Trenton, N. J.
Circle 404 on reader service card

Porcelain ceramic tile
An 8-page color booklet highlights a line of porcelain ceramic tile products. Included is an extensive color chart, product descriptions, and diagrams of tile trims, sizes, and shapes. Mosaics, swimming pools, murals, and historical renovations are also discussed. Winburn Tile Manufacturing Co., Little Rock, Ark.
Circle 405 on reader service card



Face brick
The manufacturer's line of face brick, pavers, and tile is featured in an 8-page color brochure. The literature reviews the Ironspot clay tiles available in either smooth or wirecut textures. Dimensional diagrams and photographs of available blends are also included. Endicott Tile Ltd., Fairbury, Neb.
Circle 406 on reader service card

Ceramic tile collection
The *Heritage* tile collection is reviewed in a 6-page color foldout brochure. The literature includes dimensional breakdowns of several available patterns and trim units. Test results and photographs of the tiles are included, along with installation recommendations. Epro Tile, Inc., Westerville, Ohio.
Circle 407 on reader service card

Ceramic tile collection
A 28-page color brochure reviews a line of ceramic tile products. The brochure contains descriptions of product characteristics, suggested applications, available colors, and ordering information. Nineteen different styles are reviewed, along with product specifications. International American Ceramics, Inc., Tulsa, Okla.
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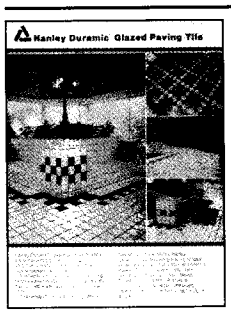
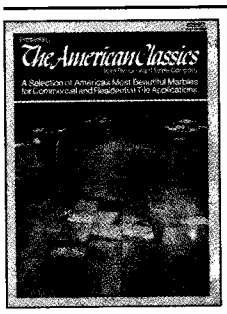


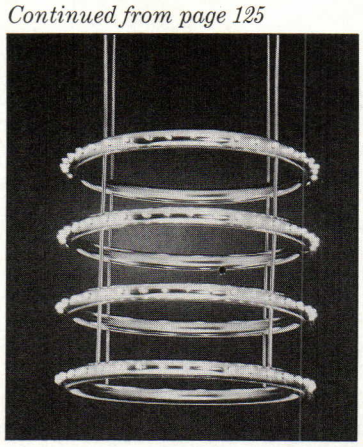
Paving tile
The *Duramic* line of glazed paving tile is featured on a 2-page color fact sheet. The literature includes specification test data, descriptions of shades and standards, photographs of installations, and examples of five available color options. Glen-Gery, Summerville, Pa.
Circle 409 on reader service card



Marble tile
A 4-page color brochure highlights the manufacturer's line of marble tile intended for use as flooring tile but also suitable for exterior applications. The brochure includes photographs of a selection of eight different marbles, as well as several kitchen and bathroom installations. Georgia Marble Co., Nelson, Ga.
Circle 410 on reader service card

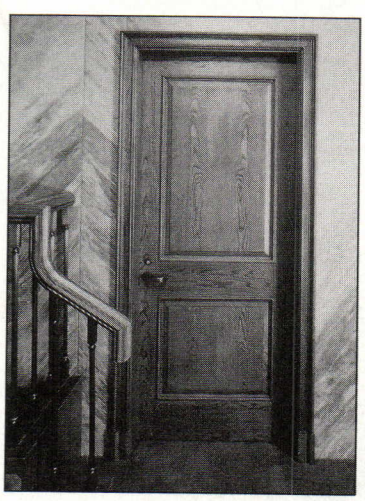
Ceramic tile collection
The manufacturer's 1987 ceramic tile brochure includes a technical information section and an architectural specifications guide. Each product or group of series has a detailed description, catalog numbers, and color keys. Installation photographs and illustrations are also included. American Marazzi Tile, Dallas.
Circle 411 on reader service card

Continued from page 125



Lighting system
A line of lighting fixtures is made of two-part, round, square, or tapered aluminum extrusions can be curved or mitered to create a variety of forms. Free-form shapes, curves, and circles can be customized in diameters from 3 to 20 ft. A selection of four finishes is also available. Sentinel Lighting, Los Angeles.
Circle 303 on reader service card

Lounge furniture
The *Elysée Palace Collection* of lounge furniture includes a mesh chair, lounge chair, and a three-seat sofa. The chairs are constructed of steel and brass parts with square steel mesh and are finished in black or dapple gray enamel. A fixed foam cushion may be specified in leather or a custom material. JG Furniture Systems, Inc., Quakertown, Pa.
Circle 304 on reader service card



Fire-rated doors
The *Firestile* line of doors and matching wood frames feature 20-minute fire labels and is available in mahogany, maple, white and red oak, ash, birch, cherry, walnut, and teak. The doors may be specified in a selection of sizes. The Minton Co., Mountain View, Calif.
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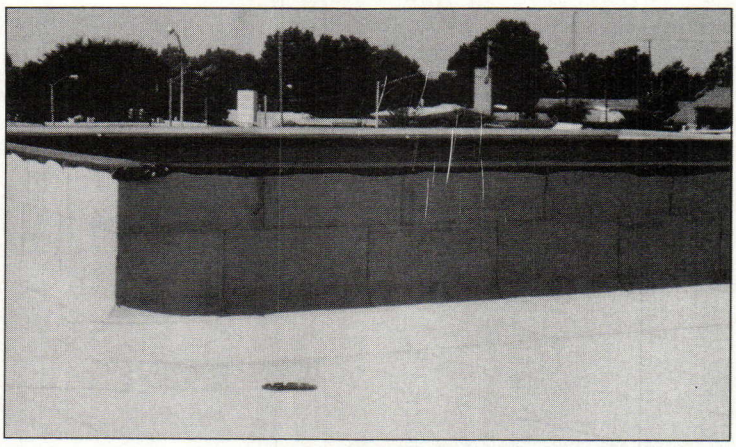

Flashing
Versa-Flash 160 flashing material is constructed of a matrix-reinforced fiberglass mat backed with a coating of modified asphalt and mineral granules. The flashing may be applied by hot mopping or cold adhesive. Tamko Asphalt Products, Joplin, Mo.
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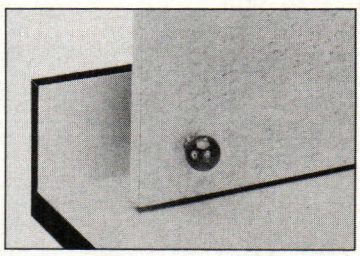

Laminates
The *Woodgrains Plus* line of 36 decorative woodgrain laminates is available in a variety of product types, including general purpose and postforming grades, decorative tambours, pre-laminated panels, and in a wall panel system. An additional 100 patterns are also available. Wilsonart, Temple, Tex.
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Architecture Faculty Opening — Columbia University's Graduate School of Architecture, Planning and Preservation is seeking applicants for a full-time position within the faculty of the Division of Architecture. The position will commence in the fall semester of 1987, at a level commensurate with training and academic experience. Preference will be given to candidates with professional and academic experience. In addition to a capacity for studio teaching, candidates must be able to offer an academic course. Applicants should submit their resumes before February 20, 1987 to: Professor Kenneth Frampton, Chairman, Division of Architecture, 404 Avery Hall, Graduate School of Architecture, Planning and Preservation, Columbia University, New York, NY 10027. Columbia University is an Affirmation Action / Equal Opportunity Employer. Women and minorities are encouraged to apply.

SUNY at Buffalo's Department of Architecture is recruiting three full-time tenure track faculty for Fall 1987. Two of the faculty are being recruited at the rank of Assistant or associate professor to teach design studios as well as support courses. The third position is also being recruited at the rank of assistant or associate professor and will primarily focus on the further development of our second professional, M.Arch., degree program in Advanced Building Technology. Salary for all positions according to rank and qualifications. Applicants should write to Professor Hiroaki Hata, Chairman, Faculty Search Committee, Department of Architecture, School of Architecture and Environmental Design, State University of New York at Buffalo, Hayes Hall, Buffalo, New York 14214. Applications should be submitted not later than 15 February 1987 and should include: a complete resume; a list of at least three references with full names, addresses, and phone numbers; and samples of professional, artistic, and scholarly work. As an equal opportunity / affirmative action employer, SUNYAB is particularly interested in identifying and recruiting qualified applicants who are women, handicapped persons, and members of ethnic minority groups.

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Director of Planning and Engineering — Ball State University Muncie, Indiana 47306 is seeking candidates for the position of Director of Planning and Engineering. The director is responsible for the leadership and coordination of the architectural, design and engineering planning and development of all campus projects. He or she will direct various types of studies concerning campus planning; building repair and rehabilitation; mechanical and electrical systems; and prepare long and short term recommendations and schedules for projects. The director will be responsible for budget recommendations and oversight for the planning area; and the hiring and supervision of personnel in the planning and engineering area. Ball State University is located in east central Indiana with a total enrollment of approximately 17,500. The campus consists of 1,000 acres with 53 major structures and 5.3 million square feet of space. To be considered, an applicant must hold a bachelors degree in architecture or mechanical, electrical or civil engineering and be registered to practice in the State of Indiana. At least ten years of experience in a planning / engineering function with a major university or similar position in another organization would be preferred. Salary will be commensurate with level of training and experience. Position is available immediately but will remain open until filled. Send letters of application, resume, and three original letters of recommendation to Mr. Bob M. Mantock, Director of Facilities Planning and Management, Ball State University, Muncie, IN 47306.

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The Florida Agricultural And Mechanical University invites applications and nominations for the position of Dean School of Architecture. Search Extended — The Florida A&M University is a historically black, fully accredited, comprehensive university in the Florida State University System with an enrollment of approximately 5,000 students and a faculty of 350. The School of Architecture, one of the 12 schools and colleges of the University, has been designated as a Center of Excellence by the State University System of Florida. With 20 full-time faculty and a current enrollment of over 200 students, the School offers NAAB accredited B.Arch. and M.Arch. degree programs. The School is housed in a new $5.3 million award-winning building that includes a resource center, technical and computer labs, and a full complement of support facilities. Continuing education and research activities are provided through the Institute for Building Sciences and a Washington, D.C. based urban studio. Beginning with the Fall Semester, 1986, a cooperative Master of Architecture program with the University of South Florida in Tampa will be implemented. Candidates should possess the Master of Architecture degree or equivalent; licensure preferred; significant academic experience, as well as meaningful architectural experience; ability to communicate effectively with external groups; demonstrated leadership ability; a strong interest in research; ability to attract external funding; and sensitivity to the University's commitment to increase minority representation in the field of architecture. The successful candidate must qualify for a senior faculty appointment. Salary is negotiable, depending on qualifications. Letter of application, resume, three letters of recommendation and other supportive materials must be postmarked by February 27, 1987. The successful candidate will assume the position by July 1, 1987. Address all communications to: Dr. James H. Ammons, Chairman, Dean of Architecture Search Committee, Office of the Vice President for Academic Affairs, The Florida A&M University, Tallahassee, Florida 32307. An Equal Employment, Affirmative Action Employer.

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Manufacturer sources

For your convenience in locating building materials and other products shown in this month's feature articles, RECORD has asked the architects to identify the products specified

Pages 68-71
Forest Hill Station
Esherick Homsey Dodge Davis, Architects
Pages 68-69—Paint: Sinclair Paint Products. Roof: Craycroft Clay Tile Co. Windows: Kreiger Steel Co. Flooring: American Biltrite. Ticket kiosk: Bay City Cabinet. Phone kiosk: Herman Oliver, Inc. Fire cabinet: Wilkirk, Inc. Ceiling: Armstrong. Signage: M. C. B. Indus.
Page 70—Elevators: Dover Elevator Co. Benches: Western Art Stone. Tile: Buchtal. Ceiling: Alcan Metal Ceiling, Co.

Pages 72-75
Alewife Station, Boston
Ellenzweig, Moore and Associates, Inc.
Pages 72-73—Concrete: San-Vel Precast. Tile: Heather Brown. Bronze tiles: Nancy Webb. Atrium framing: Kawneer. Lighting: Kim. Paints: Tnemec. Entrance: Forms & Surfaces.
Pages 74-75—Downlights: Kurt Versen. Graphics: Toshihiro Katayama. Escalator and elevators: Montgomery. Skylights: SuperSky Products, Inc. Benches: William Keyser Jr. Chandelier: Gen's Norfolk. Railings: custom by architects, fabricated by Gardner. Neon sculpture: Alejandro and Moira Sina. Metal ceiling: Levelor.

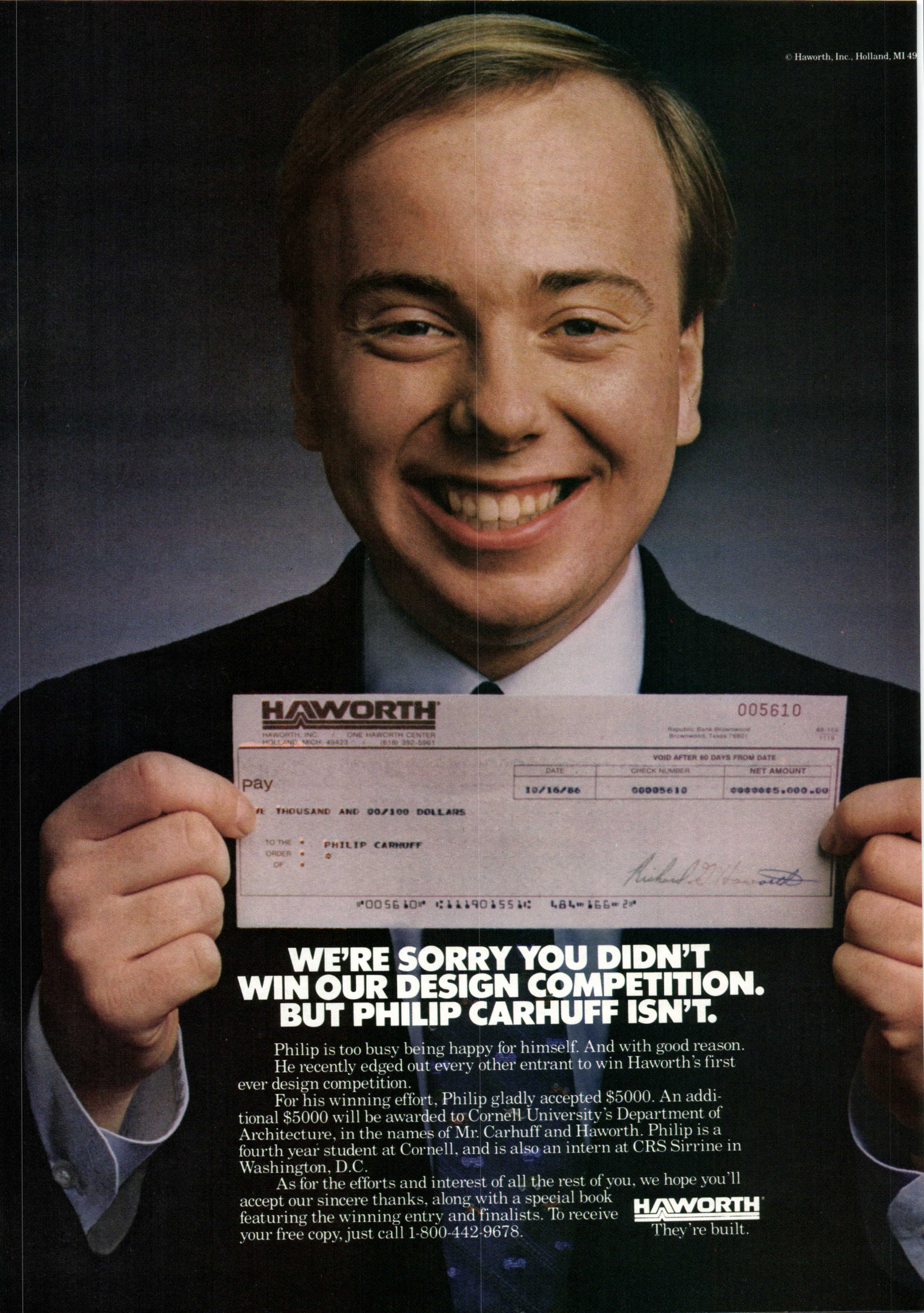
Pages 76-79
Suffolk Downs Station
Lozano, White and Associates, Inc.
Fencing and railings: custom by architects, fabricated by Rusco/Carlson. Brick: Spaulding. Lighting: Crouse-Hinds.

Pages 80-83
Astor Place Station
Prentice & Chan, Ohlhausen
Page 80—Cast iron: Robinson Iron Corp.
Pages 81-83—Tile: Buchtal. Ceramic mosaic: Terra Designs, Inc. Glass tile: Semon Bache Inc. Benches: Theo. G. Bayer & Son, Inc.

Pages 84-93
Washington Harbour
Arthur Cotton Moore/Associates P.C.
Pages 84-85—Glazing: Falconer. Skylights: Bohem; McKinney. Brick: Hanley. Roofing: James Meyers Co. (Colorclad). Metal doors: Tubelite. Rolling doors: Overhead Door Co., Inc. Roofing: W. R. Grace.
Pages 89-93—Windows and doors: Ampat Southern, TSI. Hardware: Baldwin. Exit devices: McKinney.

Pages 106-109
Conservatory
Techler-Tamarkin Associates
Pages 106-107—Greenhouse: Lord & Burnham. Brick: Victor Cushwa & Sons. Cast stone: Suabrad Concrete Products. Roof: Follansbee Steel. Doors: Marvin.
Pages 108-109—Locksets: Schlage. Cabinets, counters: custom by architects, fabricated by Gaston and Wyatt Inc. Lamp: Custom Metal Craft Inc. Wicker chairs: Jack Lenor Larsen.

Pages 110-117
Terra cotta: past to present
Pages 110-111—Gladding-McBean.
Pages 112-113—Ludowici-Celadon Co., Inc.



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concrete houses set in the sloping Swiss countryside. Typically modest in scale, Botta's houses nevertheless communicate a sense of tense, contracted monumentality. In formal inventiveness they are ingenious to the point of quirkiness: one features a cylindrical plan, for example, another a huge circular window—aptly dubbed a "Cyclops eye" by Wrede—set in the center of a broken rectangular facade. Several of the houses have facades decorated by bands of differently shaded concrete blocks, while yet another, at Morbio Superiore (photo page 41), has a gently curved facade articulated by alternating bands of concrete blocks set flat and at a 45-degree angle.

Not all of Botta's houses are entirely successful, I think, but considering the risks that he has taken, it is surprising how high a percentage are, or almost are. The architect's larger projects—which include a school, several libraries, an office building, an art gallery, and row housing—are only slightly less strikingly original than his houses. Many feature a meticulous decorative use of structural concrete—it is here that Botta declares his debt to Kahn most overtly—and all are at pains to reinterpret the legacy of Modernism in an uncompromisingly contemporary key.

As Wrede points out in the useful, if somewhat clumsily written, introductory essay he contributed to the catalog, Botta's central task is to steer a middle course between the rationalistic, austerely functional utopianism that would have us wipe the slate of architectural history clean and begin *ab novo*, and the nostalgic excursions of Postmodernism and strict architectural preservationism. Whether Botta always succeeds in achieving this middle ground—whether his search for formal innovation doesn't occasionally degenerate into precisely the kind of frivolous decorative posing that he criticizes—is at least an open question.

In this context, Wrede speaks cheerfully of Botta's having emancipated himself from Kahn's "structural rationalism," of his recapturing a sense of ornament and architectural gesture not confined to strict functionalism. But it is not at all clear that this emancipation necessarily marks a step forward. For the truth is that some of Botta's more fancifully dramatic designs all but turn their back on the uncompromising integrity that was at the center of Kahn's vision and strength. One thinks of some of Botta's more histrionic houses, certainly, but also of the highly self-conscious designs of several of his urban projects: the recent office building in Lugano (1981-85), for example, with its porthole windows and brick-clad, "cut-out" facade [RECORD, July 1986, pages 132-137]. Nevertheless, in Botta's best buildings—the 1976 house in Ligornetto, say, or his 1986 Bank of Gotthard Building in Lugano—one discerns the kind of simple ingenuity and attention to detail and context that are the mark of a genuine, if still inconsistent, architectural talent. *Roger Kimball*

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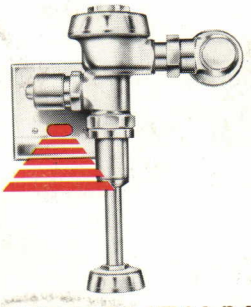

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