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Cover photograph: the door to Ossorio's garden wall by Norman McGrath

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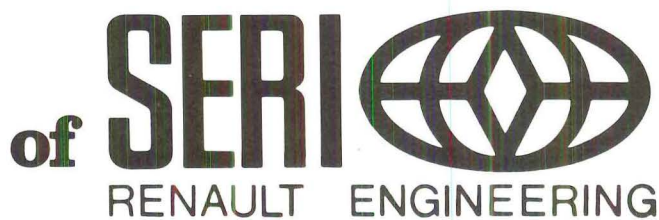
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Letters

New York housing

"New York Housing Breaks the Mold" in the November 1973 issue by Stanley Abercrombie rightly praises the work of architects Davis, Brody and Associates. Among other deserved plaudits, it commends them for sensible siting of the Riverhead (sic) project.

Regrettably, the Waterside group's siting is not as sensible. It cuts off mercilessly the newly completed Bellevue Hospital Center from its vista to and across the East River. This is insensitive siting, which the planners could have averted. Surely, these imaginative architects could have come up with a solution which was proper for Waterside as well as for its predecessor on the west side of Franklin Roosevelt Drive.

It seems that "enclave planning" took precedence over community planning, with disastrous results.

JOSEPH BLUMENKRANZ
Architect, New York, N.Y.

We still feel, as our article said, that Waterside has "made the friendly gesture to its landlocked neighbors of constricting itself generally to tall, narrow towers, thus obstructing the river views as little as possible." Indeed, now that Mr. Blumenkranz (one of the architects of the new Bellevue building) mentions it, one of the few shortcomings of Waterside is that so many of its views of Manhattan are cut off by the monstrous bulk of Bellevue.—ED.

We are very pleased with the excellent article on our firm's housing which just appeared.

There is, however, one important error in it that we are upset about and hope can be rectified to some extent. That, of course, is the incorrect date for when Chet Wisniewski left the firm and it was reorganized as Davis, Brody & Associates. It was 1964 and not 1957. This is not just an academic question, as you can appreciate, because Chet was an active principal in the firm from the beginning until he left; our developing reputation in the field during those earlier years was based on his most important contribution of design talent, energy and time. We would never have had the opportunity to get into these larger commissions unless we had established our credentials during those years. In fact, two of the projects shown were already incubating in the office (Riverbend and Waterside) before Chet actually left and he added valuable input into them while he remained.

LEWIS DAVIS
SAMUEL BRODY
Architects, New York, N.Y.

We sincerely regret our error.

—ED.

India

We strongly object to Peter Blake's editorial on India (October issue). He endows India with intelligence, humanity, civilization and beauty. He characterizes Indira Gandhi as a friend of all mankind.

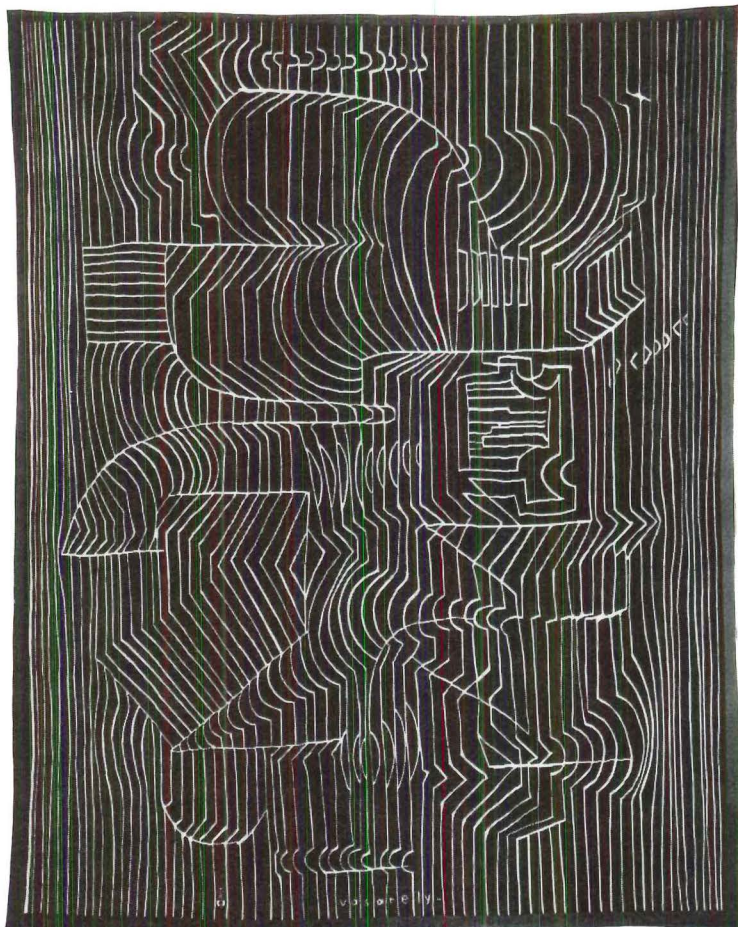
The facts are different. India does have reverence for life—as long as it is not human. Dead children float down the Ganges River—but cows are worshipped. India, since her independence, has fought more aggressive war than any other country on earth. Her population will riot about the prophet's hair—and kill hundreds of human beings in the process. Intelligent Indians have only one thought—to leave their wretched country and never to come back. Mrs. Gandhi, and many of her fel-

Bellevue on the left, Waterside on the right. Photo: Skyviews.



continued on page 8

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continued from page 6

low Brahmins, never cease to lecture to the civilized nations of the West on morality—and then start another war, while the Indian masses starve. The Indian semi-socialist functionaries curse the United States—and then insist that Americans send them food, so that they won't have to soil their hands with honest labor. Mrs. Gandhi and her hypocritical friends are no friends of ours. We pity the masses of Indian people, living in ignorance, hunger and overpopulation. Whatever may be wrong with America, India has nothing to fix our shortcomings—morally or materially.

WERNER H. GUMPERTZ
Engineer, Cambridge, Massachusetts

Landmarks

Since first learning of Mr. Costonis' efforts in preservation legislation (October issue), I have often wondered why his ideas have not been applied to all building.

For example, suppose an owner acquires a site which is zoned for 13-story construction. Although he only needs a 10-story building, he feels compelled to build a 13-story building to realize the full potential of the site. The result is the crew-cut silhouette of Washington, D.C.

If, however, the owner could transfer his unneeded volume to another site, the city would gain a more exciting skyline and the pedestrian would gain much-needed breaks in the super human-scaled walls of our streets.

Perhaps we should carry Mr. Costonis' outstanding ideas one step further.

KEITH RAY
Architect, Washington, D.C.

McGraw-Hill Building

Read the McGraw-Hill story in your October issue. Very interesting! I happened to be chief in charge of Ray Hood's office at that time. You discussed simple detailing of exterior green T.C., so I thought this might interest you.

The T.C. (typical) scale details (not including the top or the storefronts) were minor in quantity and covered only one sheet of drawings. It was all there because there was little that needed illustrating. Hood wanted to see the details and looked at this ONE sheet. "This isn't enough—full-size it." He was a very conscientious chap but didn't know too much of the necessities or mechanics of working-construction drawings. We full-sized the stuff, and Hood was happy—no one was going to cheat

his clients. (But these drawings were never printed and never issued; and owner Eken didn't want them.)

Ray Hood was a wonderful boss. He was kind and thoughtful of his men. He worried about his clients and bent backwards to service them and earn his fees.

DON CAMPBELL
Architect, La Jolla, California

Baker House

I have recently returned from overseas and have just read my first issue of Architecture PLUS.

May I congratulate you for producing the one magazine in my experience that has finally adopted a "no nonsense" approach to the discussion of buildings.

Concerning Baker House (October issue), I lived in a triple, double, and single room and my comment is that unlike many architectural designs, Baker House works.

RICHARD M. SHERWOOD
Architect, Denver, Colorado

Fabric Structures

The article, "Fabric Structures Grow Up," in the October issue, is a very comprehensive and good review of the new technology which is permitting more permanent use

of these structures.

However, in view of technical facts developed so far, we are sure you, and your readers, will share our concern about the accuracy of two statements regarding life expectancy of glass fabric coated with "Teflon" fluorocarbon resin.

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For these reasons we do expect a long life for such fabric structures, but just how long they will last in an outdoor situation, remains yet to be determined.

D. L. ORMOND
Industry Manager, Fluorocarbons
Division
E. I. du Pont de Nemours & Company
Wilmington, Delaware

continued on page 14



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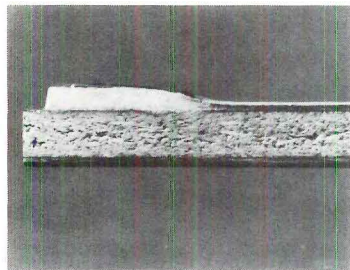
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Flame-Stop

Book Review

The Architecture of Ludwig Wittgenstein: A Documentation by Bernhard Leitner. Published by The Press of the Nova Scotia College of Art and Design, Halifax, N.S.; co-published by Studio International Publications Ltd., London, England, 1973. Bilingual edition English/German, 128 pages, 88 reproductions, semi-hard case binding. \$9.95.

Reviewed by Les Levine

Les Levine is an artist, a professor of environmental design at New York University, President of the Museum of Mott Art, Inc. in New York and a contributing editor to Arts Magazine.

Surrounded by incompetents

The Press of the Nova Scotia College of Art and Design has launched as its first publication a documentation of the house designed by Ludwig Wittgenstein in 1926 to 1928 in Vienna.

The book compiled by Bernhard Leitner primarily consists of a photographic study of the interior made in the summer of 1972 under the supervision of the author. Explanatory drawings are also included and the book contains an extract from the previously unpublished "Family Recollections of Hermine Wittgenstein," Wittgenstein's eldest sister.

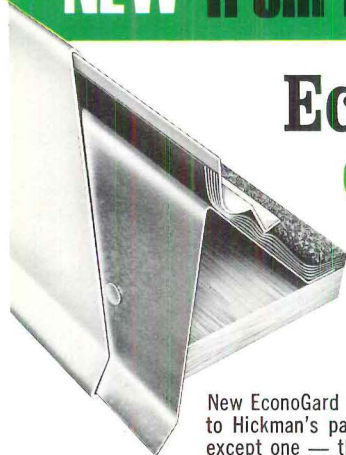
Wittgenstein, who lived from 1889 to 1951, is best known as an Austrian philosopher. He was a protégé of Bertrand Russell, having studied under Russell at Cam-

bridge around 1912. His work is primarily known for the philosophical models he developed for esthetic experience. Amongst other philosophies developed by Wittgenstein were: Logical Atomism, i.e. things are what they seem to be and because of what they seem to be they will become what they are; and the Tyranny of Language, a philosophy which maintains that we are victims of the way language behaves as a system and our dependence upon that system almost to the detriment of freedom of expression. Wittgenstein's most important volumes are called the *Blue and Brown Books*. He is highly respected amongst artists and scholars as a major philosopher of the twentieth century. Many believe that his *Blue and Brown Books* are to philosophy what McLuhan's *Understanding Media* is to information theory.

The Architecture of Ludwig Wittgenstein: A Documentation is a bilingual edition in English and German. It contains 128 pages and 88 reproductions. While this book must be recognized as a welcome sight after a year and a half of preparation and an expenditure of \$30,000 on the part of the College, it is hard for one to consider it as much more than an extended museum catalog.

There are approximately 6,000 words, 5,000 of these written by Hermine Wittgenstein. The book will probably take a slow reader all of 20 minutes from cover to

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View from the south in 1928, shortly after completion.

cover. It has the appearance of an economics journal put out by the Department of Agriculture as a study for war-time austerity measures. Or perhaps I'm wrong; perhaps it is the proletariat esthetic or that institutional "poori" look that educational institutions insist on as "serious" when in actuality it's just dumb.

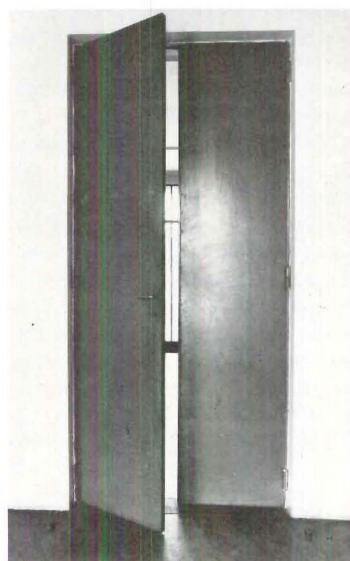
Misleading beyond redemption

It is no doubt a "trendy" book, to have been slapped together at this moment of resurging interest amongst intellectuals in the philosophy of Ludwig Wittgenstein. The introduction states that this documentation does not attempt to explain Wittgenstein's architecture in terms of his philosophy, which is a good thing because it certainly doesn't do that. It is also pointed out that this house commands attention because of its uniqueness in 20th century architecture, a statement which if not false at least is a highly romantic notion.

The title *The Architecture of Ludwig Wittgenstein* is pretentious and misleading beyond redemption considering the fact that he only built one house. "A House by Ludwig Wittgenstein" would have been more honest and in the long run a more generous gesture on the part of the publisher.

It is not surprising that a philosopher of Wittgenstein's caliber would be capable of designing a structure of considerable elegance. Indeed one could well imagine that if an important artist, such as Jasper Johns, were invited to design a house, that the results would be fascinating, but quite aside from the works of major architectural influences, such as Corbu and Mies. For after all, these are the unique figures in 20th century architecture who by their persistence and conviction, developed styles that have in very direct ways changed our philosophy of living spaces.

A little more background on why Wittgenstein decided to do this construction would have been helpful. Perhaps a little of his philosophy could have been introduced so one could understand a bit more. There were really no conclusions drawn by Leitner, who collected this information. I wanted to find

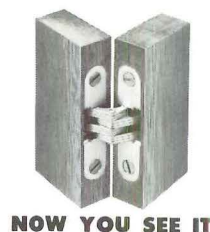


Typical metal doors 10'9" high, with a single doorhandle 5' above the floor.

out more about Wittgenstein, and if possible, to find out what's happened to the house. The book doesn't say. It does say it was destined for demolition. Unless somebody knows something about Wittgenstein and is interested in him as a philosopher, he would not be attracted to this book. But let's assume that this book really is only for those who are interested in Wittgenstein's philosophy.

Neurotic as the rest of us

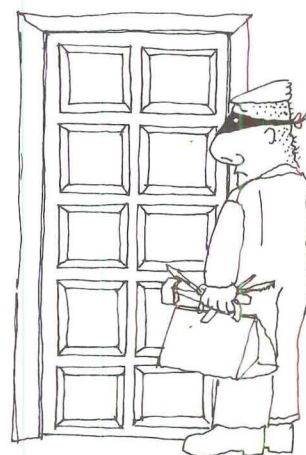
Wittgenstein was obviously trying to say things about houses and living and the utilitarian aspects—and yet he wasn't willing to use ready-made, factory manufactured doors, light fixtures, handles and things. That seems a paradox to me. The idea of the "specially made" gives an elite eloquence that seems to be in opposition to his philosophy. He is saying, "I'm going to make a very stark utilitarian house. The shades we put on the light fixtures we took off because they weren't right and didn't fit." And yet, instead of using others that were already on the market as utilitarian items, he took his ideas from them, but then carefully redesigned each one for his house. Maybe he was making models for projected possibilities—prototypes—although one doesn't feel enough information is given to draw that conclusion.



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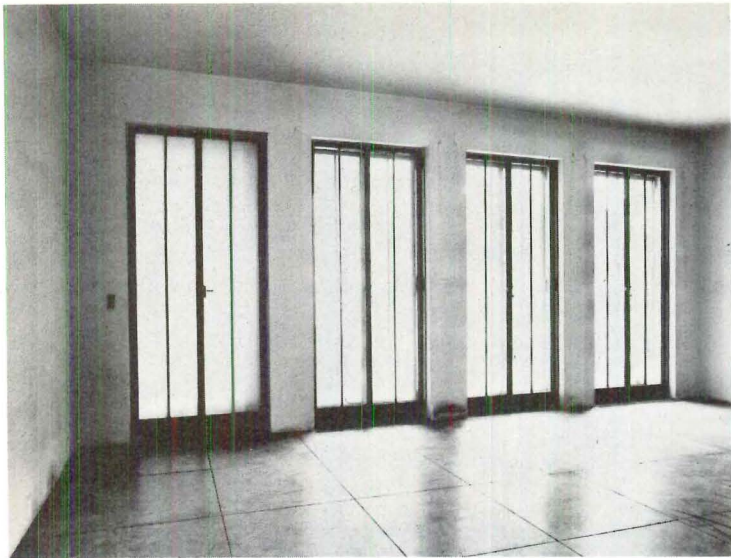
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Four pairs of doors in the dining room, the left one leading into the hall, the other three to a terrace. The ceiling fixture held a bare bulb.

It gets to be an obsession when it got to the point where he raised the ceiling an inch and a half after almost completing the whole house. In one way I understand how he was striving for this perfection, but I wonder how his sister could appreciate such extravagance as raising the ceiling an inch and a half which would take months. There's another paradox; his sister's statement that early in his life he had shocked them all by deciding that

he didn't want to be wealthy anymore. And then he specially manufactured everything for the house. Cost was no object. My feeling is that he was probably as neurotic as the rest of us.

It's just bad taste

This is an extremely elegant house. It tends to have this kind of utilitarian "provera" look, but underneath it all, it's at least a very decadent concern on his part. Was

he just trying to make a perfect house? In the stone slabs on the floor, there's a straight line coming down the middle of the door to the middle of the heat register. Maybe he was just striving for perfection and the cost didn't matter, but that kind of perfection in an industrial society by nature becomes decadent. It's not the same kind of decadence as hanging crystal chandeliers or gold-plated doorknobs. In an industrial society where crystal chandeliers are manufactured and mass-produced, that's not decadent, it's just bad taste: if you insist on being such a perfectionist in a society that isn't geared for perfection, an enormous amount of waste is incurred.

The other book I thought about the most while I was reading this book was Charles Jencks and Nathan Silver's *Adhocism*. All the way through their book, they would show utilitarian constructions (architecture, objects) that had been made with ready-made parts, factory ordered parts, and it seemed to be getting at the same end through very different means.

Leitner was clearly concerned with the inside of the house and the detail. I got the impression that Wittgenstein was fascinated by the space. It's a different kind of light than the kind of things Louis Kahn has done, yet he's dealing with some of the same problems.

Seeing the measurements of the rooms and the architectural plans is much more interesting than the text. Perhaps there are no conclusions drawn. It really sort of leaves me up in the air. One is set up for that by its being called a documentation. I have the impression that the author was concerned about the house and was concerned about its demolition. And perhaps in a backwards way, he has involved us in that, too. By doing it in this cut and dried way, are we more aware of what could happen to that house if he had said, "Isn't it awful? They're going to tear it down."?

Published by Dutton or Praeger

In reading through Hermine's "Recollections," it would seem that Ludwig was surrounded by incompetents. "A workman producing a door lock said to Ludwig, 'Tell me, Herr Ingenieur, is a millimeter here really that important for you?' and even before he had finished the sentence, the loud, energetic, 'Ja,' that almost made him recoil. During the talks with the firm that finally completed the doors, the negotiating engineer became hysterical. He did not want to give up the commission and yet he doubted whether it was possible to carry it out in accordance with Ludwig's demands." On another occasion, Ludwig tried to influence

his friend, the sculptor Michael Drobil, in the making of his sculpture. "He even began to sculpt since he was tempted to make his own version of the head which he had disliked in one of Drobil's works." What a terrible burden it must have been to feel that you can be other people even better than they can be themselves. I'm sure a good psychiatrist could offer us considerable illumination on that.

The book impresses one as a stingy effort. It reminds one of the "star-fuck" attitude of Hollywood in its most decadent period at the beginning of the '60s when the most common approach to movie-making was to produce an absolutely nothing plot with a star thrown in for box-office appeal. In other words, give them nothing, but put a star on the cover so they'll be tempted to buy. When Studio International, the co-publishers, saw the book, they insisted on having a dust jacket made for distribution in Europe. The cover design by Frank Fox is dumb. It looks more like it's been designed by a constipated turkey than a frank fox.

Well, perhaps the answer is to get it published by Dutton or Praeger. Take all the German out, put all the photographs at the back and all the print at the front, put a new title on it, re-design the cover and binding and put it out for \$2.50.

Deserves an "F"

A question this book begs us to ask is: can the one-shot architecture of an important philosopher be as valuable an experience as the main body of his philosophy? The answer is a resounding, "No." The activity is no different than the Sunday paintings of a major politician. They may give us some small insight into the human personality of the man or contribute to his public relations image, but they do not explain his position on slum housing or make us more or less victims of his policies.

If anything, the book diminishes Wittgenstein's heroic image in my mind. It also leaves considerable questions as to what is the purpose and value of an art college publishing such volumes. A new publisher is always necessary, and if that publisher brings us further insight into what we are and where we're going even if we just get better entertainment or fun, Bravo! But if this is the taste of things to come from the Nova Scotia College of Art and Design, i.e., an avant-garde name thrown together with some conceptual art clowning into an "Information Canada pamphlet," then it's obvious that the College still hasn't done its homework and deserves an "F" in book publishing.

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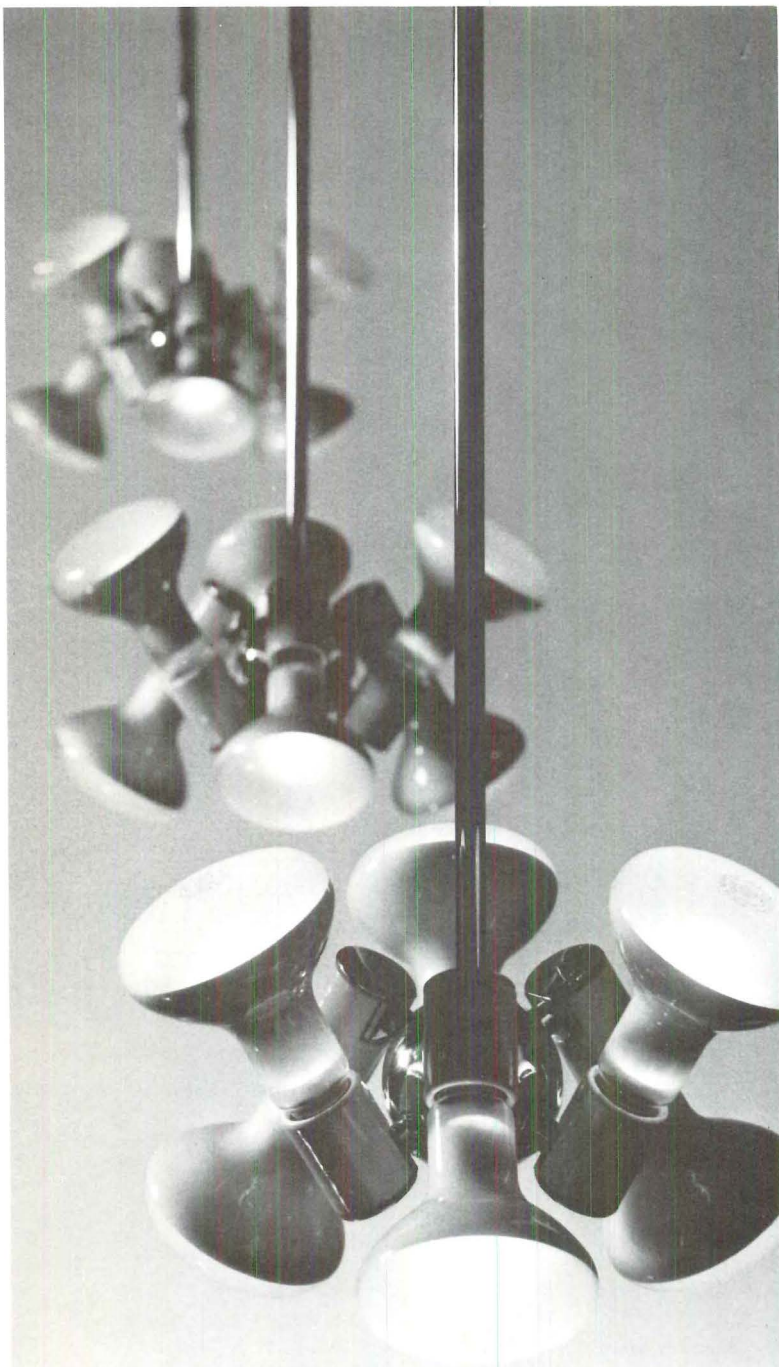
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Letters

continued from page 8

A- Award

Am delighted to be the recipient of the first First (November issue, pages 80-81). It will probably be the first time an architect *loses* clients by being published!

Please hold rubber T-square until final GSA approval of plans.

RICHARD D. MCFARLAND
Architect, San Francisco, California

The double page print of the "Modest Proposal For A Nixon Library" in the November issue of your good magazine makes me wish I had a full-size ozalid of the original, suitable for framing for my office wall.

While it is really unimportant to me whether "Richard D. McFarland" is a pseudonym, I am hoping that my enclosed check to cover the cost of a fresh print can be forwarded to the responsible draftsman.

MCCLOUD B. HODGES, JR.
McLean, Virginia

P.S. My bank takes no exceptions to endorsements of checks by pseudonyms, if applicable to this instance.

We are extremely impressed by the appropriateness of Mr. McFarland's proposal for the Nixon Library, and we believe his design objectives were at least perfectly clear.

However, as a group of Architects and designers, we like to see a well justified scheme like Mr. McFarland's followed through to the construction stage, and were wondering where the missing elevations, sections, details etc. were? After more consideration of this question on our part, and considering the man for whom this great facility is being proposed, we theorized what became of these drawings.

One night when the underpaid draftsman was working late at the office, the phone rang. While he reached back to answer it, he accidentally left his thumb on his electric eraser for two hours and twenty-seven minutes and the remaining drawings were inadvertently erased. Our only remorse is that Mr. Nixon will never get the monument he truly deserves.

DEREK HOLDSWORTH AND STAFF AT
ERNEST L. MC COY, ARCHITECT
Bakersfield, California

Since receiving Architecture PLUS from its very first issue, I have enjoyed its high quality and comprehensive philosophy.

However, your November issue

has done it!

The so-called "Nixon Library" is an insult to those of us who still believe that the office of the President of the United States demands certain respect for him who serves that office. The referenced presentation in your November issue is in poor taste. Please cancel my subscription as of this date. I do not want your magazine on my desk.

JOHN M. CREAMER
Architect, Jacksonville, Florida

For the first time in my life, I am both ashamed and embarrassed to use the name of Architect—after reviewing what you apparently think is cute or clever in the First Architecture Minus Award. I thought this magazine was dedicated to the advancement of architecture rather than to politics.

GAYLE D. WILHITE
Architect, Brownsville, Texas

A request that now that Mr. McFarland has shown the Nixon memorial he now turn his attention to a McGovern memorial with rooms for Vice-Presidential "askees"—the area required for this portion alone would cover the Saharah (sic.) with a special room for Teddy K. to give lectures on how to escape a sinking car and general Scuba diving technique.

If your rag wasn't free, I'd cancel my subscription.

Seriously, don't you think the press and TV are doing a good enough hatchet job and the professional magazine is not the place for partisan politics? I do!

UNSIGNED

Please cancel my free subscription to Architecture PLUS.

I thought your publication was the greatest thing that has happened in the architectural publishing field in years. But a good architectural publication should be positive, stimulating and should show leadership in the social as well as the architectural aura. Your Architectural Minus Award article, "Nixon Library," is negative and perpetuates the political smut and social discontent prevalent in our country today.

G. C. MCGILL
Architect, Dallas, Texas

We want to thank the above for taking the time to write to us. We are always interested in the views of our readers, and hope that even the most outraged of you will remain with us as readers—of our letters columns, at least.—ED.

We are not about to take credit for the worldwide energy crisis, God forbid! But we do take credit for what is probably one of the more thoughtful, step-by-step analyses of its impact on architecture and building published to date: the 14-page article (July 1973) by Engineer Fred Dubin and our Senior Editor Margot Villecco, which was written six months before the Arabs cut off their oil.

The Dubin/Villecco article covered everything from site orientation to glazing details in an attempt to identify, in general, the principal energy leaks in buildings; but it failed to address itself to one central question: how, in a perhaps excessively free society, do you get investors in buildings to do the right thing, energy- or any-other-wise, if it is going to cost more to do so?

The answer, of course, is to bribe them. You probably can't pass a law to prevent energy leaks (except in public buildings); but you *can* make energy conservation quite profitable for those who are, legitimately, interested in profit.

You can, for example, reduce real estate taxes on buildings that comply with the Dubin/Villecco standards; you can reduce rates charged by publicly regulated utilities and insurance companies; you can offer subsidized, low-interest mortgages to building owners who comply; and there are other potentially effective bribes.

We have plenty of precedents in free enterprise societies for bribing citizens who are willing to do the right thing. Rockefellers have long and successfully been bribed (through generous tax deductions) to induce them to support museums of art; and Fords, Carnegies, Mellons and innumerable others have long been similarly induced to support major foundations which, in turn, have done the right thing in many areas of human endeavor, from the support of civil rights movements, to the support of ballet dancers.

It is a perfectly OK device by which to circumvent Congresses and Parliaments whose members don't have the nerve to (publicly) subsidize Picasso, Martin Luther King, or Balanchine. And so they permit wealthy taxpayers to do the subsidizing instead. A bit sneaky, but quite legal and quite reasonable.

The immediate problem, then, in the building industry, isn't really to *identify* the energy leaks. Dubin/Villecco and others have already done that. The immediate problem is to identify all the sneaky tools available to a free society that will make it highly profitable for builders to go to heaven. Any further suggestions?

—PETER BLAKE.

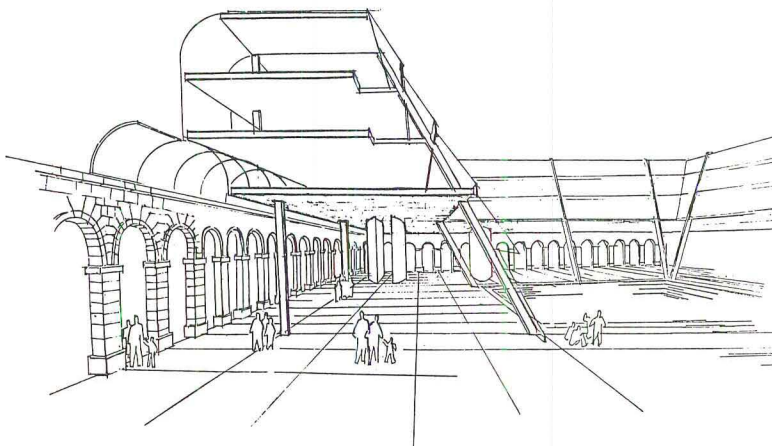
Saint-Germain-des-Près

In October 1972, a design competition was held for the reconstruction of the 19th-century Paris market hall at Saint-Germain-des-Près. All architects practicing in the vicinity of Paris were eligible to enter, and 75 proposals were received. Five prizes were awarded with first place given to the project sub-

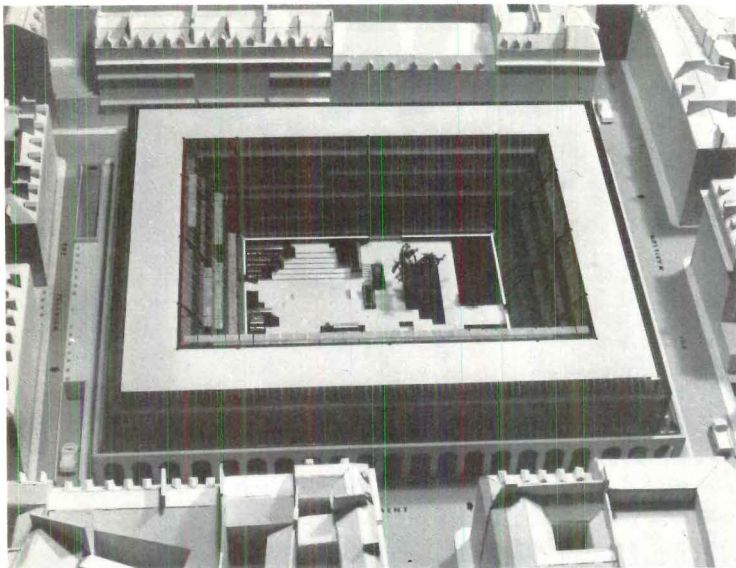
mitted by Renaud Bardon, Pierre Colboc, Philippe G. Lamy, and Jean-Paul Philippon, architects; and Denis Bimbenet and Christian Gravier, engineers.

The competition problem involved the renovation of the existing market, preserving its facilities, and the addition of a swimming pool, gymnas-

Many of the news reports and comments are from our regular John Donat (London), Gilles de Bure (Paris), Detlef Schreiber (Milan), Charles Correa (Bombay), Patricia Boyd and (Melbourne), Yasuo Uesaka (Tokyo), and Leonardo Aizenberg (E Plus correspondents are identified by their initials; other contributors full names. The remainder is contributed by our New York staff.



et
buil



A 19th-century market becomes a 20th-century community center

torium, social service and medical facilities, including a day care center for 60 children, facilities for handicapped children, a mental health clinic, a senior citizens club, and parking facilities for 100 cars.

The original market is an arcaded Italianate structure designed by J. B. Blondel, which opened in 1818 and is still in good shape despite the gradual encroachment of later buildings and additions. At one point this most successful market was threatened with demolition but now its preservation is considered to be essential as a recognized center of local activity for the neighborhood, and as an architectural landmark.

The original market design offers the sort of central pedestrian space that has since become so rare in

Paris. The interior is thus to be returned to its original state, with the arcades forming a transition between street and marketplace. It is then to be fitted out in a steel and glass structure whose contrast with the massive arcading is intended as its chief design feature.

The immediate surroundings are to be treated as a semi-pedestrian zone with delivery access and parking relegated to a level below grade. Also on that level will be the swimming pool and the gymnasium. The ground floor will house the market with the central open space being turned into a garden which can double as an open-air theater on occasion. The upper floors will house the social services and medical clinics. Total floor space is 12,000 sq. m.

England's see-through pyramid

The winning entry to the competition for a £5-million county hall for the Northamptonshire County Council has been won by Jeremy and Fenella Dixon with Edward Jones of Cross, Dixon, Gold, Jones & Sansom. Seven assessors, including five architects and two lay members of the Northamptonshire County Council, selected the winning design from a first-stage entry of 224 and a second-stage entry of nine designs selected for development.

There was a fundamental disagreement between the architects and the lay assessors, who regretfully presented a minority report rejecting the winning design.

The following are extracts from the report indicating the total divergence of opinion:

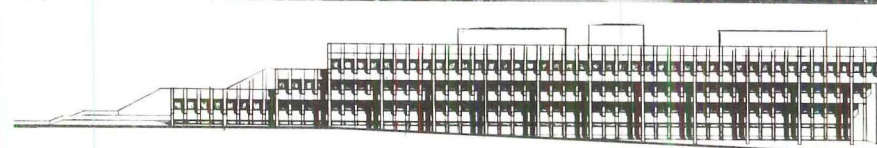
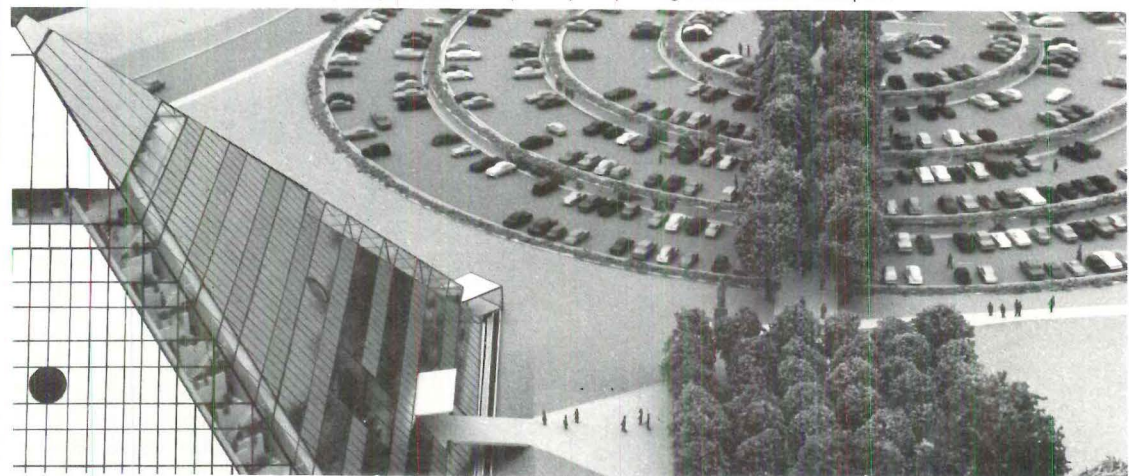
The architects: "... in their proposals to accommodate the human activities foreseen ... (the winning scheme) invents an architecture for them. It does so with audacity, imagination and a comprehensive underlying logic which we cannot fault objectively.

"Within the building, ground floor reception and library areas are surmounted by five floors of offices, each of a different size and thereby of varying spatial quality. Vertical access is arranged centrally and by inclined corner stairways, these serving also as winter gardens. Above the offices a separate floor holds the restaurant and common rooms—and yet another the Committee Rooms and an exciting Members' Concourse, above which the actual Council Chamber is sedately poised as apex to the entire composition.

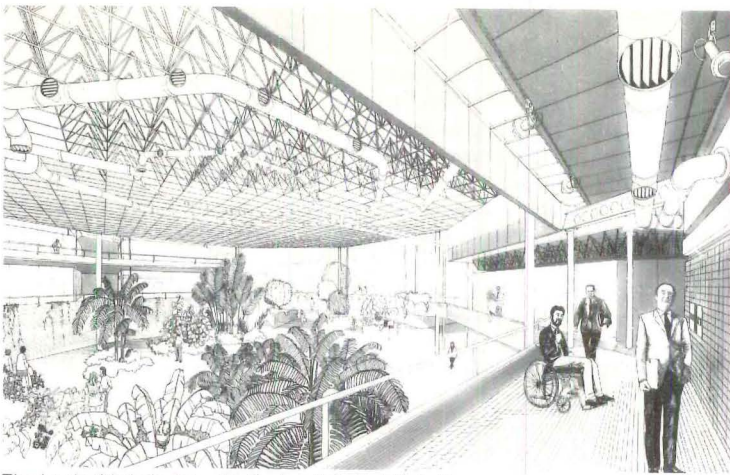
"We see the best feature of this design to lie in its provision of exceptionally good working environment. ... In so far as architecture is 'an experience,' this is a structure likely to prove in-



The jurors' vote: 5 architects loved it; 2 laymen hated it. (Below) the parking lot/mound is "sculpture"



The jury's second choice—Kallmann, McKinnell & Craig



The jury's third choice—W. Burton & G. L. Mitchell

vigorating to see, to visit and in which to work."

The council representatives, opposing: "... the scheme selected as the award winning design ... is, in our opinion, totally misconceived for the purpose of a new County Hall for Northamptonshire."

The representatives regard the design as an intellectual concept ingeniously worked out and seductively presented, whose shape imposes its own constraints and makes an extension a major problem in design and siting. Although it was not a requirement of the competition conditions that the building should be capable of being erected in phases, the fact that this cannot be done is a disadvantage of the winning design.

The representatives opposed to the design express doubts about the building's orientation, technology and energy consumption. They object to the Council Chamber at the top of the pyramid "in a manner that is foreign to the new conception of democracy and participation. ... We consider the shape to be reminiscent of a mausoleum and the dead Pharaohs. ... In our opinion a glass building of such size is totally unsuited to its environment. A giant glass pyramid is particularly unsuited to the rolling landscape of Northamptonshire. In short, we believe this to be an imposed solution."

The outcome of this disagreement between the two groups of assessors could have very serious consequences for the whole system of selecting architectural designs by competition. The competition system in the U.K. and worldwide has created unique opportunities for young and talented designers to build. In the U.K. one has only to think of the Skylon and Pimlico Housing won at the time of the Festival of Britain (1951) by Powell and Moya; of the Hunstanton School won by Alison and Peter Smithson; of Lillington Gardens housing won by Darbourne and Darke. But one must also recall the struggles and catastrophes:

the brilliant design for the Lincoln Civic Centre won by Eldred Evans when still a student, which was abandoned after four years' work; the Runcorn Housing competition (the largest housing competition ever—£7 million) won by Darbourne and Darke, also abandoned; the new Parliament Building competition won by Spence and Webster, which hung in the balance for almost two years; not to mention the fiasco over the UNESCO headquarters in Vienna or the notorious but vindicated Sydney Opera House.

The outcome of the Northampton disagreement and whether the County Council have the nerve to build their winning entry could be crucial to the future of design by competition as well as to the future of the young architects who designed it.

The jurors for the Northamptonshire County Hall competition were: R. H. Sheppard, H. Faulkner-Brown, N. Conder, W. Whitfield, A.C.A. Colton, D. P. Oxenham, and J. F. Goff.

The jury's second choice was Kallmann, McKinnell & Craig; and their third was W. Burton & G. L. Mitchell.—J.D.

For a sample of reactions in England to the winning scheme, we quote here from three letters which appeared in *The Architects' Journal*, 7 November issue:

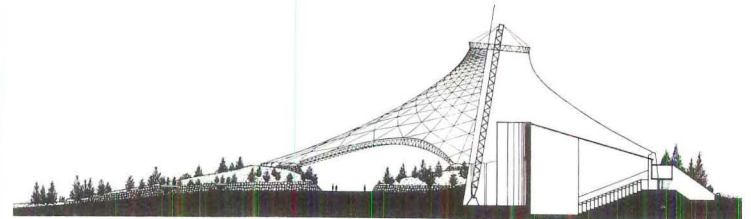
May we, as competitors, comment on the proposed Northampton County Hall. We do not agree with those who complain that the building is reminiscent of a mausoleum or the tombs of the Pharaohs. So what? Any number of civic buildings around the world are reminiscent of Greek temples originally intended for the worship of ancient gods but nobody complains. ... On the vexed question of whether or not the building is capable of extension, we agree with the architects' contention that the country is littered with civic buildings on which extensions have been attempted in various styles at different times and rarely does it come off. No architect can assume

that he will get the job of extending his building and the better solution is to put up a separate building. ... Our only real criticism concerned the proposal to park cars on an artificial mound. The aesthetic reasons seemed a little suspect, but accommodating a thousand cars on the ground is a near impossible visual problem and one can only admire the skill and panache with which the architects offered a solution. In our opinion the best scheme won, so let's get on with it.—A. Hunt and J. Evans, Bedford.

I cannot call to mind any single recent event likely to be more

damaging to the standing of the architectural profession than the result of the Northampton competition.—Clive Hicks, London.

May a non-participant in the competition, who cannot be accused of sour grapes, express dismay at the result? That it should require two non-architect assessors to point out in their minority report the obvious failures of this scheme ... is nothing short of disgraceful. ... At a crucial time for architecture this is one more nail in the coffin (or should I say sarcophagus?) of not only the competition system but also public respect for architects.—David Ottewill, Portsmouth.



SECTION

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At night, inside lights can be seen through the translucent canopy

Expo 74

Now under construction in Spokane, Wash. is the U.S. Pavilion for Expo 74, which will be held in that city from May 1 to October 31, 1974. The Pavilion will consist of a large white translucent canopy (320 by 280 ft.) suspended from a network of cables which extends from the high off-center crown of the structure down to two sides of the base, where they are anchored to a series of pylons and piers. The openings between the pylons form two large arches facing north and south that open the interior to the rest of the fairground. Massive earth berms around the canopy lend an organic mood to the structure, quite in keeping with the Pavilion theme, "Man and Nature, One and Indivisible."

There being no standard geometric formula to fit the canopy's irregular shape, the structural en-

gineers built a model, hung weights on the cables, and took readings with a surveying instrument.

The center mast is 152 ft. high. In cross-section, it is an equilateral triangle with 5-ft. sides supported in a ball joint at the base. At the end of the fair, canopy, cables and mast can be easily dismantled and removed, and will be salvageable.

Besides several theaters for films, the Pavilion will have a central exhibit space of about an acre, surrounded by gardens. The mezzanine will contain offices and reception areas.

The architects are Naramo Bain Brady & Johanson of Sea Washington. Structural engineers are Skilling, Helle, Chris Robertson of Seattle.

The project site is 31 acres adjacent to the Spokane River. Estimated cost: \$11.5 million, including construction and operation.





To save a giant

The National Trust for Historic Preservation in Washington, D.C., has taken an option to buy Louis Sullivan's Wainwright Building in St. Louis. The Wainwright, one of the world's first modern office buildings, was designed in 1890-92.

James Biddle, president of the National Trust, called the Wainwright "a great American architectural statement"; and said, "It is our intention during the period of our option to find ways of rehabilitating this building. We want not only to preserve it as a great American building, but to make it again a viable part of downtown St. Louis. Obviously, you can't turn a large office building into a museum, and that's the last thing we

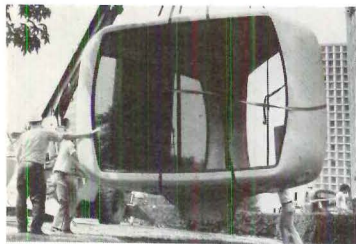
would want to do. We want to put it to contemporary use . . . return it to what it was meant to be, a thriving office building and an ornament to downtown St. Louis." Biddle added that this is an entirely new direction for the National Trust, which is celebrating its 25th year.

Though it was not the first tall building, the Wainwright, built of steel throughout, on a base of red Missouri granite rising two feet above the ground, set the pattern for modern skyscraper architecture around the world.

The exterior is stone, brick and terra cotta. Two stories of brown sandstone have carved faces. Above the ninth floor, the entire face of the building is of richly ornamented terra cotta, to form the cornice.

The pods of Pittsburgh

Situated in Pittsburgh's Golden Triangle area is a three-module structure serving as a Visitor Infor-



mation Center. Triangular in plan, with rounded corners, each module has double walls of fiber glass reinforced polyester resin. Walls may be glazed, fitted with opaque doors, or left open to be linked to another pod. The windows conform to the bow-like curvature of the walls. The modules rest on a precast circular concrete base containing pipes and utility connections.

Each pod contains 100 sq. ft. of floor space, and weighs 800 lbs. Three pods are needed to complete a basic structure, and additional pods are added as needed. A trained five-man crew can put up 25 of them in one day.

The units may be disassembled, rearranged or moved to another location—quite suitable for today's mobile society. The designer and manufacturer is MHI, Inc. of Zelienople, Pa.

Rebirth of a masterpiece

In 1870 the Pennsylvania Academy of the Fine Arts held a competition for the design of a new building in Philadelphia to be finished in time for the approaching Centennial Exposition, celebrating the U.S.' 100 years as a nation. The winners were two young unknown architects, Frank H. Furness (1839-1912) and George W. Hewitt (1841-1919). Furness, the designer of the Academy, had been a pupil of Richard Morris Hunt. Hewitt, a specialist in Gothic detail, left the partnership before the completion of the Academy to work with his brother, William D. Hewitt. The museum was finished in time for the Exposition and the Academy, a masterpiece of 19th-century architecture, firmly established Frank Furness as an architect to be reckoned with.

The Academy building is, according to Dr. John P. Coolidge, professor of fine arts at Harvard University, a monument to the American spirit in the era of the "Years of Promise" during which the building was designed.

"It is that spirit which explains a Greek statue between Gothic

columns under a Mansard roof, a Baroque staircase leading to Moorish arcades, a hydraulic elevator; tile, sandstone, brick, iron, glass; a floor of custard yellow with scarlet accents, raspberry walls above a Delft-blue dado, chocolate spandrels diapered in gold leaf: all of these elements which, as the astonished visitor perceives, make up the Pennsylvania Academy," wrote Coolidge of the building.

Now, a \$7.4 million Bicentennial project to restore the building to its original condition has been announced by John Gribbel II, president of the Academy's Board of Directors. The restoration is expected to last from May 1974 to February 1976, during which time the Academy will be relocated.

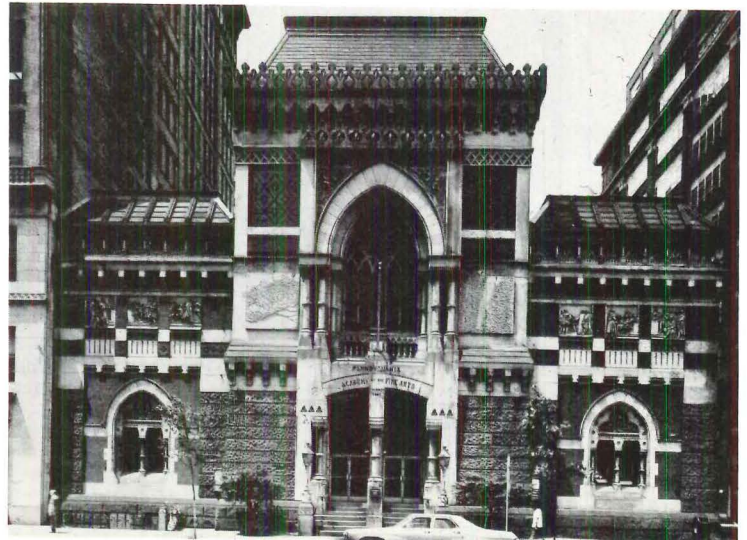
The restoration work will be done by the architecture firm of Day & Zimmerman.

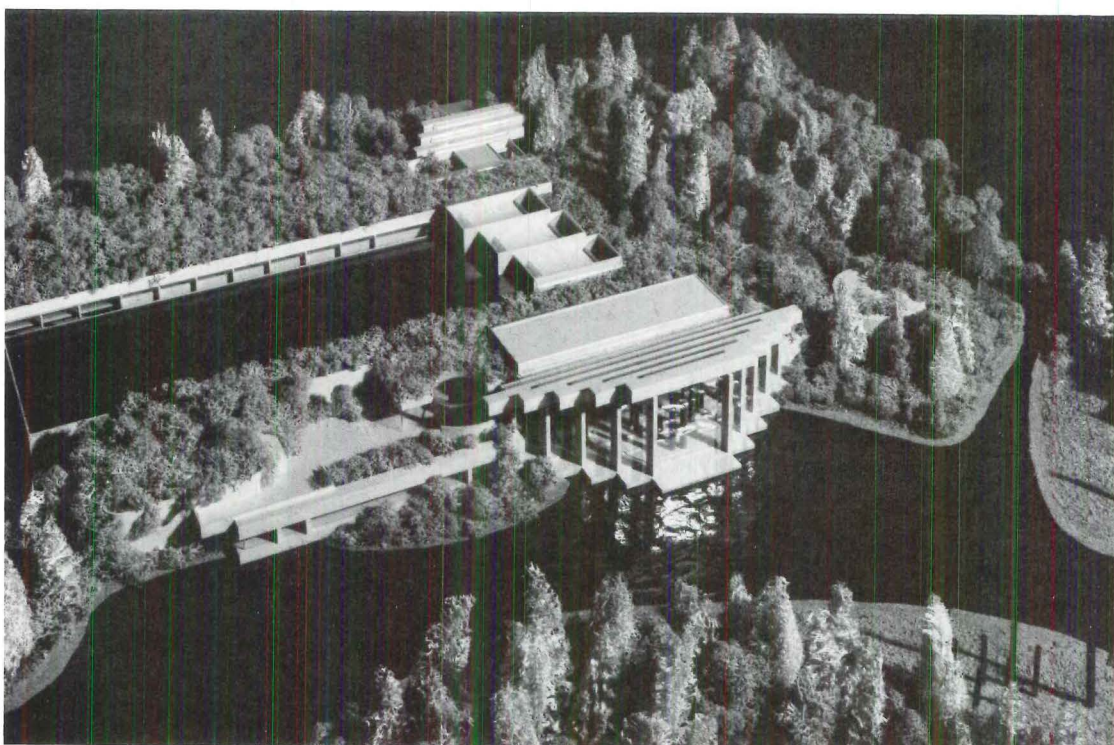
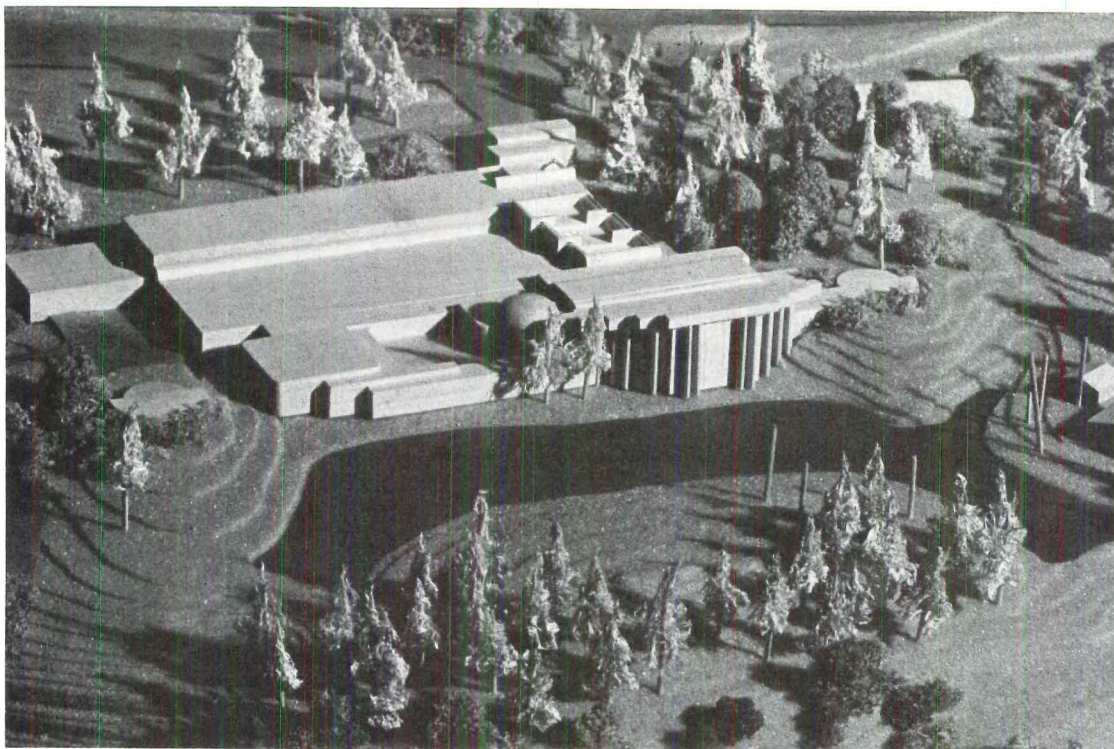
The Academy school has an annual enrollment of 400 students in the fine arts, and has about 2,600 paintings and sculptures in its permanent collection.

(A feature article on the work of Frank Furness including the Academy of Fine Arts appeared in our August '73 issue.)

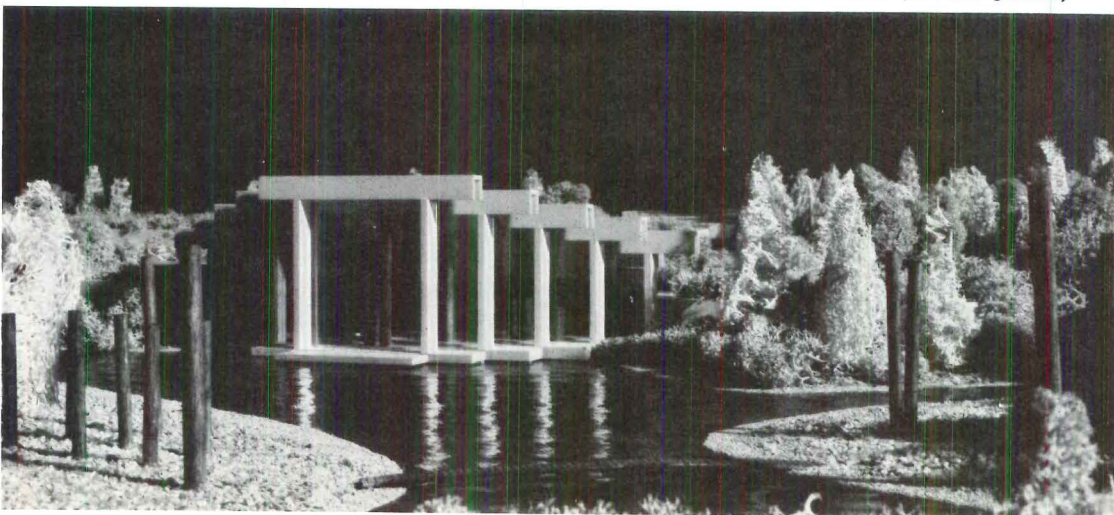


In its horse and buggy days the Academy had clerestories and fancy portals; the doodads (below) will be completely restored for the 1976 Bicentennial





Model of the Museum of Anthropology seen (top) in its entirety; and (above) nearly hidden under pool and greenery



Huge and ancient Indian totem poles will have an appropriately dramatic setting in the Great Hall

British Columbia, Canada

A Museum of Anthropology, which will serve both as a public building and as a school of Anthropology, Sociology and Archaeology, is to be built on the campus of the University of British Columbia in Western Canada, on a site overlooking the Strait of Georgia and the North Shore mountains. Mainly devoted to ancient West Coast Indian life, it will also have galleries for collections of the tribal art of Oceania, Africa, Southeast Asia, Central and South America, the Mediterranean; and artifacts from all the major North American Indians and the Eskimos.

This is an extremely interesting building: by using water in pools on the roof of a large part of the building, and small but dense growth on the roof of another substantial part of it, the large building literally disappears into the landscape, especially when viewed from the approach side.

One important feature of this museum will be the visible storage of artifacts. One hundred percent of its collection will be on display at all times, eliminating the common headache museum designers face—where to store vast amounts of treasures temporarily set aside.

The high-ceilinged Great Hall will house massive totem poles. Glass windows 40 ft. high will permit the indoor totem poles to be seen in natural light. These rare and valuable poles, collected from remote regions of Canada, must be enclosed in a controlled environment to be successfully preserved. The poles are placed inside the museum in such a way as to cause the pond in front of the museum to appear to merge with the sea beyond, giving the illusion of an inlet.

Arthur Erickson/Architects of Vancouver are the designers.



Orante by Sir Lawrence Alma-Tadema

World's worst painter

Last November, Sotheby's Belgravia, the London auction house, sold 35 paintings by the Victorian academician, Sir Lawrence Alma-Tadema, for \$570,000. (One painting, "The Finding of Moses" sold for \$72,900; its previous price in 1962 was \$750.) The paintings had belonged to Allen Funt, creator of TV's "Candid Camera" program.

Alma-Tadema's popularity reached a high point at the turn of the century. His draped Romans languishing amid rose petals were commanding top prices of \$20,000—\$30,000. He was knighted by Queen Victoria and his paintings were exhibited every year at the Royal Academy in London. After his death in 1913 and the corresponding demise of Victoriana, the high prices tumbled steadily until 1960 when his canvases went for less than \$300.

It was in the mid-sixties that Allen Funt bought his first Alma-Tadema (for \$8,000 at the beginning of his return to vogue) "... The first one we bought seemed more a piece of decoration than a work of art. Soon after I began reading about Victorian painters.

I was jolted by a statement by John Ruskin that Alma-Tadema was the worst painter of the nineteenth century. How did it happen, I wondered, that I should have selected a painter without advice or guidance and come up with the work of a man who ranked last of all the artists of his time. I jumped to the defensive. ... Soon I found myself with a houseful of Alma-Tademas and a warm feeling of sympathy. ... Word got around and dealers began to keep me in mind whenever an Alma-Tadema became available. ..."

The painter's new zenith came in the spring of 1973, when the Metropolitan Museum of Art in New York sponsored an exhibition of 35 of his paintings. The show was called "Victorians in Togas."

After the London sale, Mr. Funt, now somewhat richer, missed his old Alma-Tademas, and had full-size color photographs (at \$90 a throw) made of them and hung in their original frames in his apartment. Says Funt, "I like the idea of collecting the worst painter around and having the Met come to me to have it put on exhibit. I like that."

The bicycles of Kyoto

One thousand lemon yellow bicycles wending through the byways and narrow lanes of Kyoto, Japan, (an ingenious traffic solution and lots of fun), were carrying the participants to the Industrial Design Congress held there in October. The bicycles had been lent to the visitors by the Congress organizers to help them commute between their hotels and the Congress Hall, and to encourage them to browse around the 1,200-year-old city's cultural and historic relics.

The Congress, whose theme was "Soul and Material Things," was the highlight of the '73 Design Year movement in Japan, which promoted design consciousness throughout the country.

Among 124 speakers were Sir Colin Buchanan from the United Kingdom, Dr. Bernard J. Muller-Thym from the U.S., Professor Jean Baudrillard from France and Professor Tadao Umesao from Japan.

In the "Plaza Tent," Japanese sake and tea and snacks were served and, according to the management, "a totally free and unrestricted atmosphere was created."

The next Congress will be held in Moscow in 1975, where, a source close to the ICSID (International Council of Societies of Industrial Design) tells us, there will be 1,000 bright red troikas at the disposal of the conferees.—Y.U.



Congress participants bicycling around Kyoto and (below) with sake and snacks



Commuters everywhere are responding to the oil gap with the indomitable spirit man has always shown in the times when his ingenuity is challenged. Here we have the ultimate car pool, built by ten craftsmen in Veldhausen, Germany; and the "Hop Rod," a gas-powered pogo stick available at Hammacher Schlemmer in New York. With approximately a thimbleful of gasoline and a few batteries, this one gets around 2,000

Berlin architect Werner Düttmann's Christmas card put Santa on a bicycle illuminated by a candle/bulb. It doesn't conserve any gasoline but saves a huge amount of hay.

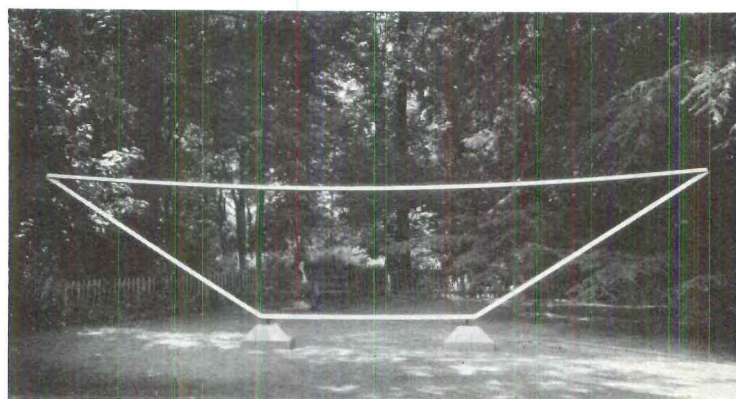
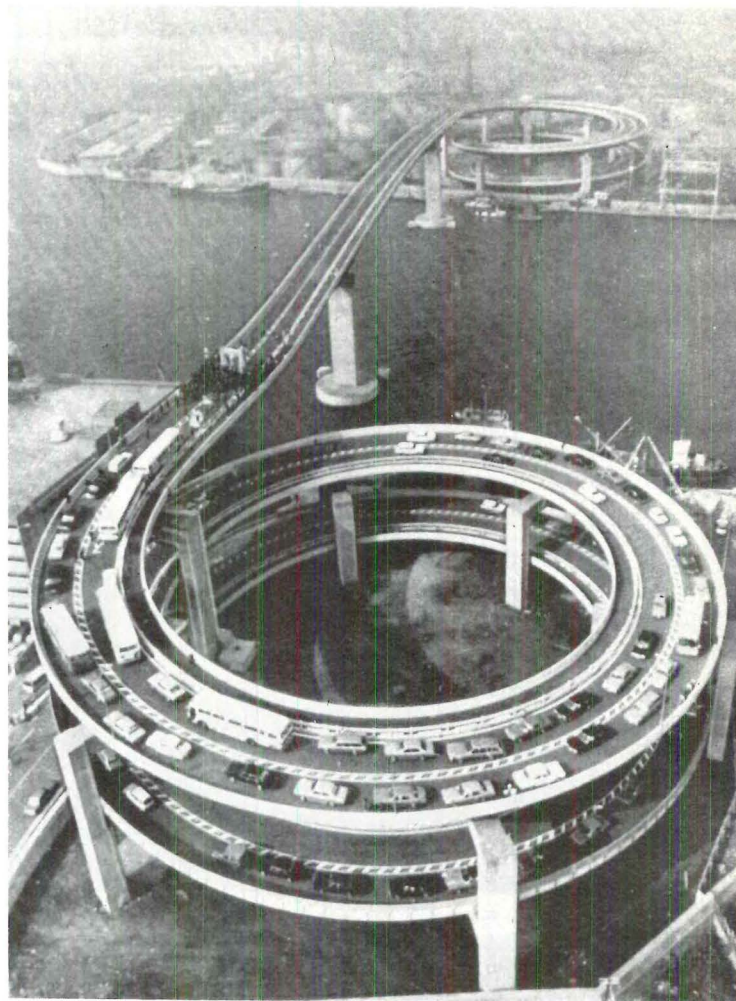


Several solutions to the energy crisis



What appears to be the world's largest pair of spectacles, upon closer scrutiny, turns out to be the new Sembomatsu Bridge, which connects the industrial area of west-

ern Osaka with the south of Japan. The bridge, which is more than 1,000 feet long, and which rises 120 feet above the water, was officially opened with appropriate ceremony on October 31, 1973.



The Arts Board of the Greater London Council has recently purchased a sculpture by Peter Hide, called "Trapezium." Cost: £1,100. The chairman of the Arts Board, Ellis Hillman, in discussing the purchase, called it a fitting tribute to the skill and technique of a new generation of young London sculptors, and added "the Board aired various views about the work but agreed unanimously that we should support and encourage our young sculptors in a practical way."

The 29-year-old sculptor created the piece for his current show in

Marble Hill Park: the Peter Hide/
John Foster Open Air Exhibition
of Steel Sculptures, which was
sponsored by the GLC.

"Trapezium," finished in the summer of 1972, is mild steel and concrete, 272 cm. high and 1,054 cm. long. Of his work Mr. Hide says, "the deflection in a length of steel, suspended horizontally, shows its elasticity as well as compressive and tensile strength. In a landscape a sculpture can act as a key linking human to landscape scale."

For the time being the piece will remain where it is, at Marble Hill House, in Twickenham.—J. D.

Liverpool

In what appears to be a wonderfully enlightened move, the Liverpool City Council has voted to relocate the city's 4,000-student Polytechnic into the vacant and historic cast iron and brick Albert Dock warehouses on Liverpool's waterfront—an idea which was born in the Polytechnic's own Department of Architecture. The Building Design Partnership of Manchester did detailed feasibility studies of the project and will be assisting with the preparation of the Development Plan to be presented to the Department of Edu-

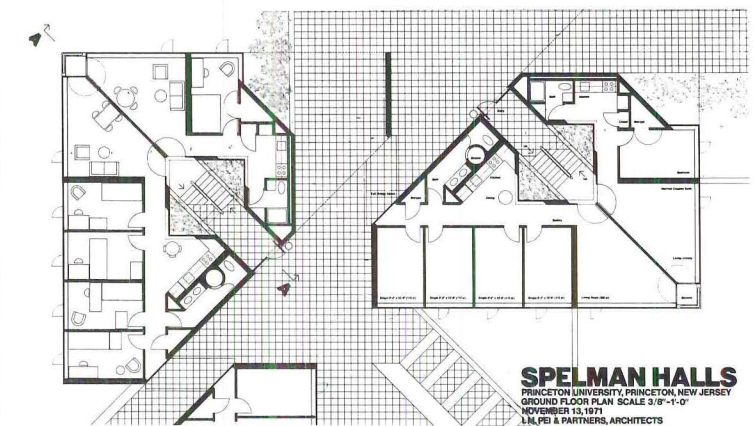
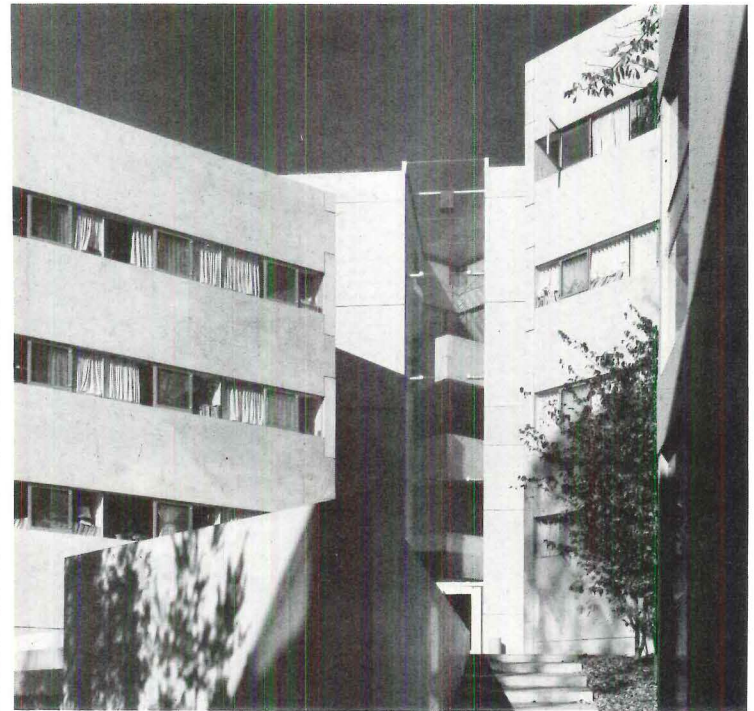
cation and Science for approval.

The study showed that the 130-year-old buildings could provide more than one million square feet of usable space for less money than it would take to build comparable new buildings, and needless to say, in much less time. The move into the seven-acre docks will enable the Polytechnic to expand to 10,000 students over a ten-year period.

The long-unused structures are in good condition except for the roofs, and some portions which were bombed during the war. The conversion work is expected to cost £12 million.



(Below) upper floor interior shows graceful cast iron and brick vaulted passages



University housing

Spelman Halls, a new concrete \$3,350,000-complex for men and women undergraduates at Princeton University, New Jersey, was dedicated in November. There are 58 apartments in eight interdependent houses. The design, by I.M. Pei and Partners, met three considerations: to preserve the open, wooded landscape, to further the informal sequence of open space, and to foster a spirit of community among the students without sacrificing their privacy.

The buildings bear the maiden

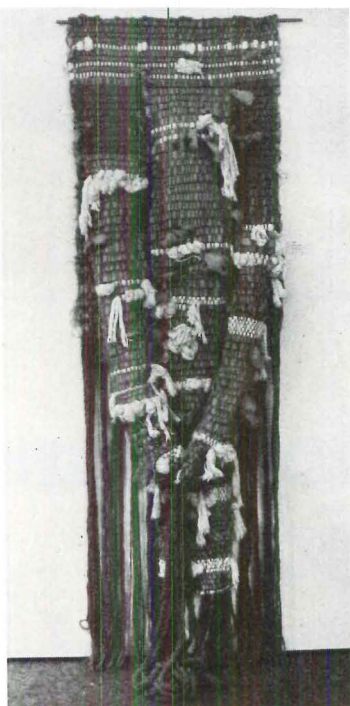
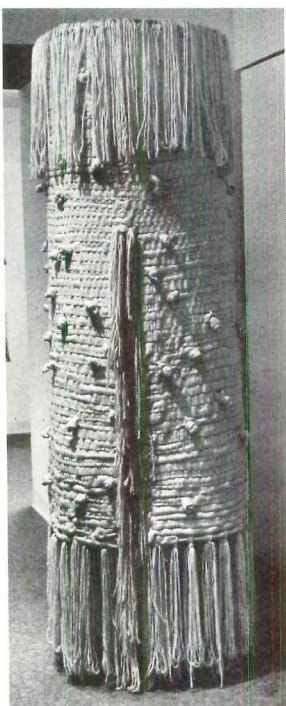
name of Mrs. J. D. Rockefeller Sr. who died in 1915 at the age of 75. Her family's gifts to the university helped Princeton launch its coeducational program in 1969. Now, four years later, there are 1,100 women and 3,100 men enrolled as undergraduates. Mrs. Rockefeller's lifelong concern was involved with the education of women and blacks, a career which officially began in Cleveland, Ohio, with her high school graduation speech, "I Can Paddle My Own Canoe," in which she set forth her views on the need for self-reliance in women.

Biggest car pool in town

The transit commission of the twin cities of Minneapolis and St. Paul has come up with a solution for luring the car-loving commuter back to mass transit. They've begun to paint the buses to look like cars.

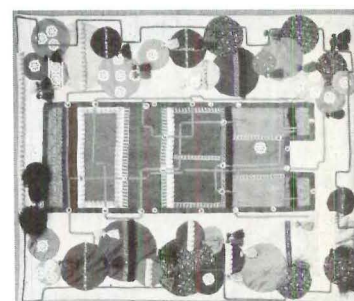
The first one, a glorious and classic Deussenberg, was done for a television commercial aimed at increasing the public's use of the buses. When the commercial was finished the Deussenberg/bus was used on the regular commuter line for fun. It was such a success that a "Chevrolet station wagon" for den-mother types was added, and work has begun on a "Volkswagen"—quite appropriate for these low-fuel days.

In the past three years the Twin Cities Metropolitan Transit Commission has increased its passenger count by 16 percent—so they must be doing something right.



Shaggy presences

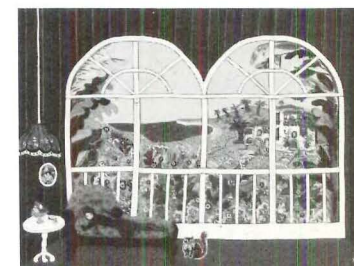
Susan Kimber, a young sculptor/weaver, recently exhibited her hangings at the Robert Tait Fabrics showroom in New York. The near-human presence of these hangings was impressively effective. Shown here are "Black Magic," a six-foot tall white cylinder designed to be suspended from the ceiling; "Dumbo," a wall hanging of similar size; and "Soska," who is not meant to be hung at all—he's Miss Kimber's *puli*, a Hungarian sheep dog and an obvious inspiration.—S. A.



Michèle-Elisabeth Chaix



Jeanne Korn



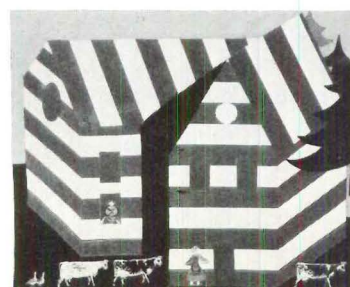
Mercédès Perez-Andreu

Art from the heart

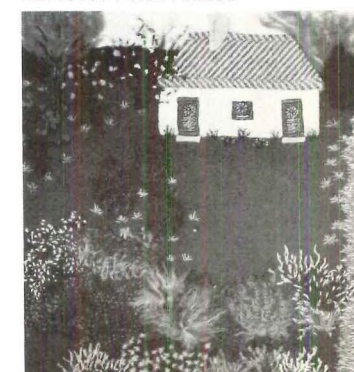
The "Golden Needles" contest sponsored by France's *Elle* magazine last fall was open to readers from anywhere in the world who embroider, knit, sew, make collages or tapestries, etc.

The 55 winning entries, all of which received cash prizes, (and 98 other entries "too good to go unseen") were displayed at the Musée des Arts et Traditions Populaires in Paris December 5, 1973 to January 21, 1974.

Designer Marc Held called it "art from the heart" and said the exhibit was "by far the most colorful, imaginative and optimistic show in Paris for the past five years."—Betty Rocher



Marie-Paule Legrand



Rolande Barbaud

continued on page 112



Minnesota Ore Operations Administration Building, Mountain Iron, Minnesota. *Owner:* United States Steel Corporation, Pittsburgh, Pennsylvania. *Architect:* Architectural Resources, Inc. Hibbing & Duluth, Minnesota. *Engineer:* R. O. Jacobson, Jr., Hibbing, Minnesota. *Fabricator:* American Bridge Division, United States Steel Corporation, Chicago, Illinois.

No invisible means of support!

U.S. Steel builds first load-bearing exposed steel plate-wall building.

Sitting among the ore fields of Northern Minnesota, at Mountain Iron, is a structure that breaks new ground in building design.

Serving as the administration headquarters of U.S. Steel's Minnesota Ore Operations, its most unique feature is a load-bearing, exposed A36 steel plate-wall. Floor and roof loads are directly supported by the wall.

To our knowledge, this is the first building in which exposed, painted steel plate *on the outside* supports loads *on the inside*. The steel plate wall actually holds up the building!

This advance in building design is functionally efficient and can help cut construction costs.

The rolled wide-flange shapes welded to the plate wall, apart from serving as an architectural element, perform two key functions: they stiffen the plate-wall and support the floor

loads. The wall itself was fabricated in modules with window openings cut into the plate.

A 3-coat paint system was used—a primer and 2 field coats, having a total thickness of 3.5 mils.

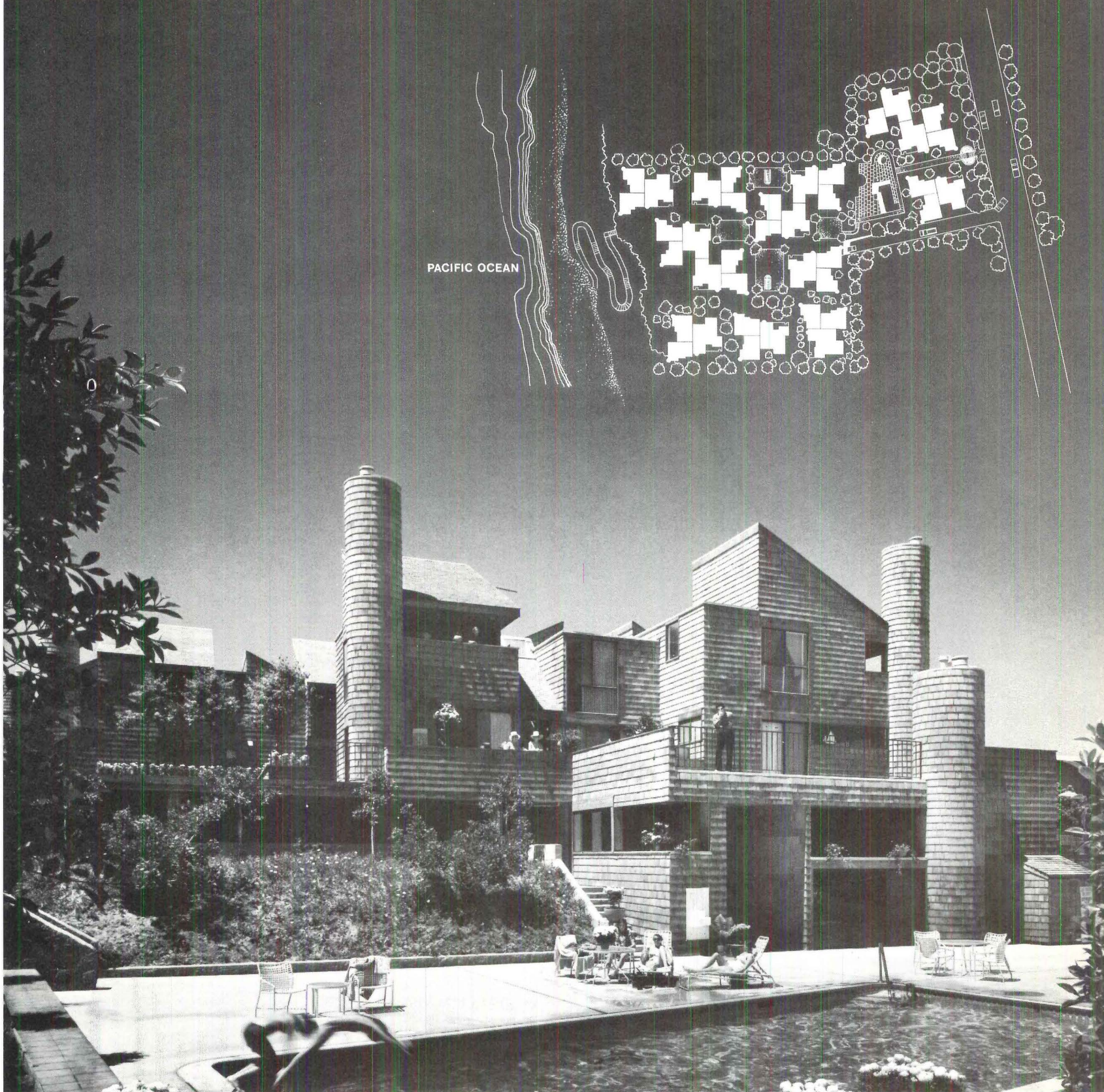
Considerable research and experimentation went into the construction of this new building at Mountain Iron. The result is a clean, crisp structural wall in steel that serves the additional purpose of enclosing the building.

This system, pioneered and developed by U.S. Steel, marks another step forward in the uses of exposed steel for modern building exteriors.

For more information, contact a USS Construction Marketing Representative through the nearest USS Sales Office or write: United States Steel, (Room C254), 600 Grant Street, Pittsburgh, Pa. 15230.

United States Steel





Seascape II, Solana Beach, California. Roofs: Certigrade shingles No. 1 Grade, 24" Royals. Walls: Certigrade shingles No. 1 Grade, 16" Fivex. Architects: Oxley & Landau.

At a California condominium, beauty takes many forms.

Circular, angular and rectilinear forms create a sculptured look for this fifty-unit seaside condominium near San Diego.

Richly textured red cedar shingles give natural expression to the novel design. They establish a single identity for the community of diverse structures and shapes.

Their quality appeals to residents and to local planners as well.

Equally important, red cedar shingles are durable. They weather beautifully, even in harsh marine air. Their look of warmth and elegance lasts for decades with virtually no upkeep.

And they'll withstand hurricane winds.

For details and our specification guide on Certigrade shingles and Certi-Split handsplit shakes, write us at 5510 White Building, Seattle, Washington 98101. In Canada, write 1055 West Hastings St., Vancouver 1, B.C.



Red Cedar Shingle & Handsplit Shake Bureau

One of a series presented by members of the American Wood Council.



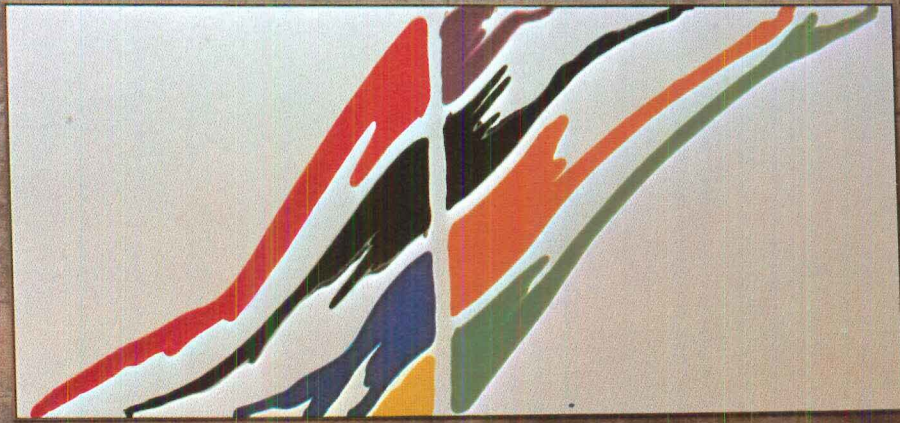
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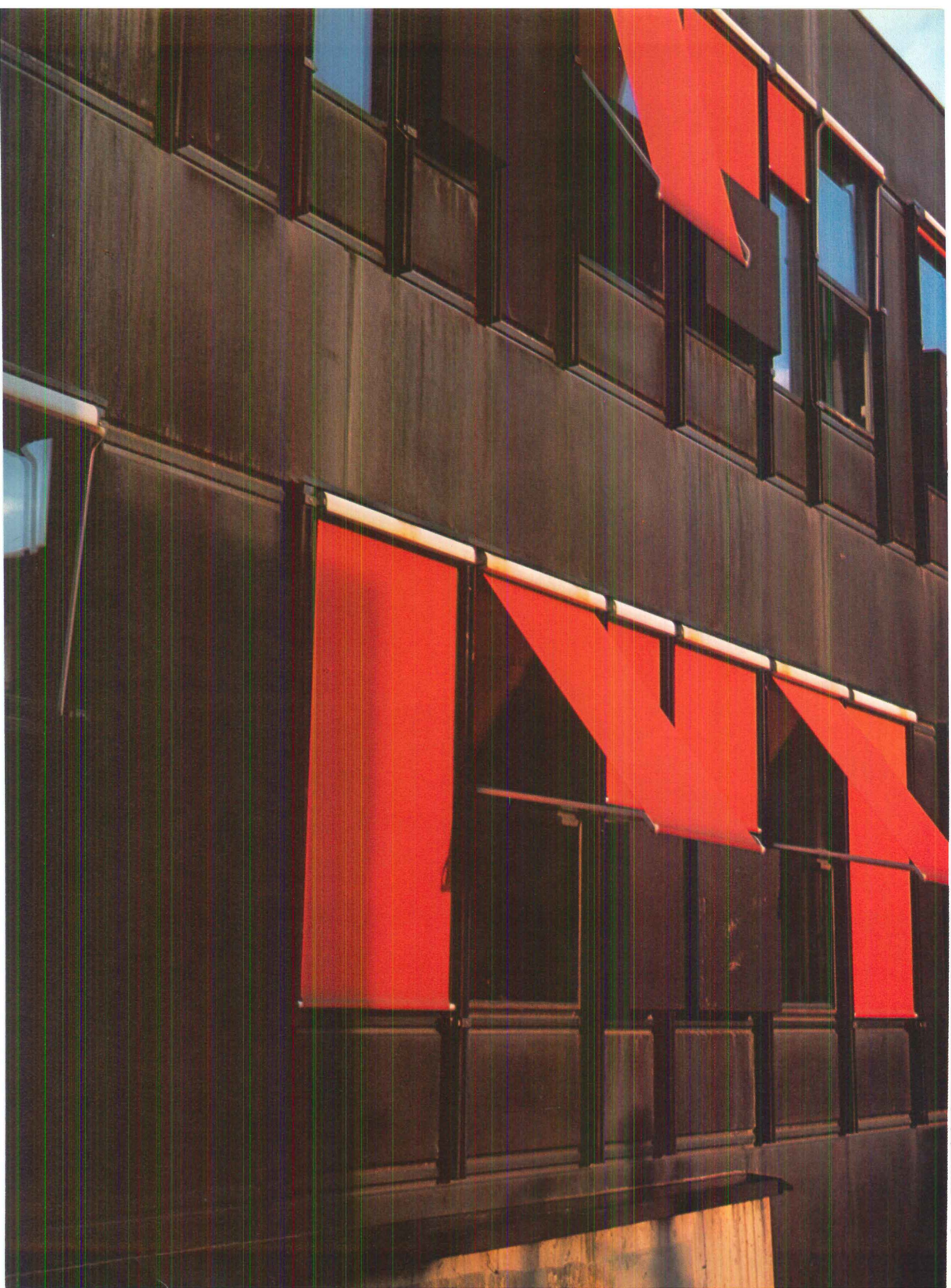
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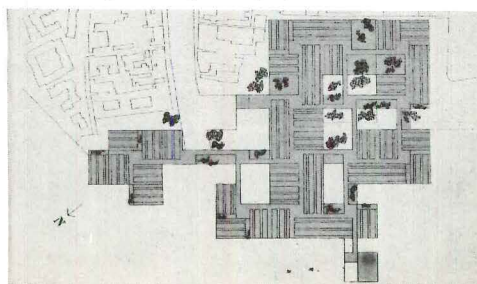
The most radical architectural departure of the 1960s is finally built

In the 1960s architecture changed. Its definition stretched to include a type of building never considered architecture before: building which subjugated its tangible form so completely to an intangible idea that only the idea was permanent; building reduced to an organizing principle within the logic of which physical forms could come and go at will; the building of change.

The epitome of this new architecture was the Berlin Free University designed in 1963 by the Paris-based firm of Georges Candilis, Alexy Josic and Shadrach Woods, in collaboration with the Berlin architect Manfred Schiedhelm. Now, a decade later, within months of the death of Shadrach Woods, the first phase of the Free University is at last built and occupied by students, with construction of the second phase about to begin.

The concept of change, embodied fully for the first time in this building, did not, of course, spring suddenly or unheralded from the four architects; it was a concept beginning to coalesce in many minds. It had some precedent in the aborted theorizing of the Russian constructivists in the 1920s. It was approached, but not fully realized, in Le Corbusier's 1931 scheme for a spiral museum capable of infinite expansion ("not fully realized," because the museum, at whatever stage of its expansion, remained a traditionally monumental object). It was an idea being discussed particularly among the members of Team 10 (two of the most respected members being, of course, Candilis and Woods) when that group was formed in 1956 as an offshoot of the Congrès Internationaux d'Architecture Moderne (CIAM). The CIAM meeting was held that year in Dubrovnik under the chairmanship of Jacob Bakema, and its theme was "Change and Growth."

Having been given physical form in the



Le Corbusier's Venice Hospital

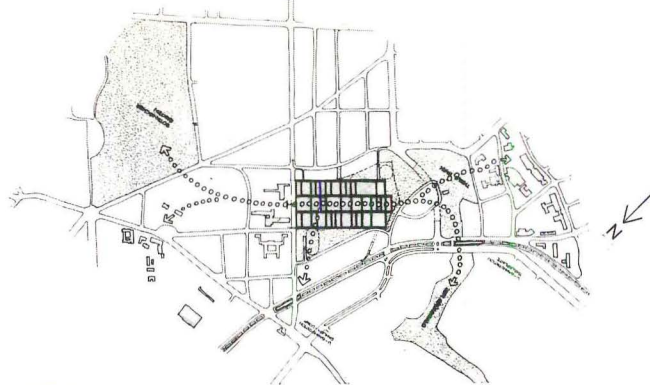
Free University design, the building of change became an influence even on the work of the old master (and Shadrach Woods' former employer), Le Corbusier. At the end of his career, Le Corbusier's 1964 hospital design for Venice owed much to the Free University model. And it is an idea which has continued to spread, now become a way of thought available to all of us.

The Free University began in rebellion, and its 25-year history has been one of continual controversy. It was formed in West Berlin in 1948, during the "cold war," by a group of teachers and students who had left East Berlin's Humboldt University in protest against Communist interference. It served 2,140 students in that first year; by 1960 the student body had grown to 10,900; now it is 26,500. Few conventional building systems could have accommodated such growth.

Or such changes in educational philosophy as this school has experienced—a change from a traditional set of distinct disciplines into more vaguely defined areas of related subjects. A further complication in the life of this school is the fact that student protest, now quiet in the United States and France, continues at the Free University with unabated vigor. Student sentiment, strongly pro-American when the Communists built the Berlin wall, has swung emphatically against America because of Viet Nam. Similarly, this university, founded in protest against Communism, now harbors a number of powerful and outspoken Marxist and Maoist groups, responsible for what Rolf Kreibich, the University President, has called "rude and at times terrorist activities."

Like all German universities, the Free University is publicly supported (students pay only about \$50 per term), and many students are thought to view university enrollment as an aid in avoiding the draft rather than as an aid in learning. On December 4, 1973, the school's anniversary day, official celebrations were avoided for fear of student demonstrations. According to *The New York Times*, "The Free University of West Berlin passed its 25th anniversary... in a state of disarray and conflict."

The Free University's first new buildings had been the result of a design competition in 1951. They were modest and conven-



SITE PLAN

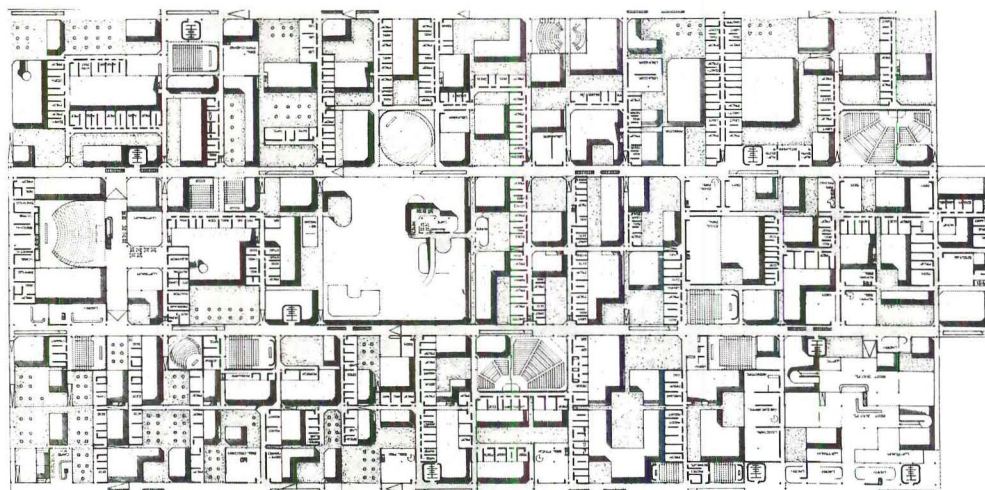
tional, fitting easily into their suburban surroundings. Three years later, with these first buildings still under construction, another competition was held for a second group. By the 1960s it had become clear that piecemeal additions were a poor response to growth and change.

The result of this awareness was the 1963 competition for a master plan for all future growth. It was a competition of international importance, with a jury including Bakema from the Netherlands, Werner Düttmann from Germany, and Arne Jacobsen from Denmark. The program called specifically for an extension to the arts and science faculties sufficient for 3,600 new students. The thirty acre site was bounded on the northeast by existing science buildings, and on the southwest by a low-density residential area and a municipal park, beyond which were other university buildings housing the philosophy, law, political economy and sociology departments. It was thus clear that the new design must function not only as a new teaching facility but also as a link between two previously separated building groups.

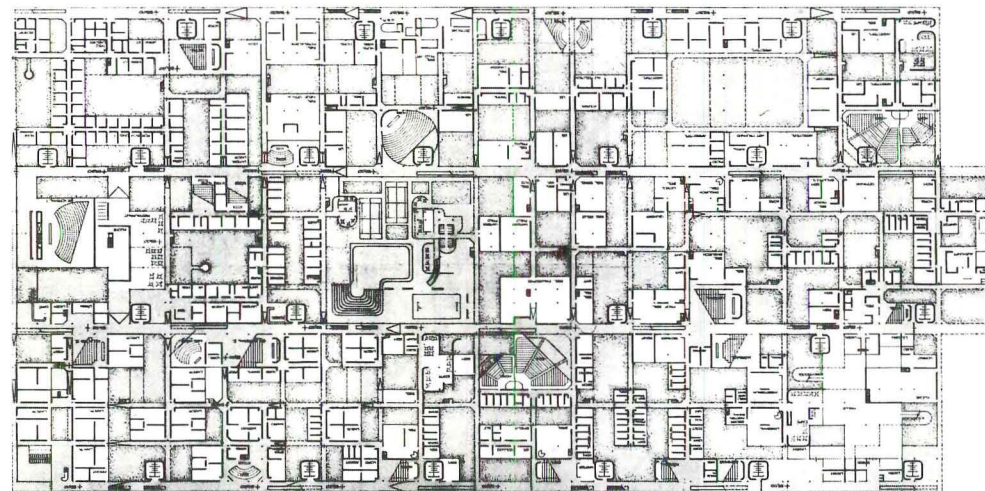
The jury awarded first prize (40,000 Deutsche marks) to the design submitted by Candilis, Josic, Woods, and Schiedhelm, commending its "flexible principle of order." Second prize (25,000 Deutsche marks) was given to Henning Larsen of Copenhagen.

The winning design was a network of circulation paths, four parallel major paths stretching the length of the site, joining the two groups of existing buildings, and minor cross paths connecting the major ones. Spaces for activity and congregation were to be built as required along the major paths; spaces for rest or quiet study along the minor paths. And these spaces were intended not only to be built as required, but also, through the use of a construction system of demountable and re-usable parts, to be dismantled, shifted, or enlarged as requirements changed. The dimensions of these parts were based on Le Corbusier's Modulor, and the distances between the major paths were based on a one-minute walk (estimated at about 70 yards).

This circulation network was to cover two levels above grade, with a similar network of servicing "spines" directly below

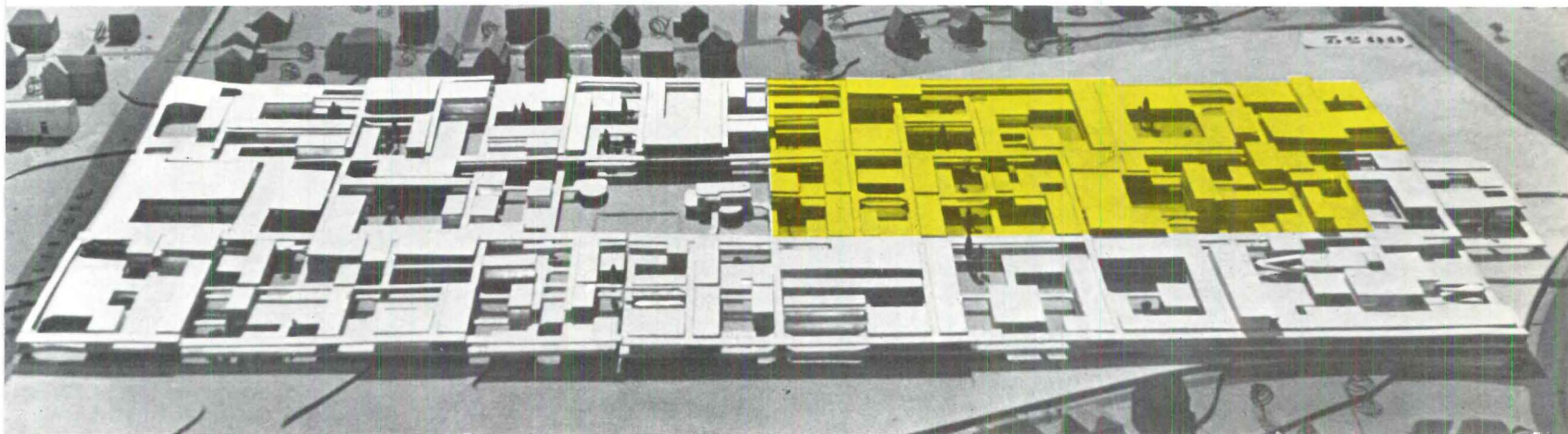


SECOND LEVEL



GROUND LEVEL

The competition-winning plans and their relationship to the neighborhood (left) emphasize the designers' intent that the streets within the building connect the existing BFU buildings at either end of the site. The portion that has been built (below) is about one-quarter of the original scheme. A major entrance occurs at the southwest corner of the building (bottom).



Each of the fourteen courtyards within the new BFU building has a different plan and is landscaped to emphasize that uniqueness. Many of them contain exterior spiral staircases that contrast with the oxidizing steel curtain walls.

them. A fourth level, intended as housing, was another possibility of the design, and, in addition, the roofs were intended to be accessible as either public or semi-public terraces. At ground level, unbuilt areas were to be used as landscaped outdoor courts, each with its own configuration.

The Free University competition had attracted great interest, and elation over this winning design was widespread; no one imagined then the difficulties ahead.

"The thorny wood of Academe," in Shadrach Woods' own words, "is jealously guarded by the lynxes, lions and she-wolves of bureaucracy." When he wrote that (for the *Harvard Educational Review*) in 1969, he had already been struggling for six years to turn his design into a building, and four more years of effort lay ahead.

The decade of work began happily enough. The competition results were announced in December of 1963, and in the following June the commission for master planning was formally awarded to Candilis, Josic, Woods and Schiedhelm. In August of 1965, the firm was awarded another commission, for the design of the first stage of that plan. The architects called in the innovative engineer Jean Prouvé as a consultant, and Prouvé was asked to develop a simplified structural design which could be used as the basis for a further competition, one to determine the structural details and to choose a builder. The architects had envisioned a steel frame because of the design's demand for flexibility; the university's advisors maintained that concrete would be cheaper. In a victory for the architects and Prouvé, the results proved that steel was competitive, and the firm of Krupp was chosen in June of 1966 as supplier of the primary structure and, later, as general contractor.

Prouvé also assisted the architects in setting up a similar competition for the elements which would fit into the basic structure—the panels of the façade, the partitions, ceilings and floors. A French firm, CIMT, was chosen as the winner.

But here the "she-wolves of bureaucracy" began to howl. For political reasons, a small Berlin firm had to be accepted as a partner in the work of mounting the façade panels. This contract for the façade was signed in January 1971; cancellation was threatened in March; by May another

German firm was asked to take over the contract.

Working drawings and first cost estimates had been completed in May 1967. Two years later, government authorities criticized the documents as having been incomplete; in December 1969 they criticized the slow progress of the construction; a month later problems—both technical and bureaucratic—had grown so that construction was stopped. The following April the administration asked for changes to meet new laws, and a fresh start was made.

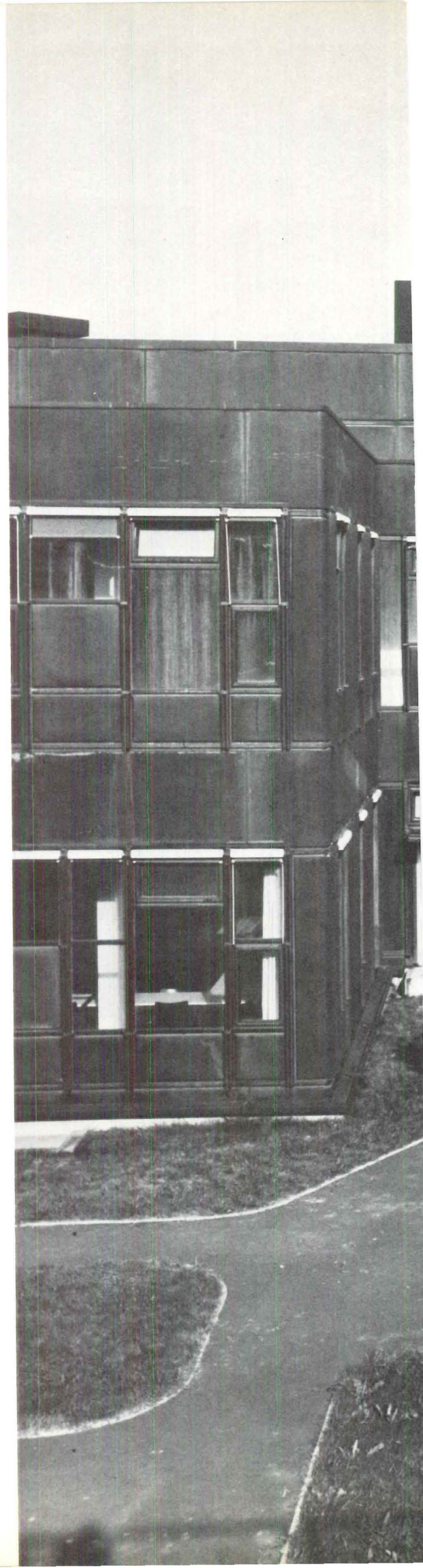
The government next consulted landscape architects in Berlin who advised that there was no possibility of growing anything on roofs in that climate; this argument was finally defeated by the fact, obvious to all, that seeds accidentally blown onto the roof of a mock-up had resulted in a tangle of weeds and grasses three feet high.

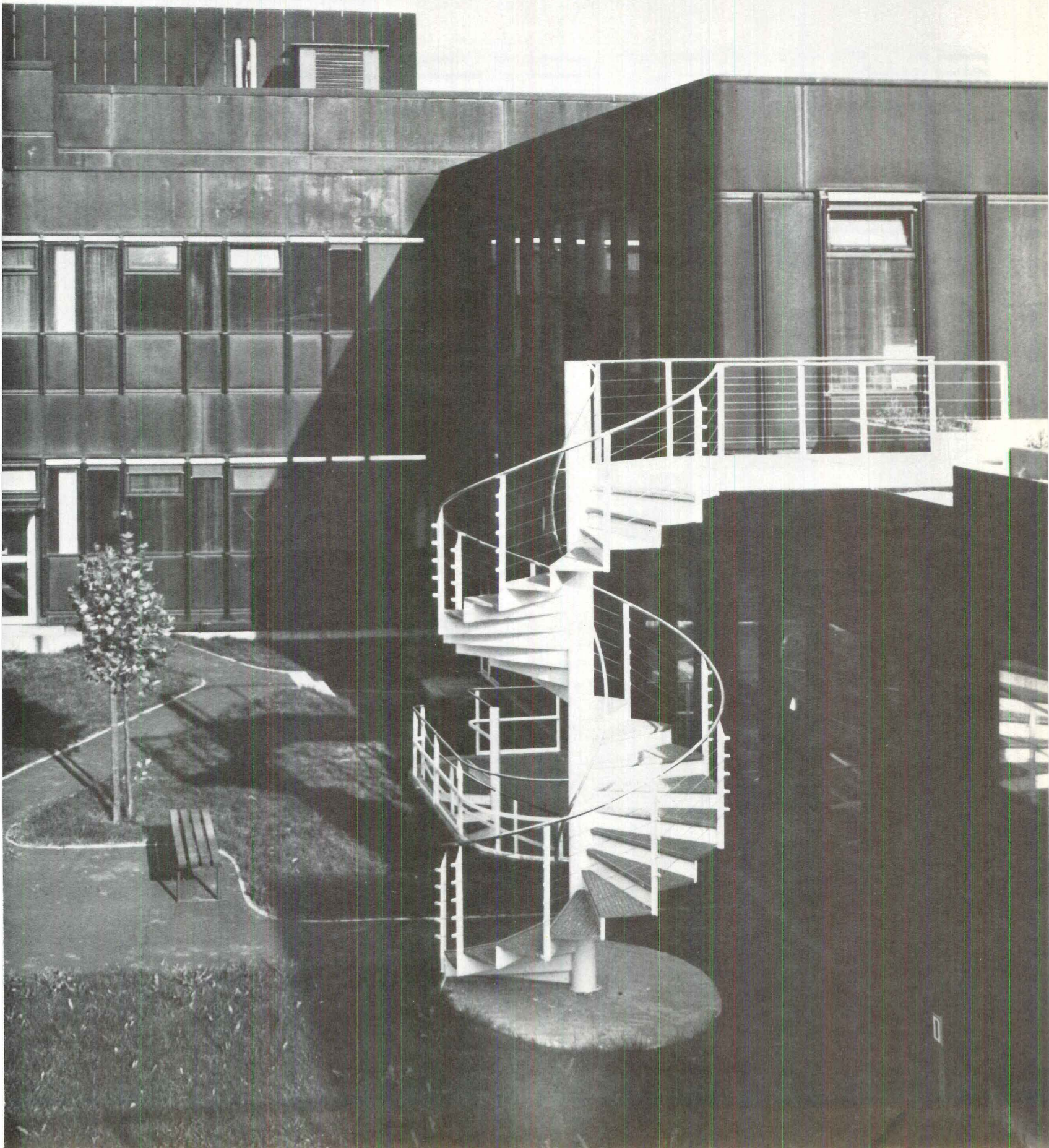
Government engineers, trained in concrete construction and distrustful of the steel wall panels, then maintained that the panels were unsafe. Again construction was interrupted; loading tests were made; again the architects were vindicated.

At last, in 1973, after many other trials, changes in program requirements, and the inevitable budget problems, the first phase was finished.

The building of change is still a building, and the order imposed by an abstract principle is still order. The architecture of the new Free University building is by no means random, by no means chaotic. The organizing power of the circulation paths—even, by implication, of the portions still unbuilt—is forceful and clear. Subservient to this order, the physical forms of classrooms, lecture halls and study alcoves are allowed to be determined not by a conscious striving for effect, but purely by the temporary requirements of function.

The building of change is not a replacement for conventional building, but an addition to it. Shadrach Woods, musing on the significance of the Free University design, once suggested that "the need for symbolic or representative geometry has disappeared—if it ever existed." For most of us, this is going too far; the experience of our reactions to architectural forms is too potent to be denied; indeed, the manipulation of such forms remains the architect's basic tool.

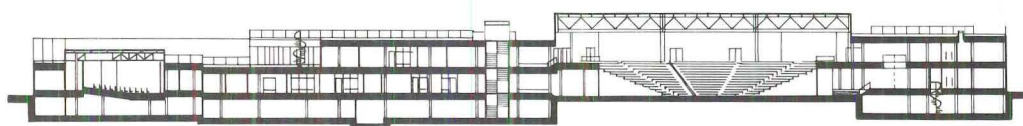




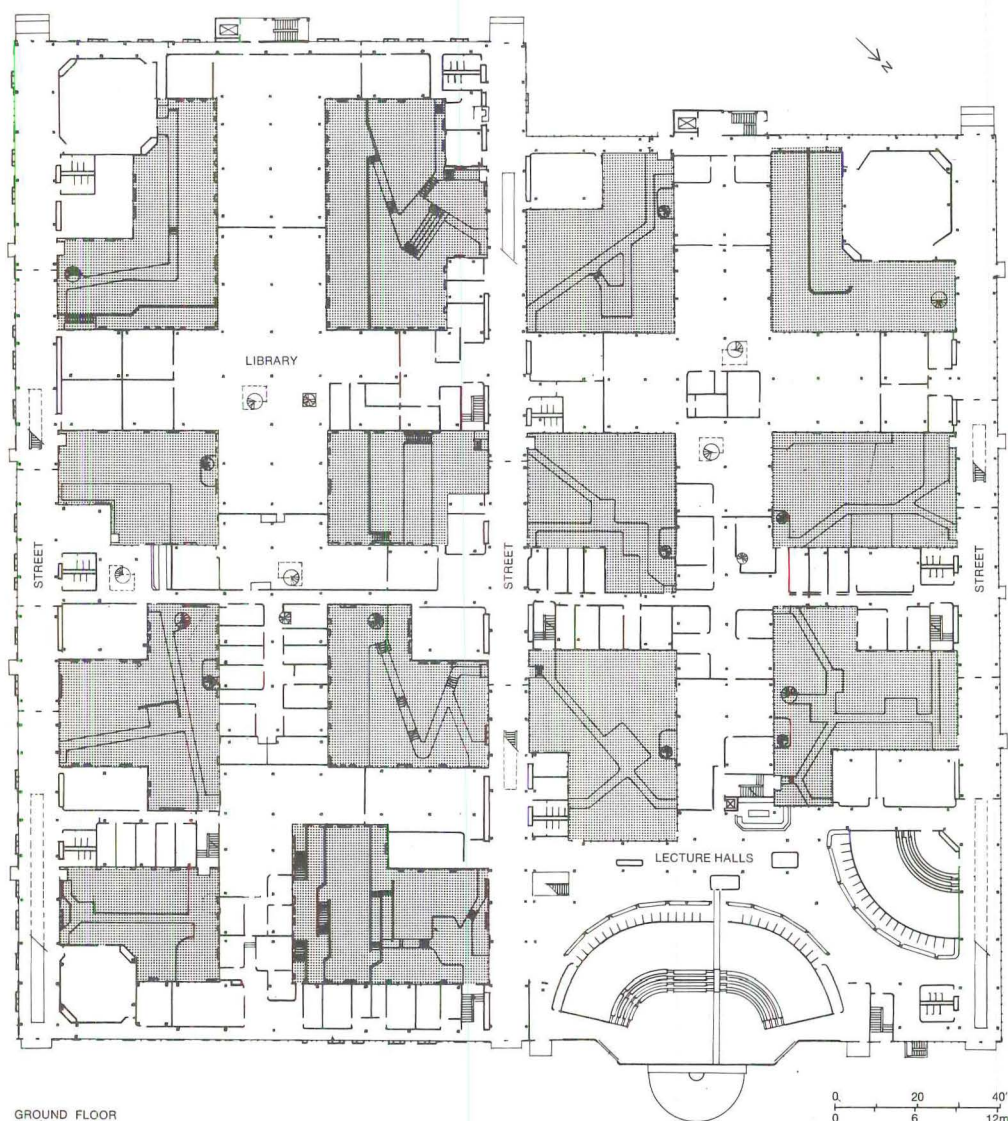
Smooth pedestrian circulation was the principal design criterion for BFU and a variety of devices—large and small-scale ramps, spiral and conventional stairs—are used to make it as easy to move vertically as horizontally. The plan and sections of the building as actually built (below) also underline that important goal.



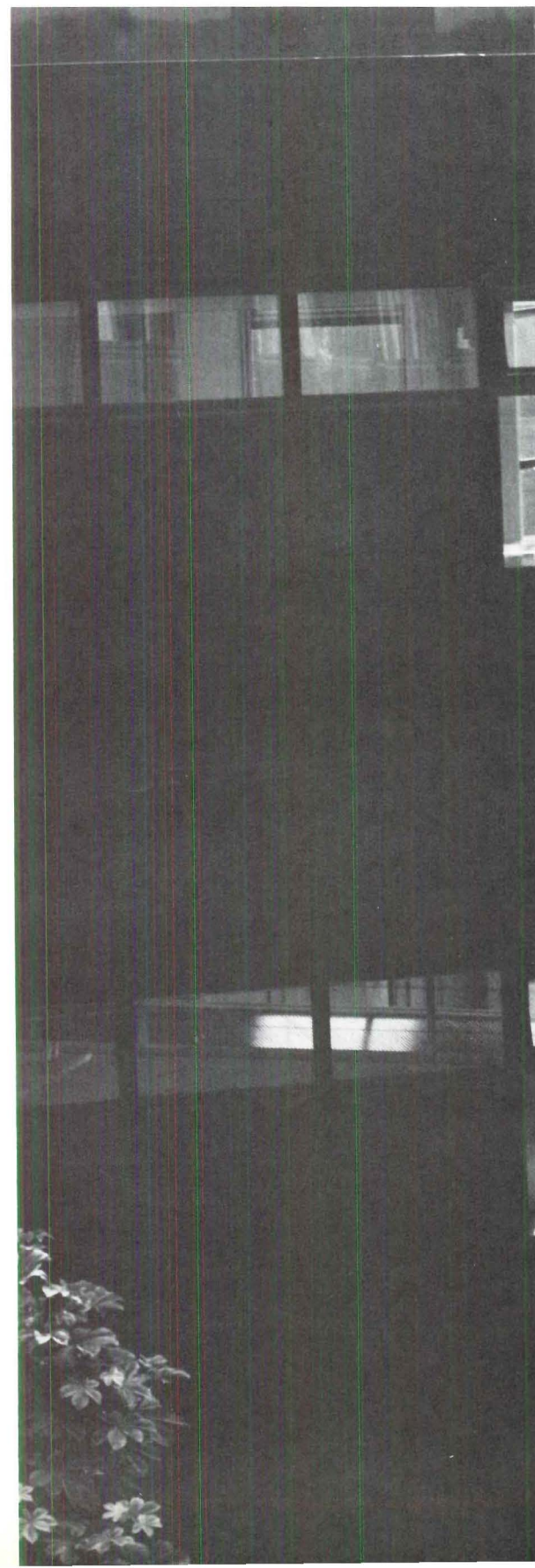
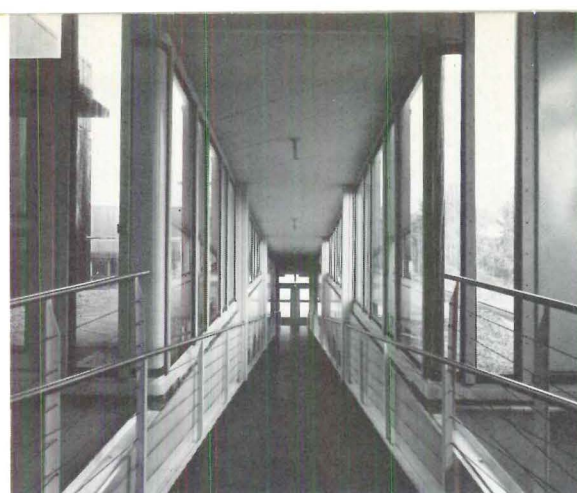
TYPICAL TRANSVERSE SECTION

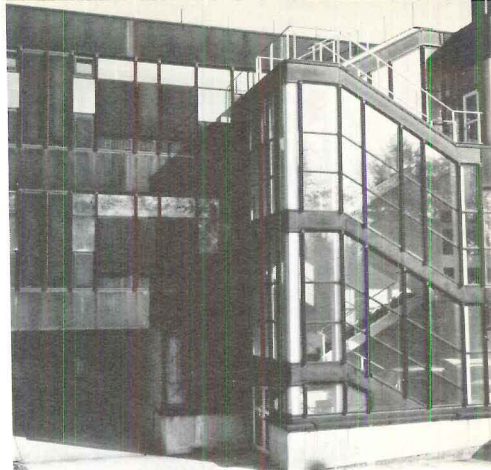
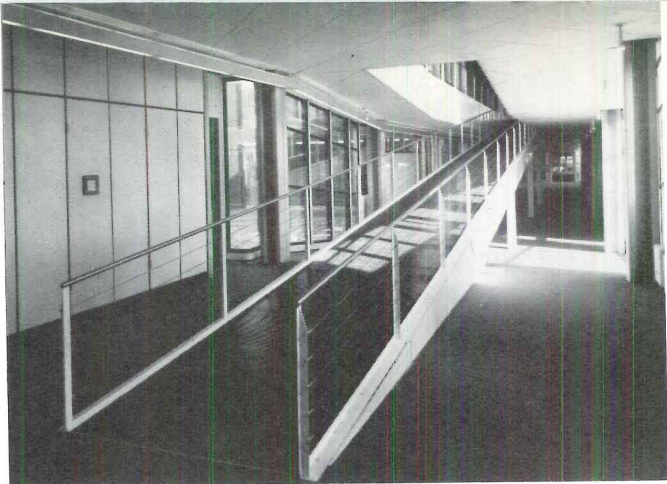


SECTION THROUGH LECTURE HALLS



GROUND FLOOR





The wide variety of interior functions accommodated by the building benefit from the transparency of the curtain walls. Their modular construction also allows for variation in ventilation and storage needs.

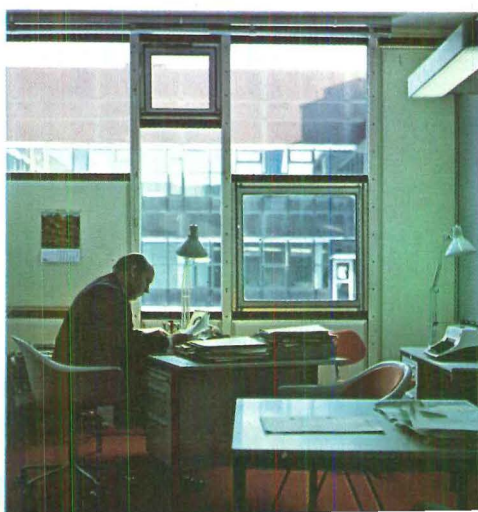
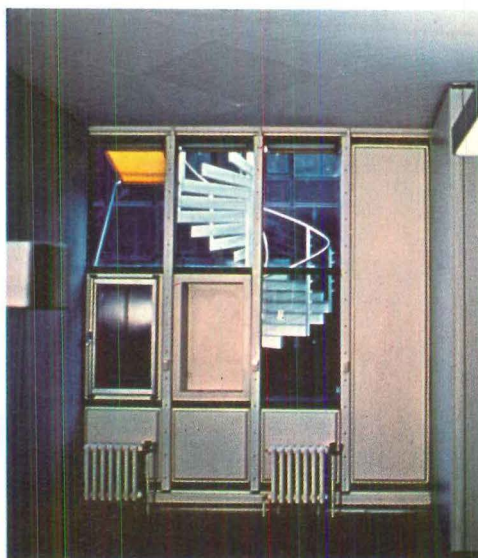
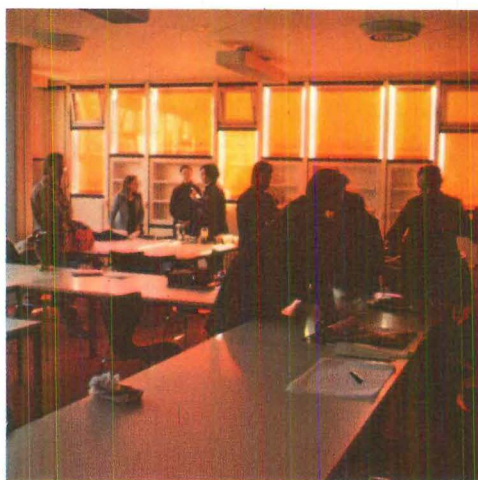
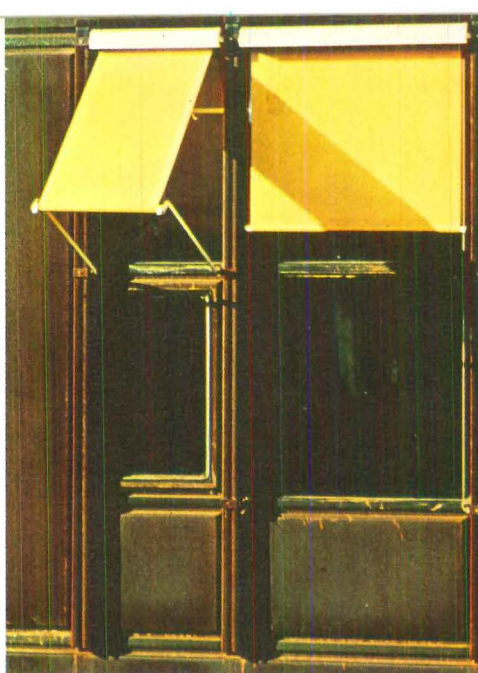
A further reservation about the Free University design is raised by some of the evaluations which follow. Despite the impressive ability of the design to accommodate a decade of changes during the construction process, the flexibility of building elements in actual use may prove to be expensive and unwieldy. This hardly detracts, however, from the design's achievement. Edison's first phonograph probably made a wretched noise, but how grateful we are for that invention!

Only by means of such invention—work which expands the scope of architecture as we have previously known it—can our profession hope to continue its usefulness to a changing society. It is thoughtful architects like Shadrach Woods and his collaborators who keep architecture young, who give it both muscle and resilience. As Woods wrote, "We do not wish to solve the problems of the future but to act now in ways that still leave a desirable number of options open, . . . to recognize that in our world design is an act of ordering which may never be accomplished, but which is continually renewed."

A brief description of the BFU's structural innovations follows, and, after that, evaluations by a number of architects and critics who have awaited with great interest the completion of the first stage. If these evaluations cannot be final—the building has not yet been fully tested in use, and even the self-protective oxidizing steel panels have not achieved their final color—they do, however, make clear that the place in architectural history of Shadrach Woods, the primary force behind the BFU design, is unquestioned.—STANLEY ABERCROMBIE

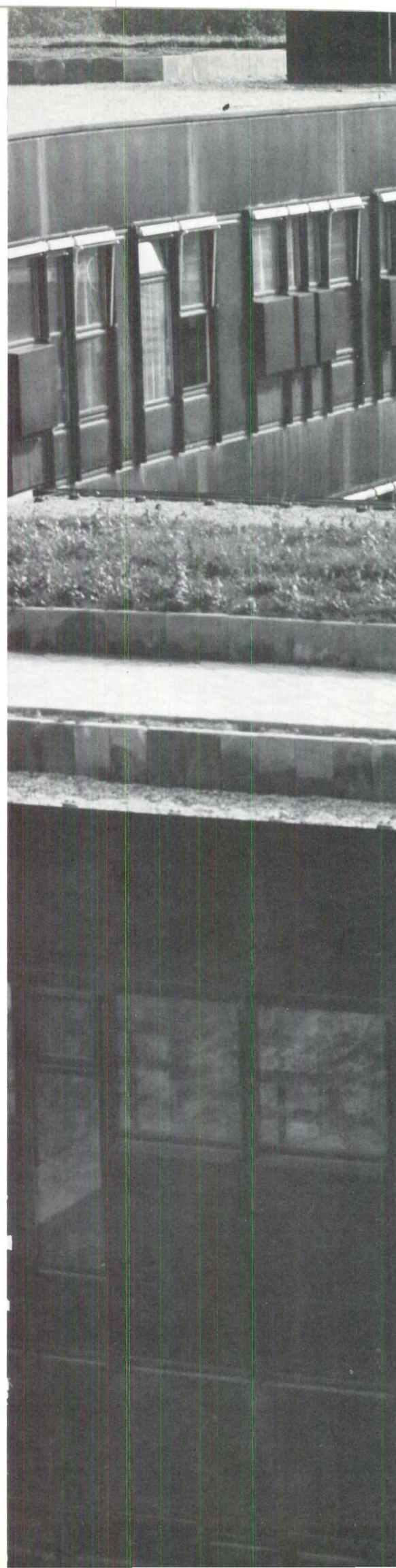
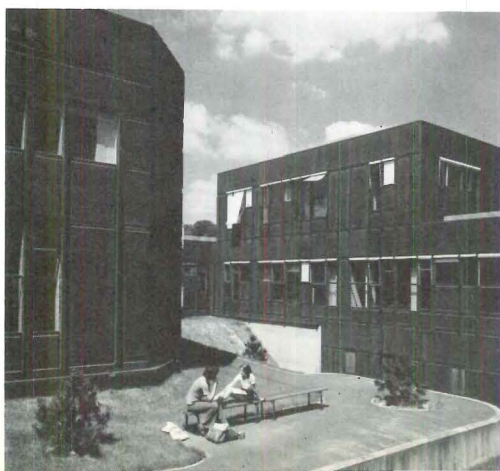
Facts and Figures

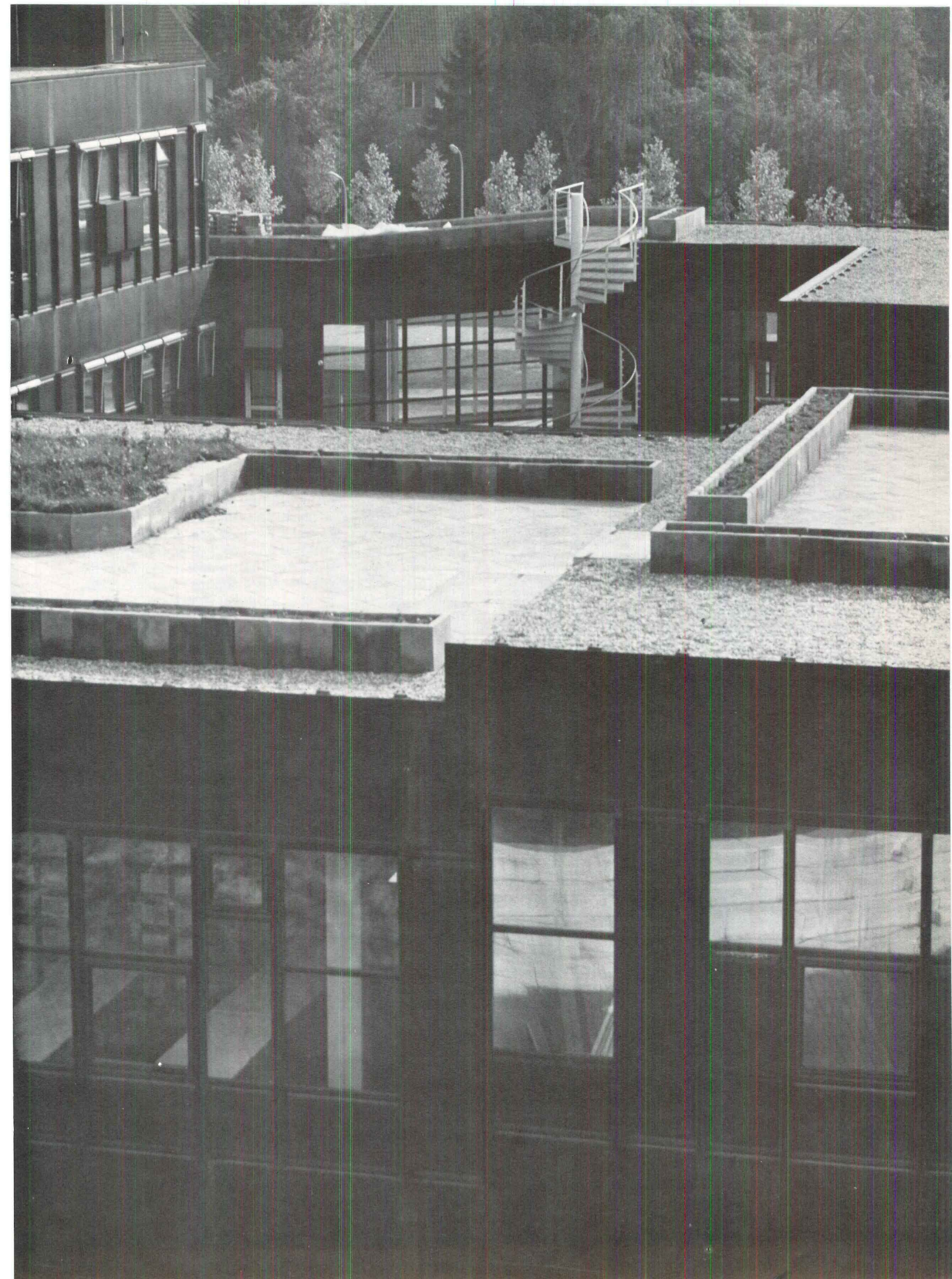
Berlin Free University Thielallee, Berlin-Dahlem, Germany. Architects: Candilis, Josic, Woods, Schiedhelm. The New York office of the firm continues as Roger A. Cumming, Architect, in collaboration with Waltraude Schleicher (Mrs. S. Woods); the Berlin office continues under the direction of Manfred Schiedhelm. Engineers: Krupp Druckenmüller and Krupp Bauplanung. Consultants: Jean Prouvé and Sean Mulcahy. General contractor: Arge Krupp. Photographs: Atelier Waldhausen, p. 35 (below); Pierre Joly and Véra Cardot, p. 37, 38 (top left), 39 (below), 43, 44 (two top photos), 45; Reinhard Friedrich, p. 39 (top left, and top center), 44 (two bottom photos).

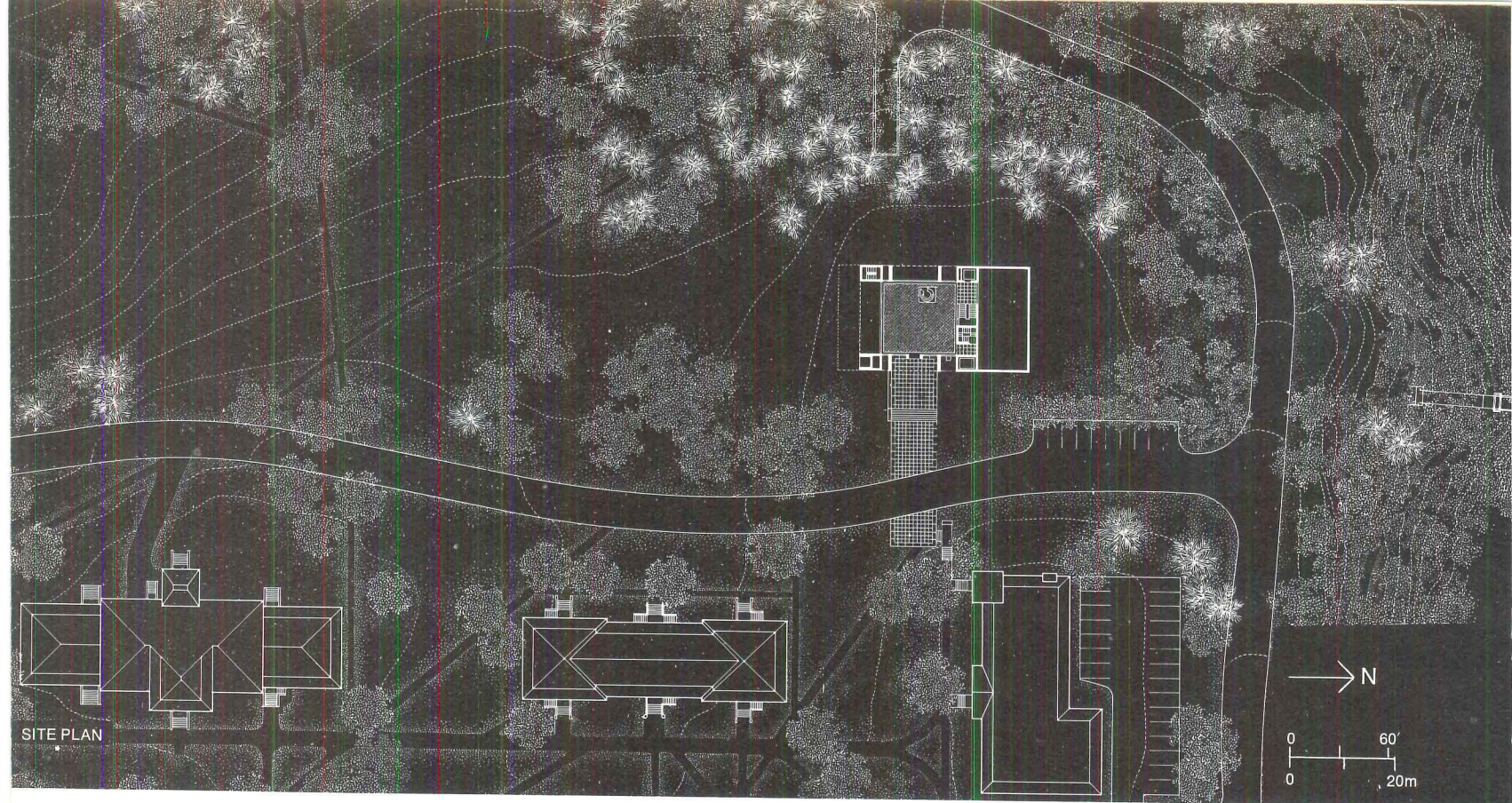




After some official contention that the rooftop gardens would not support plant growth in the Berlin climate, a series of simple planters has produced vigorous gardens of native grasses.

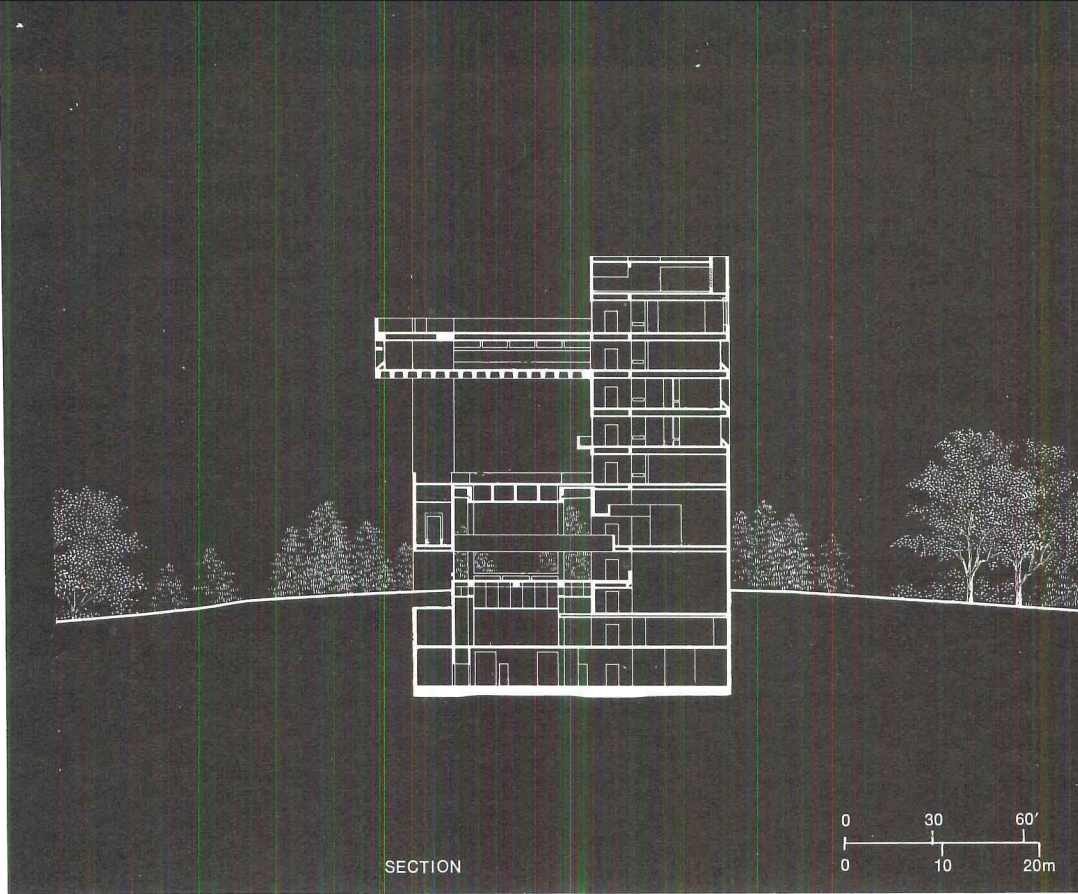






CORNELL

On an old and venerable campus, a radical and visible departure



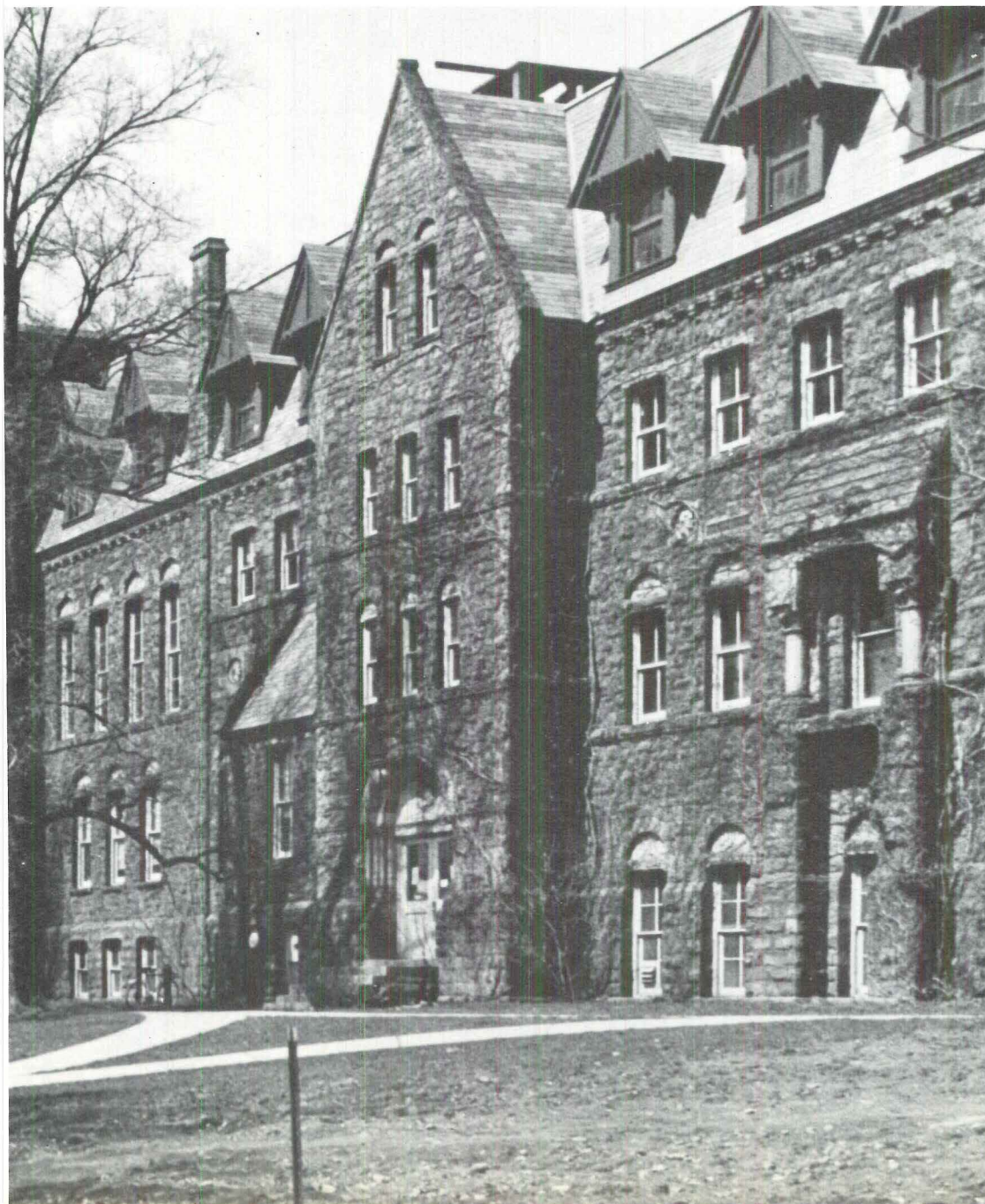
The Cornell University campus above Ithaca, N.Y., is not especially well known for the quality of its recent buildings. Except for three or four first-rate laboratories designed by Ulrich Franzen (on the "East" or "State" part of the campus), and a remarkable underground campus store (or *non-building*) designed by Earl Flansburgh, the most recent crop of Cornell architecture has been disappointing.

Yet this is a campus with some very special qualities. Its natural setting, on a mountain overlooking the Finger Lakes, is one of the most pleasant in the U.S. And the older quadrangles, framed by unpretentious buildings of local stone, and shaded by majestic oak and elm trees, are still relatively unspoiled.

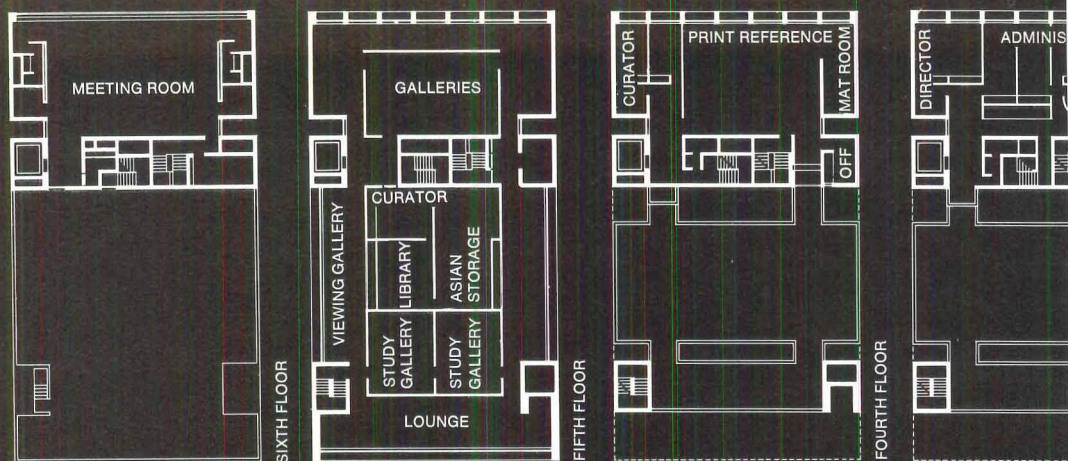
In this setting I.M. Pei and Partners have just completed a very interesting building, the Johnson Art Center, named after Herbert F. Johnson, a Cornell alumnus who was a frequent client of Frank Lloyd Wright. It is hardly a Wrightian building, and it is certainly not a *non-building*: it is a highly visible tower, on the most visible site on the Cornell campus—a natural promontory just to the west of the College of Architecture, which forms one side of Cornell's oldest and most splendid quadrangle, the Arts Quad.

The Johnson tower is a concrete lookout of formidable height, and it is a controversial building for that reason alone; but, unlike some new apparitions on the Cornell campus, it is hardly an insensitive building. In a recent article in the *New York Times*, a critic described the so-called "New York School" of architecture as being concerned primarily with form, rather than with problems of function or of site. The Johnson tower is, of course, a formal exercise reminiscent of earlier formal exercises, such as Lissitzky's and Stam's Constructivist "cloud props" of 1924; but the Johnson tower is, more importantly, very much concerned with problems of function and of site.

First, the functional problems: the building was to be, from the very start, a multi-purpose structure; and like the early Constructivists, I.M. Pei and Partners have articulated each function in considerable detail. The two lower floors below the entrance level were intended, originally, to contain the George and Mary Rockwell collection of Asian art, in a special environment scaled to the smallness of these objects. For various reasons, it was decided to



Plans of the principal levels are shown at right. The most significant ones are those of the entrance lobby, which overlooks a 2-story gallery below, and is, in turn, overlooked by mezzanine galleries; the plan of the open-air sculpture court two levels above grade; and the plan of the wide, horizontal floor that shelters the sculpture terrace, and contains galleries and lounges. The photo shows the Johnson Museum from the south. The horizontal slot near the top of the building defines the lounge, with its panoramic views.



place this collection into some of the galleries on the upper floors—at least until the “special environment” of sunken patios and connected pavilions is ultimately constructed. (Knock-out panels have been left in the lower-floor walls to permit such future expansion to the north.)

Aside from this programmatic change and its attendant complications, the functional organization of the building is clear: the two story lobby (with a mezzanine-gallery) is topped by another public gallery and an open-air sculpture court—placed here, two floors above grade, partly to protect the works from vandalism, and partly to open up the spectacular views of Lake Cayuga, that begin to unfold at this elevation. The sculpture court, like the lobby beneath it, is a multi-story space, overlooked by mezzanines containing curatorial offices and related areas; and it is topped by the wide lid of the top floor which, in addition to the galleries housing the Asian collection, contains lounges that command the most dramatic views available anywhere on the Cornell campus. A penthouse, with a meeting room for Cornell's trustees, sits on top of the wide, horizontal floor.

This step-by-step ascent toward a concrete aerie forms the main portion of the building. In typical, Constructivist fashion, the varied functions have been articulated in various forms and spaces; even the vertical stack of administrative offices has been separately defined by a vertical slot of glass. The entire building is an explicit, functional diagram.

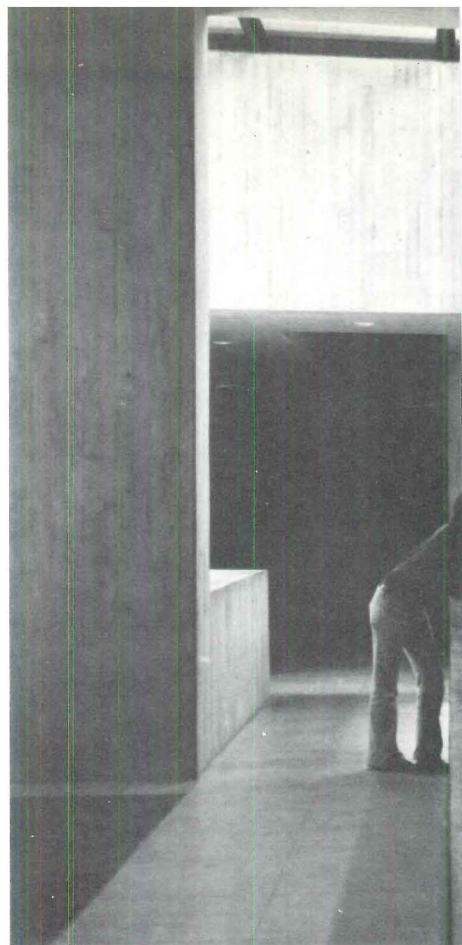
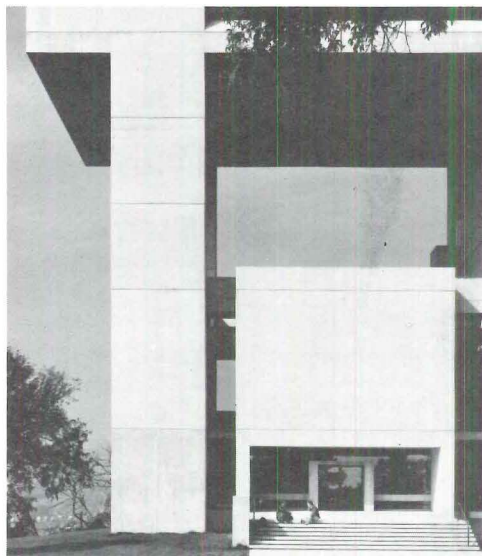
Intimately related to the functional solution is the problem presented by the beautiful but demanding site. To many Cornellians, a building on this site suggested an isolated event on a pleasant knoll overlooking the valley. Most of the functional requirements could have been fulfilled in a much lower building—perhaps as little as three stories in height.

But the architects recognized that any building, on this particular site, would necessarily become a major, spatial enclosure of the corner of the Arts Quad, from where it is clearly visible once you pass the row of old stone buildings on your way to the College of Architecture. A three-story lump, in that location, would hardly have served as a closure; it would have simply blocked the view in an irritating and inconclusive fashion. “We felt we had to make the build-





The detail at left is a see-through slot into the 2-story lobby, with the valley visible in the distance. Directly below is a close-up of the lobby-block, clearly articulated and separated from other elements of the building. At right is a mezzanine gallery overlooking the lobby. The painting is "Shenandoah Wall" by Franz Kline. Below that, an overall view of the lobby, with "Colleoni II" by Jason Seley (the equestrian statue), and "Germinating Form" by Phillip Grausman.



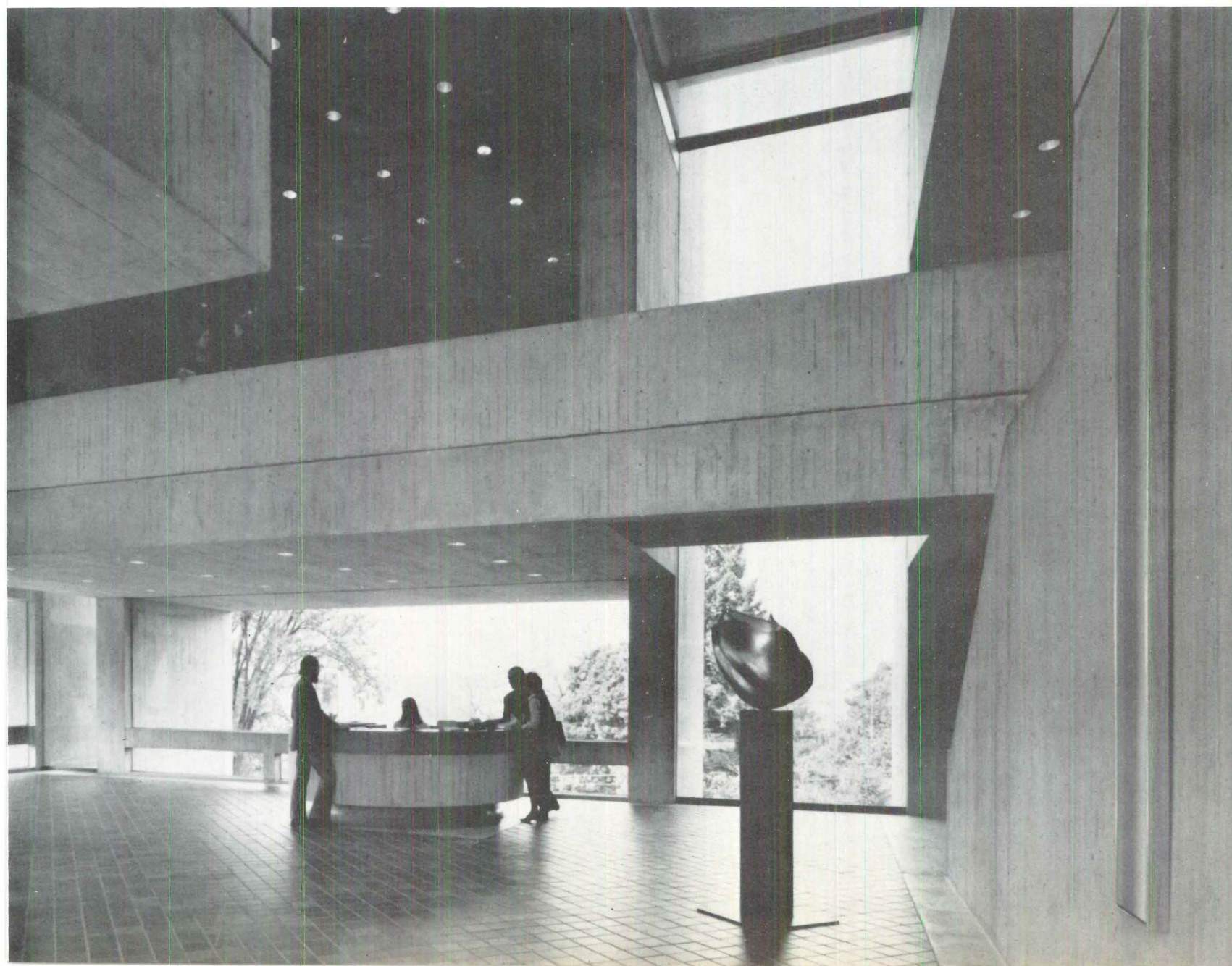
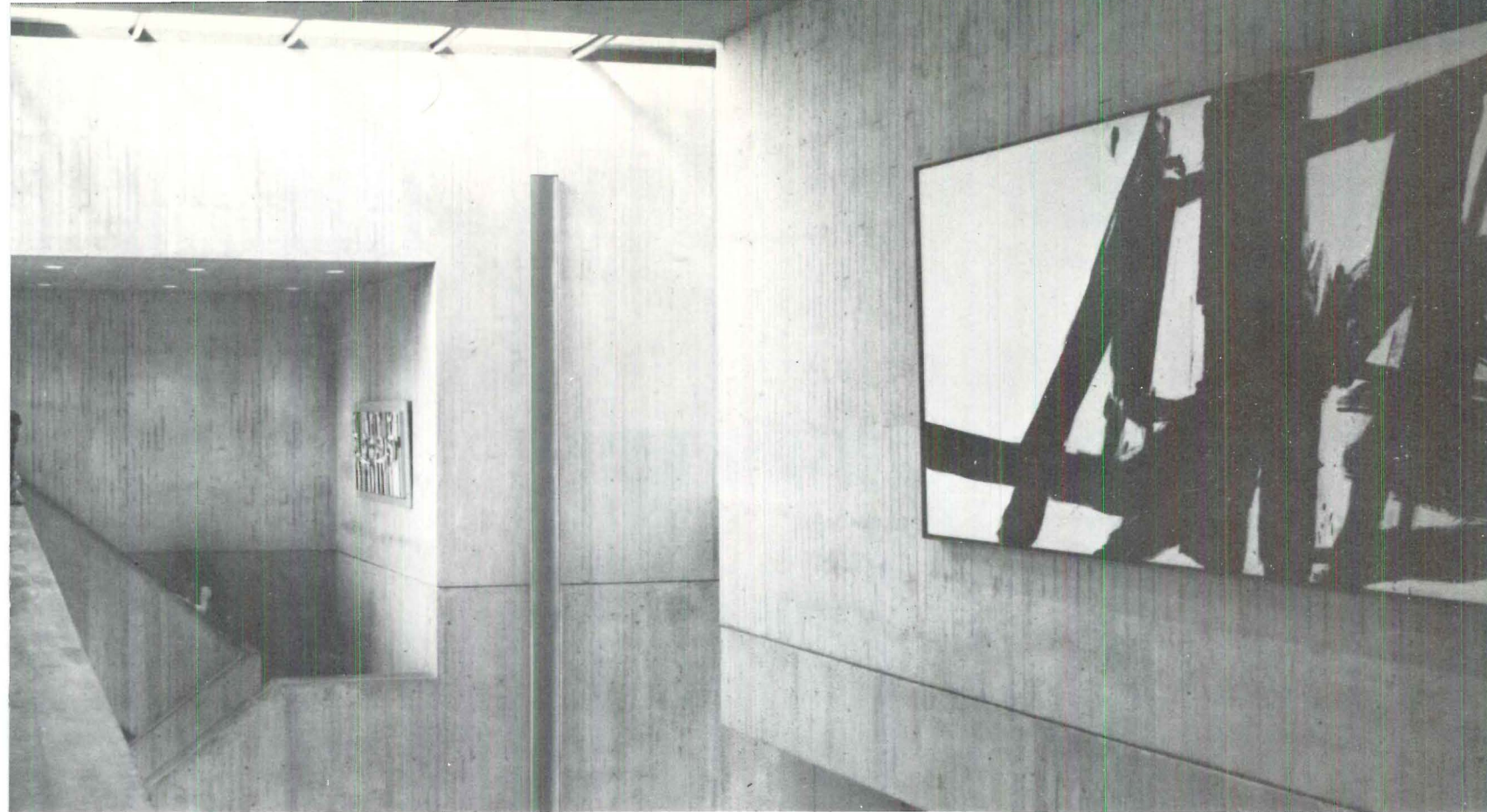
ing as high as the old campus buildings that would frame it," the architects say. So the new tower has a "cornice line" that aligns with that of the older buildings.

By making the Johnson Art Center vertical, the architects were able to leave much of the site visually open, thus permitting glimpses of the valley that would have been blocked by a lower and wider structure.

Because they understood the high visibility of the building in relation to the old quadrangle, they looked for a material and color that would successfully blend with the stone of the existing buildings. Once they decided that their tower, to enclose the space effectively, had to be eight stories tall, stone seemed to be out—a stone veneer being, in their view, out of keeping with the Constructivist character of the building. Steel and glass would have been inappropriate here; there are some terrible examples of that kind of mis-match elsewhere on the Cornell campus. So concrete (vertically board-formed) seemed to be it, and the aggregate was chosen to recall the color of the limestone trim in the older buildings.

The concrete is perhaps a little too light, although a darker, poured-in-place material might have looked dingy. In any event, the new building seems to relate well to the older ones (see first page).





The sculpture court above the lobby is shown at near right. It contains two figures by Auguste Rodin (one visible at left), and one figure by Leonard Baskin, visible at right. The views from this level unfold in three directions. At far right is the view of Lake Cayuga from the Trustees' Meeting Room in the building's penthouse. At bottom, right, is the lounge on the top public floor, with views toward the south. The statue at the end of the lounge is Indian, part of the Asian collection.

In considering the problems of function and of site which the architects attempted to solve here, one is bound to think of alternatives that might have produced a less monumental structure. It seems obvious that a long and low lump of a building, on that site, would have been neither fish nor fowl—just another nonentity on a campus already too strong on nonentities.

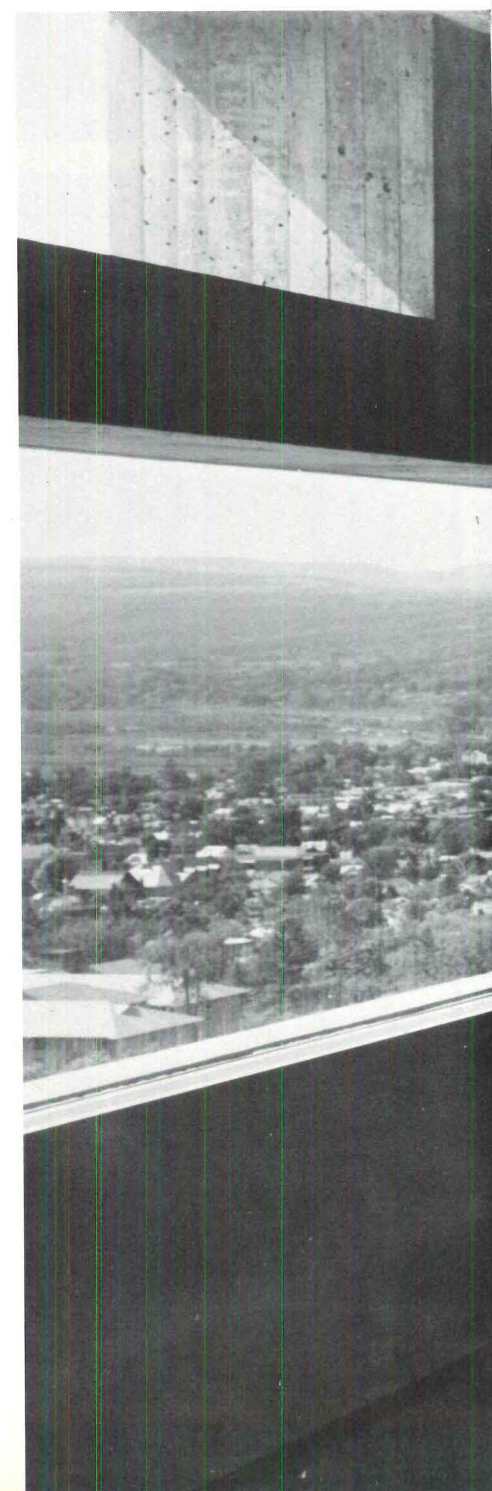
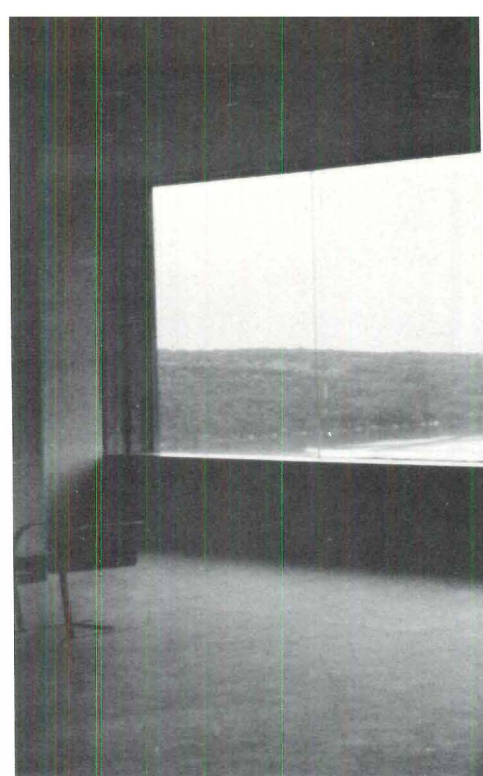
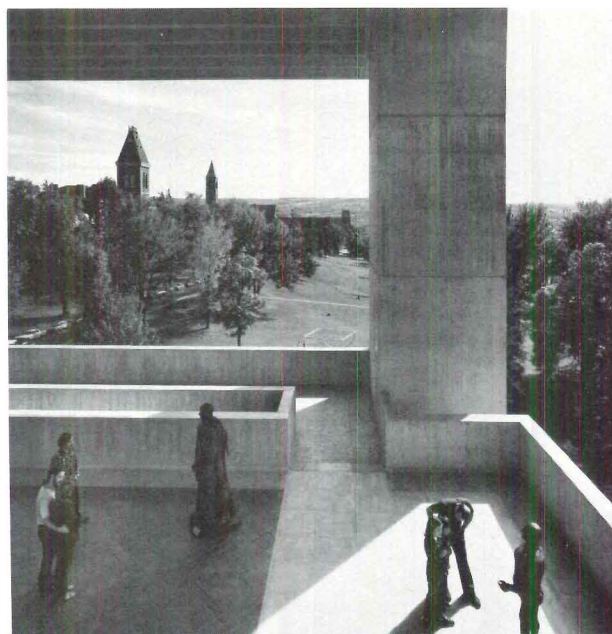
So the only alternative that comes to mind is another *non-building*—a multi-story art center tucked away under the crest of this promontory site, and seeded and planted on top.

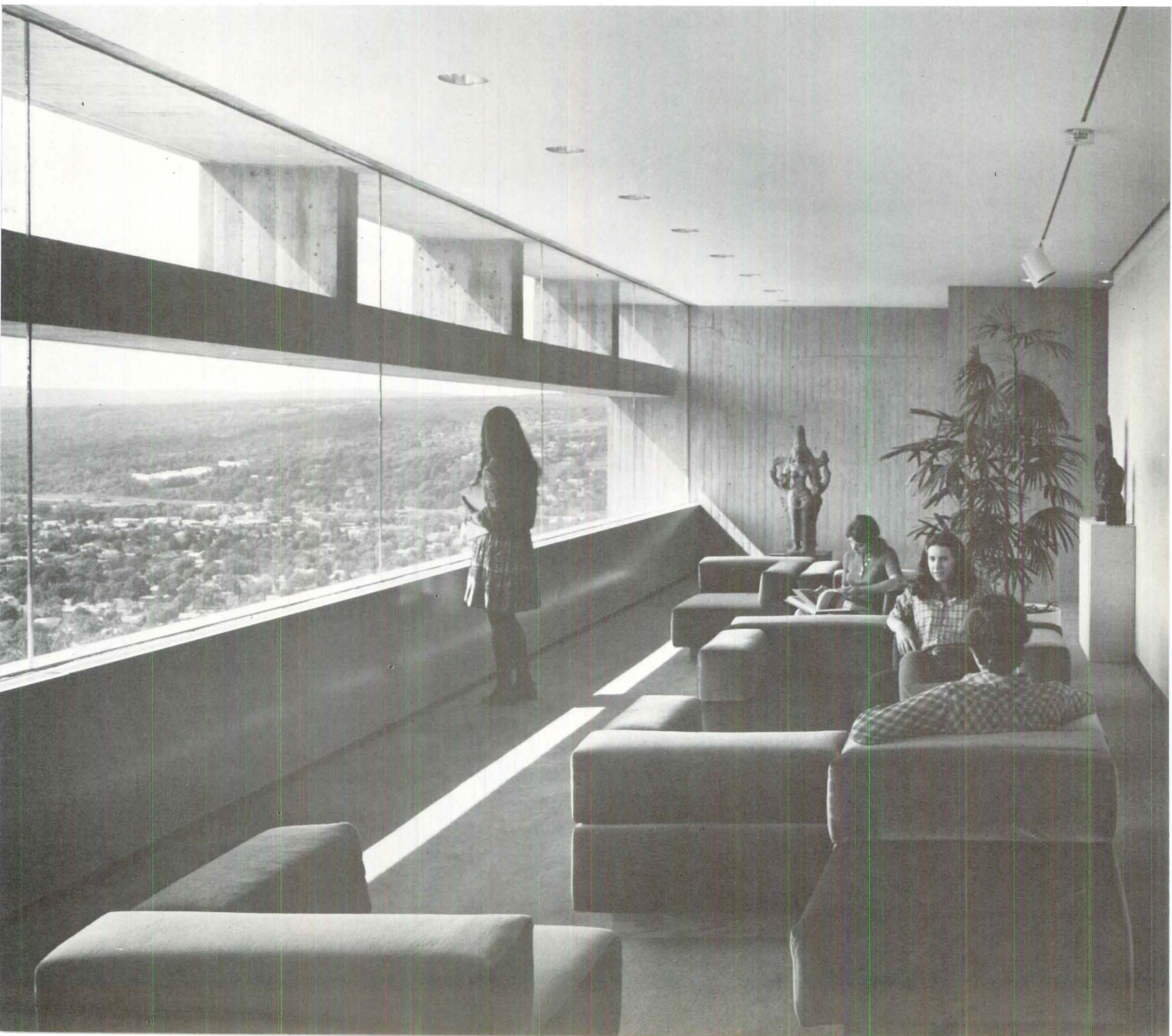
It is not an inconceivable solution, but it would have lacked two qualities that the new building possesses: it would not have opened up the views from the top; and it would not have stopped the leaking out of space that occurs, at present, at the rather open and unresolved corners of the old Arts Quad. Moreover, in exploring the nature of the site, the architects discovered that the existing water table was too high to permit them to excavate much farther than they actually did; and they further found that widening the building below or above ground would have meant cutting down some beautiful trees they found on the site.

So there is a very good case to be made for this building and the way it is, and the building itself makes it for us. It also makes a case for courage: courage on the part of a University which hasn't shown too much of that in terms of architecture, in recent years; and courage on the part of the architects, whose very visibility on this campus now predictably invites brickbats from all comers. (But, then, the Johnson tower looks solid enough to resist those.)—P.B.

Facts and Figures

Herbert F. Johnson Museum of Art, Cornell University, Ithaca, New York. Architect: I.M. Pei & Partners. Architect-in-Charge: John L. Sullivan III; in collaboration with Robert H. Landsman, Floyd G. Brezavar, Robert Bates, Robert L. Lanier, Alicia Foussats. Engineers: Nicolet Dressel Mercille, Ltd. (structural); Segner & Dalton (mechanical). Landscape Architect: Dan Kiley & Partners. Special Consultants: Edison Price, Inc. (lighting); Carroll Cline (lighting consultant). Contractors: Wm. C. Pahl Construction Co., Inc. (general); A.J. Eckert Co., Inc. (mechanical), Superior Electric Construction Corp. (electrical). Gross building area: 60,000 sq. ft. (including 1,500 sq. ft. of exterior sculpture terraces). Total construction cost \$3,620,350. Photographs: Nathaniel Lieberman, except first page, Russell C. Hamilton. Building Suppliers listed on page 129.







D|R

A new San Francisco store and its contents are complementary



Entrances on two levels (above) are connected by a double stair in the center of the store (left).

The plans of every large-scale urban complex built these days have extensive open areas labeled "commercial." In most cases those areas are filled with stores whose interior design is extremely superficial. When Design Research (DR) contemplated another San Francisco store in architect-developer John Portman's Embarcadero Center, they turned for its design to a local architect known for his whimsical approach to such ordinary building problems.

William Turnbull, Jr., a partner of the MLTW group, has used stair circulation and daylight, basic design elements indeed, to resolve what he calls the "paradoxes" he found in dealing with the already-defined limits of the structure and its site.

The location of the newly-built, two-level commercial space on the north side of the Security Pacific Tower and its heavy exterior columns and fascia made it a very gloomy space. Turnbull and his colleagues began by replacing the central 18 by 28-foot roof bay with a skylight. Under that they placed a puckish double stair—an open scissors stair in effect—on the diagonal and framed it in free-standing arches (built of sheetrock) whose various sizes and shapes recall, he says, "the poetic idiosyncrasies of Victorian San Francisco houses." Those arches were then outlined with neon tubing so no one will mistake them as part of the original structure.

And if that is not enough to break the "tyranny" of the concrete structural grid, the surface-mounted fluorescent ceiling fixtures take still another diagonal. Then they, and all the other pipes, ducts, wires and hangers normally hidden above a dropped ceiling, or at least painted the same dark color as the ceiling to minimize their presence, are cheerfully exposed to view above a lattice made of the nailable aluminum studs used in light construction. When the display fixtures, plants and the lively goods themselves are added, the results are truly vibrant.

To those who would like to have seen a jazzier, Italian-style design, Turnbull says that he had no stylistic preconceptions but used the bright and cheery character of Design Research's merchandise for his inspiration, especially as a foil to the impersonalness of Embarcadero Center itself.

It was much harder for Turnbull to achieve this kind of identity on the exterior. John Portman as architect wanted to em-



Simple components—wood block floor, aluminum ceiling grid, minimal display racks—set the tone.

The central stair and arches, placed in a seemingly random way into the building's highly ordered structure, in turn order and complement the displays of lively home furnishings and fabrics.

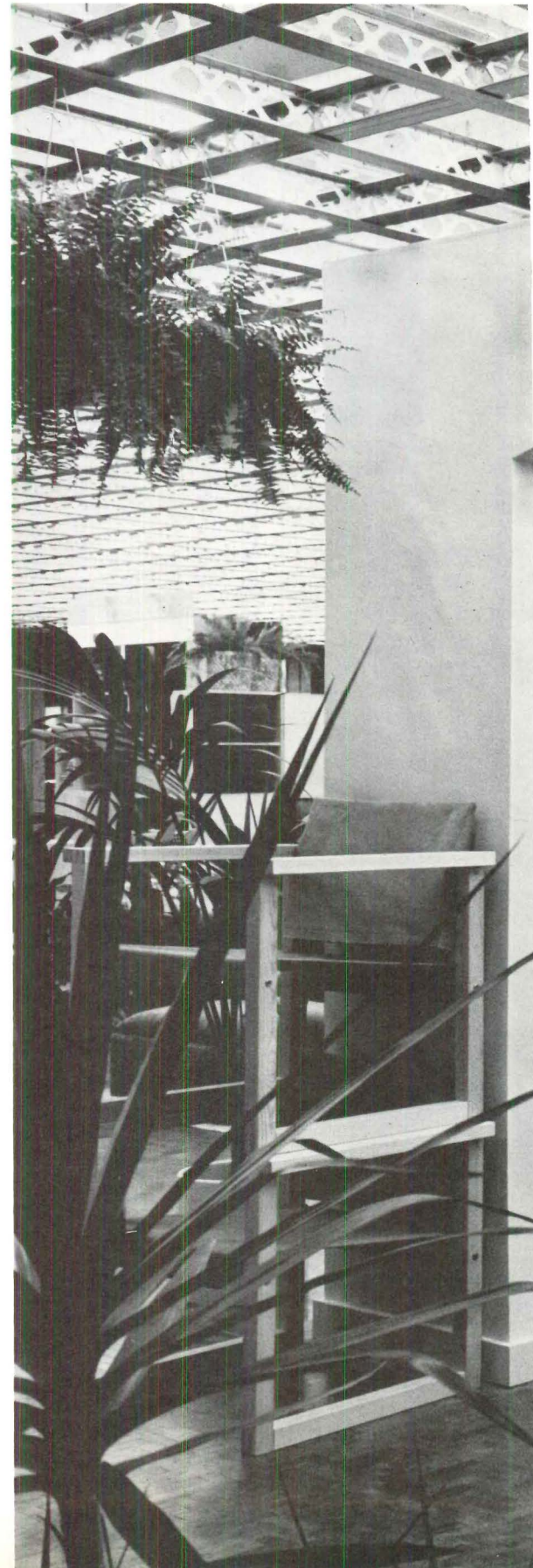
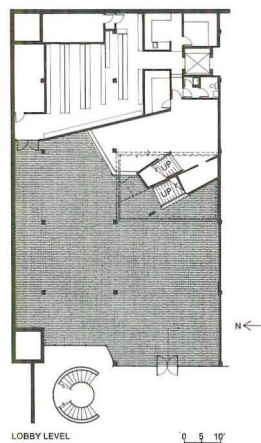
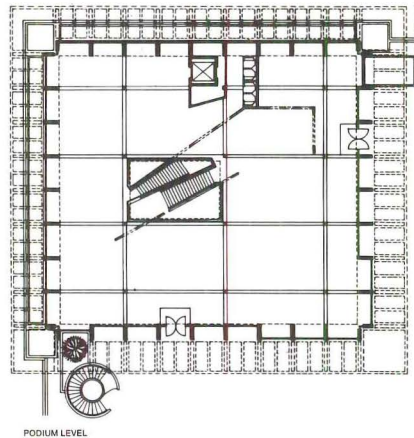
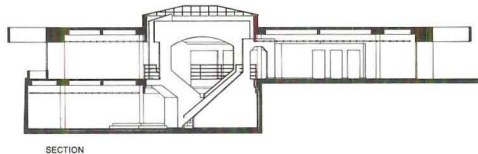


phasize the overall image of Embarcadero Center rather than any particular element of it; as developer, he retained control over any changes, including signage. The problem was compounded by DR's location on a plaza three floors above an already congested street with little parking. Yet the plaza itself has not been completed and today it is hardly the busy, heavily-trafficked promenade that it is expected to be in the future. How to attract customers or, at the very least, to indicate DR's presence to people in the neighborhood?

First, Turnbull replaced the dark-bronze glazing of the deeply-inset windows with clear glass. A simple sign in neon tubing was hung in those windows. The store itself was designed to be capable of continuous rearrangement of objects and fabrics, even to allow them to be moved out onto the plaza itself on good days. Thus passers-by are treated to the liveliest sort of displays. Second, the DR flagpole, visible from the street, has a special flag that can change daily depending on the whim of the person who raises it. To Turnbull, after all, "The design game is foil and counterfoil, whimsy and recall—the resolution of paradoxes."

Facts and Figures

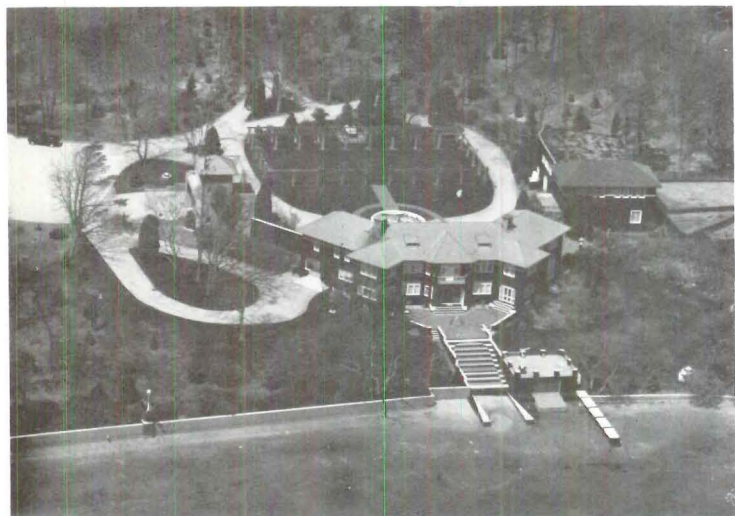
Design Research, Inc., San Francisco, California.
Owner: Design Research International. Architect: William Turnbull, Jr. Associates: Richard Miller with Richard Graham and Paul Lobush. Engineers: Ben Kacyra (structural); Glumac and Webster (mechanical and electrical). Interiors consultants: Blase Gallo (display fixtures); Richard Peters (lighting). General contractor: Lambert and Wells Construction Co. Building area: 13,000 sq. ft.
Photographs: Jeremiah O. Bragstad
Building Suppliers listed on page 129.





OSSORIO

On 60 acres of Long Island, this artist has created his most dazzling assemblage.



Alfonso Ossorio is a major American painter and sculptor, and the collector of some of the best 20th-century art. He was born in 1916, in Manila, the Philippines, and he now lives on a 60-acre estate in East Hampton, Long Island, New York. This house is his home.

Ossorio's work has been described as a series of "assemblages" made from what he calls "congregations." The "congregations" are objects found in stores and factories and in the workshops of taxidermists; but the "assemblages" are Ossorio's own.

This house in which he lives and works is probably his most extraordinary "assemblage." It is also one of the most extraordinary houses in the U.S.

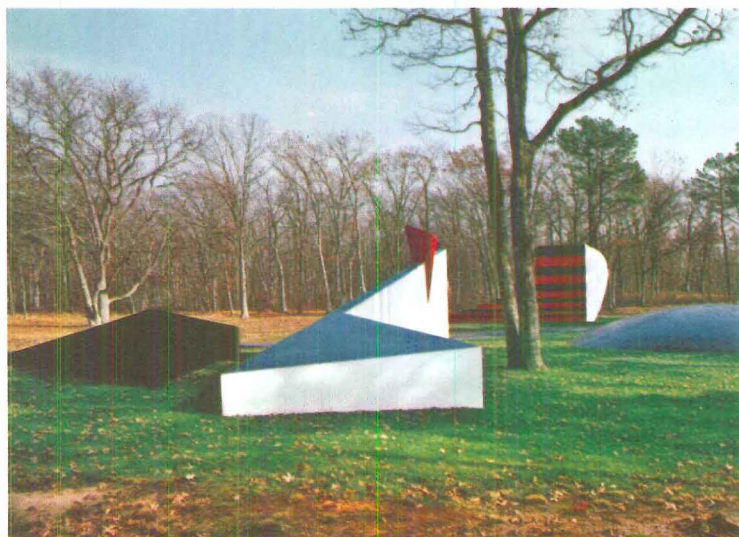
It is an "assemblage" of many things: the past, for one—this place was built 75 years ago by Albert and Adele Herter, the parents of Christian Herter, Eisenhower's second Secretary of State; Albert Herter was a successful mural painter, and one of the wings of this house is a huge studio that doubles as a theater, complete with stage and dressing rooms.

It is an "assemblage" of the present as well: the work of many of Ossorio's artist friends—Jackson Pollock, Jean Dubuffet, Lee Krasner, Clyfford Still, John Little, Bill DeKooning, Wilfred Zogbaum, and many more. It is an "assemblage" of much talent—from that of Edward Dragon who designed and installed most of these unbelievable rooms, to that of some inspired gardener,





Exterior views at right show the approach side of the house; the garage wing (with a tower containing servants' rooms); and the main house as seen from Georgica Pond, to the south. The walls are finished in stucco now painted black, with red, white and blue trim around window and door openings. The close-up below is of Ossorio's 1971-72 monumental sculpture (named In and Out) that guards the entrance gate along the Montauk Highway. The pieces are of concrete, also painted red, white and blue. The large interior at right shows the Music Room, a flight of steps down from the main living areas. The bristling "assemblage" mounted on the wall at right is a 1971 Ossorio called Couple # 2. The studio/theater wing of the house is just visible through the large windows. Another view of the Music Room (with Ossorio's 1969 Yang and Yin painting) appears on the previous page, as does an aerial of the main house and its wings. The area shown in the aerial view represents a tiny fraction of the 60-acre estate.



who looks after each tree and bush and each blade of grass with tender, loving care.

And it is an "assemblage" of many other works as well: Ossorio's most recent, monumental, painted weather vanes, mounted on a sea wall that circles the estate; Ossorio's even more monumental sculpture—a kind of "day-glo" Maginot Line—that guards the estate against intruders from the Montauk Highway to the north; and, finally, the work of nature—the stunning panorama, east, south and west, of a huge pond inhabited by families of swans; and the dunes and the Atlantic Ocean beyond.

Ossorio's 60-acre "assemblage" has been in the works for more than twenty years, and it is not yet complete, nor will it ever be. Only ten years ago, this house was a series of galleries as pristine as any found in a respectable museum of modern art; today, Ossorio's house is a sunburst of some new Dadaism, a wild storehouse of everything from the most beautiful painting Jackson Pollock ever painted, to the most bizarre works of religious fanatics and of other, inspired lunatics. On the landing, halfway between Pollock and Dubuffet, there is an inlaid shoeshine stand, from Turkey. And everywhere, there are Ossorio's own fantastic "assemblages."

To those who have known this house over the past decades, it is a strange and unpredictable friend. When the "New York School" of painting first identified itself, this house was one of the two or three places where the action was: this is where Pollock,





The wide gallery at near right is on the main floor. In addition to the large Inxit door (1968) by Ossorio, this room displays the remarkable 1950 Paysag  e by Jean Dubuffet, and Jackson Pollock's "Lavender Mist," considered by many his best work. The floor is covered with a magnificent 19th century Indian rug, woven in a British jail. At far right is a view in the opposite direction, toward the Living Room with its Ossorios, plants, and parrot cages. The photo directly below is of one of the second-story bedrooms, with a rug by Max Ernst. The large photographs at bottom, right, are of the second-story chapel, with its primitive crucifixes and the small 18th century Spanish figure of the Christ child. The photo at bottom, right, shows a sitting room off one of the upstairs bedrooms. The works of art include an American 19th century chair made of the horns of Texas Longhorns. The Ossorio construction on the easel is dated 1965.



Still, DeKooning, Clem Greenberg, and a great many hangers-on, would meet and drink and talk until the hours of the next morning, or the one after that. It was the scene of some of the most dramatic arguments and some of the most tragic endings. It was—and continues to be—the place where artists from all over the world come, quite naturally, after they land at Kennedy Airport; because this, in a way, is their second home.

To any certified modern architect, this house will seem, of course, just a trifle peculiar. It contains, among innumerable other appurtenances, a glass cheese bell under which is displayed what appears to be a stuffed infant. It also contains a brown Junior Jesus, an uneasy chair made of the horns of Texas Longhorns, a rather generous collection of human (and animal) skulls, and a couple of live African grays (parrots) that frequently say things like "here today, gone tomorrow." In fact, this is not a terrifically contemporary home: no Mies chairs throughout, and not a single chromium ash tray. It isn't really what you'd normally call a "home." It is, quite simply, an "assemblage" of beautiful dreams and of shattering nightmares, put together by Messrs. Ossorio and Dragon as a commentary on the contemporary scene as they see it.

And what a scene it is! Wealth, of course, had a good deal to do with the making of it; but it is, much more importantly, a product of incredible fantasy. One is reminded of Gaud   and of Schwitters, and of Sam Rodia, in Watts. One is reminded, also,





The upstairs corridor (near right) doubles as a gallery that contains several Dubuffets, Pollocks and Ossorios. At far right is the upstairs landing, with an inlaid Turkish shoeshine stand in the foreground, a painting (Parting Sun, 1957) by Ossorio at left, and one of Pollock's last, black-line portraits at right. Directly below is a view of the pantry, on the main floor of the house. At bottom right is a typical upstairs bathroom, containing a 1948 figurative painting by Joe Glasco called Cat's Cradle. Next to that view is a photograph of the spacious kitchen. The views on the next (and last) two pages show the first impression a visitor gets upon entering the house: an 18th century Chinese Bronze of a Buddha, framed in a British 19th century arch of elephant tusks (mounted on elephant feet). The large interior view is of the Bird Room, off the Living Room. All photographs (except for the aerial on the first page, and the water view on the fourth) were taken by Norman McGrath.



of Dali (but his place near Cadaques, at Port Lligat, looks like a San Diego motel by comparison); one is reminded of Miro and Max Ernst and Queen Victoria and the Maharaja of Mysore.

But not a single one of them—except, perhaps, Antoni Gaudí—went very far beyond “congregations” to arrive at “assemblages.” One is a bit suspicious of the word “environment”—but when was there ever an environment that was more complete?

Ossorio's home may be an exercise in really terrible taste. He is one of those rare, 20th-century artists who really knows almost *everything*—unlike most of his *confrères*, he reads and looks and listens, all the time. One feels that this “terrible taste” is what he has sought all his life—a way of looking at our world in a manner so ironic that the world would simply have to sober up, and face itself.

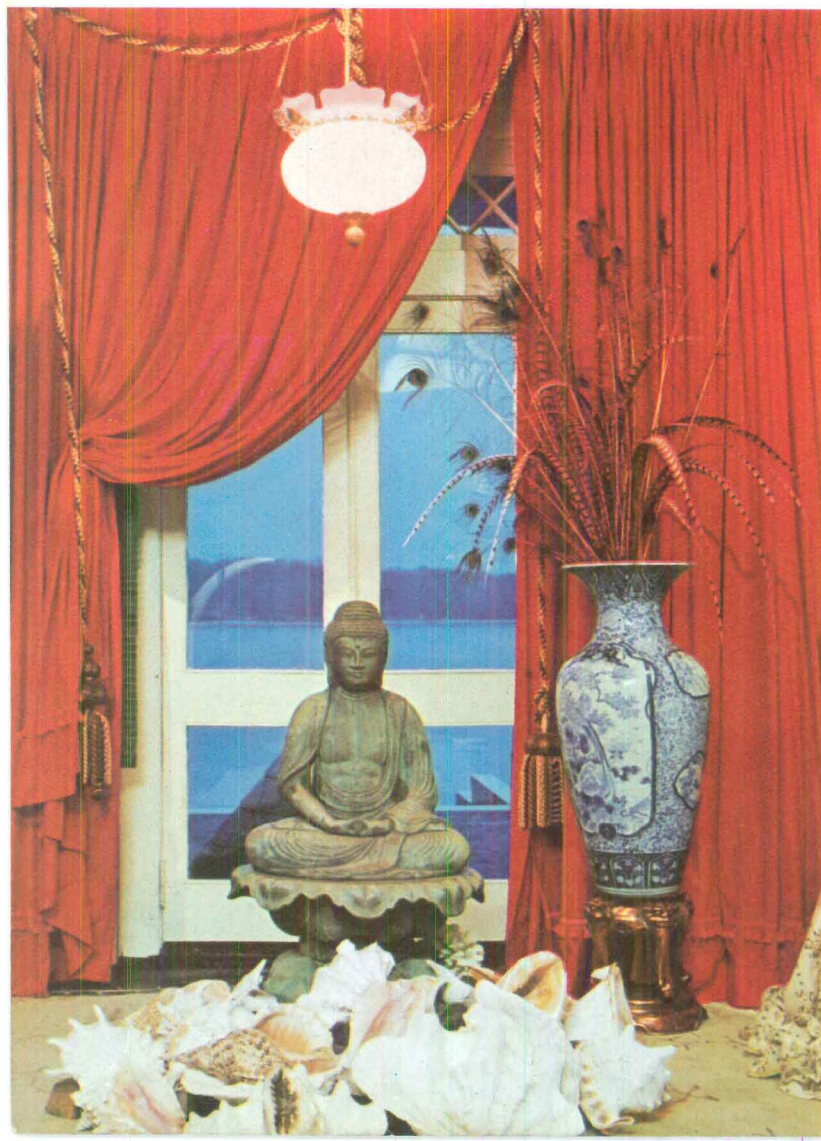
Ossorio is a very disturbing artist, and hence quite unfashionable. His home is a disturbing and unfashionable house. New York's Museum of Modern Art will never give him a one-man show.

Because they can't. His best work is this 60-acre “assemblage” of memories from confrontations with this century and with other centuries before it—and 60 acres cannot be compressed very easily into a gallery on Manhattan's West 53rd Street.

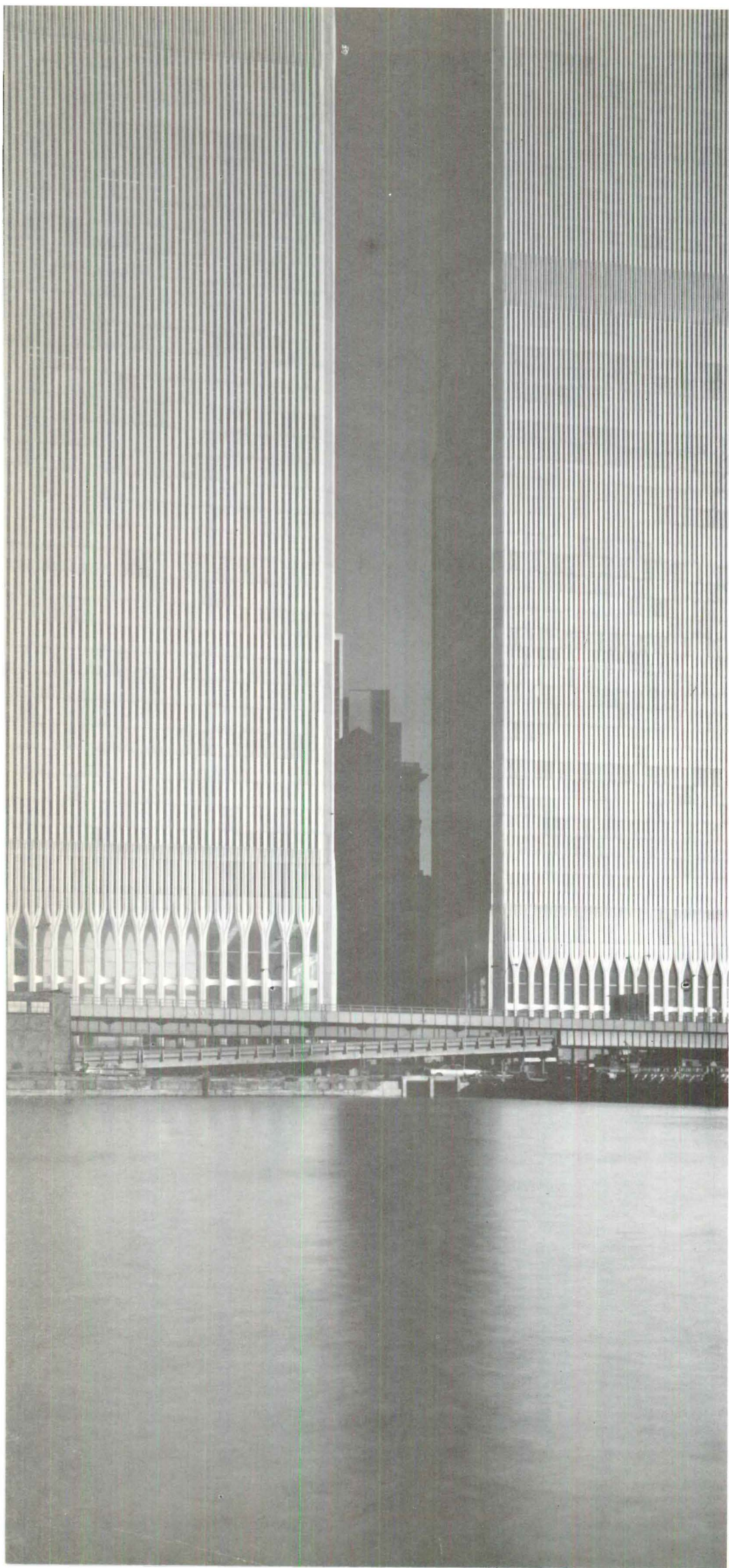
Ossorio's work may remain dormant for a decade or two—after which there will, perhaps, be a rediscovery of what one man did, in defiance of all the “good taste” of his time, to describe a world revealed to him, for better or for worse.—PETER BLAKE











WTC

The World Trade Center makes a strong case for bearing wall versus cage construction

by Henry Wright

In some circles, an approving remark about Manhattan's World Trade Center designed by Minoru Yamasaki and Associates and Emery Roth and Sons evokes the kind of "are-you-kidding" expression usually reserved for advocates of Esperanto. Praise for the WTC is definitely not an "in" thing; there are too many things to object to. Free enterprisers complain that it never should have been built, or if built, not by the N.Y. Port Authority, a quasi-governmental body charged largely with transportation responsibilities. More emotional commentators seem to be experiencing a delayed reaction to the *program* of the single-purpose skyscraper, with its floor-on-identical-floor of homogenized, impersonal space—a program that WTC manifests in a particularly monstrous way. Thought of in terms of program, the towers recall two loaves of mechanically sliced sandwich bread, American style—a less than inspiring image. Moreover, their sheer size makes them stand out like a pair of adolescent bullies on a kindergarten playground. It would have been interesting to have heard what LeCorbusier—whose first reaction to the New York skyline was that the skyscrapers weren't big enough—thought of them. These, surely, are big enough.

As Architecture, *Newsweek's* art critic called the towers "ugly"—a clear case of ugliness in the eye of the beholder. Ada Louise Huxtable called their lobbies "pure schmaltz." She can say *that* again. But most observers have agreed that the towers are marvels of engineering. Some have identified their load-bearing walls as a technological breakthrough of considerable practical importance.

I go further. I believe that the WTC wall may bring about a better era of tall building design, for a fundamental reason. It may mark the beginning of the end for the curtain wall—not merely in the pejorative sense of ticky-tacky construction, but in the sense of the skeleton-frame and non-load-bearing wall celebrated by historians like Sigfried Giedion and Carl W. Condit. If I'm correct, the sons of this year's graduating architects, who also enter architecture school, may be hearing about Minoru

Henry Wright, a former Managing Editor of Architectural Forum, is The Director of Research of the School of Architecture at New York's City College.

Yamasaki and the early 1970s in the same terms that their fathers and grandfathers heard about William LeBaron Jenny and 1883.

According to Condit, Jenny's way of putting together the tall-building envelope "remains the practice for tall steel- or concrete-framed structures. Without [it] the skyscraper as we know it would have been an impossibility." James Marston Fitch describes the cage frame as an "endoskeleton" as opposed to exoskeletal bearing-wall construction. "As with the higher vertebrates," he asserts, "it was the precondition to higher levels of performance."

Both pundits stop just short of proclaiming the skeleton-frame plus curtain-wall the ultimate form of the skyscraper. And both fail to anticipate the application of another celebrated Chicago invention—the balloon frame—to tall steel buildings. This, however, is what the WTC wall represents. It stands in the same relationship to the cage frame as the balloon frame, invented in 1833, bore to the earlier post-and-beam, mortise-and-tenon structure it replaced.

The WTC "balloon frame," as will be shown, has a special appropriateness to wide-span floors. It solves in an unusually simple way, the problems of vertical stiffness generated by extreme height. And in addition to a fundamentally different structure, the WTC wall offers for the first time a truly rational approach to problems of rain-water penetration and thermal expansion, while suggesting unique—if not wholly acceptable answers to questions of acrophobia, solar heat gain, and sky glare—all factors maximized by building height.

Important as these things are, I feel that the WTC wall will have even greater esthetic significance. For 88 years, skyscraper architects have been dealing in various ways with a singularly unvarying problem. Essentially, their assignment has been to provide socially acceptable clothing for post-and-beam bays 20 to 25 feet square, multiplied in three dimensions. This structure is more like a children's jungle gym than a cage, and scarcely more sophisticated. It reached its ultimate and least fortunate expression in the setbacks dictated by New York City's former zoning law. The side-street ziggurats this law produced would have been hard to build in another way. In contrast, the WTC towers are a



Sullivan's Wainwright Building, St. Louis



Hood's New York Daily News Building



Holabird & Root's Palmolive Building, Chicago

straight line from top to bottom because their structure not only *wanted* to be like that, *à la* Louis Kahn; it *insisted* on it.

The cage-frame building was "engineer dictated." It thus relegated skyscraper architecture—even the best skyscraper architecture—to a cosmetic role. WTC could change all that. To show why this is possible—why the steel-bearing wall may be of transcendental design importance—I'm going to digress long enough to explore the effects of the cage frame on the past of skyscraper architecture. I promise to divide this history into three easily swallowed capsules.

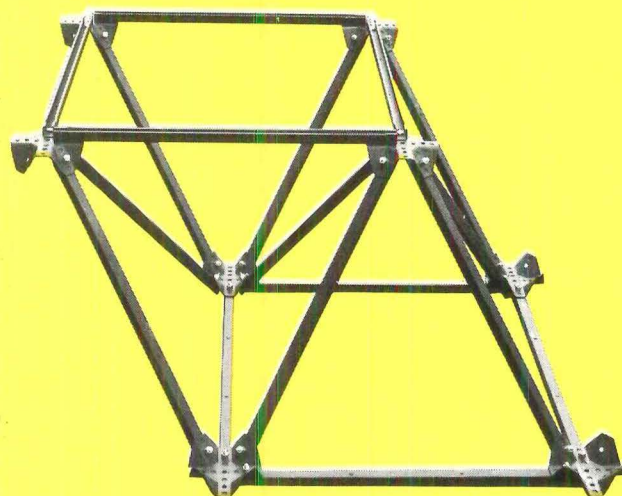
1890-1930: Poetic license

Louis Sullivan's seminal Wainwright Building (St. Louis, 1891) and his Guaranty Building (Buffalo, 1894) accepted the cage frame as a given, but ungainly fact. Sullivan—like Raymond Hood in his much later, stunningly successful Daily News Building (New York, 1930)—introduced between the real columns false ones that were structurally so much dead weight. He did so, he said, because he wanted the skyscraper to "stand tall."

This formula, repeated in hundreds of cases, produced handsome buildings, but it falsely portrayed the nature of the steel frame. Its essential prevarication was compounded in the 1920s by further slight-of-hand. It was discovered that by varying the treatment of the vertical row of windows next to the corners of the building, in the way typified by Holabird and Root's Palmolive (now Playboy) Building (Chicago, 1929), the corner "piers" could be made to seem much more massive. To 1920s eyes, bemused by the *Beaux Arts* preoccupation with masonry, this was a godsend: the tall building looked strong enough at last!

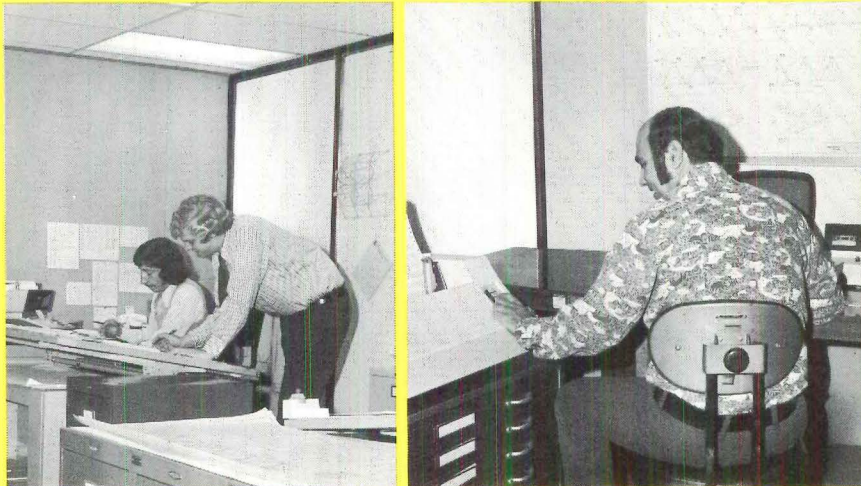
Such misrepresentation has been a conscious concern of only those persons (and periods, like the 1930s) that stressed a moralistic approach to design. But it was constantly brought to the attention of the uninitiated by a curious circumstance: skyscrapers under construction looked utterly different from the way they looked when completed. While being built the cage frame presented a series of horizontal planes, one above the other, which appeared to float almost miraculously, to invite human occupancy. Once the masonry clothing had been applied, this effect was lost forever.

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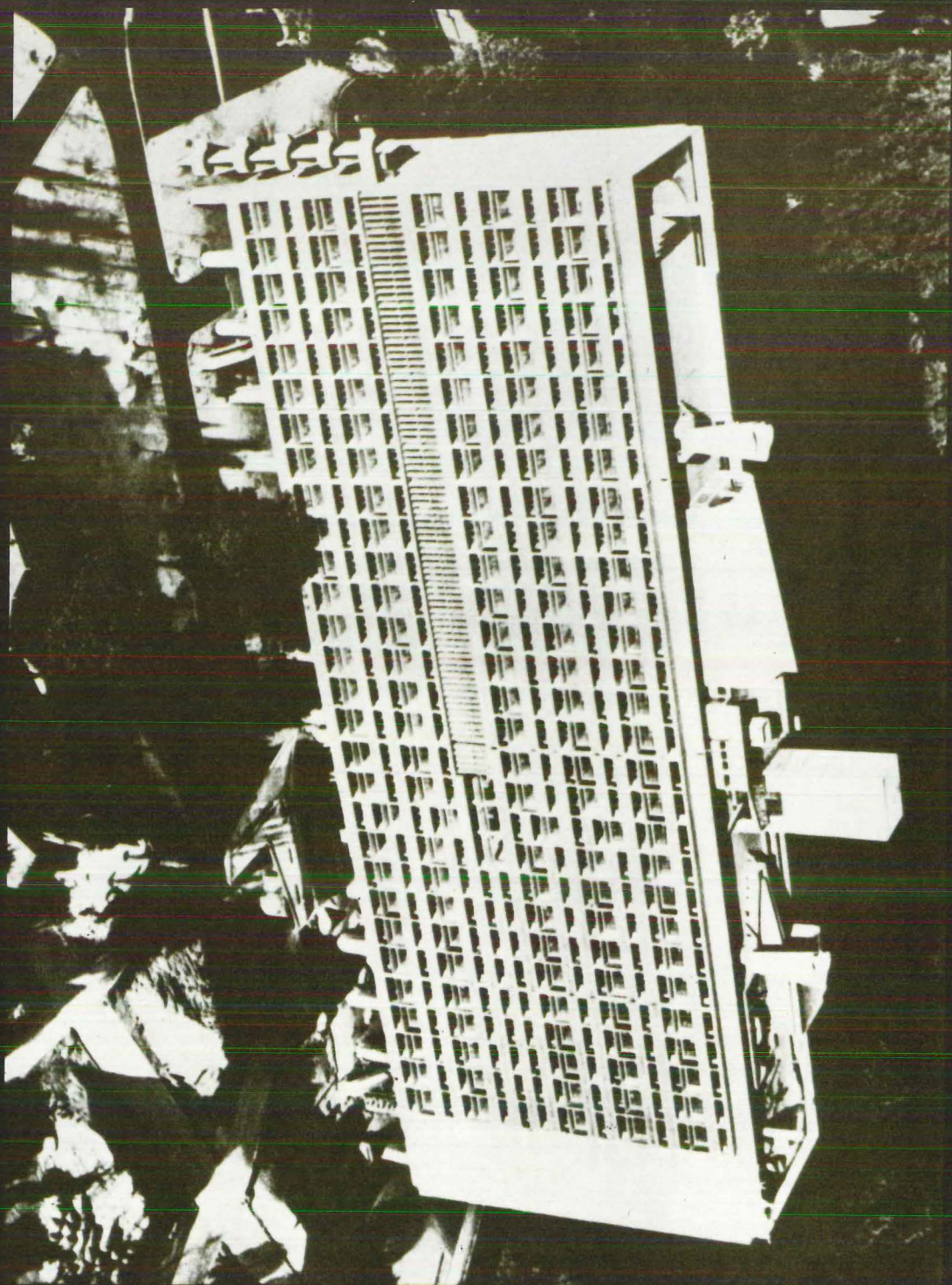


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MARSEILLE

A housing consultant's look
at Le Corbusier's Unité d'Habitation after two decades of use

by Roger Schafer



As one drives out from Marseille through its triumphal arch, the Boulevard de Paris becomes the Rue de Rome, which in turn becomes the Avenue de Prado, which finally becomes the Boulevard Michelet. There at number 280 is the long rectangular apartment block called simply "Maison Le Corbusier." The public knows it by that name, and if, anywhere in Marseille, you ask to see Le Corbusier, they direct you to this building.

Providing 321 apartments (for approximately 1,600 residents), the Marseille block may represent the furthest effort to date of an architect as sociologist to create a vital living environment in an urban setting. It was Le Corbusier's aim to create a village in town so that, even in high rise construction, people would have the sense of community associated with a small French town. In a French town the private housing and public facilities are dispersed horizontally, of course; in the Marseille block, the same elements are dispersed vertically.

The building on Boulevard Michelet represents a specific effort to force people to meet, to interact, to form a community, all while using a relatively small area of land. It is the embodiment of ideas that Le Corbusier had written about and lectured about for many years before the start of construction in 1947, ideas now familiar to all of us.

Le Corbusier chose the size of the building himself, with the idea that approximately 320 families was not too small a number to be able to function as a community, but not so large as to allow the occupants to lose touch with that community. Basic to any such social organization are shopping, schools, restaurants and recreation facilities, both active and passive; all these elements Le Corbusier built into the Marseille block.

The building's seventeen floors and roof garden are lifted high above its $3\frac{1}{2}$ hectares ($8\frac{1}{2}$ acres) of land on the 38 famous concrete *pilotis*. The apartments are entered

As another in a projected series of return visits to key buildings, we have solicited this examination, not by an architect or historian, but by a passionately concerned layman. Roger Schafer started working on cooperative housing in Harlem in 1936; his firm now provides counsel for many community and business groups interested in low-income and moderate-income housing. He is a Contributor to Architecture Plus.

from long, unusually wide and brightly painted corridors which occur not on every floor but only on the second, fifth, tenth, thirteenth, and sixteenth. In addition, on the seventh and eighth floors of the building is the two-level main street with a clothing shop, gift shop, drug store, cleaning establishments, a toy store, a small restaurant (its terrace with a view of the Mediterranean), and an 18-room hotel. The space set aside here for convenience food shops has been vacated, and some former retail areas are being converted into office space, many of the offices leased to architects. Also inactive now is a rooftop theater where Le Corbusier had imagined spontaneous productions involving a high degree of audience participation. On the roof is a gymnasium and just below is a children's day care center. Putting such elements at the top of a building was a radical departure from previous French practice which required that children's facilities be at ground level. But Le Corbusier put them at the top for good reasons: on the roof of the Marseille block there is space, there is view (because of the parapet height, not a view of the rather uninteresting suburbs nearby, but, from the many elevated platforms and man-made "hills," only distant views of the Mediterranean, the Chateau d'If and the Alpes Maritimes), and, most important to Le Corbusier, on the roof there is sunlight. One of Le Corbusier's younger associates said that use of the roof for play and recreation may be a result of his Swiss Calvinist heritage—if a Brazilian architect had done the same building, he would have used the roof for a night club.

Except for the hotel rooms and a few small "studio" apartments, each apartment has a living room two stories (almost sixteen feet) high. Most apartments in the block originally had outdoor balconies at each end, facing east and west (a few units at the south of the building have only one orientation; no units face north), but some tenants have now enclosed their balconies for more indoor space. In a typical apartment, the double-height living room opens on its lower level to the kitchen and on its upper level to a balcony bedroom. A three-bedroom apartment has a children's room with a blackboard as one of its walls, a built-in invitation to creative graffiti, and two of these extremely narrow (only six feet) bedrooms open on to another outdoor

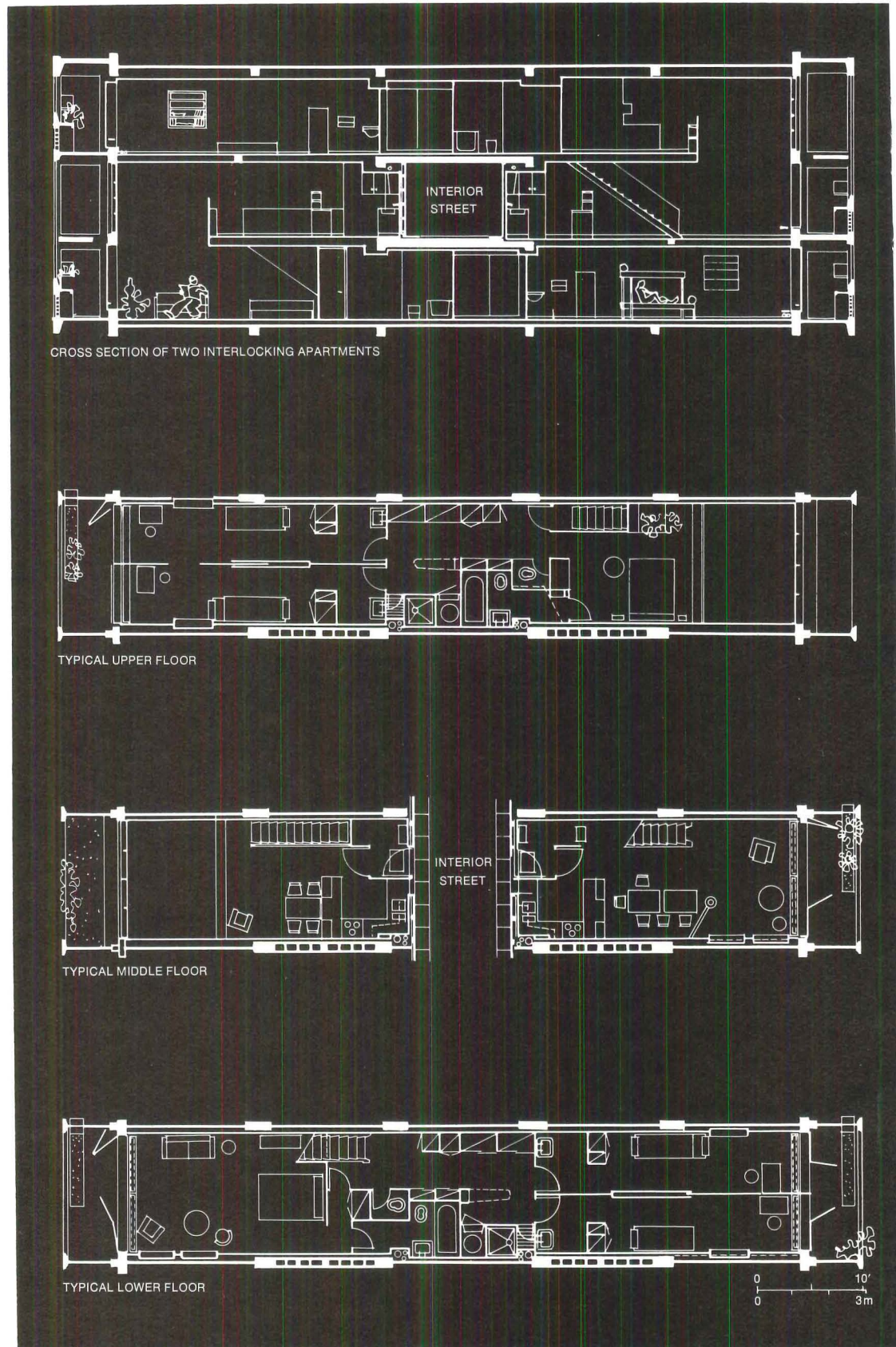
Partial section and typical apartment plans show how units interlock with space between them for an interior street on every third floor. Right, a transverse section through the building, a two-story area of the mid-building shopping street which forms the Unité's town center, and three typical apartment interiors; the view at the far right looking down from a balcony bedroom to the tall glass wall and terrace beyond.

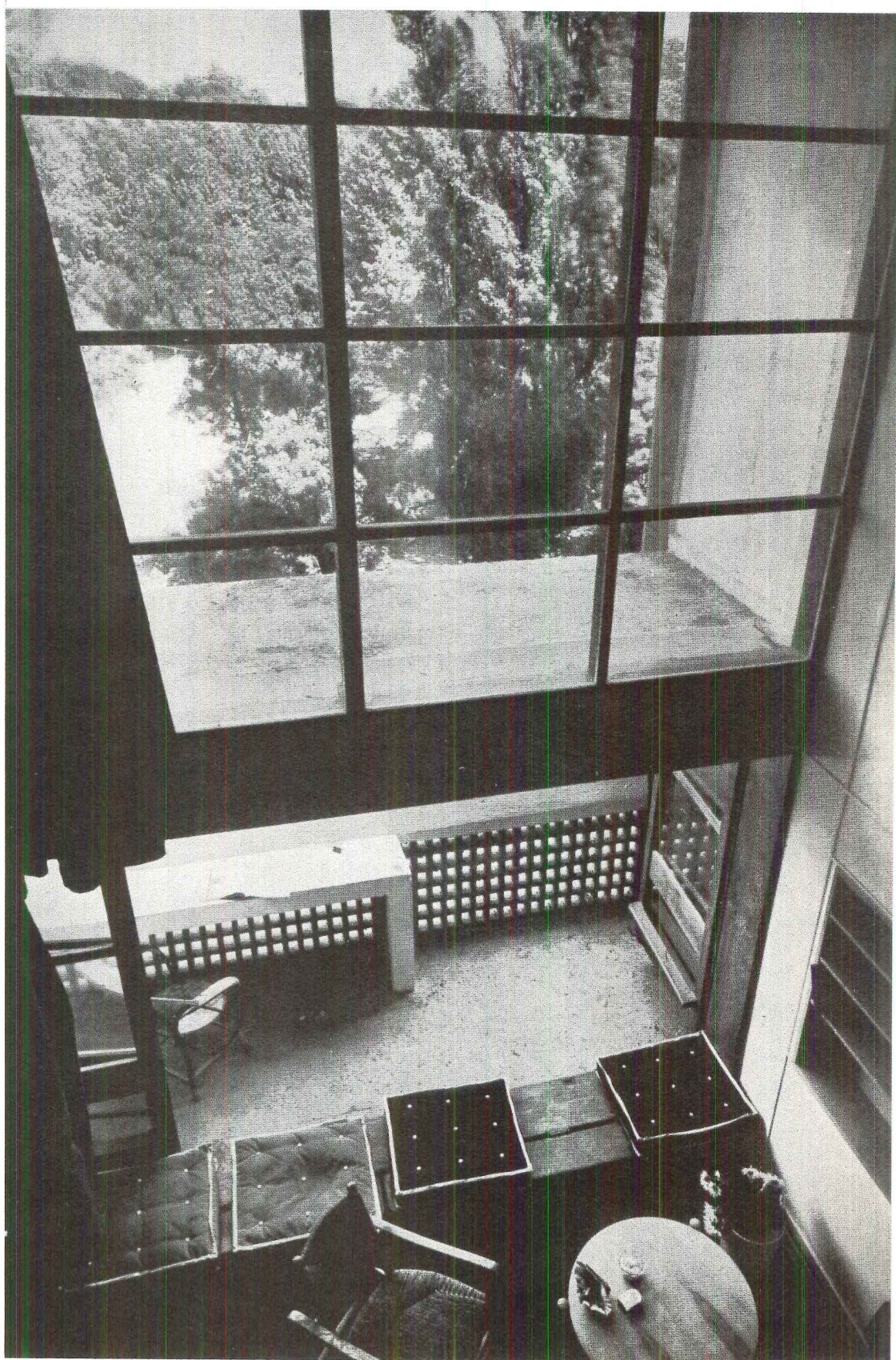
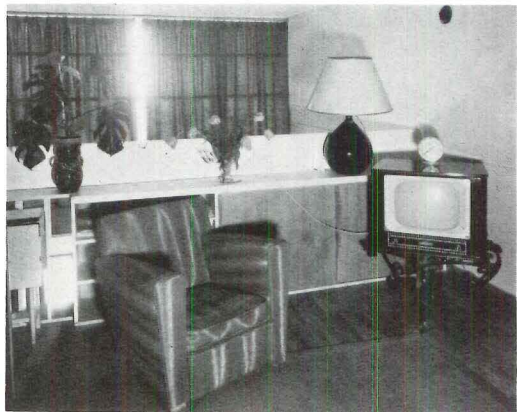
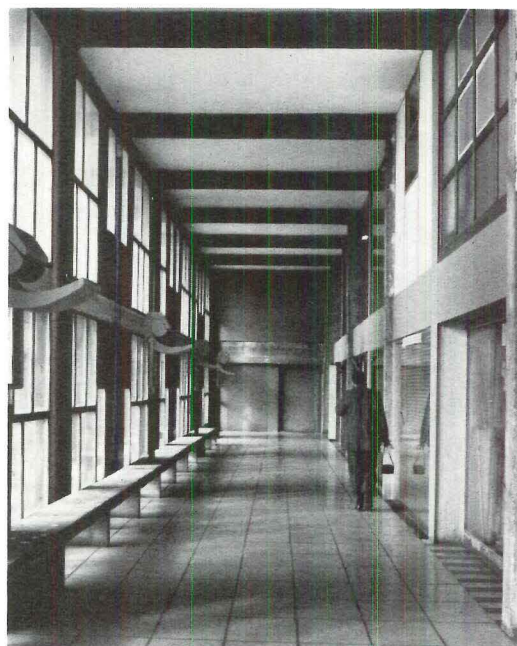
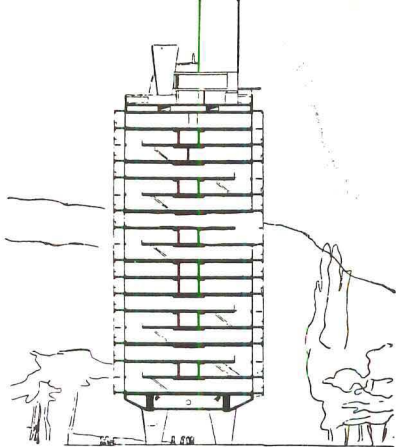
balcony this one only one floor high.

From the point of view of Monsieur Veron, the manager of the Marseille block since 1954, Le Corbusier's efforts to encourage a sense of community have also created unusual management headaches: the commercial facilities in the middle of the building, for example, necessarily bring non-resident visitors inside, giving them uncontrolled access from the elevators to all apartment corridors, and obviously aggravating problems of security. If the shops were completely supported by the residents, as Le Corbusier had hoped, this problem would not exist, but such support is not economically possible.

A great help to M. Veron's management, however, is the building's unusually effective sound insulation. Because each apartment unit was built as a complete self-contained box, meant to be inserted into the structural frame as, in Le Corbusier's phrase, "bottles into a wine rack," and because these concrete boxes do not even rest directly on the structural frame but are separated from it by lead pads, there is an air space completely surrounding each apartment, and the resultant degree of sound insulation is exceptional.

From the beginning of construction in October, 1947, until its completion in October, 1952, Le Corbusier was under continual attack about his design. One difficulty was that although the building was begun under the auspices of France's enlightened Minister for Reconstruction, Eugène Claudius-Petit, who was sympathetic with Le Corbusier's idealistic experiment, the building was completed under other ministers and local government officials who were far less understanding. The design was condemned by a group of people who felt that they would not be able to afford the rents, and by another group whose main complaint was that the kitchens were too small. A Committee of Inquiry was established to examine the kitchen plans, and some of its members (who lived on large country estates with enormous kitchens) could not understand how residents could survive with Le Corbusier's design. The project's supporters pointed out that the kitchens were all electric, with built-in ovens and refrigerators (then rare in France), that no longer did every bourgeois household have a servant, and that Le Corbusier's plan, with its kitchen open to the living





room, prevented the mother from being isolated when she cooked.

The built-in closets were also unusual at that time in France, and were also questioned. Le Corbusier pointed out, in answering an attack on this building intended to prevent the construction of a similar one in Nantes, that one could furnish an entire apartment in the Marseille block with a table, beds, and chairs; everything else was built into the design. The Unité d'Habitation at Nantes did proceed, of course, and was finished in 1953. A third Unité, in Berlin, was built in 1958, a fourth at Briey-en-Forêt in 1959, and a fifth, at Firminy, was finished in 1968, three years after Le Corbusier's death. These successors prove the impact of their original model at Marseille, but none of the later Unités incorporated the mid-building "town center," so that only the Marseille block itself is a real test of the architect's social ideals.

The most difficult opponent to these ideals, the one dragon Le Corbusier could not slay, was economics. Costs rose so steeply during construction that, instead of having the intended village—with its own mayor and council—owned by the State for families of lower-middle income, the State, desirous of getting some of its investment quickly returned, sold the apartments at prices which only those of upper-middle income could afford. The building thus became what is called in France a "co-proprietorship," and each apartment is owned individually. Now only about half the people who own the apartments continue to live in the building. As a result, meetings of the co-proprietors are attended by a very small percentage of the present residents, and at annual business meetings the maintenance budget of 800,000 francs a year is controlled by a minority.

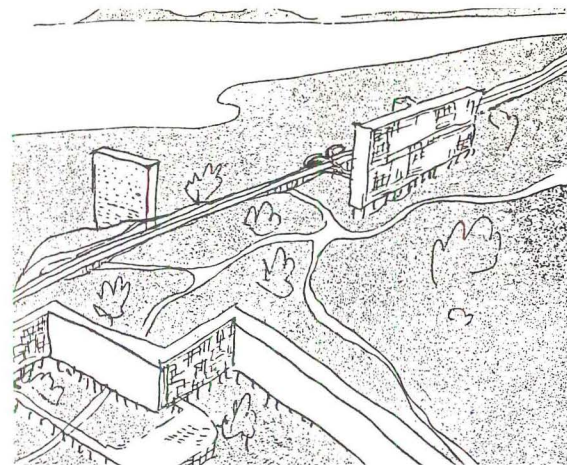
From a strictly fiscal point of view the Marseille block is a success: there is a waiting list for the apartments; Marseille residents do want to live there. There is a wide heterogeneity of ethnic and racial backgrounds among the present tenants, a mix that would probably have pleased Le Corbusier, but the economic class is not what he intended. A 1972 survey of residents showed the following vocational breakdown: people in commerce and industry, 25 percent; people in liberal professions (architects, engineers, lawyers, etc.), 25 percent; employees of government

agencies, 25 percent; people in public education, 16 percent; other, 9 percent.

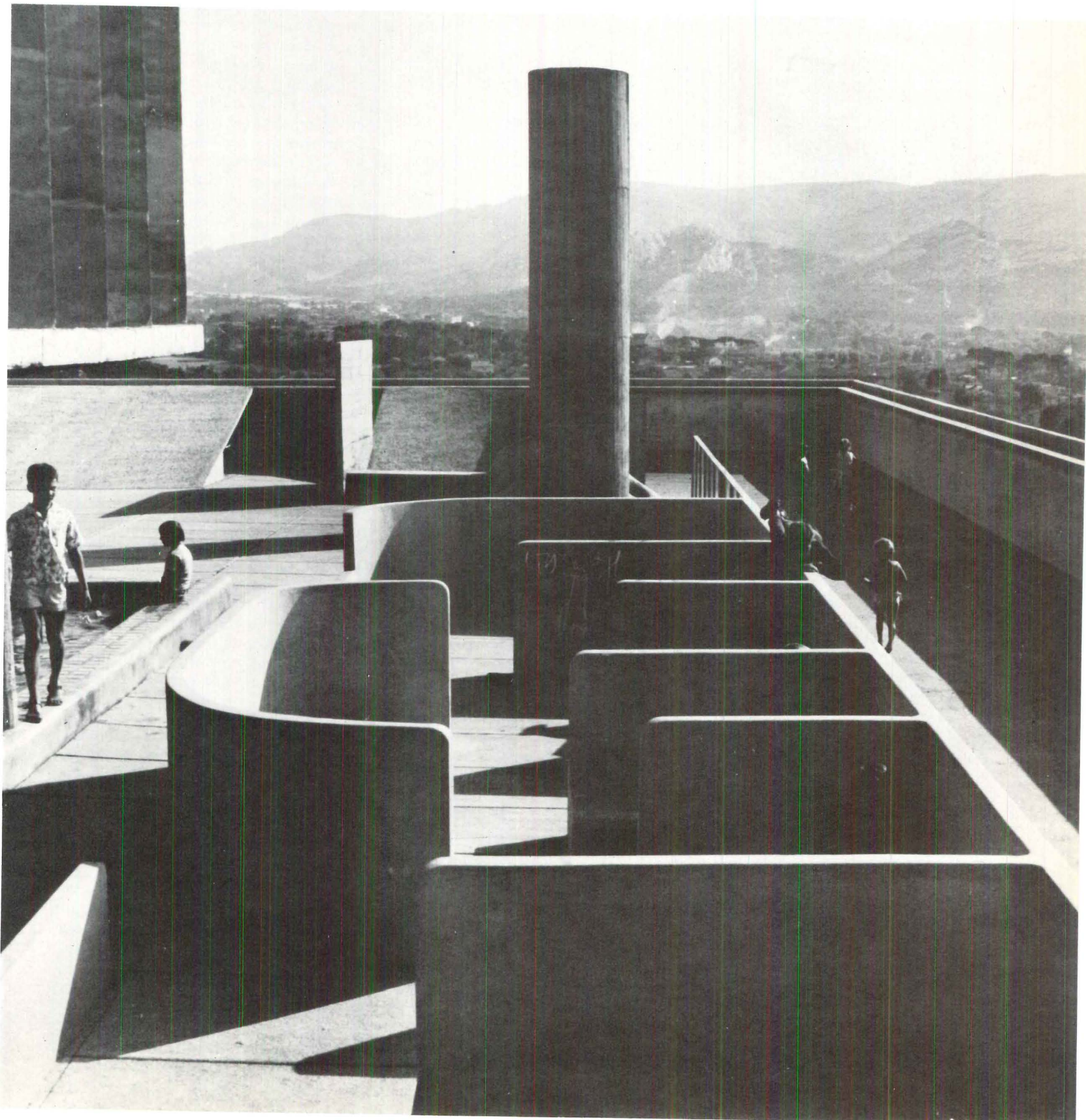
Failure to attract the lower-middle economic class for which Le Corbusier designed the building has resulted in its facilities being used in ways far different than intended. The gymnasium, for example, is run by a private entrepreneur and draws chiefly on the people of the surrounding area for its membership; it is used by a mere two percent of the residents. Similarly, the small hotel facility was intended to enable residents with large families and small apartments to have their visitors stay in the same building; today it is used primarily by transients with no direct link to the building residents. The shops along the mid-building streets have also failed to function just as intended. In the United States, a population base needed to sustain a food market, in an area of low-income housing, is 600 families, so Le Corbusier was not far from the mark in imagining a convenience food shop supported by 321 families. However, for higher income groups, which are more mobile, the base is wider. Because the people living in the Marseille block are relatively mobile and independent, an in-house food shop has failed to be feasible.

Maison Le Corbusier is not, then, functioning as its architect planned, and his aspirations to create a self-sufficient vertically organized French town are still partially untested. The fact remains, however, that after two decades of use, Maison Le Corbusier remains one of our most idealistic and tempting models of urban organization. For those who now live there, it is unquestionably *working*, and working very well. Many years ago, one of the builders of Chandigarh came to Marseille to visit the building. Shown into her apartment, one of the residents said, "He said to me that he didn't want to talk to me of architecture but wanted to know simply if I were happy. Since I speak English poorly, I got my husband, my two children, and brought them next to me. I showed him my apartment, how the sun came in and everything, and I said to him, 'Just take a look.' He smiled. He understood."

Photographs: p. 87, Fenno Jacobs; p. 89, Dorothy Alexander, Société Éditions de France, and Lucien Hervé; this page, Peter Blake (top), Lucien Hervé (below); next page, Richard Miller.



Le Corbusier's 1942 sketch, at left, for an apartment block in Algiers was a forerunner of the Marseille Unité d'Habitation. Below left, the Unité's blank end wall facing north, with its sculptured exit stair from the mid-building shopping street, and a view of the bottom of the stair between the great supporting pilotis. Below, the play area on the building's roof; the Alpes Maritimes are visible over the high parapet.



letter from BERKELEY

by Linda Groat

"A question was posed to the radical candidate: if the landlord cannot be assured of a profitable rate of return, won't he abandon Berkeley?"

Berkeley, California, is unique in America as the home of burgeoning community activities. To mention the free clinic, the food conspiracies, the free university, and the numerous neighborhood associations is only to scratch the surface. And so, it seems only appropriate that Berkeley's radical movement would have originated a housing and land use program participatory both in process and design.

Even as a newcomer to Berkeley it was quite easy to feel caught up in the movement's enthusiasm for the planning program, partly because it seemed so entirely feasible, but also because its implementation would produce such tangible results. Among other things, the proposal would allow for neighborhoods to be substantially involved in planning their own development, for substandard housing to be rehabilitated, and for apartment buildings to be converted to cooperatives at minimal expense to the tenants. In effect, these measures would encourage those people who have always been at the mercy of landlords, developers, and the federal government to take control of their own housing. And this, finally, was a vision of the future I wanted and expected to be part of.

But now, months later, that sense of optimism and confidence has been severely eroded. Indeed, it has been a very painful process to discover that Berkeley, the one city which seemed so open to the participatory process and fundamental change, has spurned the radical efforts. In retrospect, I realize that the setbacks which the radicals encountered were, in fact, inevitable; but to clarify this point I must describe my experience as it happened.

Shortly after I moved to Berkeley in the fall of 1972, I discovered that a close friend had recently joined a small group of advocacy planners and architects called People's Architecture. It was one of the most enduring organizations in Berkeley's counter culture, and as such it seemed to offer an appropriate opportunity to learn about

the alternative community and to find a way in which I might become involved.

In its early days People's Architecture had promoted a number of community-based planning schemes as alternatives to those of the city's Planning Department and Redevelopment Agency; it had been both a design team and an organizing tool. But since then, many of the members had become disillusioned with the group's role as an alternative design team. They had come to believe that, without a sufficiently supportive political or economic framework, none of their proposals could ever be meaningfully implemented. And so, gradually the focus of the group had shifted; by the time I entered the group it had become largely a forum for analysis and discussion of the politics of planning in Berkeley.

Ostensibly, the purpose of the weekly meetings was to discuss the means by which People's Architecture could initiate or lend its support to specific planning proposals, but for a newcomer to the city the digressions from the intended topics often offered the best insights into current issues. On many occasions, various members of the group would trade colorful anecdotes and vignettes from Berkeley's recent history. Gradually I realized that for the veterans of the group, in particular, events such as the Free Speech Movement and especially People's Park were not merely the vague political symbols that they were for me; rather they were crises which had directly influenced the group's political attitudes. In fact, the struggle for People's Park had marked the beginning of a political trend which eventually culminated in the group's (and the movement's) current emphasis on housing and land use issues. For that reason, the details of the People's Park incident are important to note here.

In the years prior to People's Park, the University and the City had jointly made a number of decisions which significantly altered the density and land use patterns of the areas adjacent to the campus. For its part, the University embarked on a plan to expand both its enrollment and its physical plant, and this required the acquisition of several city blocks comprised primarily of older homes subdivided for low-income student apartments. The City, in turn, rezoned the south campus area to allow for high density apartment buildings. At the same time, however, a substantial non-student (hippy, if you will) population had begun to settle in the south campus area. The re-

Linda Groat recently received an MFA in Design from California Institute of the Arts. She is a free-lance writer and designer living in Berkeley, California.

This is the first in a series of "Letters" from correspondents in different parts of the world, that will appear regularly in Architecture Plus. The next issue will contain Senior Editor Jim Morgan's "Letter from Capetown."—ED.

sult was that, as the older homes were demolished to make way for the highly profitable apartment buildings, the south campus residents were squeezed into an increasingly ghetto-like situation and forced to pay higher rents for their inconvenience.

The block of land which eventually came to be known as People's Park is representative of this process. Originally, this site too had been occupied by low-income student housing, but the University acquired the properties, demolished the housing, and made plans to build a complex of married student housing. In the meantime, state-wide budget cuts delayed the construction indefinitely, and the land lay vacant for months until nearby residents reclaimed it for a park. Squeezed as the students and their neighbors were by the City's zoning policies and the real estate investors' profit margins, they were at least able to utilize this land, the only open space in the entire south campus area. When the University finally erected a fence and denied its use to them, they literally had no place to go but the streets.

Once the dust had cleared, however, some new political lessons had been learned. For one thing, the University had been revealed as intimately related to the other power structures of the city, not the least of which were the developers, the real estate investors, and the City government. In this case, confronting one of them, the University, meant confronting the rest as well. The significance of this fact was not lost to the radicals; as a primary focus of political activities, the University was gradually replaced by its colleagues in land development—the real estate investors and the landlords. Indeed, for most residents of south campus, the “landlord” is perhaps even more omnipotent than the University. In the aftermath of People's Park, the formation of a tenants' union was a natural.

Although the tenants' union did, in fact, initiate a new series of political activities in Berkeley, its significance was not immediately apparent largely because its first actions achieved only a limited success. Not long after People's Park, the union did call for a rent strike which produced a flurry of activity, but other than the formation of a cooperative housing group, the strike accomplished few specific objectives. Still, the tenants' union did set in motion an enduring tenants' movement which has proved to be an articulate and persistent voice in Berkeley politics. That movement,

in turn, originated one of the Left's most important political coups in recent years. On June 6, 1972, after three years of tenant organizing and a heated initiative campaign, a rent control charter amendment was approved by the Berkeley voters.

(California law provides for an initiative process which is designed to protect the electorate from an unresponsive legislature. To place a legislative measure on the election ballot, a voter must first file a notice of intent and then circulate a petition for the legislation. In the case of a municipal charter amendment, the petition must bear a number of signatures equivalent to 15 percent of the votes cast in the last mayoralty election. For a municipal ordinance, only 5 percent is required.)

That election victory was to a great extent responsible for the exuberance and hope I sensed among the Left at the time I arrived in Berkeley, for it represented the first clear electoral majority for the radicals. Although they had won three out of four vacancies in the well-publicized city council election of 1971, the radical candidates had won their seats against a disorganized opposition with considerably less than a majority. Moreover, the radicals had supported an initiative measure calling for community control of the police which had been soundly defeated. The opponents of rent control therefore assumed, and not without good reason, that the rent control charter amendment would suffer a similar defeat. When instead it won an upset victory, there was every reason to believe that the radicals had finally achieved political ascendancy in Berkeley.

Thus, for both the radicals and their opponents, the rent control amendment victory seemed to indicate the beginning of a new political era in Berkeley, particularly in the context of housing and land use issues. Since the amendment had obviously struck a sympathetic note with most of Berkeley's tenants (who comprise no less than 60 percent of the city's population), the radicals were encouraged to regard the election as something of a mandate for change in the housing and rental situation. Furthermore, the charter amendment had authorized a rent board election (scheduled for January 23, 1973), and the upcoming campaign seemed to offer an appropriate opportunity for the radicals to present other elements of a comprehensive housing program.

The radical housing program was not so much innovative as it was a resourceful syn-

thesis of existing housing plans in other cities, and as such it represented a real possibility for fundamental change in housing finance. Specifically, the program included a low-interest rehabilitation service (similar to the Pittsburgh Neighborhood Housing Services) and a mortgage guarantee system (similar to one in Fresno, California), both of which could be financed through municipal resources such as pension fund moneys or revenue bonds. Although these prototypes have been used elsewhere primarily to assist property-owners, the radicals were proposing that, by linking them with the rent control amendment, they be used to address the grievances of the tenant class as well, the eventual goal being the abolition of the tenant-landlord relationship. This would be accomplished largely by creating the incentives necessary for the development of cooperative housing. For example, at the same time that rent control would limit the range of the landlord's profit margin, a municipally guaranteed mortgage would allow financing terms such that the tenants might purchase their building with an initial outlay of little more than the combined cost of first and last months' rent. Additionally, in the case of substandard rental housing, a tenant group would also be able to utilize the benefits of the low-interest rehabilitation loans.

As the rent board campaign progressed and my familiarity with the issues expanded, I found myself increasingly committed to the goals of this housing program and the election of the radical rent board slate. Nevertheless, toward the end of the campaign, I was still sufficiently curious about their opponents to attend a meeting of the New Era Democratic Club at which representatives of both the radical and the so-called Berkeley-5 slate would debate the issues of rent control administration.

The genesis of the Berkeley-5 slate was in itself an important aspect of the rent board campaign. The five candidates had been selected largely through the efforts of one of the more conservative city council members as an attempt to unify non-radical voters. The strategy was almost certain to draw the votes of the conservatives and moderates, but it was not yet clear how the “liberal” Democratic votes would be split. For that reason, it seemed that the response of the New Era Democrats to the candidates might well be a strong indication of the election outcome.

Prior to the occasion, the Club had been

“It was a response I certainly would have expected of the Chamber of Commerce or the Board of Realtors, but from the New Era Democrats? I was shocked.”

described to me as the left wing of the traditional Democratic organization, and my first impression of the group did little to persuade me otherwise. The twenty-odd members, including an appropriate sampling of university professors, were uniformly articulate and successful professionals. As they gathered for the meeting, many of them chatted amiably and comfortably with the student guests and radical representatives.

The meeting moved slowly at first with the preliminary presentations of the candidates, but once the discussion was opened for questions, the more controversial issues of rent control suddenly surfaced. A question was posed to the radical candidate: if the landlord cannot be assured of a sufficiently profitable rate of return, won't he abandon Berkeley to invest elsewhere? Her answer was direct: we're not losing anything if he doesn't invest in Berkeley; we want to develop other financing. With that question the meeting was abruptly confronted with what had by then become the central issue in the campaign: was rent control merely an administrative function, as the Berkeley-5 would have it, or the first stage in the redistribution of housing opportunities as the radicals proposed? A University of California professor (and an authority on rent control) sharpened the debate by observing that such a fundamental reform had never been accomplished through rent control anywhere in the country. The radicals countered by reminding him that no city with a rent control policy had ever instituted the financial mechanisms to make such reform possible.

As the debate raged feverishly among the speakers, Club members, and visitors, I began to notice that, almost without exception, the New Era Democrats were unanimous and passionate in their rejection of the radical proposals. Instead of the careful and thoughtful dialogue I had expected of this group, they were each, one after another, lining up to take shots at every aspect of the radical housing program. It was a response I certainly would have expected of the Chamber of Commerce or the Board of Realtors, but from the New Era Democrats? I was shocked.

The very intensity of the arguments indicated that the radicals had hit upon an already tender subject. Although at the time I could not define the issue more precisely, I knew quite well that if the “left” Democrats had felt threatened by the radicals,

then a great number of other Berkeley voters would feel threatened as well. And if that were the case, the chances of a radical victory were slim indeed.

As the election results proved only a few days later, my uneasiness had been entirely justified; the radicals lost all five rent board seats. Still, the outcome offered some hope for the future, since the defeat seemed to be at least in part the result of a badly organized campaign. The precincts had not been thoroughly canvassed, if they had been canvassed at all. As a result, most conservative precincts had registered a heavy turn-out, while in the lower-income precincts voting had been irregular at best.

Ironically enough, only a few days after the election debacle, the Nixon Administration announced the details of its moratorium on housing subsidies and its termination of community development projects. While the radicals could congratulate themselves for having already prepared a locally-financed housing program, they were not the only ones who had begun to agitate for city council action. Officials of both the **FACE** (Federally Assisted Code Enforcement) and **Model Cities** projects were already seeking municipal support for housing programs which were essentially offshoots of the original federal projects. **Model Cities** had previously funded a non-profit rehabilitation corporation which was intended to become self-sustaining; and the **FACE** program had inspired proposals for a pilot project (similar to **FACE**) to be funded by assets of savings and loan companies and other private investment groups.

Although the **FACE** and **Model Cities** proposals were much more limited in scope than the radicals' program, together these efforts had finally brought the issue of housing to the center of Berkeley's political arena. In its most basic terms, the issue was this: to what extent can housing be considered a public responsibility? To be sure, “public responsibility” suggests a variety of interpretations, but in its most radical sense it implies that decent housing is a basic human right. This, in turn, suggests that some level of government must assume responsibility for the maintenance of existing housing stock and the development of new (especially low-income) housing. And finally, the issue becomes: what level of government is most capable of assuming that responsibility? and by what means does it pursue this public mandate?

The fear among some critics, however,

"The very council members who had endorsed the statement that 'Every citizen has a right to adequate, decent, and safe housing' were fiercely arguing against low-income housing."

was that public responsibility in housing might easily lead to abuse of public power. The Director of Planning in Berkeley, for example, considered one incident before the Planning Commission as clear evidence of this danger. A developer had acquired a one acre parcel of land, made plans to build a series of condominium units, and in compliance with the Zoning Ordinance, he had applied to the Planning Commission for a permit of subdivision. At the Commission's public hearing, however, one of the radical commissioners had argued against the majority that the permit be denied on the grounds that the land, one of the few vacant parcels in Berkeley, ought to be used for low-income housing.

In a discussion several weeks after the hearing, the Planning Director argued that the radicals' position was not only unfeasible but unconstitutional as well. Since the city did not seem willing to buy the property, he maintained, denial of the permit would be tantamount to condemnation without compensation, and consequently a denial of the Fourteenth Amendment's guarantee of equal protection under the law. Contrary to the Director's intimations, however, the radicals' intent was not so much to prohibit the developer's use of the land, but to demand that the city buy the property as a low-income housing site. Despite the odds against reversing the Planning Commission, the radicals requested a new public hearing in an appeal to the city council.

Public hearings in Berkeley have not been known for either their tranquility or efficiency in recent years, and this occasion was no exception. The audience was highly partisan and sometimes openly contemptuous, the majority being radical supporters. While a number of speakers, including neighborhood residents, argued passionately and forcefully for low-income housing, the debate turned largely on the arguments of the radical economists. They maintained that, by readjusting conventional financing procedures, the city could buy out the developer (to his profit), use standard construction, and still build low-income housing. All that was needed was city council approval.

I listened to both the hearing and the council debate which followed with a sense of impotence and frustration, for I knew the odds were against reversal. Still, when one of the radical council members suggested a postponement until the feasibility of

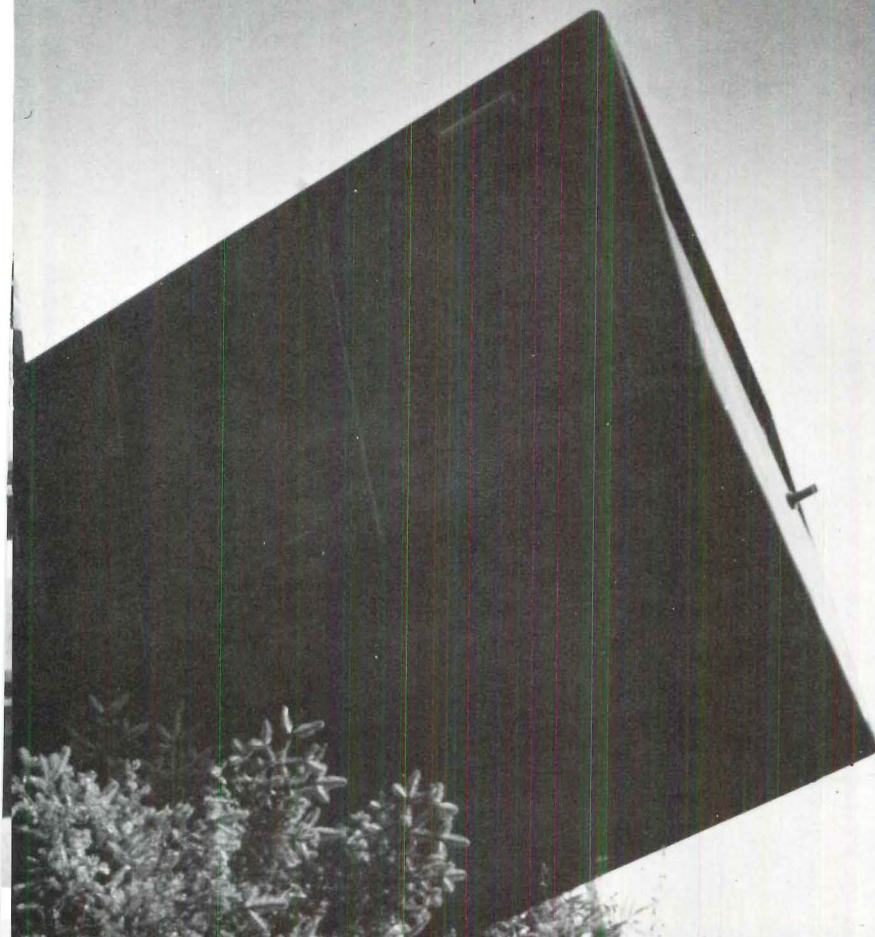
the proposal could be studied, I allowed myself to be hopeful. It seemed to be both a modest and reasonable compromise. But as the debate progressed, I was shocked once again; somehow this proposal had aroused the same passions that rent control and coops had among the New Era Democrats.

Here the very council members who had recently endorsed the statement that "Every Berkeley citizen has a right to adequate, decent, and safe housing" were fiercely arguing against low-income housing. Arguments were raised that the city council had no legal authority to implement a housing program such as this, but that seemed not to be the central issue. Rather, the intensity of the debate suggested a more visceral than intellectual response. At the very least, the issue of "power politics" seemed to be a factor, since the council majority made it a point of honor to resist what they considered the pressure tactics of the radicals. But it was perhaps equally possible that they were responding to the same potential threat to the power and prerogatives of private property owners that the Planning Commission had feared. After all, even if the city were to purchase the land, the developer's profit margin might be considerably less than he would have otherwise enjoyed. Finally, it appeared to be a symbolic gesture as well. If one of the first condominium projects in Berkeley were to be denied a subdivision permit, it would further discourage other investors who were already reluctant to build in Berkeley because of rent control.

That incident pointed convincingly to the significance of the upcoming municipal elections for the radical housing and land use program. With three radicals already on the city council and four vacancies to be determined by the election, there was an excellent chance that the radicals might gain control of the council. In addition, seven radically supported initiative measures had been placed on the ballot, one of which was the Neighborhood Preservation Initiative. The Neighborhood Preservation Initiative had been co-sponsored by a member of People's Architecture and vigorously supported by the group as a whole. As such it was loosely related to the other radical planning efforts. Specifically, the initiative was intended to counteract the kind of speculative real estate development which had characterized the south campus area and which was threatening other neighborhoods in Berkeley. With the

continued on page 118





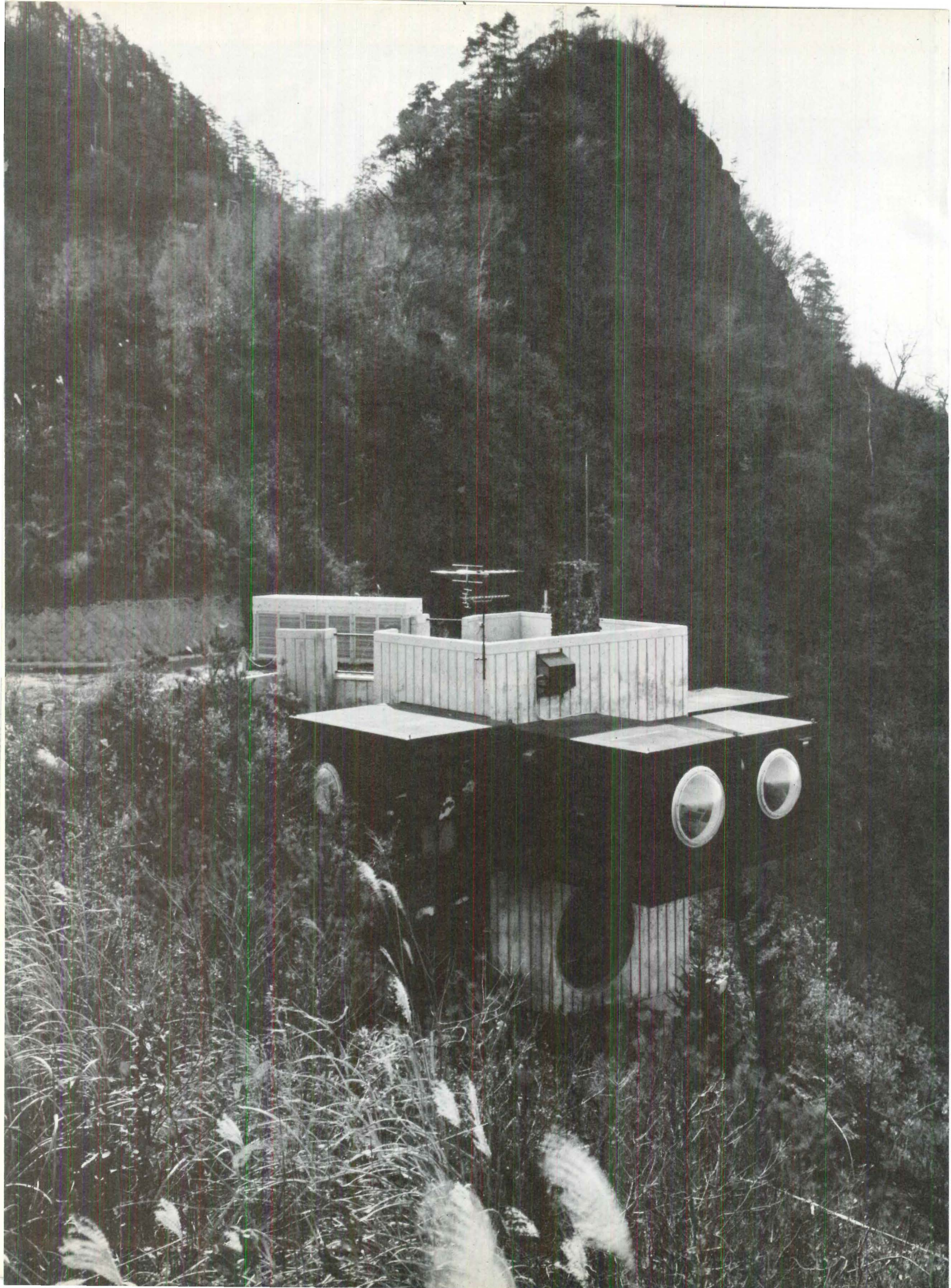
KUROKAWA



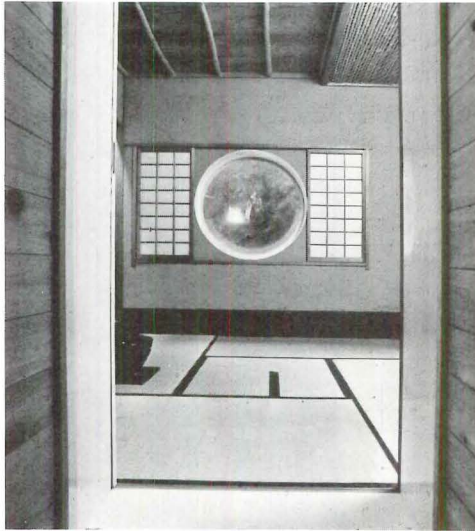
Still under 40 years old, Kisho Kurokawa has for more than a decade been a visionary leader in the Metabolist school of architecture in Japan. His projects have been theoretical and architectural, including both books and buildings. At Expo '70, in Osaka, his structural skill and imagination combined to produce fair pavilions that tantalized the eye and the mind. This article shows Kurokawa's work since Expo '70 and the most recent developments of his Metabolist arts. PLUS field editor Yasuo Uesaka wrote the story in Japan.

If Kenzo Tange represented those architects who introduced western architecture using western technology to Japan, then Kisho Kurokawa represents the new generation of Japanese architects that is trying to reintroduce a Japanese architecture using western technology. This is not to say that Tange and the others have not drawn on Japanese tradition. They did use the tradition very effectively in their treatment of details. The point is that their uses of the Japanese vocabulary were not in the composition of spaces.

The spatial compositions produced by Tange and others have been, in fact, western. Every constructed element worked to create one, final heroic space and monumentality. In these compositions, there is a definite hierarchy that leads to a space by



The capsuled villa (opposite) is a form of architectural hybrid. Designed by Kurokawa in 1972, it is composed of steel capsules, cantilevered from a concrete core and foundation, and similar in outward appearance to those used for Expo '70. The interior (left), however is something else. It includes imitation wood beams and is altogether a typical, and traditional Japanese home inside—albeit a finely designed version.



ban design, metabolism, mobile man, and action architecture, to the information society. Whether one reads his writings or talks with him, one theme comes through very strongly again and again: a concept of incompleteness; growth and change with intuitive wholeness; not a theme of academic precision or logic. Kurokawa's philosophy is in direct contrast to the western idea of determinism and inevitability.

The concept of metabolism is nothing but a sense of impermanence. To Kurokawa, what makes up this universe is a multitude of selves called JIGA, which are linked by means of accidental encountering called EN. Translated into English, JIGA means will, self, cell, living component; Kurokawa calls it *capsule*. EN means *media*, where encountering or intercommunication takes place. The world is then a juxtaposition of free wills, co-existing sometimes in harmony and sometimes in conflict through EN.

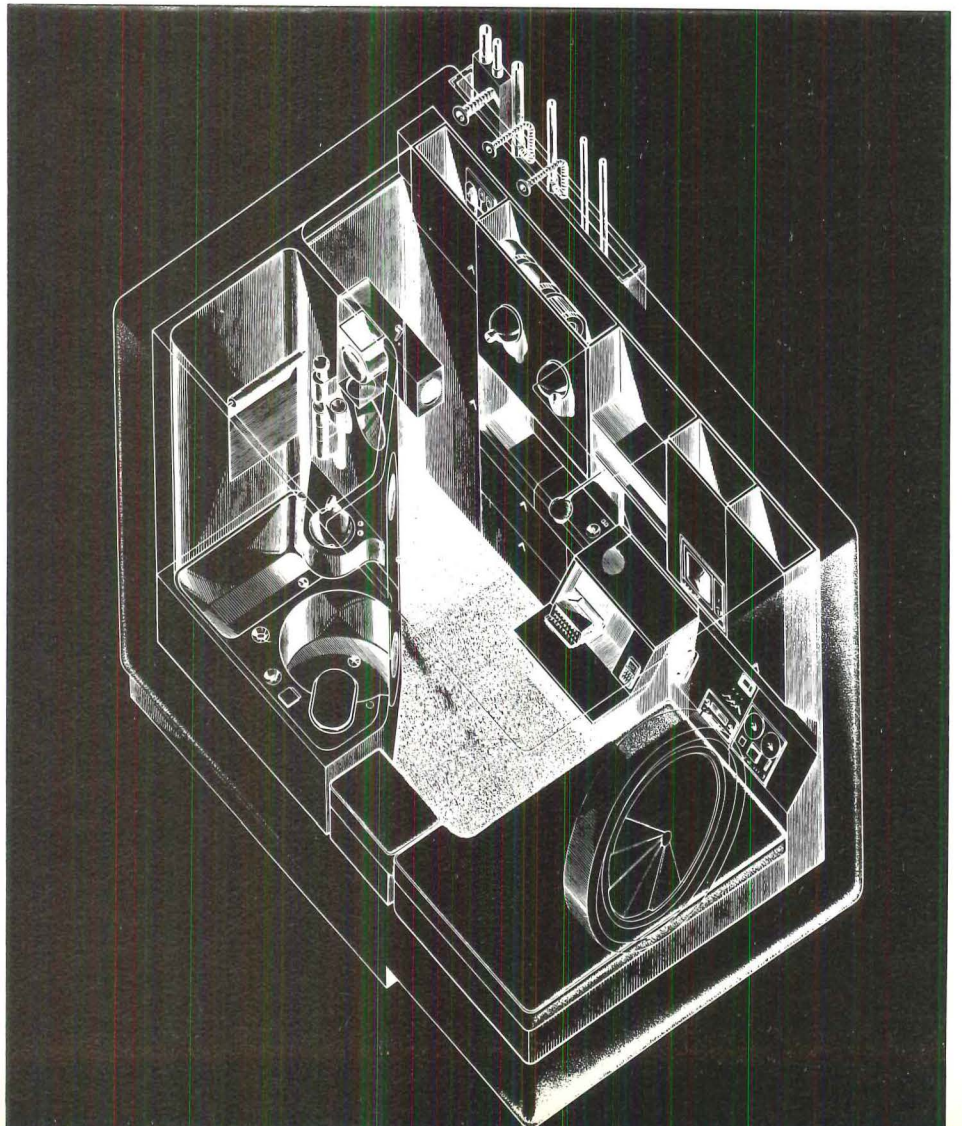
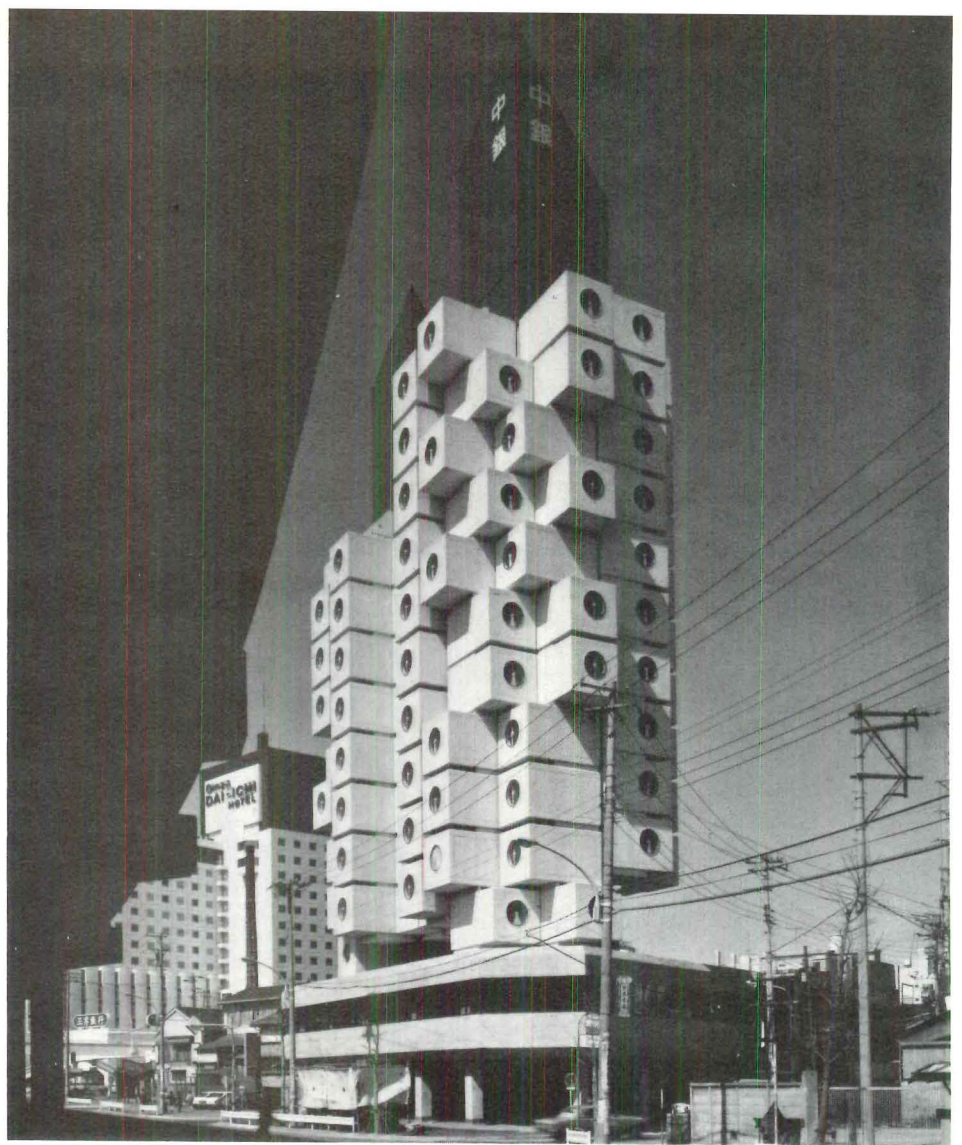
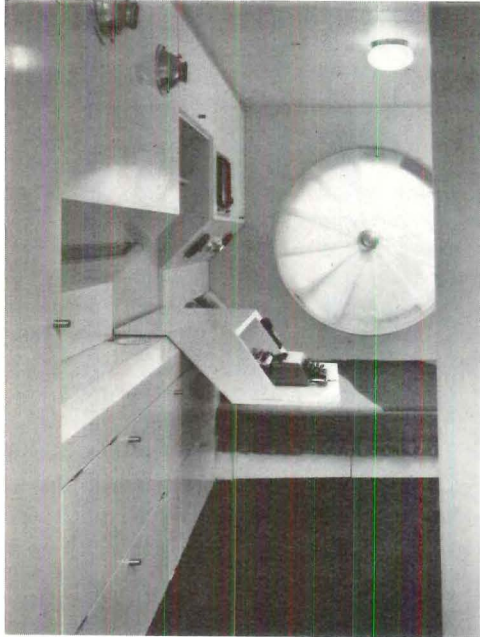
Kurokawa's notion of the capsule is not one of parts; the capsule is a self-sufficient component like a living cell, a functioning entity, a meaningful space unit with its own life cycle. It lives and dies, but the EN is always there to take on new cells. Likewise, his capsules may be moved or destroyed to make room for new capsules. The constant change, in terms of time and space, is the law of the universe called metabolism.

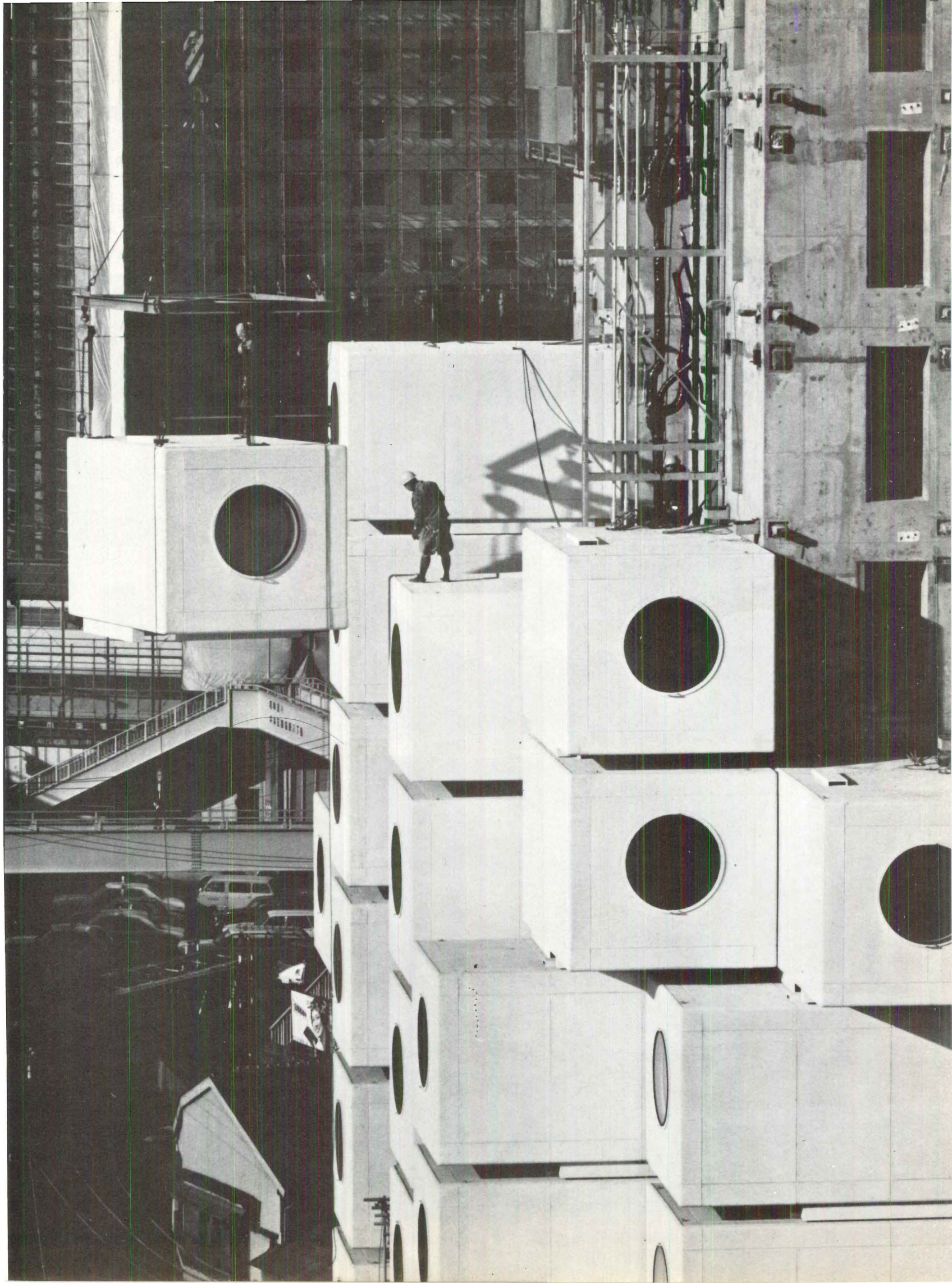
At first glance, Kurokawa's work looks unfinished. However, one can detect a trace of the eastern landscape, which is not formal, not hierarchical, unstructured, and often conflicting. To understand Kurokawa, one needs a different criterion from the traditional western concept of space. The potential of Kurokawa lies in his awareness of change and understanding of his time, in which a multitude of forces co-exist.

He is more of a philosopher than an artist. He is unconcerned with details in his buildings. Consequently, his buildings seem at times unintelligible, uneven in detail, and discordant in proportion.

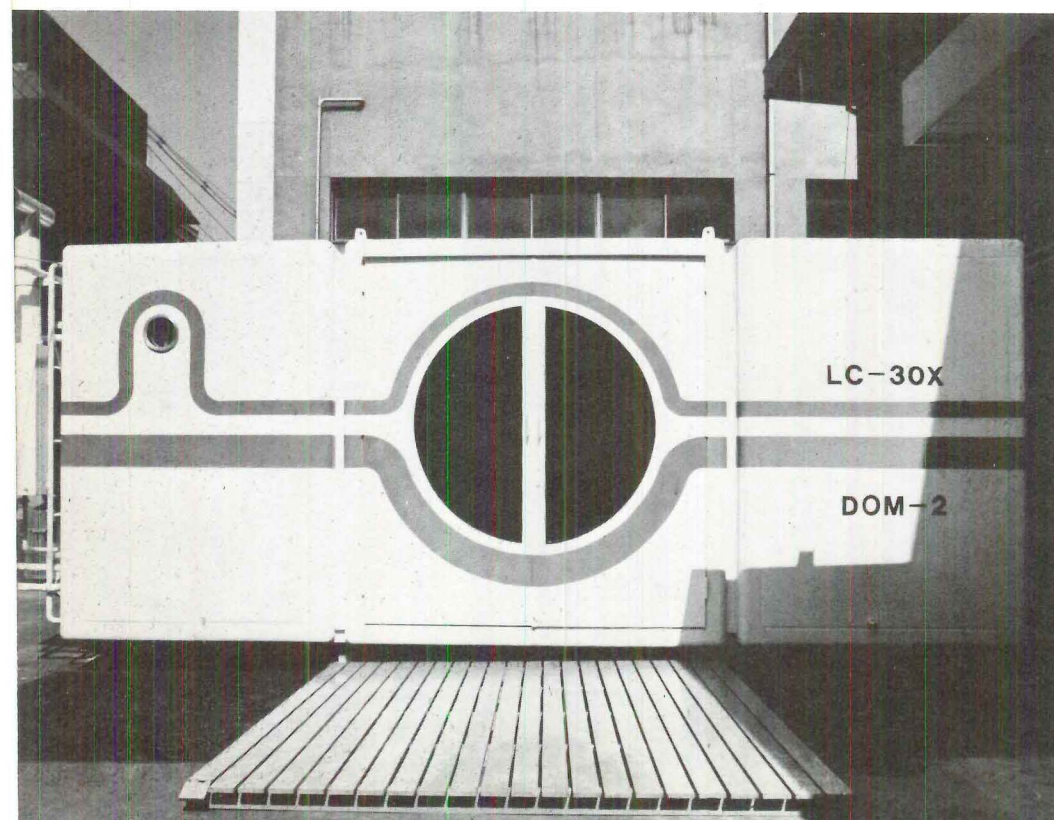
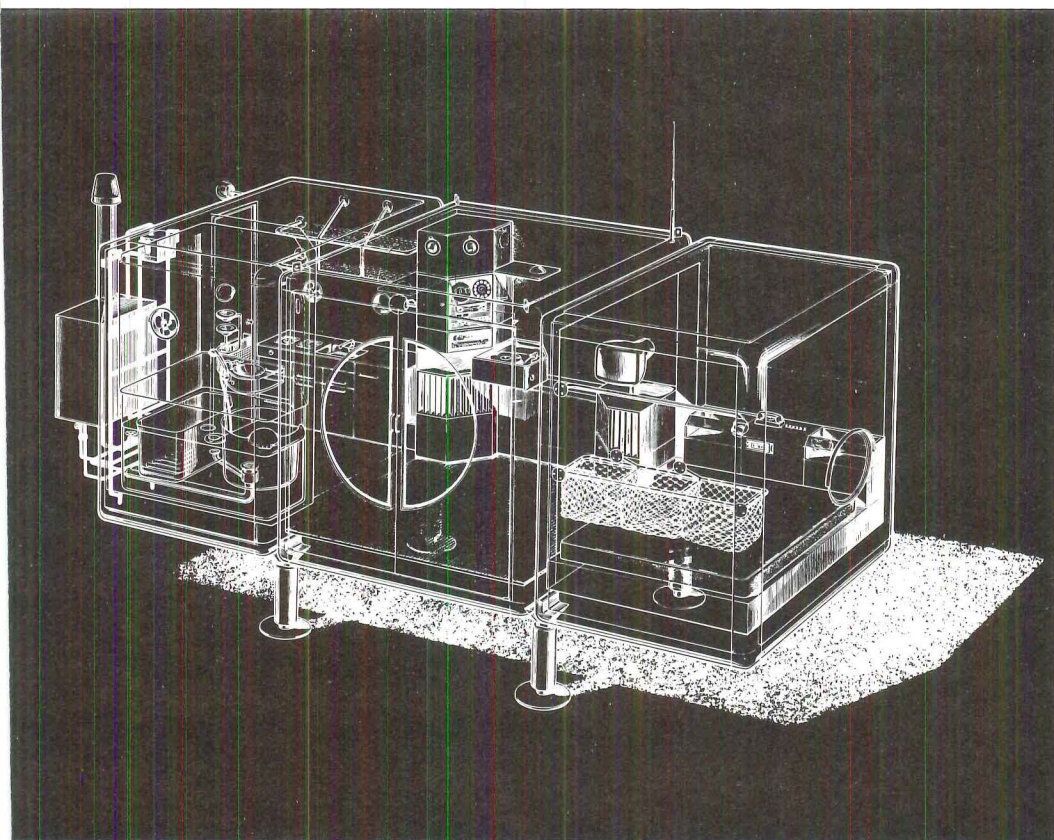
It is important to note that the new breed of leading Japanese architects is predisposed to face the changing world with a broad-minded, all-embracing attitude, which may not allow them to control everything, but at least will allow them to control the foundation, which can then shape their physical environment. The champion of these "Metabolist" architects in contemporary Japan is Kisho Kurokawa.

An early and more consistent example of Kurokawa's capsuled architecture is his 1971 Nakagin apartment tower, designed for the "in-town bachelor." As completed (top right), it includes 140 steel capsules, suspended from either of two concrete core structures. Each capsule was prefabricated in Osaka, then trucked to Tokyo, where a crane lifted it into place (opposite). The units have everything one might imagine a bachelor could enjoy, although the space is small. The interior includes a round, shadable window (below) and is totally built-in (lower right), including a bed, desk, shower and wine cabinet. A bedside console controls myriad pleasures, such as television, stereo tape deck, calculator and light dimmers. Each unit sold for between \$12,300 and \$15,600 within one month of erection.



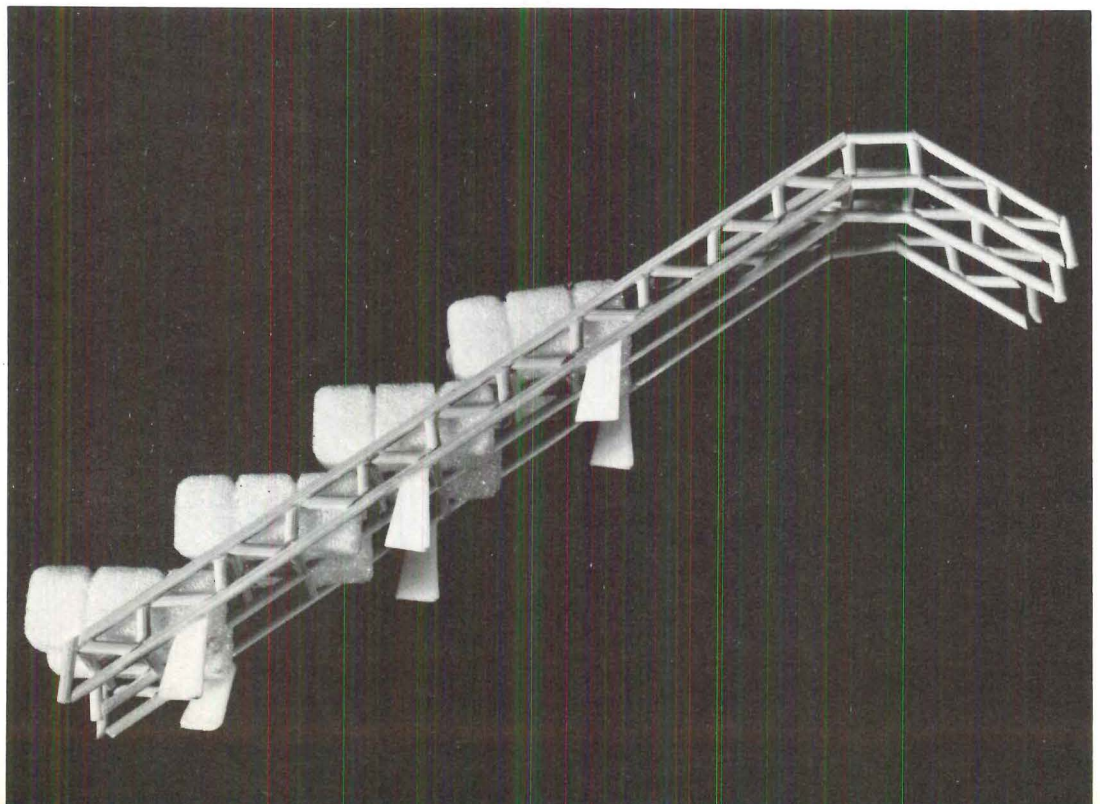
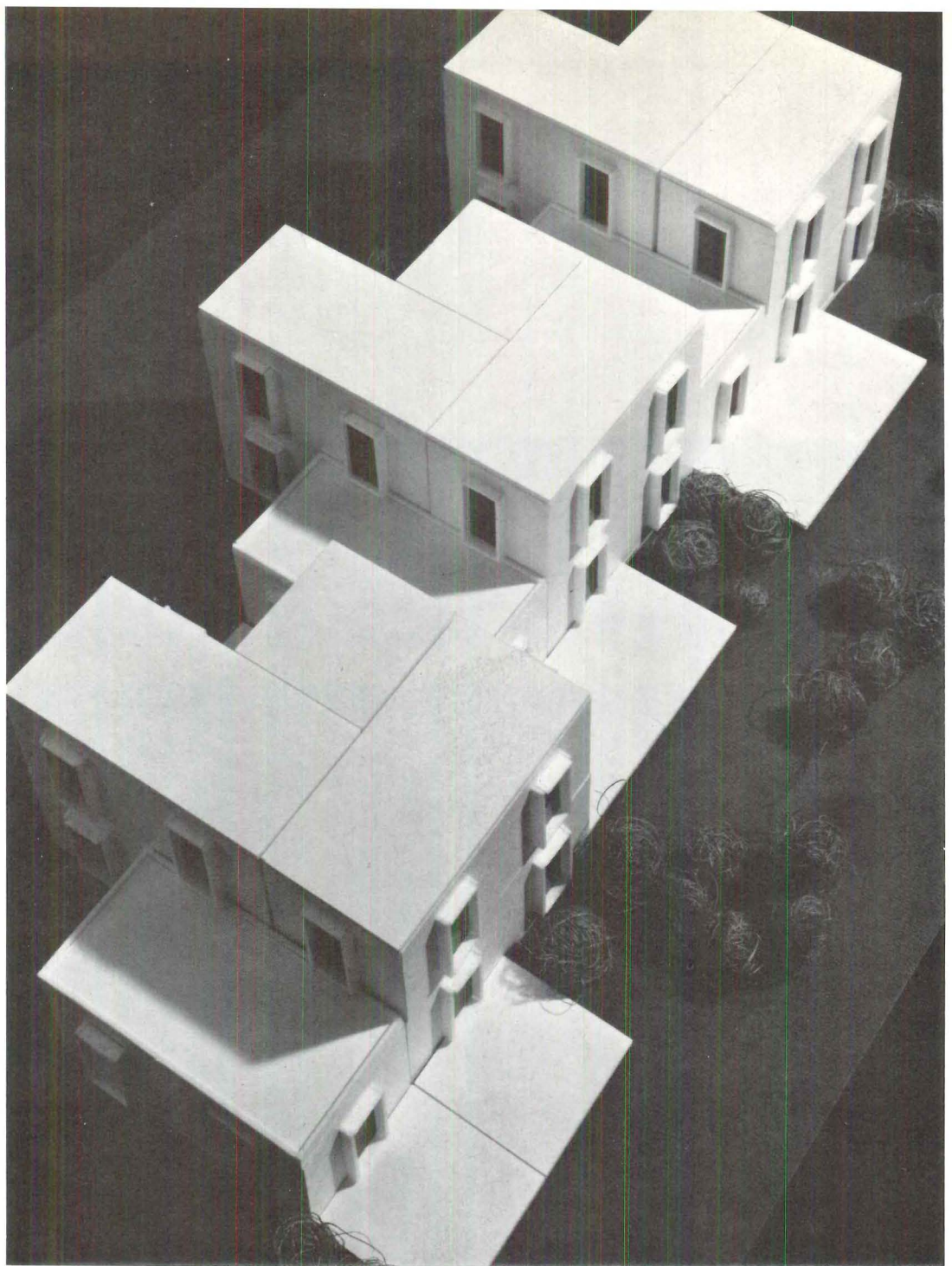
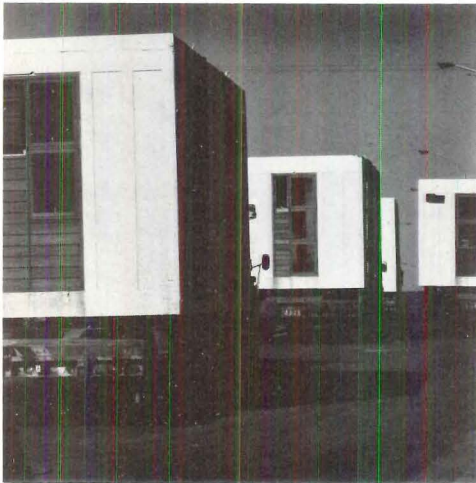


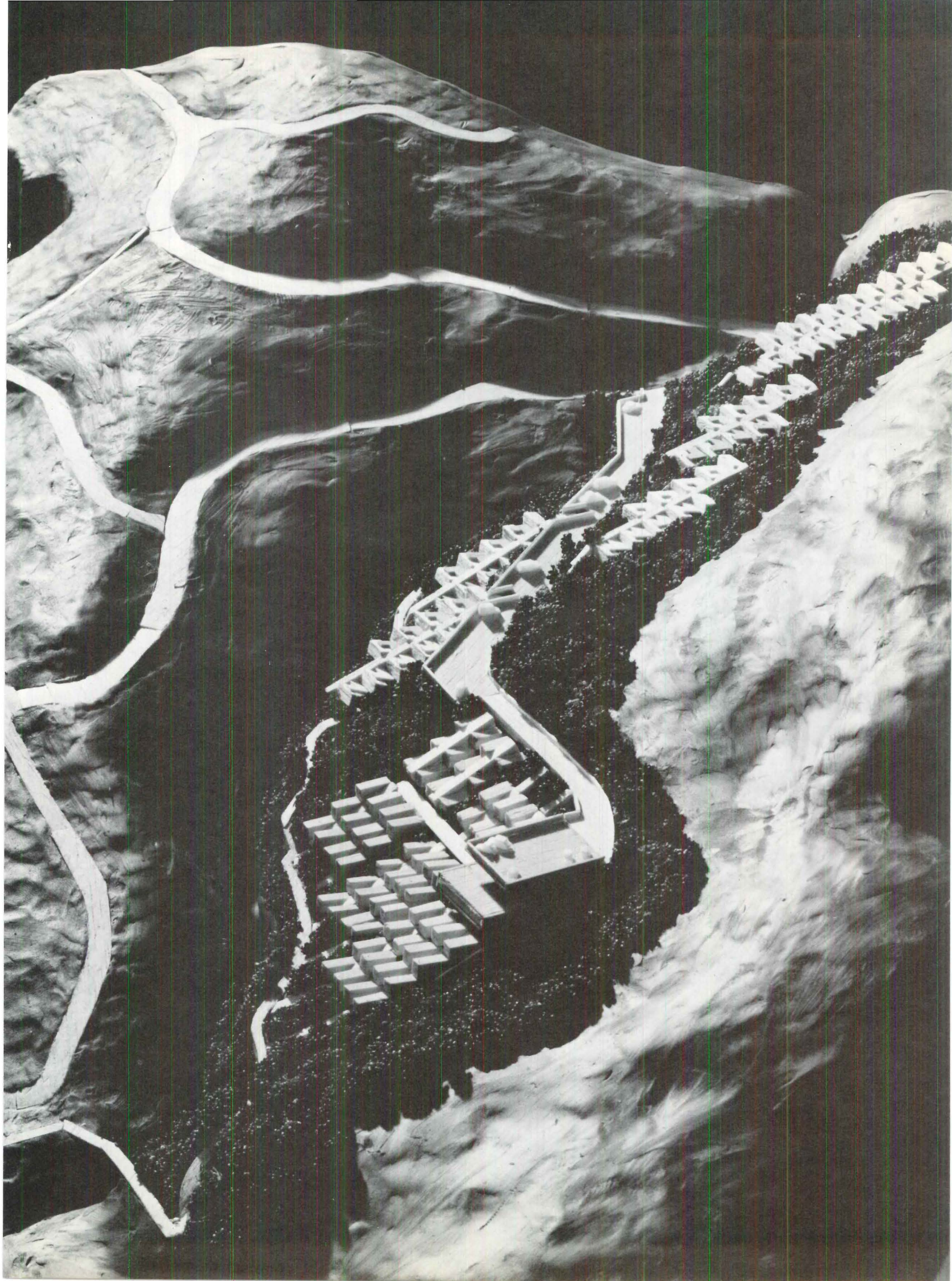
Since 1972, Kurokawa has been working on an extended and more elaborate version of the steel capsule. The basic unit (lower left) is three elements in one, with entry provided by the glazed-half-moon doors of the center module (opposite). The three sections are manufactured separately and were designed and sized for mass production and truck transport. Inside (top left) the capsules contain full living facilities for resort or apartment residents.





Kurokawa extended his capsule research to concrete prototypes in 1973. Designed for transportation to the site by truck, these modules (below) are made to turn and stack and thus form low-rise residential units (top right). Kurokawa has also extended his development plans into large schemes that will use the concrete and/or steel modules for resort or town developments. In one scheme, an ascending steel structural element (lower right) will support varying numbers of capsules on even mountainous sites, such as that illustrated opposite. According to Kurokawa, the value of such schemes, besides making "unbuildable" sites buildable, is that this kind of structural organization can grow or shrink according to changes in and the needs of a society using it. Kurokawa photos by Tomio Ohashi.





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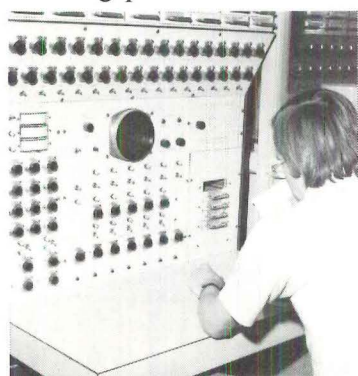


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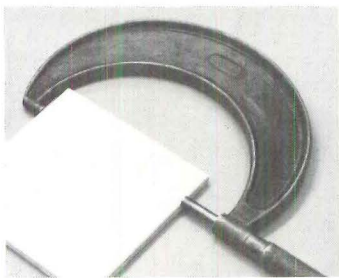
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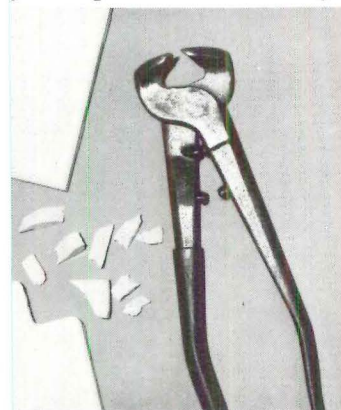
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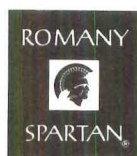
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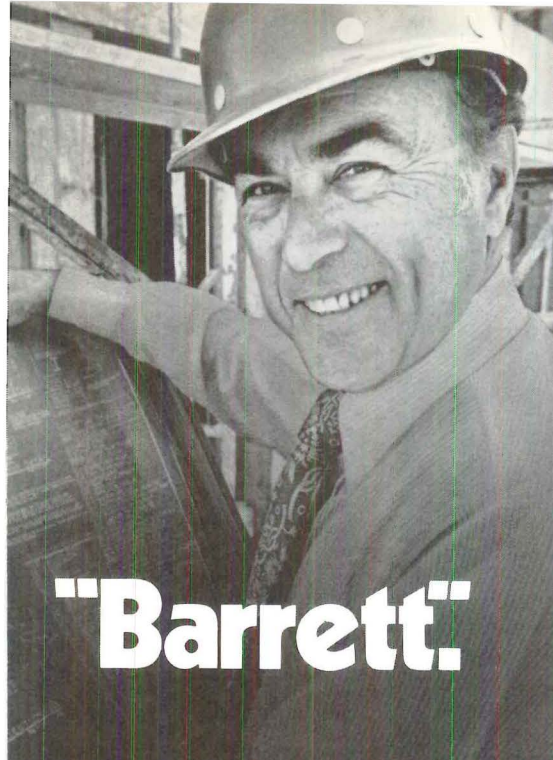


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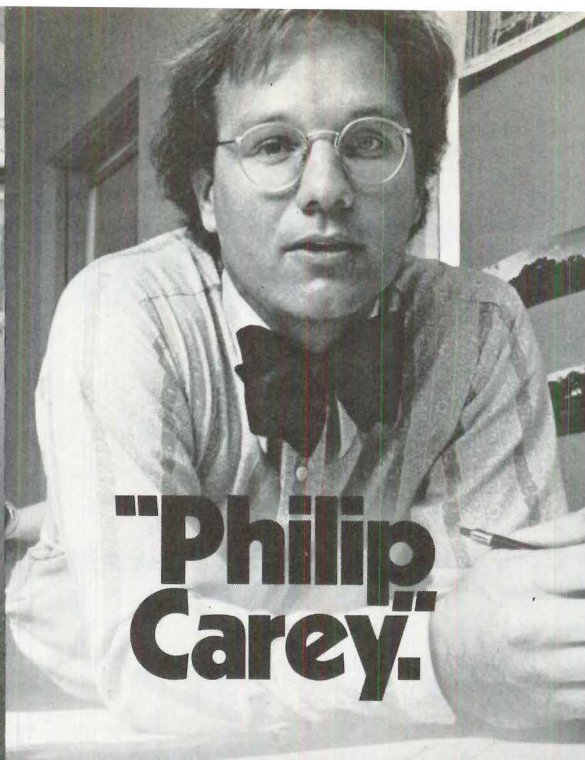
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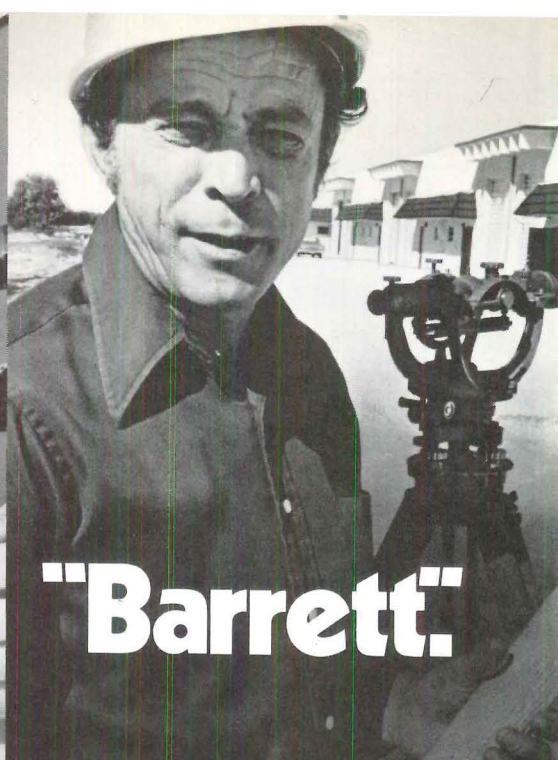
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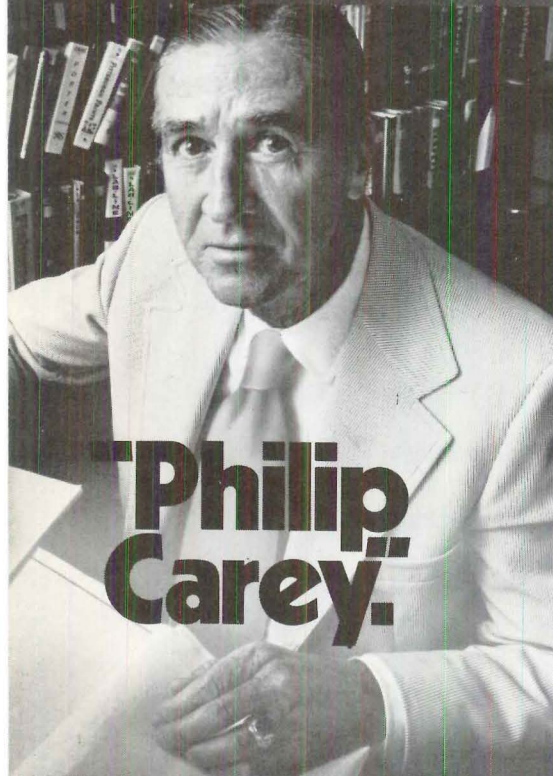
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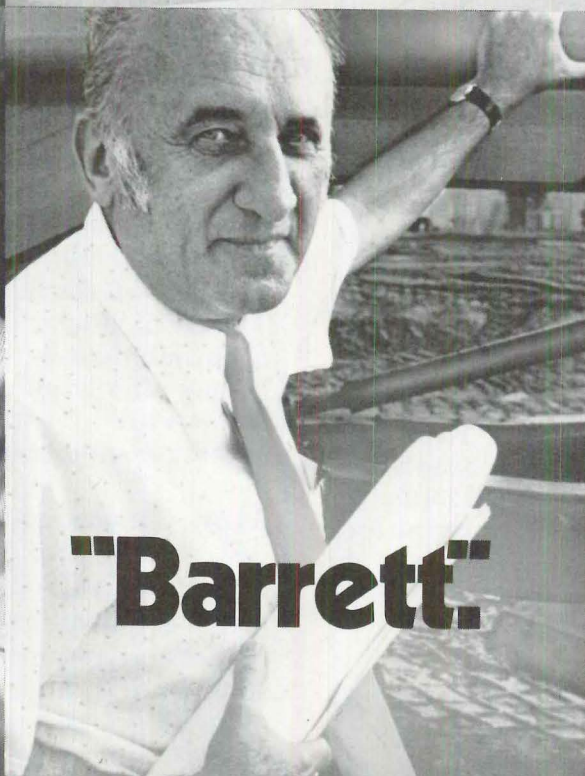
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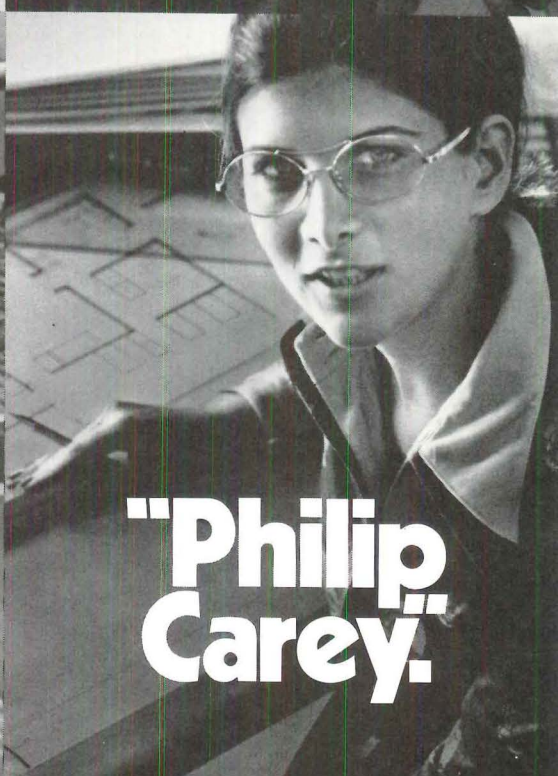
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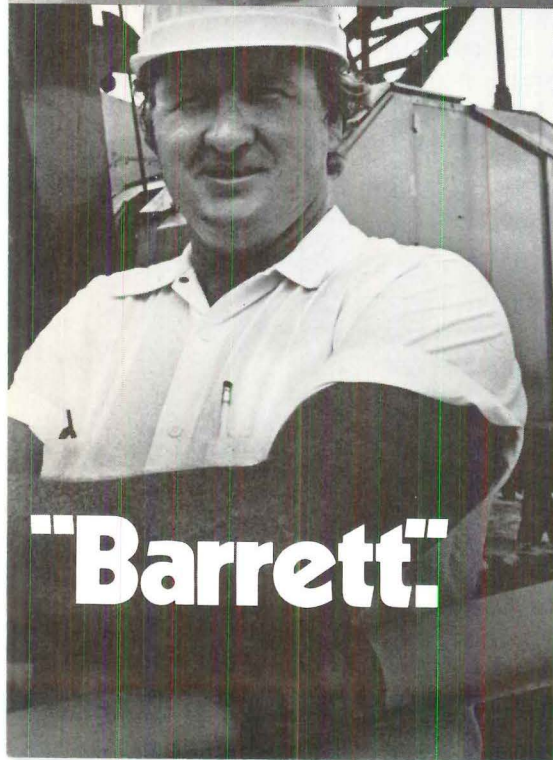
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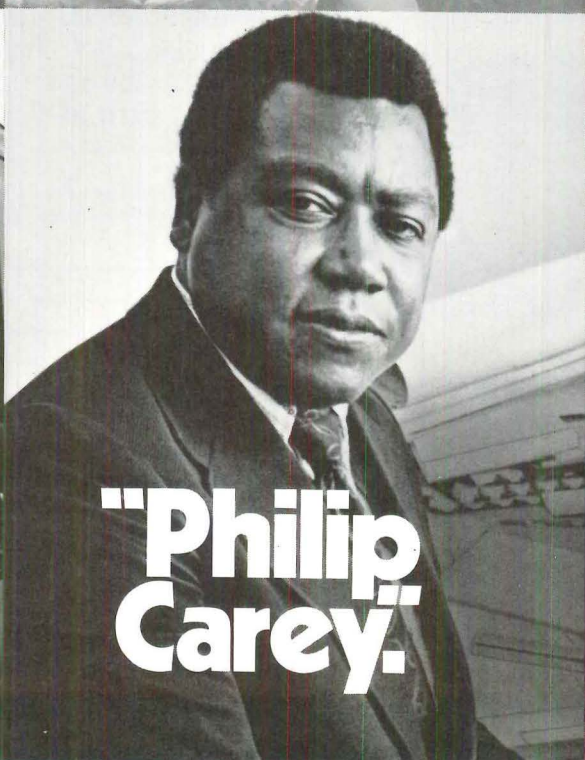
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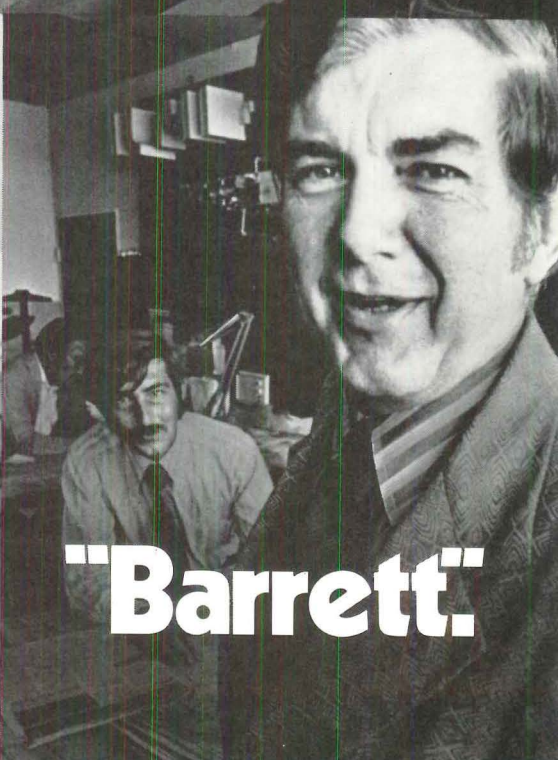
**"Philip
Carey."**



"Barrett."



**"Philip
Carey."**



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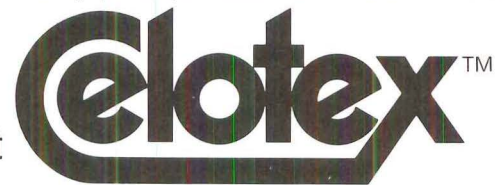
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Wanted, dead or alive

On November 8, the Cambridge, Mass., apartment of Reginald Isaacs, who is Charles Dyer Norton Professor of Regional Planning at Harvard, was broken into, and three handsome paintings by the late Jackson Pollock (who was one of Isaacs' friends) were stolen. One of them is reproduced here, on a poster that tells you all about how and where to contact the U.S. Federal Bureau of Investigation, or your local police, in the event somebody offers you a hot Pollock, lacquer on canvas or oil on paper, and vintage 1948-51. The burglars seemed to know exactly what they were after, since they left all other Isaacs possessions untouched. Three weeks later, Harvard's Fogg Museum was robbed also—which put Isaacs into excellent company, but didn't do much for the town's slipping image.

\$10,000 REWARD FOR POLLOCK PAINTINGS



The largest of the three paintings is a 65 x 56 inch black and white abstract. The others are each 36 X 30 inches. Anyone with information contact Det. James Roscoe or Det. Fidele Centrella, Cambridge Police (tel. 617 - 868 - 3400).

Australia

It was inevitable: a put-it-together-yourself Opera House for Everyman/Everywoman. We found this ad for the model kit in the November 12, 1973 issue of the Australian magazine, *Woman's Day*, and we note that this offer is "exclusive to readers of *WD*." The address, in case your magnifying glass isn't at hand, is P. O. Box 93, Beaconsfield, NSW 2015, Australia; and that \$7.50 price, alas, refers to Australian dollars.—N.C.

Build your own
Opera House from our
faithfully scaled

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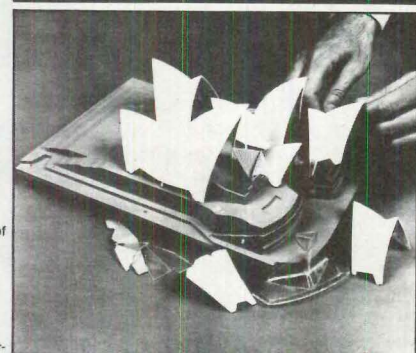
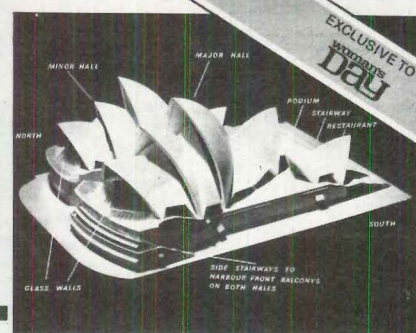
And you get — free — a brief history of the Sydney Opera House with each kit.

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Value	
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Please allow 28 days for delivery	
— CUT AROUND DOTTED LINE —	

WOMAN'S DAY, November 12, 1973 59

Spend some time in the sky

The aim of the Rooftop Oasis Project, now in full swing in New York, is to demonstrate how rooftop space can become a practical part of the urban landscape. A formal research study by Haus-Rucker-Inc. has begun on all aspects of city roof uses, including building and safety codes, shelters, enclosures, wind and sun screens, lighting, botanical and agricultural possibilities. Haus-Rucker think of rooftop space as parcels of virgin territory that can be developed with rich and fertile activity.

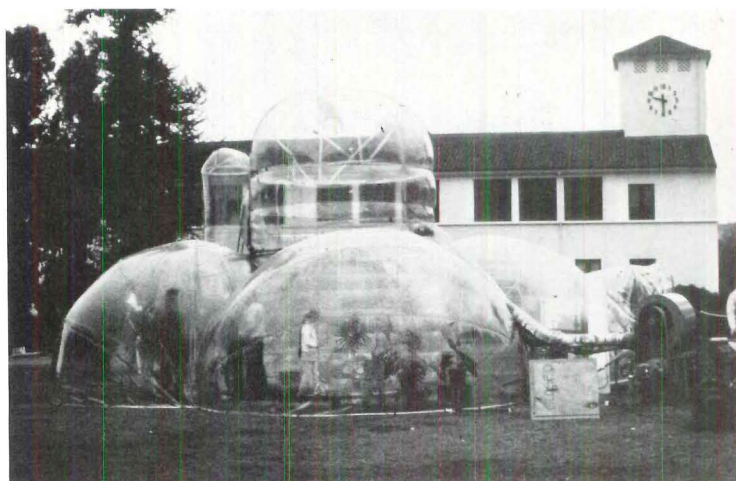
The project will also involve a public attitude survey to determine receptiveness to rooftop use.

At the conclusion of the study a *Rooftop Handbook* will be published, and a Rooftop Laboratory will be completed by then and will be open for visitors.

The Rooftop Oasis Project was made possible by a grant from the National Endowment for the Arts' "City Edges" program, to the School of Art and Architecture of Cooper Union, in conjunction with Haus-Rucker.



"Rooftops are parcels of virgin territory"



Three students will live in it; will they put up curtains?

Walking on air

Students in the School of Architecture and Environmental Design at California Polytechnic State University in San Luis Obispo, Calif. built this multi-enclosure, multi-story air supported structure, and they claim it is the first one of its kind in the U.S. They also claim that visitors can enter the second floor through a small air lock cylinder and experience the thrill of walking on air. The prototype was conceived and designed by James P. Montero, a graduate student in architecture.

The structure consists of four 16-foot diameter domes around a ten-foot diameter central column.

The domes are eight feet high and are attached to the column which stands 16 feet high overall. The central column has a completely air-supported second story which is eight feet above ground.

The polyvinyl chloride plastic membrane (20 mils thick) is stabilized against ultraviolet rays from the sun and can be seamed in several ways.

The construction phase of the project was funded by a grant from the National Endowment for the Arts. Students, in a group called "Woojair," supplied the 600 man hours of labor needed to build it. The plan now calls for three students to live in it for a year.

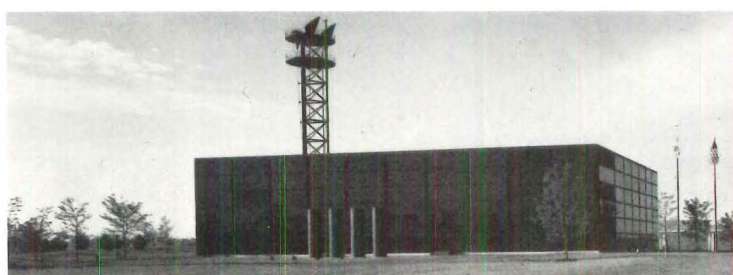
Dark mirror in the suburbs

The Illinois Bell Telephone equipment building and microwave tower in the Chicago suburb of Northbrook was designed to allow vertical and horizontal expansion, and to serve as background for a future office structure. The architects, Holabird & Root of Chicago, have just won the Honor Award of the Chicago Chapter of the AIA for this building.

The four grey towers standing in front of the building are turbine exhausts for the mechanical services, all of which are under the front plaza.

A series of steel frame panels with glass or louvre infill make up the exterior skin. As they are only bolted to the building structure, future relocation will be easy.

The gross building floor area is 125,945 square feet.



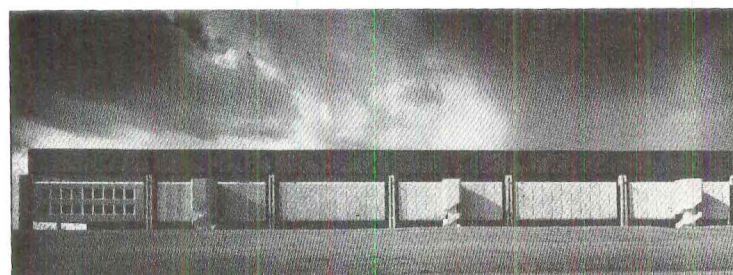
A neat reflecting glass box on 27 acres of trees

Awards

The Financial Times of London has, for the past seven years, given awards to architects and engineers for the design of "industrial works which can bring to either town or country an outstanding contribution in encouraging a better industrial environment." The jury consisted of two architects, Sir Leslie Martin and Stephen Macfarlane, and one industrialist, Sir Colin An-

derson, chairman of the Royal Fine Arts Commission.

The first prize went to Arup Associates for their John Player and Sons Horizon Factory in Nottingham. (Arup won last year's prize as well for their IBM plant at Havant.) The jury's comment, "... It demonstrates the successful integration of structure and services, and provides an unusually admirable working environment."



John Player & Sons Horizon Factory, Nottingham



Stapled parachutes, tall ladies

An exhibition of recent work by the Tunisian-born artist, Colette, was shown early in January at Manhattan's Stefanotty Gallery. Colette's "life-size" wall pieces are bas-reliefs of lovely ladies.

The lovely lady we show here is Colette herself, in the flesh,

standing, we presume, on a stool, in one of her environments. This piece is called "Environment and Performance." Colette stood there during the show and "moved around a little." The primary medium used here is parachutes which have been stapled to ceiling and walls.

The Camp David look

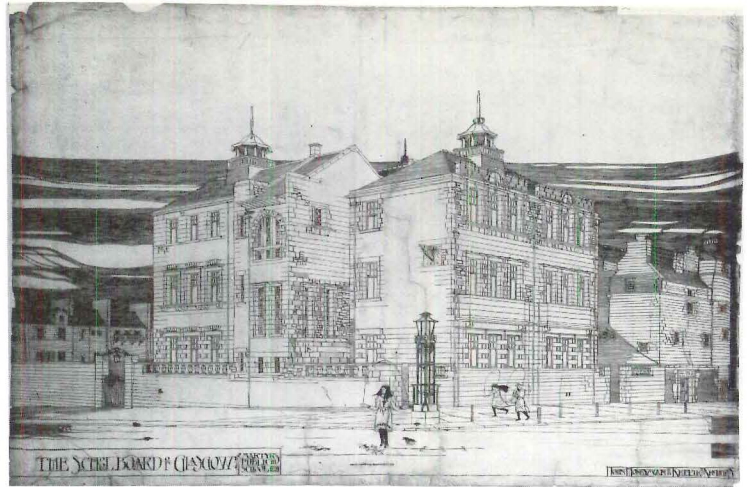
There has been much public concern lately about the amount of President Nixon's expenditures on his residences outside Washington, but not much interest in what he bought. Now Maxine Cheshire of *The Washington Post* tells us that when the President wanted to spruce up Camp David, his aide H. R. Haldeman procured a copy of *The Ethan Allen Treasury of American Traditional Interiors* (the Ethan Allen Co., New York,

\$7.50). Haldeman ordered the President's furniture by page number, and one model room, "The Ski Lodge," was bought whole.

Presidential style is apparently as influential in interiors as in other matters. When Spiro T. Agnew bought a \$190,000 house in the Maryland suburbs of Washington, Miss Cheshire further reports, he asked the Ethan Allen company to sell him furniture to give twelve rooms in the house a "Camp David look."—S.A.



Ethan Allen's "ski lodge"



Scotland

Three buildings by that unique original, Charles Rennie Mackintosh, are threatened with demolition to make way for new roads in the Glasgow area: Martyr's Public School, Queens Cross Church and the Scotland Street School. The most immediate threat is to the Martyr's Public School designed by Mackintosh in 1895 (above).

A chorus of protest is being conducted by the Charles Rennie Mackintosh Society, the Scottish Civic Trust and the RIBA.

Anyone wishing to join the chorus should write immediately voicing their objections to the City Planning Officer, 84 Queen Street, Glasgow, copy to the Secretary of State for Scotland, Dover House, Whitehall, London, S. W. 1.—J.D.



House with a view

This two-story Victorian mansion got its eaves stuck on the lightpole on its way across the 16th Avenue Overpass of the Nimitz Freeway in Oakland, Calif. Traffic came to a

halt while workmen untangled the mansion. It is being moved to Oakland Embarcadero Cove for relocation and renovation as part of a California waterfront development program.

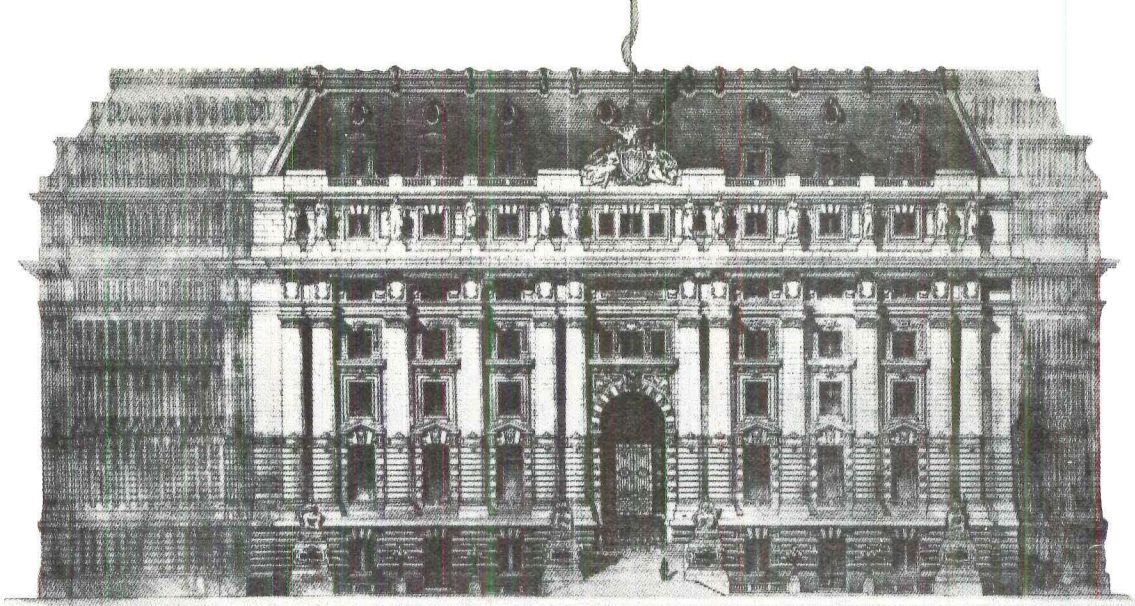
People

• Paul Goldberger, *The New York Times'* second architecture critic, said (among other things) in an appraisal of what somebody has called the New York School of contemporary architecture, that the work of its members "is an attempt to create pure form, unconstrained by problems of site, function of building, etc." Terrific! Happily, much of the architecture conceived by the members of this fictitious group remains unbuilt.

• Denys Lasdun & Partners, the British architecture firm which designed the University of East Anglia in Norwich, England, the Royal College of Physicians in London, and the Extension to Christ's Col-

lege in Cambridge, has just been commissioned to design the new headquarters for the European Investment Bank to be constructed in Luxembourg. Marcel Breuer, the New York-based architect, will serve as design consultant to the Bank.

• John Canaday, *The New York Times'* erudite and witty art critic, commented on the recent auction of part of the Scull collection (see our December issue) by saying that "that affair turned out to be an appropriately vulgar circus, which pleased me quite aside from my personal indifference to the loss of a few Andy Warhols and Roy Lichtensteins or whatever was sold that night. There are plenty more



The U.S. Customs House, designed by Cass Gilbert, 1907, setting of the banquet for Mrs. Huxtable

around to take up the slack, if any . . ." Mr. Canaday's last four words—"the slack, if any"—will, one hopes, be enshrined in the Hall of Fame (of devastating critical comment).

- Alex Cooper, a 37-year-old architect and urban designer, who was one of the brightest of the new breed of professionals brought into the New York City Urban Design Group by Mayor John Lindsay, was chosen by the outgoing Mayor to fill a vacancy left on the Planning Commission by the resignation of architect Jaquelin Robertson. It was Lindsay's last major appointment before stepping down as Mayor, and one of his best.

- Ada Louise Huxtable, the *New York Times'* principal architecture critic, was feted at a splendid dinner in Manhattan's recently abandoned (but soon-to-be-refurbished) U.S. Customs House, built on Bowling Green in 1907 by Cass Gilbert. The happy celebrants included trumpeters outside and inside, architects, critics, editors, and Mayor John V. Lindsay, who towered over Mrs. Huxtable by approximately a dozen feet, and almost (but not quite) stole the show. The occasion: her recent elevation to a place on the Editorial Board of her paper. Secondary occasion: the announcement that I. M. Pei & Partners had been selected to re-fashion the Customs House into a Downtown Manhattan cultural center.

- Richard H. Bolt, of the acoustical research firm of Bolt, Beranek & Newman, was named by Chief District Judge John J. Sirica to be a member of a panel of technical experts who have examined the White House tape with the famous 18-minute erasure gap in it. The tape included a conversation between President Nixon and his former staff chief, H. R. Haldeman, which took place three days after the Watergate break-in. The test was being made to determine the "authenticity and integrity" of the tape for Judge Sirica. Bolt, Beranek

& Newman have done the acoustical research for a number of imposing structures around the world, such as the UN headquarters in New York, the Benjamin Franklin Congress in West Berlin, all of the 1967 Centennial Festival Halls across Canada, and the original work on the New York Philharmonic Hall.

- Constantine E. Michaelides, acting dean of the Washington University School of Architecture, has been named dean of the school. Dean Michaelides has been acting dean since last July when George Anselevicius, former dean, resigned to become chairman of the Architecture Department of the Harvard University Graduate School of Design.

Constantine E. Michaelides



Academia

Harvard University in Cambridge, Massachusetts, has announced that an Architecture Research Office is being established in their Graduate School of Design. The Research Office, according to Professor George Anselevicius, chairman of the department, will coordinate all research projects in the department, and will have access to funds with which to encourage research efforts. Assistant Professor John Zeisel will be the chairman of the Research Office.

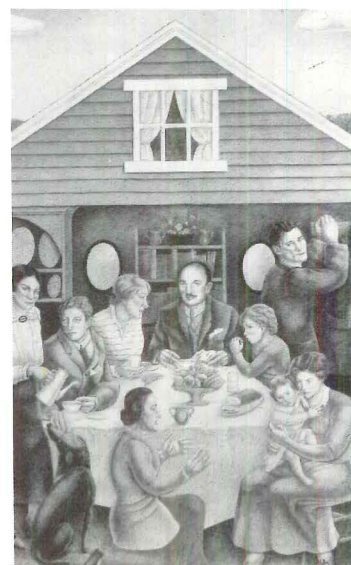
Obit

George Biddle, world-famous muralist, died in Croton-on-Hudson, New York on November 6, 1973 at the age of 88. He had over 100 one-man shows in many cities around the world, and has been referred to as "the father of federal artistic, musical and literary relief" in the U.S., due to his efforts in 1933 in helping to set up the federal arts program of the Depression years, the WPA, which employed thousands of artists during that period to do murals, paintings and sculptures for public buildings.

He was a member of the art advisory committee of the State Department, and in 1950 became a member of Fine Arts Commission in Washington, D.C. The subjects of his murals were often tenements and workshops next to warm domestic family groups, showing "the contrast between society controlled and uncontrolled by justice."

He wrote a number of books, among them, "An American Artist's Story" (1936), "Indian Impressions" (1959), and "Tahitian Journal" (1968).

Justice Dept. mural (detail)



Fellowships

The National Institute for Architectural Education is sponsoring a number of fellowships and awards this year, with design programs ranging from three to eight weeks. The design program period will be set up by the NIAE at the convenience of the student after the application is received. While some schools of architecture may be working on these as class projects, with the best work chosen for submission, any student wishing to enter on his own may do so, from any school, anywhere.

- Kenneth M. Murchison Award. The problem: "A People Corridor Thru An Outdoor Zoo." \$1,000, \$300 and \$100. Any three-week period before June 1, 1974. All architecture students, of any nationality, under 30, except those in their last year of school, may enter.

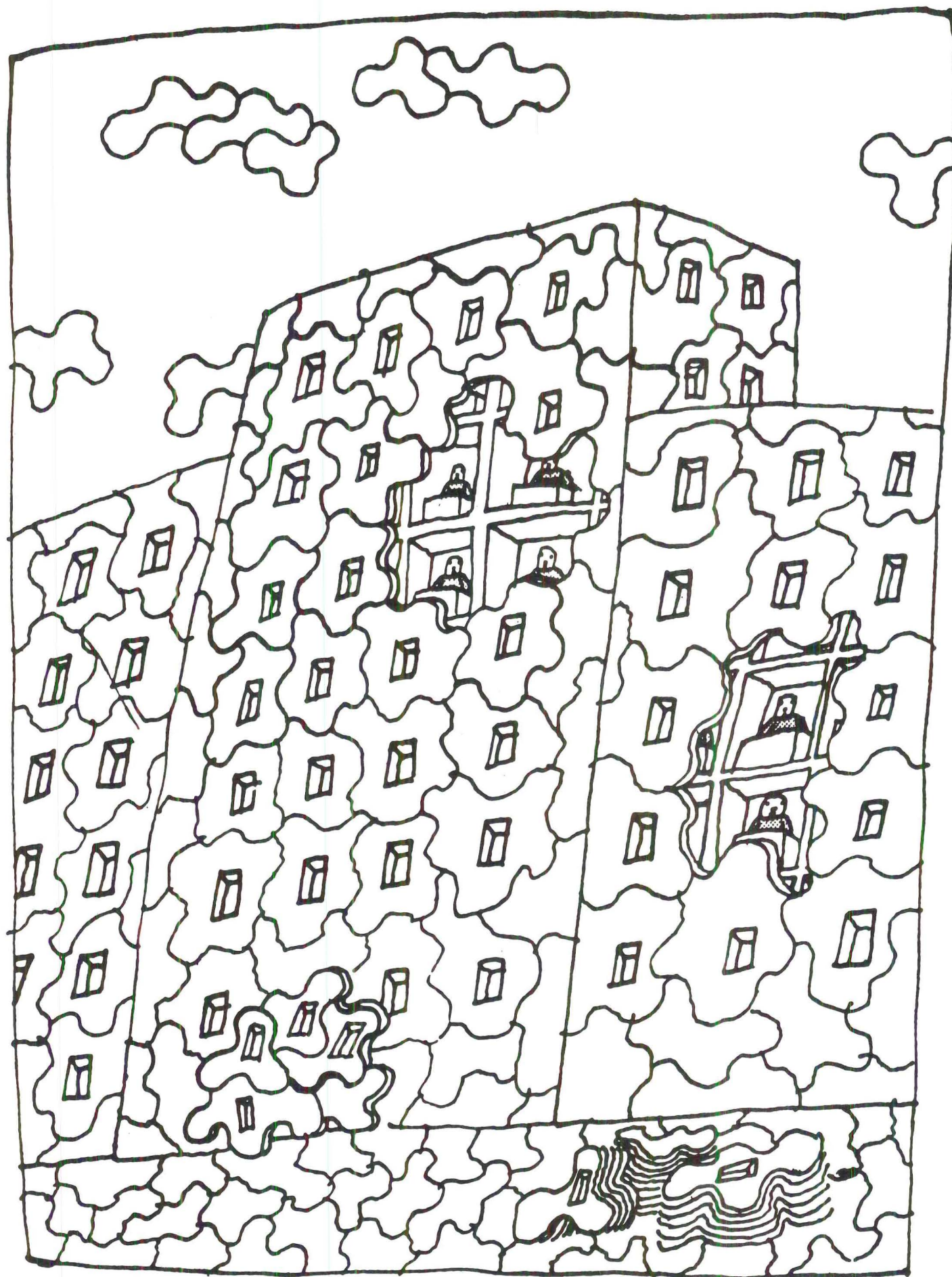
- William Van Alen Architect Memorial Award. The problem: "An Olympic Games Complex." \$6,000, \$1,000, \$100. Any eight-week period before June 1, 1974. All architecture and engineering students, of any nationality, under 35 on Dec. 1, 1974, may enter.

- National Building Granite Quarries Association, Inc., special competition. The problem: "A Study of Rear Yard Space in a Typical Urban Block." \$1,200, \$750, \$500, \$25. Any five-week period before June 1, 1974. All architecture students and others in the architecture field, of any nationality, under 30 on July 1, 1974, and not licensed or registered on the day entry is sent, may enter.

- Lloyd Warren Fellowship. The problem: "A Diplomatic Enclave in The People's Republic of China." \$6,000, \$1,000. Any six-week period before June 1, 1974. All students (graduate, post-graduate or draftsmen) who are U.S. citizens, and under 30 on July 1, 1974, may enter.

Apply (as early as possible) to the National Institute for Architectural Education, 20 West 40th Street, New York, New York 10018.

Photographs: Page 20 (top left) François Denis; (bottom) John Donat. Page 22 (top left) Peter Blake. Page 23 Simon Scott. Page 25 (top left) UPI; (top right) UPI; (bottom right) Greater London Council. Page 26 (right) George Cserna. Page 27 (lower right) all photos, Philippe Leroy, except Korn tapestry photo by Holsnyder. Page 112 (silkscreen) Henry Isaacs. Page 113 (top) Illustration, Mark Mack; photo, Nathaniel Lieberman; (bottom left) Philip Turner; (bottom right) *Architects' Journal*. Page 114 (middle right) World Wide Photo. Page 115 (bottom right) National Archives.



Footnote

This cartoon by Jean-Michel Folon makes a neat footnote to Henry Wright's article (elsewhere in this issue) on the walls of Manhattan's World Trade Center (and other modern skyscrapers around the world.) As Mr. Wright points out, the skyscraper's "cage frame" has frequently been concealed by curtain walls that completely distort its geometry—though not, perhaps, quite in the way suggested here. © 1973 by The New York Times Company. Reprinted by permission.



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letter from BERKELEY

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"In a larger sense, the radicals are suggesting that the privileges of a property owner must at least be regulated when they affect the housing or environment of others."

BART (Bay Area Rapid Transit) system nearly ready to open its line to San Francisco, Berkeley was ripe for a boom in apartment and condominium construction. Many of Berkeley's older (and architecturally distinguished) houses, now commonly subdivided with low and moderate income units, would be demolished; and in the process many of the distinctive neighborhood areas so characteristic of Berkeley would also be destroyed.

The sponsors of the Neighborhood Preservation Initiative had at first tried to prod the Planning Commission into action on this issue, but, once the proposal had died in committee, they brought the initiative proposal directly before the city council. Two developments followed as a result of the council's hearing: 1) the radicals were forced by the council's rejection of the measure to begin the tedious initiative procedures; and 2) the Planning Commission was offered two months by the council to draw up its own version of the ordinance.

(The radicals speculated, and not without reason, that the intent of the Commission's mandate was to blunt the effect of the Neighborhood Preservation Initiative if it were finally put to the voters in April.) After considerable delay, but still prior to the council elections, the Commission finally produced what it called the Land Use Controls Ordinance. These two documents are worth describing in some detail, since the differences between them reflect profound differences in political philosophy.

The Neighborhood Preservation Initiative is a very comprehensive ordinance which responds to a number of related housing and land use problems in Berkeley. Most importantly, it requires a two year period of revision for both the Master Plan (last revised in 1955) and the Zoning Ordinance, a process which would include a series of public hearings and participation by neighborhood groups. In the interim, the initiative would regulate the construction and demolition of all housing units in several ways. First, every petition for demolition or construction would be subject to a public hearing before the Board of Adjustments, and the Board would then be bound to consider in its decision both an environmental impact report and a finding of the neighborhood's sentiment. In the case of construction of four or more dwelling units, the initiative would require that at least 25 percent be low-income units (a constraint which is closely related to the radical financing proposals). Finally, demolition permits would, in most cases, be granted only after prior approval of construction permits.

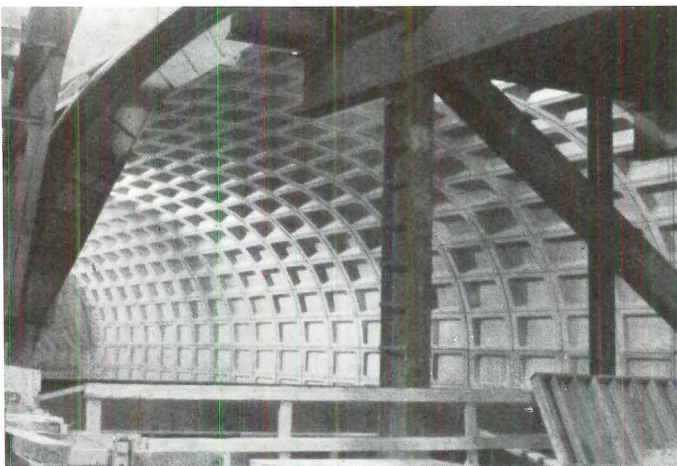
In contrast, the Land Use Controls Ordinance would merely require that petitions for construction of four or more units be subject to public hearings. It conspicuously avoids certain issues; most notably, the revision of the Master Plan and Zoning Ordinance, low-income housing, environmental impact, and demolition. To be sure, the construction of so-called ticky-tack apartments might be substantially retarded by the ordinance, but this is largely a cosmetic reform and does very little to alter the extent of, or criteria for, public responsibility in housing.

Perhaps the most symbolic difference between the two land use documents is reflected in the issue of demolition. As the absence of a demolition section in the Land Use Controls Ordinance indicates, the Planning Commission majority had con-

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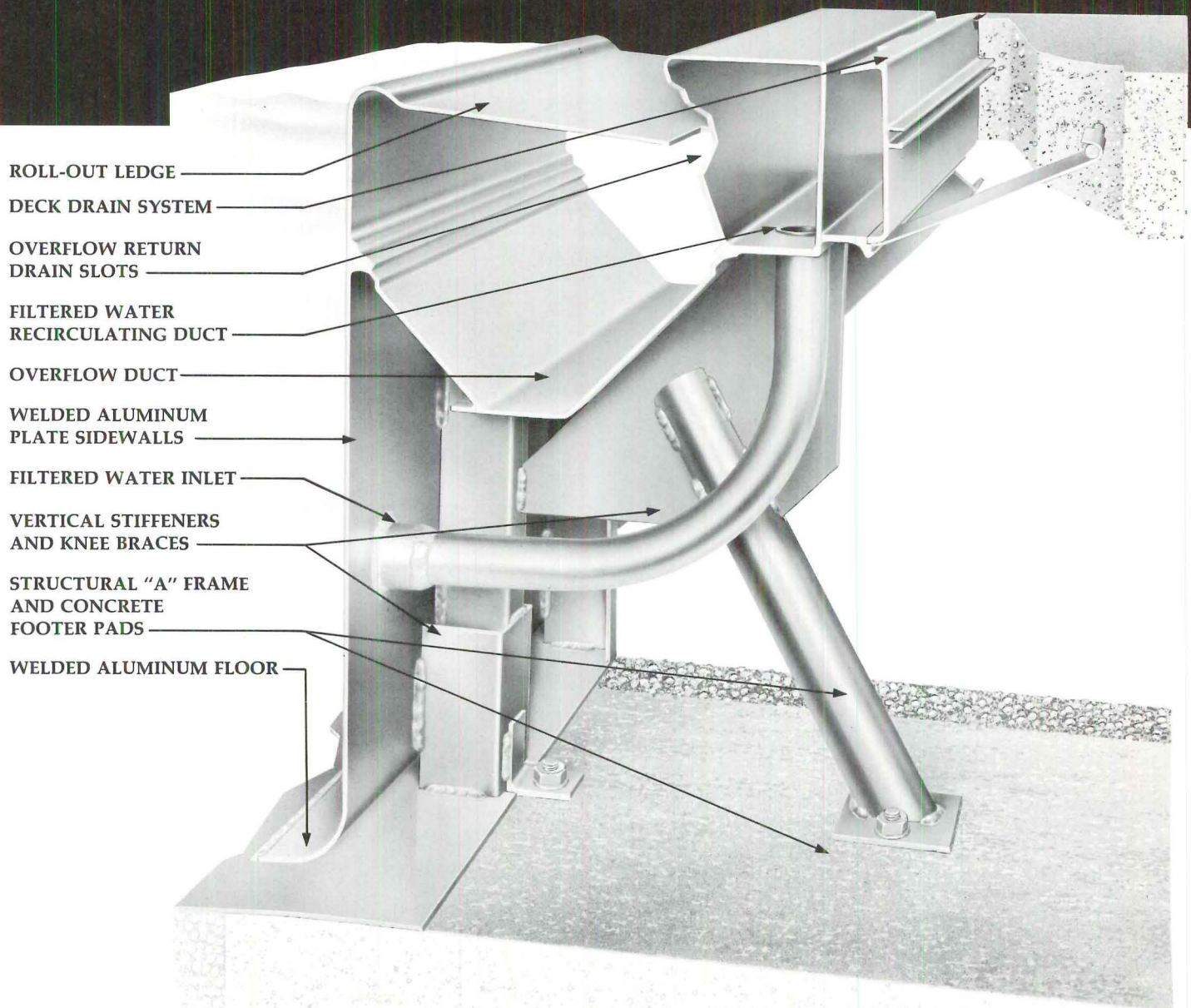
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letter from BERKELEY

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"If the right to make a profit has as much legal validity as the right to enjoy adequate housing, then all serious efforts at housing reform will have been blocked."

cluded that a property owner ought to be able to remove housing at his own discretion regardless of the public need. The radicals argued, however, that the public, as represented by the neighborhood and the Board of Adjustments, ought to be able to weigh the loss of a structure (before it occurs!) against the advantages of a new one. In a larger sense, the radicals are suggesting that the privileges of a property owner must at least be regulated when they affect the housing or environment of others; and ideally, that no basic human need ought to be exploited by the profit motive.

These same themes were echoed and amplified throughout the entire city council campaign. In a variety of issues, the radicals consistently sought to regulate or eliminate the powers of private ownership in cases where the public welfare might otherwise be compromised. Ironically, the Berkeley-4 slate offered platform proposals seemingly identical to that of the radicals, but, as candidates of the same people who had en-

gineered the rent board slate, they were simply not interested in limiting the ability of the propertied to make a profit.

In a campaign characterized by deceptive literature on the Berkeley-4 side and factionalism in the radical camp, the details of the campaign issues may very well have remained ambiguous to the majority of voters, but the basic intent of the radicals seems to have been all too well perceived by the propertied class. Again, in the same manner as the rent control election, voting was heavy in the wealthy precincts and light in the low-income areas. As a result, the radicals found themselves with only one new council seat and without a council majority.

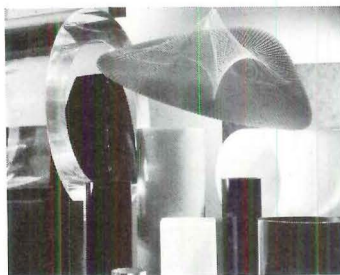
On the other hand, the initiative measures fared well with the voters—four of the seven initiatives, including Neighborhood Preservation, were approved. Unfortunately, the results are deceptive. Three of the four (two on police reform and one on the restriction of marijuana arrests) were quite modest in design, and in all likelihood the Neighborhood Preservation Initiative was approved only because it was perceived as an ecology issue. Even the effect of its approval is ambiguous. Without a radical council majority to support it, the initiative's effect on housing preservation may be very limited.

There had not even been time for me to come to terms with the consequences of the April election, when I was confronted one morning by newspaper headlines declaring the unconstitutionality of the rent control amendment. I had realized that a court action was pending on a suit filed by landlords, but I had not quite expected the entire rent control program to be thrown out. And I was even less prepared for the combination of legal and political grounds contained within the judge's ruling.

He had based his decision partly on the grounds that the landlords had not received due process as guaranteed by the Fourteenth Amendment, but he then continued on highly political grounds. He contended that housing conditions in Berkeley neither constituted an emergency nor justified the implementation of rent control regulations, and he went on to suggest that rent control was not even a legitimate mechanism to alleviate the problems of low-income groups. Finally, he addressed the issue of property rights. "The right to own property and to do with it reasonably what you will is rooted deeply in Anglo-Saxon law. It is no less a

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human right to desire reasonable income from an investment than it is to desire to pay a reasonable rent."

The consequences of the court decision on the existing housing situation were all too soon apparent. Once rent control regulations were lifted, many tenants were slapped with substantial rent increases; and worse yet, a number of tenants who had withheld rent payments under the provisions of the rent control amendment received retaliatory eviction notices. Even the substance of the Neighborhood Preservation Initiative has by now become distorted by the absence of rent control. With land values booming and rents increasing accordingly, the neighborhoods may ultimately be preserved only for the sake of higher income groups who will replace the present residents.

The real tragedy of the court decision, however, is that the future of all housing and land use reform has been seriously endangered. The radical proposals were, after all, only preliminary and modest experiments, but they demonstrate that any program which seriously attempts to place housing in control of the people who will live in it or land use under the supervision of the people who are affected by it, will of necessity alter the patterns and powers of private ownership. If, as the judge has ruled, the right to make a profit has as much legal validity as the right to enjoy adequate housing arrangements, then all serious efforts at housing reform will have been blocked.

Eventually, the rent control decision may even be overturned, but still the radical planning efforts would be contained by the real estate and investment interests which have now reasserted their political ascendancy in Berkeley. The election of the Berkeley-4 slate to the city council is only the most obvious symbol of their power. The new city council majority—their campaign coffers having been generously lined by the real estate industry—will be careful to block any proposals for cooperative development or public acquisition of housing sites. To be sure, the real estate industry will be in no mood to lose the source of its profits, its commissions, and its tax shelters to the public welfare. In addition, lending institutions, which make a considerable profit from mortgage turn-overs, will be reluctant to provide capital for cooperative ventures. After all, even the existence of non-profit and/or collective ownership represents a threat to the privileges of all investors.

Inevitably, then, the defenders of the status quo will prevail in Berkeley. As an isolated political force, the radical movement will achieve merely superficial reform. Real change in housing ownership and land use policies will occur only when the radical efforts have been duplicated in every city in the country. And who knows how long that will take!

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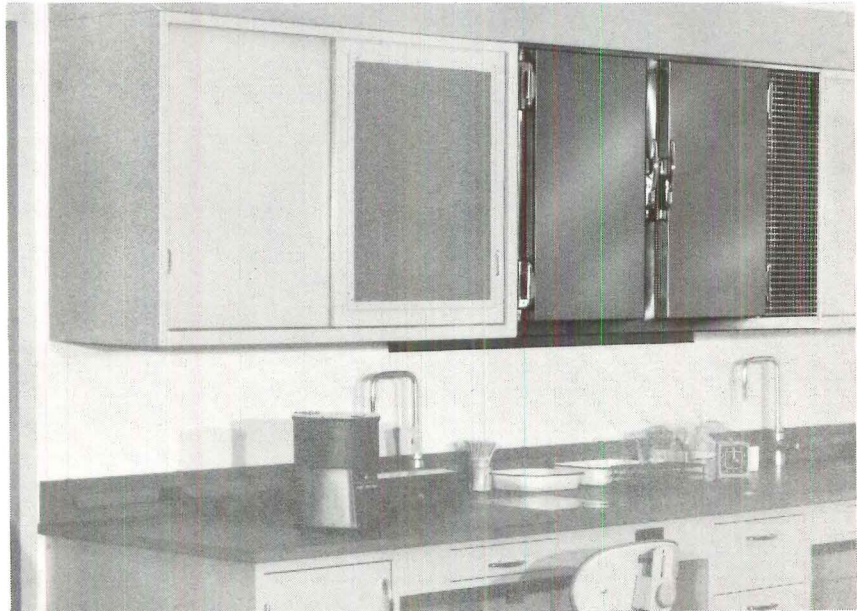
Architects: I. M. Pei & Partners. (Materials and manufacturers as submitted by the architects.) *Concrete & Cement:* Penn Dixie. *Structural Steel:* Republic Steel. *Skylight:* Super Sky Products, Inc. *Glass:* Pittsburgh Plate Glass. *Elevators:* Dover, Houser Corp. *Doors:* Alumilite, Pioneer. *Hardware:* Sargent, Stanley, Rixson. *Interior Materials:* Mo-saic Tile Co., Heather Brown, Wall-Rus Fabrics. *Paneling:* Eggers Hardwood Products. *Paint:* Devco. *Electrical Ducts & Wiring:* Superior Electric. *Standby Emergency Power:* Onan. *Lighting Fixtures, Lamps:* Edison Price. *Plumbing Fixtures:* American Standard, Kohler. *Air Supply Enclosures:* Bran-

des Corp. *Sprinkler System & Fire Protection Equip:* Davis Ulmer. *Water Coolers:* Filtrine. *Shades:* Verticals, Inc. *Carpeting:* Hasbrouck, Magee. *Furniture:* Knoll, Harvey Probber.

DESIGN RESEARCH, INC.

Architect: William Turnbull, Jr. (Materials and manufacturers as submitted by the architect.) *Hardware:* Schlage. *Interior Materials:* "Heather-brown" Tile, Louis Goldery Co. *Lighting Fixtures, Lamps:* Peerless Electric Co., Display & Stair Lighting. *Sprinkler System & Fire Protection Equip:* Grinnell Fire Protection Co. *Ceiling Materials:* Alcoa, Inc. *Finish Flooring:* Oregon Lumber Co. "Worthwood." *Furniture:* Bluepeter, Inc. *Fabrics:* Marimekko.

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CURTAIN WALL

United States Gypsum Company offers a new 24-page brochure detailing basic design concepts for non-load bearing exterior curtain wall systems.
Reader Service Number 204.

Architectural Research Corp. has prepared color pamphlet on AR-LITE aggregate custom panels. Photographs, installation, and specification data are included.
Reader Service Number 205.

DRAPERIES

A new, comprehensive guide for the scientific selection of fiber glass draperies for commercial buildings is available from PPG Industries.
Reader Service Number 206.

DOORS

A new 12-page catalog of their complete line of standard and customized steel doors and frames has just been released by Amweld Building Products.
Reader Service Number 207.

FILING EQUIPMENT

Vertical plan filing equipment, original drawing files, and drafting tables are detailed in 28-page catalog prepared by Plan Hold.
Reader Service Number 208.

FIRE DETECTION/PROTECTION

Rixson-Firemark, Inc. makes available a 32-page study of early warning fire detection performance in hospital patient sleeping rooms. Details on test procedures, facilities and results are included.
Reader Service Number 209.

"Fire-Resistant Steel-Frame Construction," a new publication issued by American Iron and Steel Institute, discusses characteristics of fire protection materials and fire-resistant constructions that influence steel-frame building design.
Reader Service Number 210.

FLOORING

Pressure-sensitive asbestos felt sheet system for the installation of ceramic tile floors has been introduced by American Olean Tile Company.
Reader Service Number 211.

HARDWARE

New catalogs detailing product selection factors for 5 hardware lines with specifications exceeding minimum standards are now available from Sargent & Company.
Reader Service Number 212.

A one-way door viewer that allows inspection of unknown visitors from the safety of a closed door is now being marketed by Hager Hinge Company.
Reader Service Number 213.

A new catalog featuring the entire line of Yale's heavy-duty cylindrical locksets has been released by Eaton Corporation's Lock and Hardware Division.
Reader Service Number 214.

HEATING

Modine Manufacturing Company has recently introduced seven basic models of horizontal delivery electric unit heaters.
Reader Service Number 215.

HOSPITAL SYSTEMS

Organizing, managing and controlling hospitals' logistic processes is the main subject of the revised illustrated edition of Co/Struc Functions and Applications. The book, available from the Herman Miller Health Care Group, explains how Co/Struc, a system of containers, frames, carts and rails, "cooperates" with the multitude of hospital serv-

ice products that need to be packaged, dispensed and controlled.
Reader Service Number 216.

INSULATION

A new bulletin describing physical properties, specifications and application data of Foamglas® insulation is available from Pittsburgh Corning Corp.
Reader Service Number 217.

A 12-page brochure on its Zonolite® insulating products has been published by the Construction Products Division, W. R. Grace & Co. Included are technical data, specifications and general descriptions.
Reader Service Number 218.

LIGHTING

General Electric Lamp Business Division's new eight-page brochure, "Lamp Selection Tips," is packed with suggestions for new and existing incandescent lighting installations.
Reader Service Number 219.

Holophane Company, Inc. announces Module 600™, an exceptionally efficient outdoor luminaire suitable for wall or pole mounting and for street furniture in shopping and civic malls, parking areas and walkways.
Reader Service Number 220.

MASONRY

The most complete line of masonry wall reinforcing available is described with detailed specifications in the new AA Wire Products Company 12-page guide.
Reader Service Number 221.

PANELING

Innovative styling and new finishes are key design elements for the Weldwood Collection, a group of prefinished interior panels just introduced by U.S. Plywood.
Reader Service Number 222.

Shakertown Corporation offers information on their new Interior-Tex panels, which combine the rustic beauty of western red cedar shingles with the application ease of panels.
Reader Service Number 223.

ROOFING

A 32-page brochure covering recommended specifications and procedures for Koppers roofing systems is now available.
Reader Service Number 224.

SEALS

A descriptive, illustrated brochure giving details of their capabilities in the design and production of bronze and aluminum seals is offered by Jas.

H. Matthews & Co.
Reader Service Number 225.

SECURITY SYSTEMS

Von Duprin, Inc. has prepared a specifications catalog covering components of an electronic security system. Included are power, intercom, control and monitor modules, console panels, switches, vibrating horns and accessories.
Reader Service Number 226.

TILE

Physical properties and characteristics of UltraBronze™ floor and wall tile, as well as installation and maintenance information, are given in data sheet available from Furtotex.
Reader Service Number 227.

TIME CONTROLS

A new comprehensive electrical time controls catalog, prepared as a basic reference tool, has been released by AMF Paragon Electric Company.
Reader Service Number 228.

WALL COVERINGS

Essential information that is not generally available on vinyl wall coverings, including documented facts on tearing, cleanability, mildew resistance and fire ratings, is contained in service brochure from L. E. Carpenter & Company.
Reader Service Number 229.

WASHROOM EQUIPMENT

A full color four-page selector folder on its lines of single- and two-handle faucets in gold and chrome finishes has been issued by the Faucet & Special Products Division of Bradley Corporation.
Reader Service Number 230.

WATERPROOFING SYSTEMS

Tremco Manufacturing Company makes available illustrated brochure giving architectural design guidelines for construction of total waterproofing systems for a variety of below, on, and above-grade applications.
Reader Service Number 231.

The Neogard Corporation offers pamphlet describing its elastomeric systems specifically designed for waterproofing problems. Specifications are included.
Reader Service Number 232.

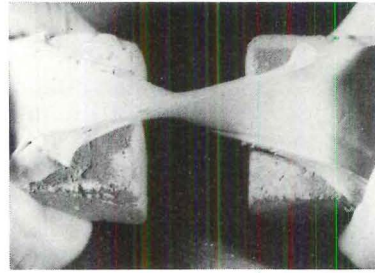
WINDOWS

A new Perma-Shield casement angle bay window, available in both 30- and 45-degree models, will be marketed in 1974 by Andersen Corporation.
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