THE INTERNATIONAL MAGAZINE OF ARCHITECTURE MARCH/APRIL 1974

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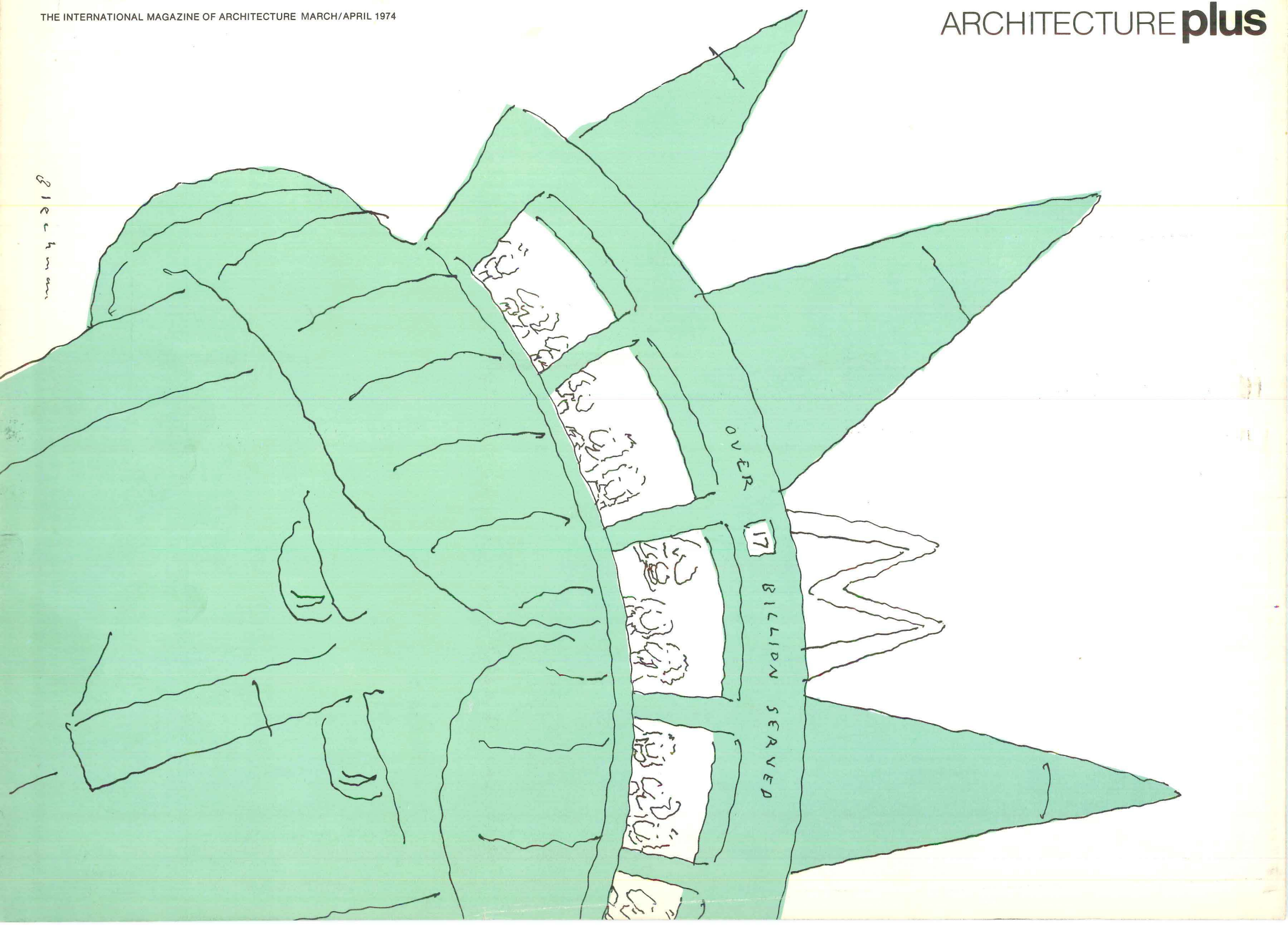

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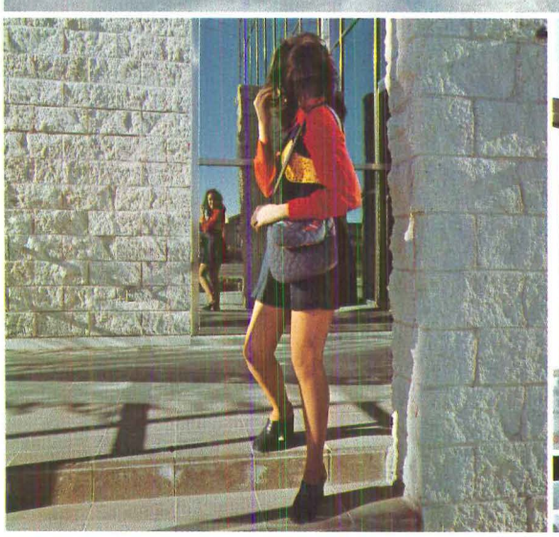
Minnesota residence. Architect: Martin F. Gould, Duluth



The Silver State Building, Las Vegas, Nev. Architect: Leo F. Borns. Owner: Disposal Investments, Inc.

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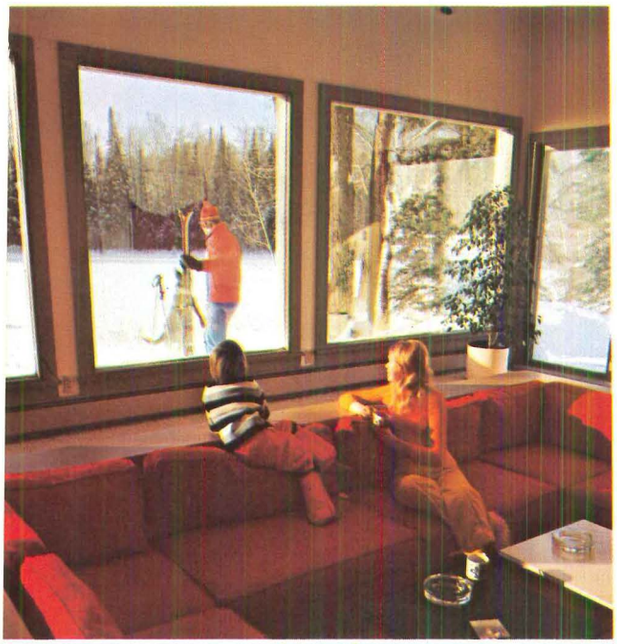

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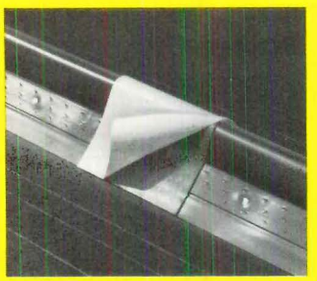

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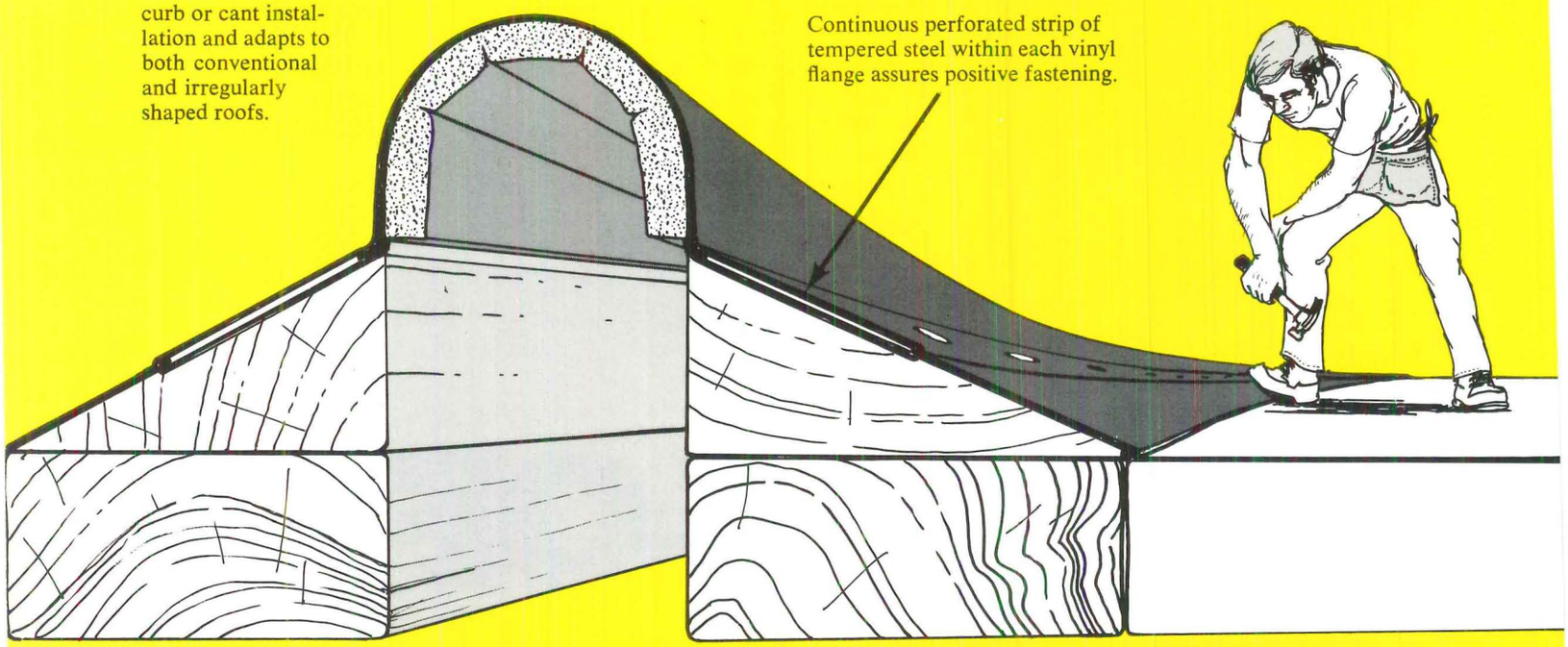

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ARCHITECTURE plus

THE INTERNATIONAL MAGAZINE OF ARCHITECTURE MARCH/APRIL 1974

Cover design by cartoonist R. O. Blechman shows his proposal for the recycling of the Statue of Liberty into a McDonald's hamburger emporium.

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Book Review

The Athens Charter by Le Corbusier. Grossman Publishers, New York, 1973. 144 pp. Illustrated. $10.00.

Reviewed by Peter Smithson

This is an altogether odd publication. Odd in that Le Corbusier's name stands alone on the cover when the Charter is a collective document. Odd in the fact that the essential material—the Charter itself—occupies only 30 pages (i.e. excluding its own summary)—the remaining 60 being the company report of good old C.I.A.M. still in business in spite of bad-times (1943) written in company report style. Odd that it took so long to get these 30 pages published in French (1933-43) . . . when the whole beautiful 345 pages of *La Ville Radieuse* (all the themes of the Charte d'Athene explored) had been published in 1933 itself . . . and that has been available in an English *facsimile* edition since 1967 (Faber and Faber Limited, London).

Odder still for this translation to appear in 1973 in America when "*The Town-Planning Chart* (as drafted by the C.I.A.M. in Athens, August 1933) . . . is reproduced in its entirety," four pages in English, as part of J. L. Sert and C.I.A.M.'s *Can Our Cities Survive?* published by The Harvard University Press in 1947.

Thinking over this review in my quiet workroom on a Sunday morning, I feel like Bede, far away on the edge of the world with a new translation before him. And I am afraid, afraid that the translation of all this old small print will be picked over for slips and foolishnesses by scholars with no vocation and much time. Picked over in a mean attempt to diminish all that was marvelously fresh and generous and hopeful fifty years ago.

Its spirit touches me still . . . from the Charter, "The problem of the dwelling, of housing, takes precedence over all others. The best locations in the city must be reserved for it; and if they have been pillaged by greed or indifference, every effort must be made to recover them. Several factors contribute to the well-being of the dwelling. We must seek simultaneously the finest views, the most healthful air (taking account of winds and fogs), the most favorably exposed slopes, and, finally, we must make use of existing verdant areas, create them if there are none, or restore them if they have been ruined." (According to St. Charles—the translation under review p. 49); "Residential districts ought to occupy the *best sites*. The climatological and topographical conditions of those sites intended for dwelling purposes must be carefully considered, as well as their proximity to existing unbuilt land surfaces suitable for recreation purposes." (According to St. Joseph—*Can Cities Survive?* p. 247). For me, Modern Architecture was a coming, and I am inescapably a churchman of that event.

Peter Smithson is an architect practicing in London, in partnership with his wife Alison. They were both members of C.I.A.M. at one time, and later helped form Team Ten, a group that broke away from C.I.A.M. in the 1950s.

Guide d'architecture contemporaine en France by D. Amouroux, M. Crettol, and J. P. Monnet. Published by L'Architecture d'Aujourd'hui (Technic-Union), Paris, 1972. 407 pages, French text, maps, illustrations. $14.50 in paper.

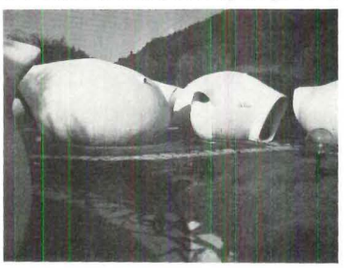
Reviewed by Paul Damaz

Paul Damaz is an American architect born in Portugal and educated in France. He is a member of the AIA and of the French Ordre des Architectes.

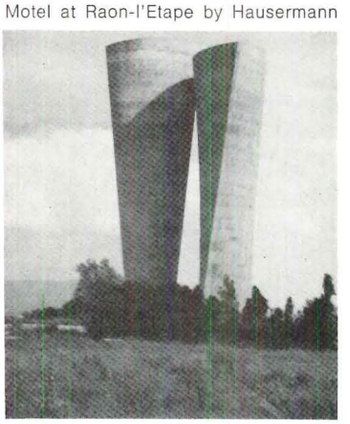
The American architect glancing through this "Guide" (published by the famous architecture magazine, *L'Architecture d'Aujourd'hui*) will find that Good and Bad have no nationality. On the one hand, buildings such as the Ecole Nationale d'Art Decoratif in Nice can stand comparison with some of America's most celebrated corporation headquarters. On the other hand, the monumental failures of the new business centers at Maine-Montparnasse and at La Défense will alleviate the chagrin felt in the U.S., and elsewhere, over missed occasions.

This book is more than a guide. Its authors take a position right at the start, before the reader has a chance to form his own judgment. After accusing the "authorities" of being indifferent to the living environment they sponsor, and the architects of designing bread and butter architecture (*architecture alimentaire*), they deplore the fact that in spite of the booming construction activity of the last ten years, they were able to select only 476 projects which deserve some kind of attention, including many deplorable examples which they acknowledge to have retained purposely to show their "exceptionally tragic character." This lack of enthusiasm, to say the least, for their subject matter may account for the otherwise unexplained inclusion of buildings designed by Le Corbusier as far back as the early 1920s.

Grenoble Cultural Center by Wogenscky



Motel at Raon-l'Etape by Hausermann



Valence water towers by Gomis

Two types of buildings seem rather particular to the French scene: the cultural centers (Maisons de la Culture), and the large scale officially sponsored resort centers. The most remarkable of these is probably the Maison de la Culture in Grenoble designed by André Wogenscky who was, for many years, Le Corbusier's right arm. It contains a theater with a flexible plan which, I believe, is unique in France. As for resort centers, they are a good illustration of the disparity of contemporary French architecture. They run the gamut from the instant new-old village such as Port-Grimaud and Cogolin, designed in the traditional local style with some salt and pepper thrown in, to the monstrous pigeon-holed Villeneuve Loubet defacing the French Riviera.

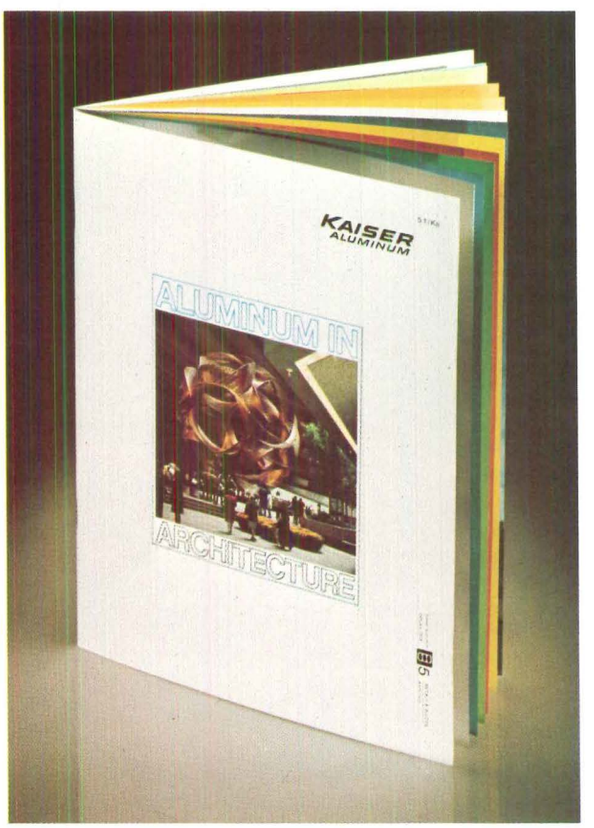
Some of the most commendable achievements are structures which are closer to engineering than to architecture. Water towers on the whole are far more esthetic than they are in the U.S. They are the one element of new towns where architects seem to be given a free hand. The most remarkable, the twin water towers built near Valence by the architect A. Gomis and his esthetics consultant (*plasticien*), Philolaos, have lost their utilitarian character to become a monumental sculpture, erected to serve as a symbol for the new town as well as for visual pleasure.

As one glances through this Guide, one is amazed by how little direct influence Le Corbusier has had on contemporary French architecture. No man is a prophet in his own country, and, while foreign architects in Latin America, Japan and elsewhere are still fascinated by the Master, his French disciples are not easy to detect. There is no discernible major trend in French design, and French architecture gives a general feeling of anarchy and disorientation. The only tendency which may be noted lies in the field of free-form design. Following the long line of Ledoux, Boullée, Gaudi and Kiesler, a number of French designers are desperately trying to break the orthogonal strait jacket. The sculptors, Pierre Szekely and André Bloc, have produced several examples of sculpture-architecture. Jacques Couelle has designed several important large scale resort facilities, some retaining a strong regional flavor; others, such as Castellaras-le-Neuf, achieving a definite integration of the architecture and its environs through the use of very free and imaginative forms. Going further in the same direction, the architect Pascal Hausermann has abandoned the craftsman construction methods of his colleagues and is trying to achieve free form through prefabrication. His motel at Raon-L'Etape and his hotel at Saint Dié are remarkable for the use of prefabricated free-form polyurethane shells, each shell corresponding to a function of the building.

As a guide, this book is well organized, with maps and illustrations of most buildings mentioned. For anyone interested in the French architectural scene it will be a valuable travel companion.

continued on page 133

a timely new look at aluminum.



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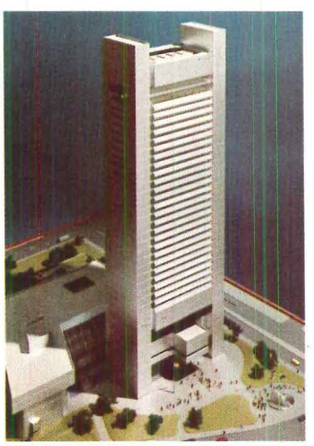

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letter from CAPE TOWN

by James D. Morgan

I had been in Cape Town barely two hours when we sat down to lunch, eight of us, all architects. I felt a powerful kinship even though I had just met them. Indeed, in some ways I felt closer to these colleagues than to the uncle, aunt and cousins who so generously welcomed me to Durban a week earlier.

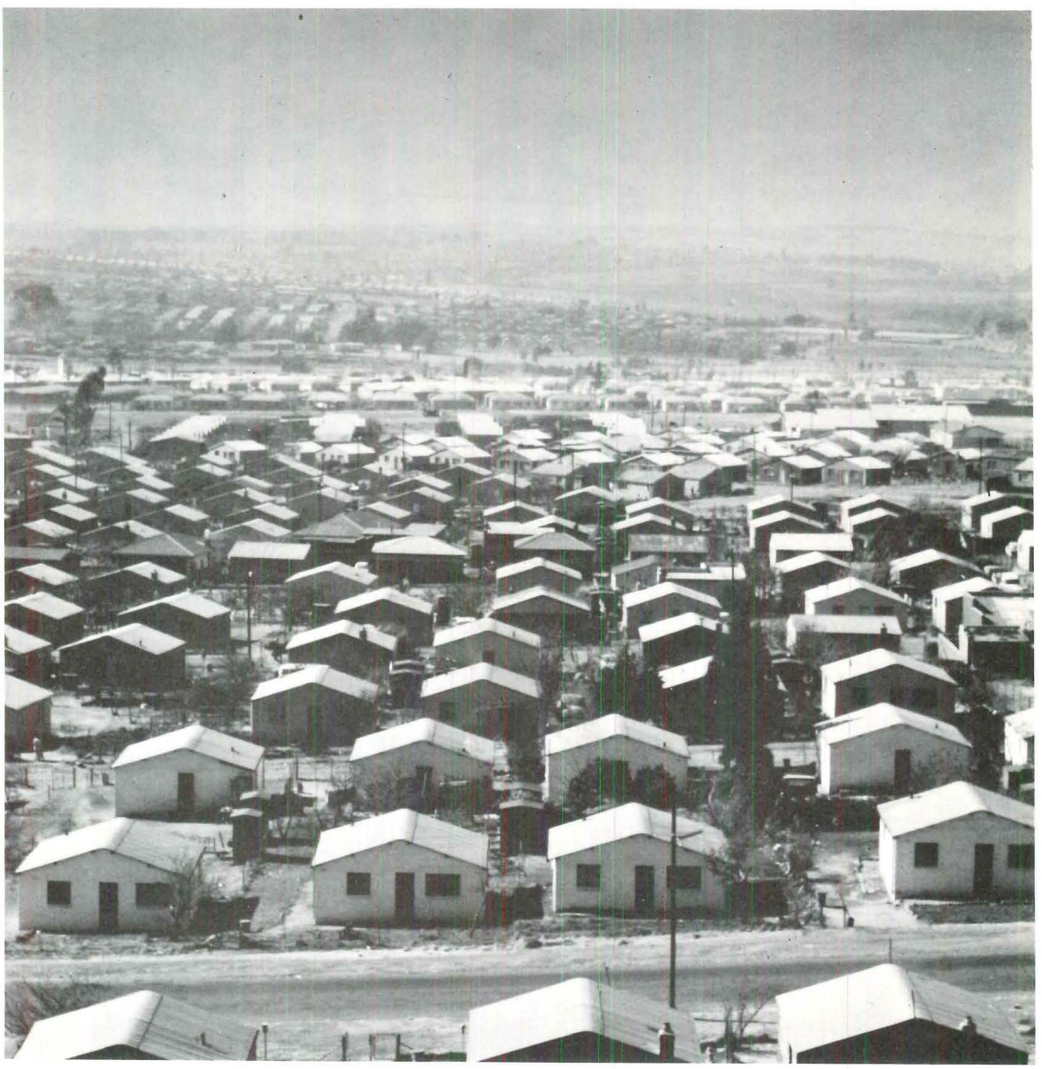
But the personal warmth of the white South Africans is not the only element that makes it difficult to report objectively on South Africa and its architecture today. No thoughtful American can guiltlessly point his finger at Apartheid, the South African government's policy designed to provide separate, economically self-sufficient and politically autonomous "homelands" or residential areas within the nation for the four recognized "races." In fact, I decided finally to visit my family in South Africa because all my feelings of self-righteousness in 1964, when I had last considered going there, had evaporated. There is no denying that the American policy of integration has failed to provide a solution to such problems here. We have not yet agreed as a nation that our non-white peoples must have maximum encouragement to determine their own political and economic future. For us, with non-white people representing 12.5 percent of the population, the results of that process would be far less revolutionary here than in South Africa where 82 percent of the people are non-white.

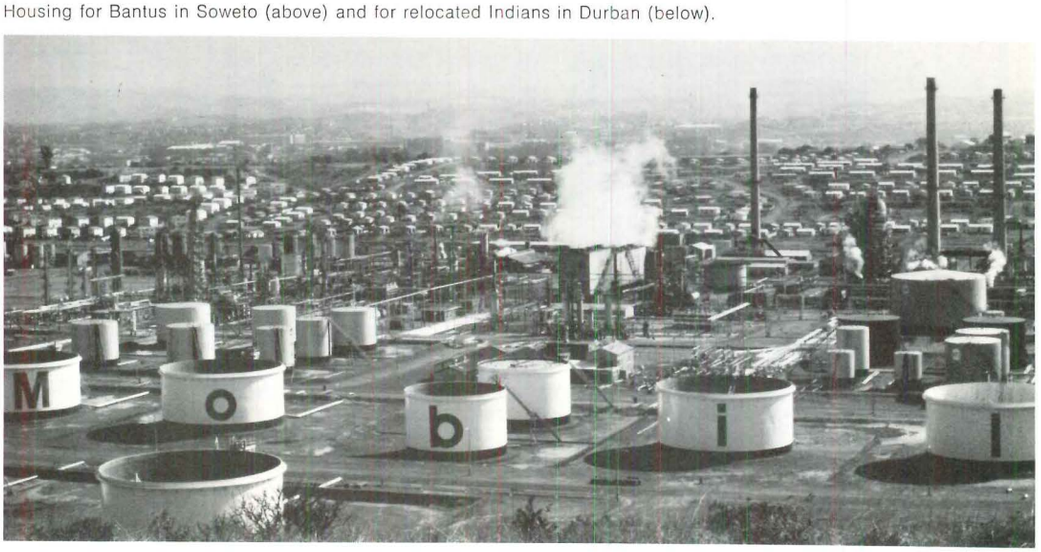
And I had another bias as well: South Africa is a beautiful country and my father's homeland. The act of returning as his surrogate, because he never did, was deeply emotional.

So for several reasons I came away from my brief encounter with the Cape Town architects thoroughly moved by their dilemma. They love their country as much as I love mine. They want to stay there and work to effect change within the system. But before describing that dilemma and the way Apartheid affects South African architecture today, I want to say a bit more about political and economic matters. While it may be true that most people are aware of the racial and economic discrimination practiced by the South African government, I found seeing the effects of Apartheid first hand so shocking that it affected everything I saw.

At the risk of sounding naive, I must say that the most startling part was to realize that Apartheid is primarily a system of economic exploitation. The racist policies, far from being the central issue, are only a tool for keeping desirable jobs and living accommodations in the hands of a minority and, by imposing a rigidly controlled social order, to encourage American and other foreign investors to come into the country. They realize enormous profits from extracting the natural re-

James Morgan, a Senior Editor of this magazine, spent some time in Cape Town recently.





Housing for Bantus in Soweto (above) and for relocated Indians in Durban (below).

sources because of the artificially-depressed wage scale. Or as an official pamphlet aimed at potential investors puts it: "South Africa has had many years of industrial peace, partly because of economic prosperity in general but also because of realistic labour laws, which promote favourable conditions of employment and ensure stable worker-management relations."

The system of social control upon which Apartheid is based is, nonetheless, truly repressive and limits everyone's options in the final analysis. For the non-whites it ranges from limited living areas for the Indians to complete restrictions on movement and living arrangements for the blacks, rigorously administered and vigorously policed. For most whites, apparently free to move about with ease, Apartheid has brought an atmosphere of fear and paranoia that makes living in New York City seem carefree indeed.

Apartheid, it is claimed, will eventually give each ethnic group sovereignty over its own affairs in its own territory. The Bantus, who represent seventy percent of the population, are promised about sixty thousand square miles of land for their own use, roughly eight percent of South Africa's total area. In fact there seems to be no way that 14.7 million black people could survive on that portion of land (slightly larger than the state of Georgia), most of which will support only subsistence agriculture. In spite of loudly-heralded programs for government sponsorship of new industry in the "homelands," essential if there is ever to be self-sufficiency for the blacks, the amount actually invested is a pittance—from 1969 through 1972, the equivalent of $2.60 for each black South African. The true irony of Apartheid, however, is this: There is no way that the white population could survive if deprived of its supply of underpaid black workers who, at present, are allowed only "temporary" residence in enclaves near the city or in the case of domestic servants, in minimal backyard sheds.

Apartheid and urban planning

Since the Bantu Resettlement Act of 1954 (which affects the other non-whites as well), tens of thousands of tiny detached houses have been built for these people in compounds in barren areas outside the cities while the best land, in terms of location, values and view, has been turned over to the whites. It is an example of "eminent domain" appropriation that makes the American Urban Renewal land-grab of the fifties seem benign.

Durban, a city whose location along the beautiful Indian Ocean beaches reminds me of Florida's east coast, is an excellent example of the process. During an interview with the chief town planner for Durban, I saw maps showing how non-whites and especially the Indians, have been moved inland and then forced to use inadequate rail and bus service to commute into the city. In some cases, the transportation costs consume ten percent of the worker's income. Yet, it is in Durban that the first major variance from the relocation policies has been allowed by the national government. A substantial community of Asian people who have always lived in the downtown neighborhood surrounding the Indian Market have been allowed to remain there. I understand that the entire city petitioned Pretoria, the seat of the Afrikaans-dominated government, for this exception. It is no wonder: the Indians are not only crucial to Durban's economy but provide the only vestige of culture to be found in that bland resort town.

Since the Indians, who are both Muslim and Hindu, are often relatively well-off despite their political limitations, it may be worthwhile at this point to mention a curious parallel in the South African social structure with American practice. The Indians' position can be equated, it seems to me, with that of the Jews in the United States in both cultural and economic terms. They each represent about three percent of their country's population. The Coloureds are equivalent to our Negroes whose genetic background is also based on mixed parentage. Both represent about ten percent of their respective populations. Finally, the Bantu peoples are akin to the American Indian. It is sobering to realize that we deal with our native people in much the same way that South Africa controls its blacks. The only difference—and it does not mitigate the injustice of the American situation—is that while the Bantu are the true majority in South Africa (70 percent), the Indians represent only four-tenths percent of our total population.

In Cape Town, the principal non-white group is the Coloured. As in Durban, they have long been an integral part of the city's life. In 1965, District Six, the heart of the Coloured community, was declared a "whites only" area and plans are underway to build luxury housing there when the 60,000 present occupants are removed. They will be added to the six hundred thousand others who have flocked to the low-lying eastern suburbs where they are permitted to live. There, in one district called Elsies River, at least 70 percent of them live in hovels crowded a dozen each on the 50- by 100-foot lots, often owned by white landlords. An effort is being made to limit these densities and no new houses can be built there now. The houses are usually built of salvage materials, sometimes have a water tap but never electricity or sewerage. Human waste is collected in buckets by trucks, and dwellers have no tenure—they can be evicted on short notice.

There are efforts being made to provide better quality housing but when built it is grim indeed. The rental housing built so far is in small units, laid out in regimented rows, with minimal utilities—and again, if the renter misses one month's payment, his family is quickly removed. Since some Coloured people are accomplished building artisans and earn very good incomes, it is possible for them to build substantial houses on their own property. In Elsies River I saw many such dwellings side-by-side with the shanties.

About two thousand units of government-sponsored housing for sale is being built each year in Cape Town. A young District engineer working to improve conditions in Elsies River told me that while the national government feels this rate is sufficient to solve the low-income housing problem, Cape Town would actually need the entire national low-income housing budget to meet its backlog.

Soweto

Johannesburg, a booming city not unlike Houston in its dynamic growth and abrasive spirit, is the place to which the black South African has traditionally come to seek his fortune, as those who have read *Cry, the Beloved Country* by Alan Paton will recall. To handle the huge and frightening exodus inspired by war-time industrialization, the South African government has built Soweto (Southwestern Townships), a sprawling "city" of nearly one million people immediately south-west of Johannesburg. It is a place which few visitors leave without emotion. To most white South Africans it seems glowing proof of the government's concern for raising African living standards. To me it was appalling.

From its beginnings in 1932, until 1954, Soweto grew amongst such nearby communities as Alexandra Township, Sophiatown and Pimville, places prominent in Paton's book, where Africans could own their own houses however humble. But with the Bantu Resettlement Act of 1954, one of the principal weapons of Apartheid, home ownership was denied them. As noted earlier, Apartheid envisions all Africans as eventually returning to their "homelands" so that those now living in the "whites only" areas near the cities are necessarily temporary residents. The fact that some of these "temporary" families have lived near Johannesburg for three generations means nothing. The Johannesburg City Council, which actually runs Soweto, has taken a much more sympathetic view over the years but is virtually impotent before the centralized power of the national government.

Although almost ten thousand houses in Soweto are still owned by their occupants, the freehold rights will revert to the government as those individuals die. Thus the government has created what can only be called a concentration camp whose residents live there only at the grace of the authorities. Dr. Ellen Hellmann, an eminent South African anthropologist, put it succinctly in a recent article on Soweto (Optima, March, 1973), "Few actions, in my opinion, could have been more effective in blighting hopes, blunting aspira-

tions, destroying potential family anchorage, and increasing the already haunting sense of insecurity of all urban Africans than this ban on home ownership." She describes the difficulties they face in shifting from tribal to urban life. She lists, in staggering detail, the obstacles to decent daily life. She writes of the violence that runs wild in Soweto's dark streets at night.

I saw Soweto from an airconditioned bus with a pretty Afrikaans guide. The tour included tea and pastries at a stop with a tower from which one could see mile after mile of tiny identical houses lined up in neat rows. It's no wonder the puritanical South Africans like to show Soweto to visitors. But to someone who thinks about what kind of lives are lived in those rows of little boxes, the texture of Soweto is grim indeed. There is no real town center although a highly-touted civic center is partly built. There are few neighborhood shopping areas, no small parks or playgrounds, only occasional huge and barren sports fields, sometimes with bleachers for watching soccer. There is one inadequate railroad into Johannesburg. The guide babbled pompously about how the government has provided nursery schools and hospitals and houses apparently out of purest altruism. But whenever I asked a question about how many classrooms or beds or houses that was per capita, the answer was always minimal in terms of human health and welfare. Finally, when we chatted during the stop for tea, she said to me in exasperation, "Look, it's a slum-clearance project, nothing more!"

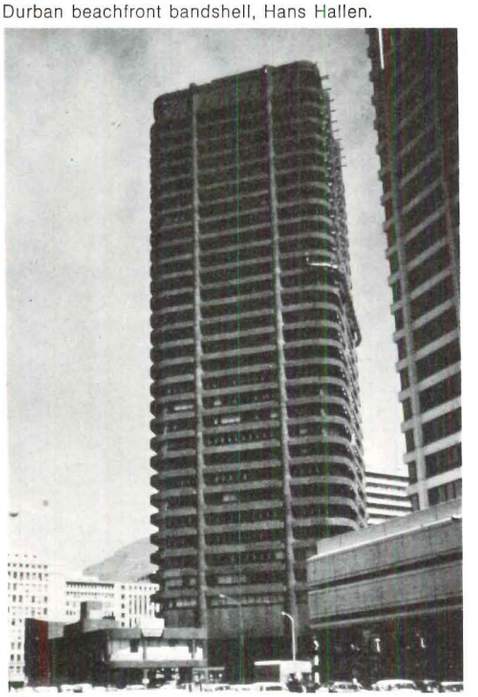
Construction boom

But let's look at the other side of it. As practically everyone knows, political repression often makes for a vigorous economy, especially in a country with as rich a reserve of natural resources and as much cheap labor as South Africa has.

South African cities are growing like mad. Each of the three major urban centers has acquired a variety of large-scale public works projects recently: highways, factories, dock facilities, civic centers, airports, beaches and other recreational areas. Durban's splendidly-equipped ocean-front beach is lined with new hotels, each generation of design a bit closer to American prototypes than the last. Cape Town has a brand-new civic theater complex on the waterfront, and real estate developers are excitedly working on cluster housing schemes, some integrated with waterways on the flat coast southeast of the city. Need I say that all of these facilities are for whites only?

Johannesburg's skyline is the one whose profile is changing most radically. Cape Town, reminiscent of San Francisco in many ways, has three or four towers, including the distinguished BP Centre by Revel Fox and Partners but the majesty of Table Mountain looming behind them somehow cancels out their importance.

Durban beachfront bandshell, Hans Hallen.



BP Centre, Cape Town, Revel Fox.

Carlton Centre (right) and its neighbors.

The flatness of the Transvaal, however, makes the new Johannesburg skyscrapers difficult to ignore. The majority of tall building construction is of reinforced concrete. There were several slip-formed central core structures underway when I was there. The one Miesian tower, the Trust Bank Building by Colyn and Meiring (there is an identical twin in Cape Town), apparently has a steel framework. Another tall building of special interest is the Standard Bank Building by Hentrich, Petschnigg and Partners of Dusseldorf. A central concrete core has outriggers from which three sets of ten floors each are hung by cables. I experienced slight uneasiness when I walked under this suspended mass into the first floor banking rooms. Nonetheless, the main criticism one might make of the tower, ironically, is not that it appears unstable but that the quality of suspension is not clearly expressed in the heavy-looking completed building.

To American readers though, the most noteworthy project in South Africa is Carlton Centre by Skidmore, Owings and Merrill in association with Rhodes Harrison, Hoffe and Partners of Johannesburg. I will limit my remarks to saying that it is *very* American. The scale in relation to the smallish buildings around it is rather insensitive but it would not seem so in New York City. Neither the detailing, building techniques nor interior finishes were strange to me. I sat in the hotel coffeeshop and, except for the Afrikaans words on the menu, I could see nothing that made me think I was not in Chicago. Even the call girls are American.

But the underground shopping arcade has apparently captured the enthusiasm of middle-class Johannesburgers. They seem drawn to everything American, and Carlton Centre is perfect for them. Naturally I went looking for the segregated toilets that caused such an uproar in New York architectural circles seven or eight years ago. I wouldn't say I disagree with those who picketed SOM at that time, but after seeing the true extent of the avarice of Apartheid, separate facilities seemed a modest issue indeed.

Universities

Finally, one area of construction that is especially vigorous in South Africa today is university building. It is in education that the government is making the most visible strides toward equal facilities. There are many new teachers colleges for non-whites. Durban has a huge, if somewhat mediocre, new Indian university which occupies an entire ridge in the Westville Indian section. The University of Zululand and the University of the North (both for blacks only) have intriguing new buildings. But once again, the figures give away any pretense of equality. There were 72,715 white students in 1970 and 5,900 non-whites.

As one architect put it with an ironic

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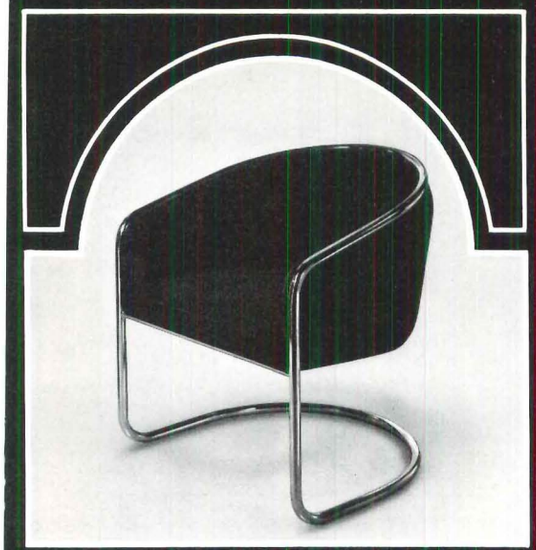

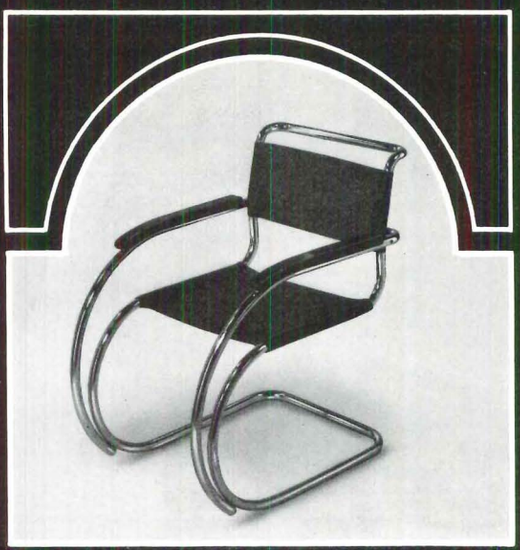

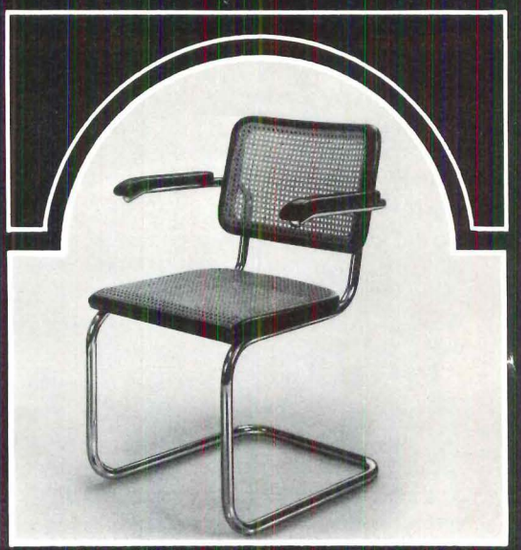

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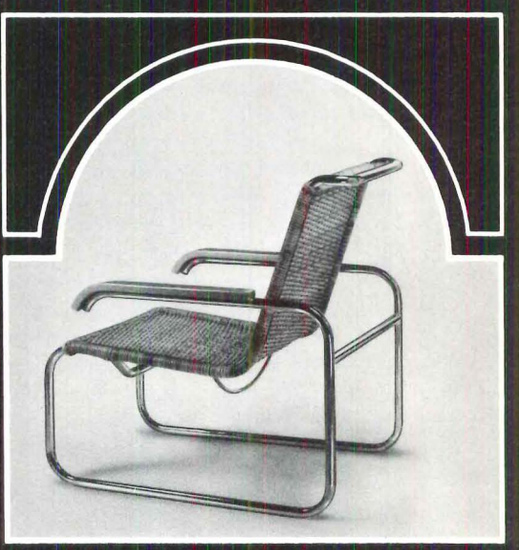

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smile, "There are eleven universities in South Africa for a white population roughly the size of Philadelphia." There are five universities for the non-white population which is more than four times as large. I visited the new School of Architecture at the University of Durban to give a slide-talk on American houses and saw several dormitories there by Hallen, Dibb and Partners that combined modest exteriors with airy, elegant interior courts.

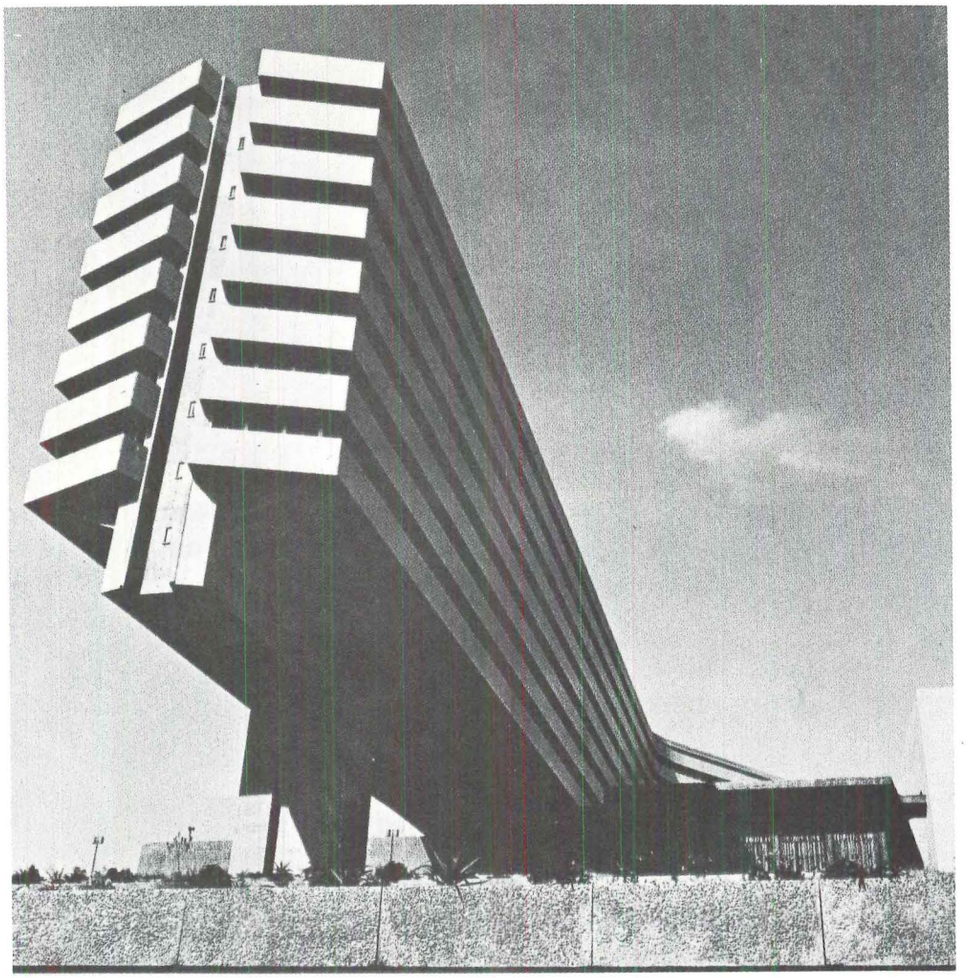
The University of Cape Town, which I also visited, is sited on the bottom slopes of Table Mountain and has a rather formal plan. One of the most intriguing projects I saw on my trip was Roelof Uytenbogaardt's scheme for integrating a large gymnasium building into the foreground of this layout without overwhelming it.

There are two new university complexes whose overbearing and imposed quality seems to express perfectly the fascist character of the South African government. The University of South Africa, which I have seen only in photographs, is an enormous building on a slope overlooking the capital city. One end swoops out in a gigantic seven-story cantilever that looks like a clenched fist ready to crush opposition.

The Rand Afrikaans University in Johannesburg by Wilhelm O. Meyer and Partners in association with J. van Wijk and Partners, is a far more subtle expression of power. My visit to Meyer's office and to the site was rich with a mixed sense of *déjà vu* and horror. As soon as Meyer's assistant began explaining the overall scheme for the huge new complex, I recognized it as my alma mater, MIT, all over again—even before he told me it is to be a technological/scientific university. And I could see repeated here all the things we now know to be wrong with such building complexes.

There is the high-density formal element that provides the visitor's first awesome impression. RAU does not face a river but has a ring of six-story teaching buildings tightly enclosing a central plaza. Behind this facade are lecture halls, and still farther are laboratory wings, all designed to expand on the same modular basis. The scheme is MIT in modern clothes—enormous, impersonal, and dedicated to efficient change and growth. But of course MIT has not grown efficiently nor will RAU, despite Meyer's intentions. Circulation is the major organizing concept of the design, emphasizing efficiency and smooth movement, but on such a huge scale that even when the complex is in use, I'm sure corridors will always seem empty.

The people in Meyer's office had little to say about the political background of RAU but it is obviously of high-priority since it is to be largely completed within five years of the original commission. I counted sixteen tower cranes on the site. It will eventually serve fifteen thousand students and cost sixty million dollars (not including cost overruns), or slightly more



The University of South Africa (above) and the Rand Afrikaans University (below).

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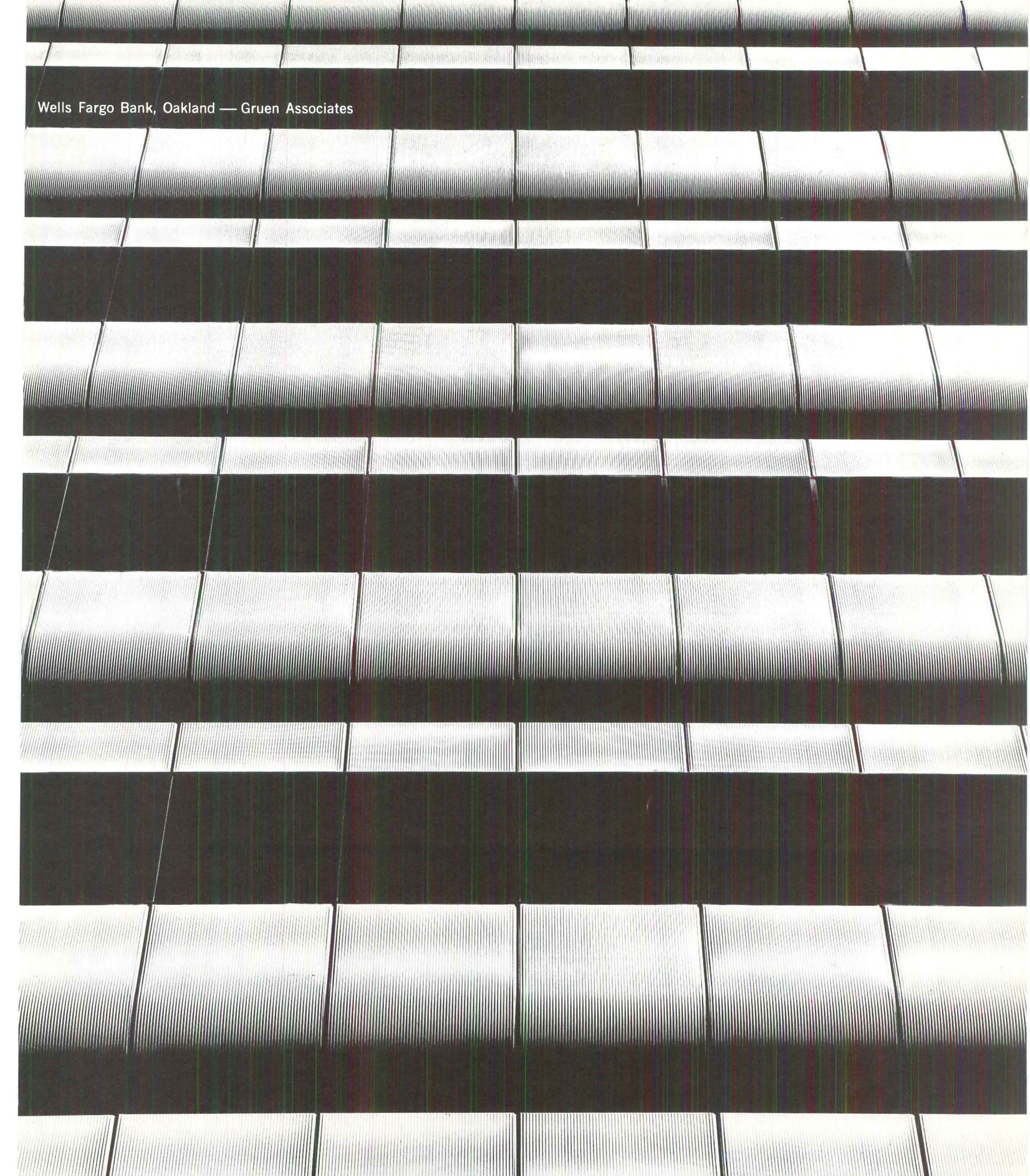

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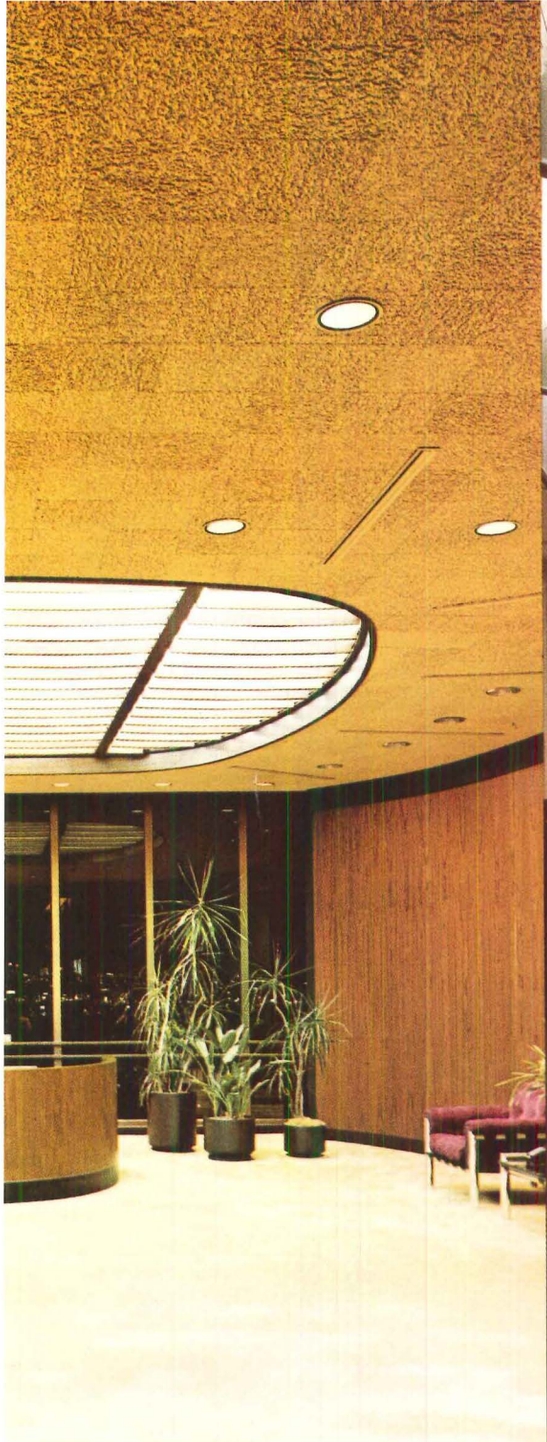

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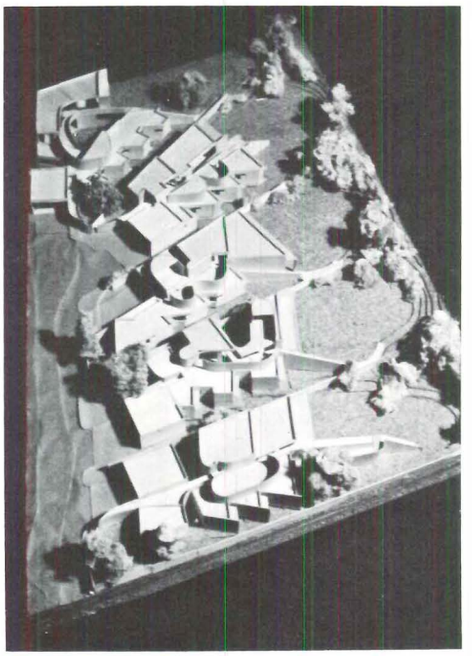
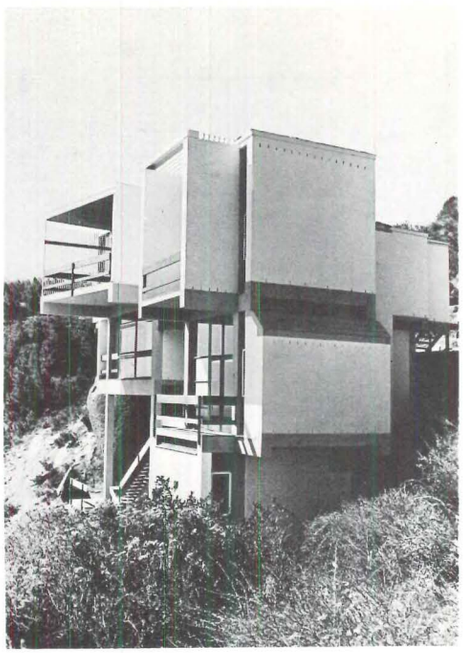
than half the entire amount the government has spent over the past forty years building Soweto, serving almost a million people. It is, as one member of the staff reluctantly volunteered, "part of a search by the Afrikaaners for some kind of identity." It is also part of a general effort by the Nationalist Party to keep the Afrikaans students loyal to the government, although several people told me there is hope that this generation may be disenchanted with their fathers' chauvinism. One other harbinger: almost all the construction workers were black and the few whites, I was told, were not South Africans but Portuguese imported for the job.

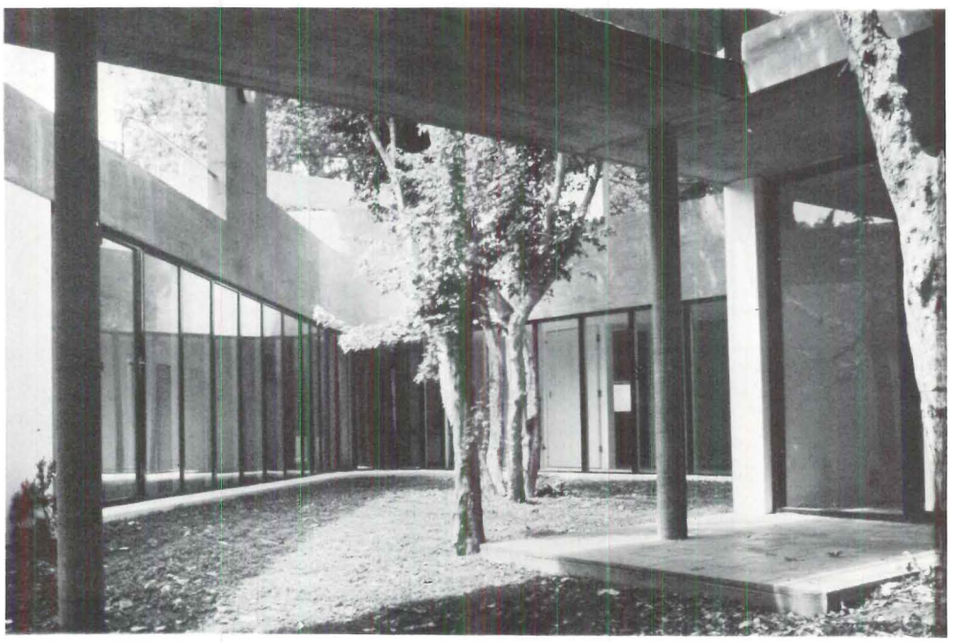
Willie Meyer himself is a modest and pleasant man who studied architecture at Penn under Louis Kahn. Certain similarities in the work can't be denied. I was told that Meyer's father is an important person in Afrikaaner circles and even if that is why such a young architect (late thirties) was given what seems to be the biggest single job in South Africa today, he seems fully equipped to carry it out. I do not intend to equate Meyer with Albert Speer; nonetheless I could not help but reflect, having recently read Speer's book, on the dilemma facing a young architect who is presented with the opportunity to build on such a monumental scale.





The De Souza Santos' houses (above, below).

House by Douglas Roberts (above).



Hindu Temple, Durban (below left) and mosque by Hans Hallen (right).

The professional network

Which brings me back to the people with whom I was having lunch in Cape Town. The South African architect can be categorized, in general terms, by his cultural background (Afrikaans or English) and by the city in which he works. Johannesburg seems to have the most pragmatic architects and the biggest firms. Durban, while growing, has a small group of architects and only one or two firms of note as designers. Cape Town, the most cosmopolitan city and the most English in its traditions, seems also to have the largest group of first-rate design architects.

The principal difference, however, is the cultural one and illustrates the political and philosophical gulf existing between the two major communities of "Europeans," as white people are officially called. The Afrikaaners, very puritanical and often with a rural background, dominate in governmental affairs and so, in the architectural profession, are the ones who do most of the public work. They practice mostly in Johannesburg and Pretoria. Among the South African intelligentsia, often but not exclusively with English names, are a few extremely capable architects who never do government work at all. Since that class resides principally in Cape Town, it is not surprising that some of them were present at that luncheon. I do not wish to imply that these people are actively attempting to undermine the policies of the government or that they even spoke to me of any discontent. The feelings expressed here are entirely my own. And after all, architects

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everywhere are usually apolitical and among the last to join in revolutionary rhetoric and activities.

Much of the basis for the kinship that I felt with these men, then, had less to do with similarities in political thought than with similarities in education. In South Africa, it is customary for the best architectural graduates to go abroad for further training. It used to be to England or Holland but in recent years many of them have come to the United States, usually to Yale or Penn. One of my companions, Douglas Roberts, had studied with Paul Rudolph and his work evokes that influence. Another mentioned earlier, Roelof Uytenbogaardt, had studied at Penn. As in the United States, these architects who complete graduate work often become teachers.

The moral dilemma

What characterizes these architects is that not having had opportunities for large-scale public work, because of political and cultural circumstances, they have chosen to spend much of their time doing housing, nursery schools and other necessary buildings for non-white communities. The work of these architects also seemed to show a concern for user needs that other new South African buildings—standard solutions to building problems—seemed to lack. Thus these architects have faced the moral dilemma of working under Apartheid and have found a viable mode of practice by helping people who will get little assistance from official sources. That in turn seems to refresh their approach in work for their private clients.

Hans Hallen, who with his partner, Danie Theron, has an active practice doing a variety of small commercial and residential buildings, has also worked with the Indian community in Durban. He has been instrumental in preparing preservation documents for more than a dozen tiny Hindu temples built between 1900 and 1940 scattered around the city. The most charming recent building I saw in Durban was Hallen's Reservoir Hills Mosque, completed in 1972

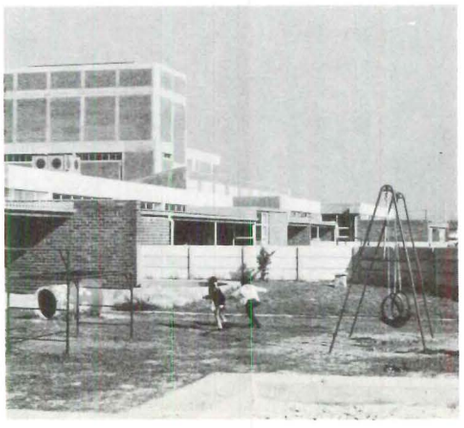
Adele and Tony De Souza Santos, who teach at Rice University in Houston and are, in my opinion, the best South African architects practicing today, have done a series of residential buildings in Cape Town that each use the CIAM idiom in a fresh and often humorous way. They recently did a set of five rental houses there that was the most exciting building complex I saw in South Africa. From a common automobile courtyard, the five houses flow like fingers on a hand, each a variation on the theme of a central passage which steps down the slope away from the blank entry wall. I found myself comparing them to the Brandenburg Concerti. In their development of the sensual forms found in the later work of Le Corbusier, they seemed infinitely more substantive than the dry restatements of his early work flooding New York these days.

But the De Souza Santos have also done a group of simple houses for migrant apple pickers in the northern Cape Province, and those who have seen both projects compare this one favorably to the one described above. These architects have also developed a series of designs for low-income housing in Louw's Bush, one of the most desolate sections in Elsies River, the Coloured shantytown. Their scheme, based on research with residents there, uses various groupings of houses rather than the endless rows of tiny detached boxes in Soweto (and for that matter, I saw them all around Brasilia as well).

Of those Cape Town architects whom I met who do no government work, the best known is Revel Fox who has completed some very large buildings nonetheless. Of these I visited the Montebello apartments done in collaboration with Lindsay Falck, and the BP Centre, mentioned earlier. The Montebello project is a large group of row-houses and medium-rise apartment blocks sited to take maximum advantage of nearby Table Mountain to the north, which in South Africa is also the direction from which sunlight comes.

The 30-story BP Centre is the tallest building in Cape Town at present. Since there are two or three nearby towers almost as tall, however, its most obvious impact comes from its diagonal siting related to the street grid and the other buildings. Continuous spandrels and sunshades accent the rounded corners of the square tower which has remarkable clarity in the urban landscape. Although the designers were obviously familiar with American tall building technology, the detailing has a delightful "home-grown" quality. That is, they examined each joint between materials and each connection between mechanical equipment and the building itself and found the precise solution for that circumstance. The interior design has the same freshness. A demountable system of steel supports and solid desk tops was developed by the architects.

It is this kind of analytic thought that Fox and his partners have applied to two buildings for the Coloured community. The first is the Eoan Group Cultural Centre, built in 1968, an auditorium and workshops for theater and dance performance. Adjacent to it is the Early Learning Centre, 1971, a nursery school planned for research into the problems of educating under-privileged children. The research program was particularly careful to relate the project to the larger needs of the community and to draw upon community experience for its design criteria. A second nursery school/infant research center by Revel Fox is underway for Soweto, both sponsored by the van Leer Foundation of Holland.



It is obvious that architects do not influence political developments much more than average citizens do, even though by building things, they have a special role. Their work often unconsciously expresses the current economic and political forces of the society in which it is built and therefore the South African architecture is primarily a record of the past, not a prophecy. However, the work of the architects just described may hint of what is to come.

Just as Apartheid developed as a system for economic exploitation, it will be through the inexorable adjustment of economic injustice that Apartheid will disappear. The non-white peoples will never be allowed to revolt in a political sense but the very selfishness that caused the present situation will give them the opportunity to make the economic progress upon which effective political power is based. Liberal whites in South Africa constantly speak of the changes taking place and urge the skeptical visitor to wait before drawing his conclusions. The economic boycotts by African nations and others are definitely having an effect. But the inequities are so huge (eight percent of the land for seventy percent of the people, for instance) that one wonders how South Africa will survive the increasing pace of change and the concomitantly rising expectations of the non-whites.

The man who is considered the dean of South African city planners, Professor Wilfrid Mallows, discussed this problem with me at length in Johannesburg, which has the largest concentration of blacks of any South African city. He sees South Africa as in the position of Great Britain a century ago, with trade unionism among the blacks in the same nascent state as in England then. As long as a nation lives by mining or farming as South Africa did until World War II, says Mallows, a policy of racial segregation works almost naturally. But as industrial growth comes, so does a pressure for economic equality. When a nation begins to make its own steel, a highly-sophisticated technological step, it begins to require a highly-skilled working class, he explains. Do the Afrikaaners, basically farmers, want to go into the hellishly hot mills and run the machinery that produces the steel? No, they'll turn that job over to the blacks with pleasure. That, to Mallows, is the beginning of the end of Apartheid.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Letters

Old Westbury

I have not as yet found any body of criticism which so decisively refutes non-classical architecture as to justify Mr. Abercrombie's curt dismissal of Christ-Janer, Johansen and Kouzmanoff's Academic Village A with the pedestrian word "picturesque." In fact PLUS' generous coverage (December issue) in tandem with a contradictory text is really quite perplexing.

The admirably involved description of the programmatic and bureaucratic evolution of Old Westbury; the on-site analysis, devoid of user complaints; the comprehensive photographs and drawings seem strangely sandwiched between subjectivisms. . . . This affliction, unfortunately, leads to the lengthy digression on the theory of the architect who had probably the smallest influence on this project.

As one who saw Academic Village A through from conception to completion, I think there are more important issues to be discussed than the visual imagery of hill-towns and related romanticisms. One might begin with the project's rather unique design process.

However, if we must leave Old Westbury to your December attention there is comfort in its very reality, an existence which is already posing a challenge to formal architecture and planning.

ROGER BARTELS
Architect, New York, New York

The contents of this letter have been on my mind for quite some time now—piqued earlier this year by a *New York Times* Sunday magazine article about "Arrogansett," more recently by the same author writing in your magazine about the McGraw Hill buildings, and . . . by Stanley Abercrombie's article about the new campus at Old Westbury by Messrs. Christ-Janer, Johansen and Kouzmanoff, a critique in Architecture PLUS taking up no less than twelve pages!

Mr. Abercrombie, not wasting any time, gets to the point in his very first paragraph, suggesting that having latched onto a faulty idea in the first place—the hillside, medieval town plan concept—Messrs. Christ-Janer, Johansen and Kouzmanoff should have their cribbook references confiscated at once. So that you may be sure to understand his position, Mr. Abercrombie in his second paragraph manages to compare the project with one by E. L. Barnes, the latter being "characterized by symmetry, dignity and clarity—exactly the opposite of Old Westbury." Now well in the mood, the writer goes on to describe the project as bleak and amorphous, small and mean, as having dime a dozen spaces, too much concrete, etc., etc. Why, one wonders, is so much space devoted to a project considered as such? I presume Mr. Abercrombie wants to comment on campus planning. And now for my point in comment.

There are several ways in which to present various points of views on any given architectural subject. No matter how the subject matter is presented, *especially* by the professional architectural press, I firmly believe that the net result of the dissertation should be an affirmation of the work of serious dedicated professionals; that the architectural press has the responsibility of reinforcing and encouraging the work of these professionals. It seems to me that the most destructive method of architectural reporting is to isolate the work of our most prominent colleagues and shine a spotlight of ridicule on it. Since, I presume, Mr. Abercrombie is not a practicing architect, he cannot realize the extent of damage that such articles reap. Not only weighted with the ballast of conservative administration—probably turning more conservative after reading Abercrombie—architects can now look forward to more ballast from their own press!

Please bear in mind that it is not Mr. Abercrombie's point of view I am attacking, it is his methods. Perhaps in his next article he will find a subject that will align him to our side of the team.

In closing, I might add that despite the editorial, several fine photos indicated that not only is Mr. Abercrombie a reporter of questionable techniques, but one also of limited vision.

ROBERT LOREN ROTNER
Architect, New York, New York

We devoted twelve pages of our December issue to the Old Westbury campus because we considered it unusually worthy of attention (not the same thing, exactly, as considering it unusually worthy of praise).

We do not think it is "supportive" of our profession to print only "affirmations" of architects' work. We intend to continue to examine buildings very critically indeed, and we believe that such examination is, in the long run, constructive rather than destructive. For those who wish to read only "affirmations," there are a number of other magazines available.

Incidentally, both Mr. Abercrombie and Mr. Morgan (the other writer whose articles were mentioned by Mr. Rotner) are registered, practicing architects, as am I.—ED.

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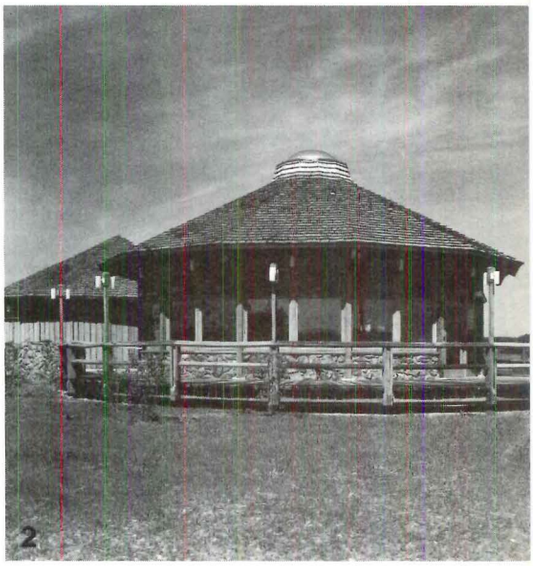

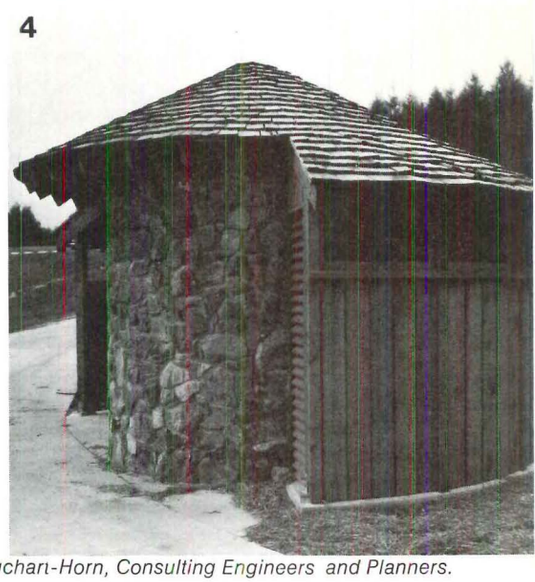

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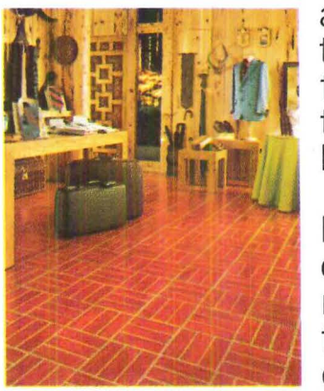

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news+

Dear Reader,

Our apologies for the delay in getting this issue to you. We were holding it in order to include the following announcement, made in New York on March 25th:

"William B. Littleford, President of Billboard Publications, Inc., and Richard A. Hashagen, President of Informat Publishing Corporation, jointly announced today that Informat, publishers of Architecture PLUS, had agreed in principle to purchase certain assets and assume the subscription obligations of the Architectural Forum."

Those of us—present company included—who spent some of the best years of our lives on the old Architectural Forum, are not especially happy to see it suspend publication. Because of the close ties of some of the present staff of PLUS with the old Forum, we obviously and gladly used the Forum's great editorial traditions as a point of departure when we started Architecture PLUS. And so we expect to continue many of the old Forum's traditions in our present endeavor.

Those of you who were paying subscribers to the Architectural Forum will automatically receive Architecture PLUS until your present subscription runs out.

Those of you who received the Architectural Forum free of charge, are now invited to subscribe to Architecture PLUS at the charter rate (for architects only) of $10 a year. You will find an envelope facing page 16 of this issue. We hope you will enter your subscription without delay.

And to those of you who now encounter PLUS for the first time with this issue: welcome, and I hope you will like what you will see.

Yours,

The architects of New Orleans, Louisiana, have suggested that contracts to design public buildings should henceforth be awarded by lottery. One reason for this rash proposal is that the Governor of the State of Louisiana admitted on TV that he believed in awarding architectural commissions to his friends—some of whom, it seems, had fortified their friendship with monetary tokens of their esteem, prior to election day.

Some of my best friends are architects in New Orleans; but I'm not sure they're on the right track. Anybody crazy enough to want to be an architect in the first place (present company included)—and especially in Louisiana—is clearly looking for trouble; and, like the late W. C. Fields, I see no reason for giving a sucker an even break.

It is certainly preferable for Governor Edwin Edwards of Louisiana to award architectural commissions to his friends rather than to his enemies; and while his friends among architects may (or may not) be dogs, they will unquestionably and unmistakably leave the imprint of Governor Edwards' incumbency upon the more-or-less sovereign State of Louisiana. This is sure to be much more entertaining than having all state buildings designed by some average architect—anonymous, honest, and dull. (Can you imagine what would have happened if Ludwig of Bavaria had been forced to select *his* architects by lottery?)

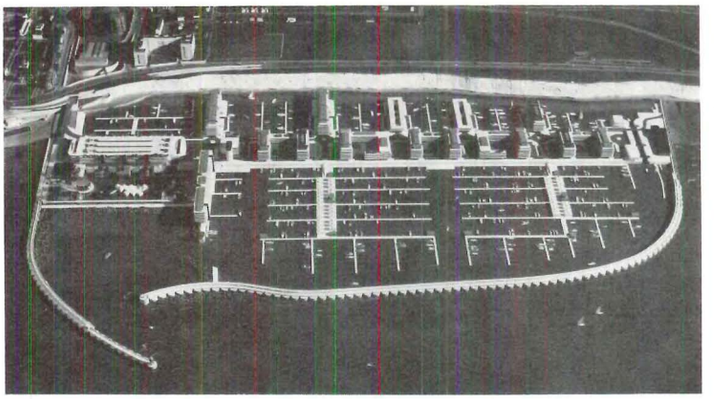
What the architects of New Orleans ought to have suggested, of course, is that all *governors* should henceforth be chosen by lottery! After which the governor, thus selected, and not at all indebted to any affluent constituent, would be entirely free (like Ludwig) to go after architects of his persuasion. And, who knows—since there are currently some 1,000 registered architects in Louisiana—the governor thus selected might in fact turn out to be an architect himself. In which case he could spend his term in office designing his own buildings, and leave everything else to the experts.—PETER BLAKE

Brighton Marina

About 12 years ago a motor dealer, who had lived for years in the seaside town of Brighton on the south coast of England, decided there should be a marina there for his boat. He formed the Brighton Marina Company and bought land from the town of Brighton situated off the coast behind the Black Rock cliffs with the idea of making a yachtsmen's center for 2,000 boats. This latest scheme for developing Brighton's shore (there have been many) was announced last month by Louis De Soussons Partnership, the architects.

In order to support the incredible cost of harbor construction, other facilities had to be intro-

Model of Brighton Marina on England's south coast.



Aerial of the model. Floating villages connected by moorings.

duced to help this expense as well as add to the amenities of the marina. It is hoped that the year-round apartments and entertainment will make the marina and Brighton a less seasonal place.

The main spine, a man-made strip of land which divides the tidal from the non-tidal section of the harbor, consists of blocks of apartments, parking and a recreational area with shopping, hotel, restaurant, theater and sports facilities at the west end for the general public. Perpendicular to this spine are two floating villages to which the moorings connect. They are protected from 20 ft. tides and bad storms by the breakwater which is made up of a series of circular reinforced concrete caissons each weighing 600 tons which are transported to and placed in the sea by a gantry crane especially designed for this project. These caissons are designed in a series of slopes and set back vertical faces causing the wave forces to dissipate and reduce so that the housing and mooring area will feel no strong wave.

The breakwater and superstructure are under construction. It is hoped by 1977 that the marina will be complete and the floating streets in place with some of the housing and car parking for the boat owners.

Brighton Marina is at this time one of the largest projects in England (estimated at £65 million a year ago).—J. D.

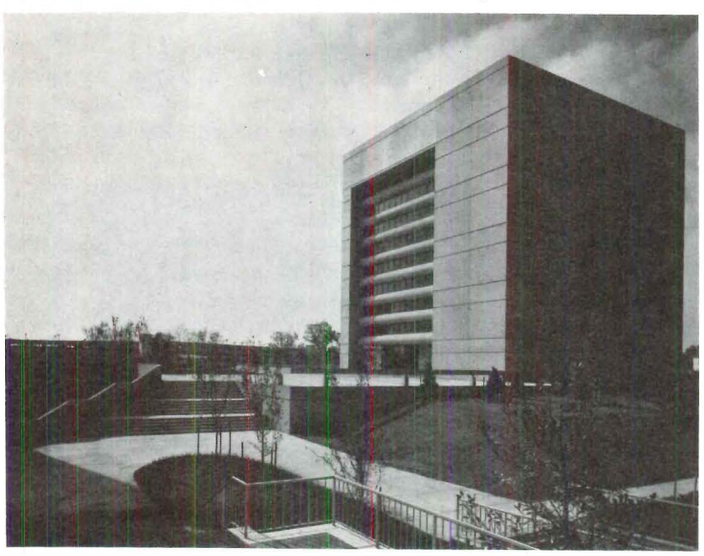
University of Kentucky

The new Agricultural Sciences Building (South) at the University of Kentucky in Lexington houses research activities, a fully equipped dairy products plant, a meat processing plant, offices and classrooms. It is the work of the Design Environment Group Architects of Louisville, Kentucky, and it won the 1973 Kentucky Society of Architects Honor Award for Design Excellence.

The structure is cast-in-place concrete with sandblasted surfaces. Office and core floors are flat slabs; other spans are pan-joist. The rounded spandrel beams span 59 feet between supports.

The classrooms and teaching laboratories are grouped at ground level around the plaza, which is set at the second floor elevation of the adjacent research building; the two buildings are connected by a pedestrian bridge. The total floor area of the new South building is 110,855 square feet.

The laboratories are in the no-window side of the building



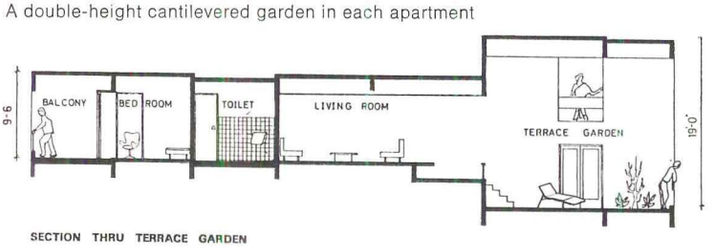
Bombay

The multi-level flats in this 32-story luxury apartment building situated on top of Cumballa Hill in Bombay interlock so as to allow a double-height cantilevered terrace garden for each apartment. This not only ensures cross-ventilation (crucial in the hot humid climate of that city) but also allows each unit to "connect" the two principal views available in Bombay: the westward view out across the Arabian Sea and the eastward view across the harbor to the mainland.

The building has a central core which was slipformed with the rest of the structure built around this core. The outside finish is of exposed concrete so that the elevation of the building is a clear diagrammatic representation of both its structure and its section.

The architect is Charles Correa, who is also the Field Editor for PLUS in India; the associate architect is Pravina Mehta.

A double-height cantilevered garden in each apartment



SECTION THRU TERRACE GARDEN

Aspen Design Conference

"Between Self and System" is the theme of the 24th International Design Conference in Aspen (IDCA) which will be held in Aspen, Colorado June 16—21, 1974.

South African architect/planner / teacher Julian Beinart, currently Visiting Professor of Architecture at the Massachusetts Institute of Technology (MIT), is this year's Program Chairman. The program committee includes Florian von Buttlar, Roger Simmonds, and Suzanne Weinberg.

The conference this year will attempt to "explore and formulate concepts that help explain the interaction between the self (the designer) and the system (the context in which the designer works). . . . The relationship is represented as a complex dialectical process, wherein self and system each move to accommodate to and make demands on the other." Got that?

For details, write IDCA, P. O. Box 664, Aspen, Colorado 81611.

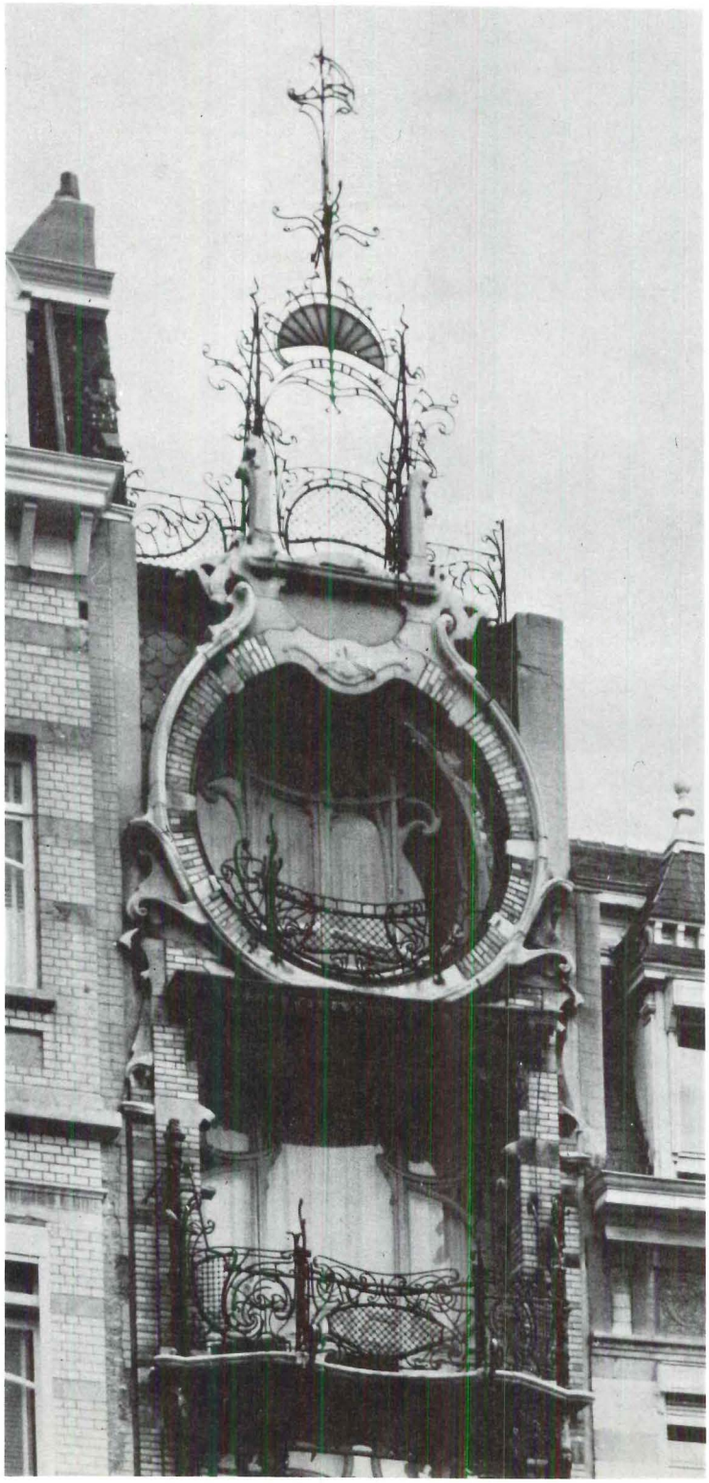
Julian Beinart

Brussels 1900

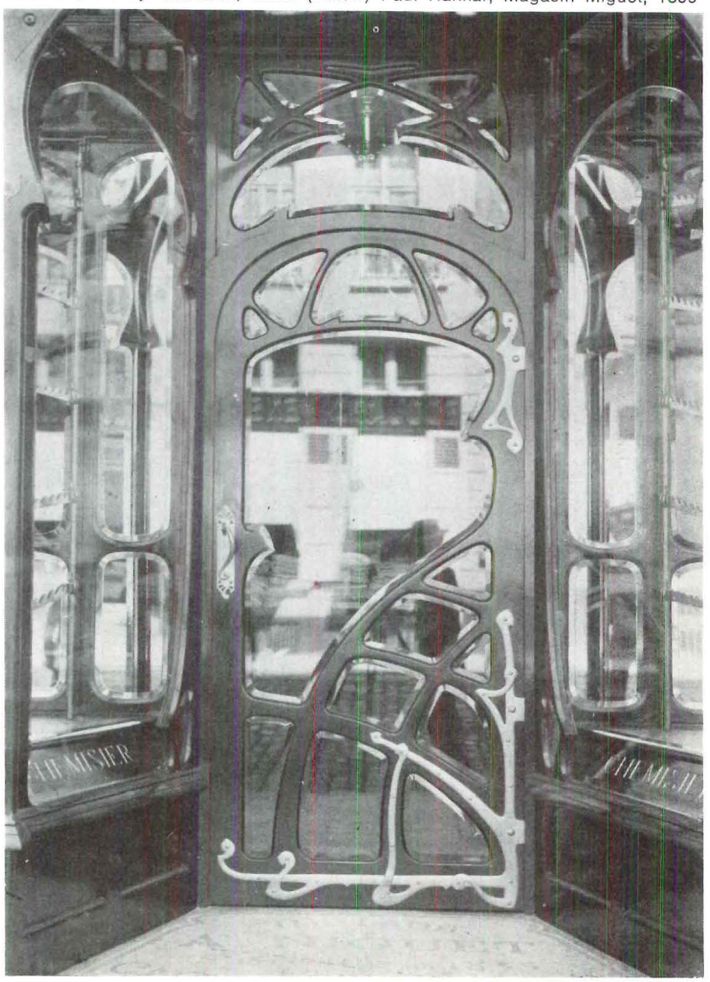
An exhibition of Art Nouveau "Brussels 1900" was opened at the Architectural Association, London, by the Belgian Ambassador, M. Rothschild, who, though very pleased that a very conformist Belgium in a very conformist age had given the world something new, added with disarming candor: "Of course I do not like it. I think it is peculiarly horrid." He suggested that the style be known as "Art Nouveau Riche" since "it was indulged in by self-made capitalists who suddenly had a lot of money and wanted something different."

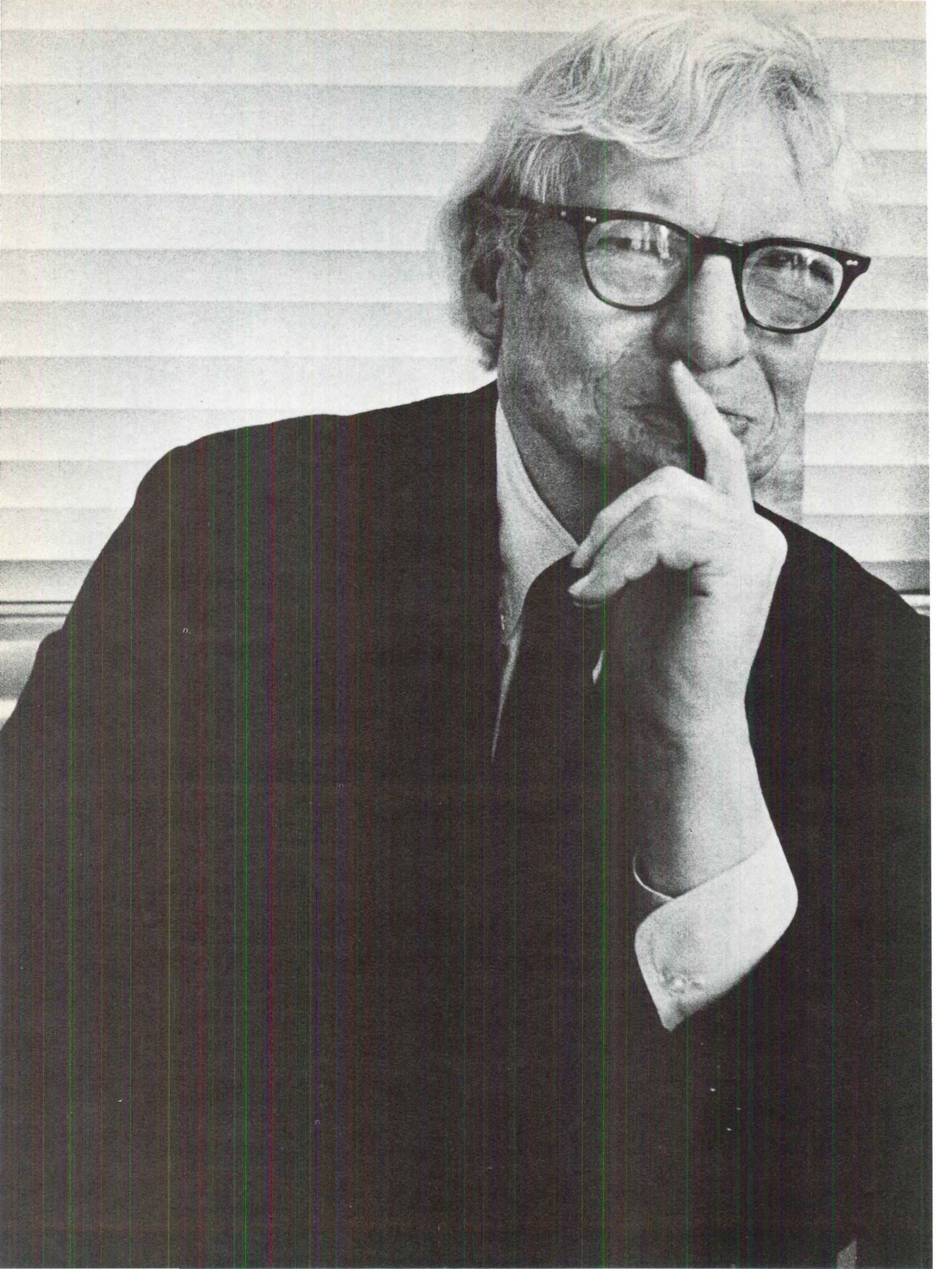
The exhibition of 168 photographs and original rendered drawings by the architects was organized as an archive of the *Belle Epoque* and as a stimulus to public opinion to protect what has not already been destroyed by Brussels' own singularly ruthless brand of modern development. It therefore contains the work of minor architects as well as the more justly famous—and even a few examples where the designers are not known.

"Brussels 1900" was organized by the Belgian Ministries of Cultural Affairs and assisted by the Archive of Modern Architecture, Brussels and the School of Architecture and Fine Arts, La Cambre, Brussels and was exhibited in January at the AA.—J. D.



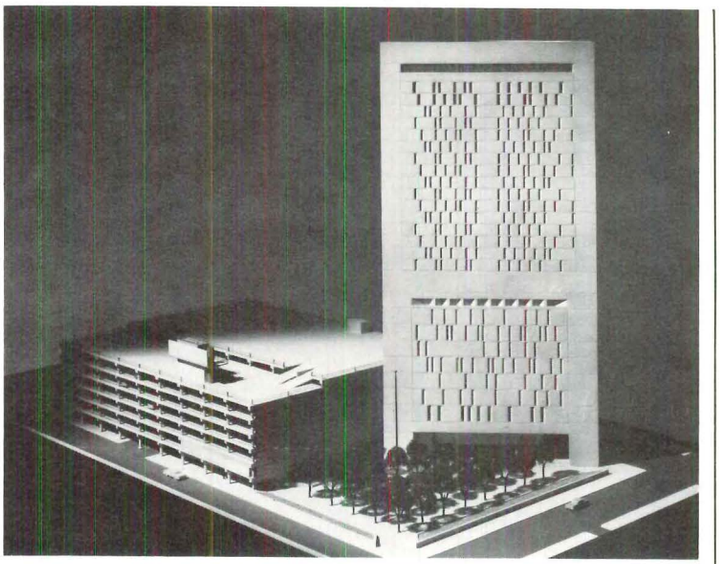
Maison du Peuple (above), destroyed 1965, designed in 1896 by Baron Victor Horta, was the most important Art Nouveau building in Brussels. (Left) Gustave Stravven, St. Cyr Mansion, 1900. (Below) Paul Hankar, Magasin Miguet, 1899





Louis I. Kahn died of a heart attack on March 17th, in New York. He was 73 years old, and during the past two dozen years of his life he—more than anyone else—changed the direction of modern architecture. He had grown up in the modern tradition of structural expressionism—of "skin and bones architecture," as Mies van der Rohe called it—and he never turned his back on the structural ethic. But he understood the growing importance of services in the shaping of buildings, and he gave those services their deserved place in the scheme of things. Mies had once said that "you can't make architecture out of plumbing," but Kahn demonstrated, more beautifully than it had ever been done before, that you could. To Kahn, buildings were living organisms, with desires and demands of their own. He spoke to them, and they to him. Through his buildings, Kahn's voice will be with us for a long time.—P.B.

HANS NAMUTH

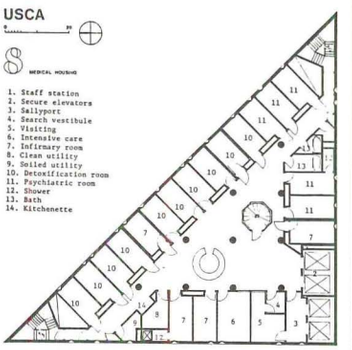


Tall prison

The U. S. Courthouse Annex now under construction in Chicago is a 27-story tower which will house correctional facilities for prisoners and detainees who are there on a temporary basis, usually waiting trial at the courthouse, and some administration offices for the courts. The tower, which resembles a three-sided IBM card, is set back from Van Buren and Clark Streets with one-half acre of densely planted trees.

A triangle concept was arrived at from the program which requires a large perimeter for numerous single rooms and a relatively small amount of interior space. On a typical floor, at the perimeter are individual prisoners' rooms, twelve of which are grouped around a common social area similar in function to the living room of the house. Four of *these* areas are grouped around a two-story common room used for dining and recreation. This split-level arrangement between the common room and the four smaller social areas allows the entire area to be observed by one single guard.

Medical and administrative programs are housed in the lower floors of the tower, the prisoners in the upper floors. The adjacent



Plan of typical floor

eight-story building is a garage, which serves as a motor pool for all the nearby Federal buildings. A 62-ft. span provides a column-free parking space.

Both buildings are of exposed reinforced concrete. The five-inch-wide floor-to-ceiling vertical windows of bronze-tinted glass, the joints splayed to improve sightlines, are the primary facade motif in the tower. The narrowness of the window eliminates the need for bars.

The building is being constructed by General Services Administration for the U.S. Bureau of Prisons. Completion is scheduled for mid-1975. Harry Weese & Associates of Chicago are the architects of the project.

NEOCON 6

The National Exposition of Contract Interior Furnishings is expanding this year to include products and visitors from around the world. Already the largest show of its kind in the U.S., NEOCON will be held at the Merchandise Mart in Chicago, June 19-21. NEOCON's theme this year is "Facing Crisis With Innovation." AIA President Archibald Rogers will deliver one of the keynote speeches on "The State of The Art."

Women's conferences

Two conferences on women in the design professions have generated broad interest among professional women and students.

Graduate students at the School of Architecture, Washington University, organized a symposium on "Women in Architecture," and held it March 29-31 in St. Louis, Mo. At latest word, the program was to be divided into three categories. The first dealt with the symbolic or theoretical implications of women as architects. (Do women experience their environment differently and therefore design differently from men?) The second topic was the professional consideration of women as architects. (What is the prevailing attitude toward women architects? Does it differ between women-women situations or women-men situations?) The third topic concerned the psychological aspects of women in an overwhelmingly male profession. (What are the role conflicts for women? How does the "fear of success" operate?)

Elise Friedman, Co-Chairperson of the Women's Symposium at Washington University, writes: "We did not care to define any particular stand on the issue, because as students, we are still in the process of developing our identities both as architects and women. As a group, we are not militant feminists. This has not been an event to promote 'women's liberation' as much as an event to promote some type of *dialogue* among women who happen to be involved in architecture." She reports a keen response from within the school, and from outside.

As this issue went to press, plans were also progressing rapidly for a West Coast Women's Design Conference, to be held several weeks later, April 18-21, at the University of Oregon in Eugene. Tentative workshop topics include: status of women in the profession; the "queen bee" syndrome; subtle sexism; "the lost heritage" (women architects of the past); women in construction; dual careers (couples in design); the changing profession and the role of women; alternative education; alternative, nonoppressive offices; early education and counselling; and "from cave to skyscraper" (the highrise as phallic symbol). This word comes from organizers in the School of Architecture: "We see the conference as one means of establishing the communication necessary for women designers to generate new energy and to be mutually supportive of one another in our professions."

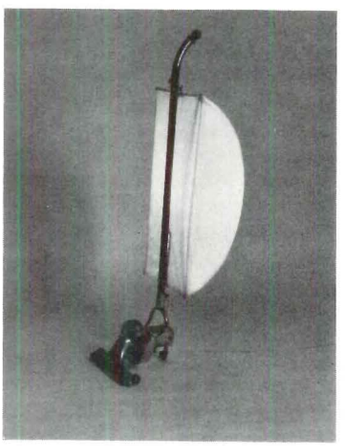
Further news on women: the Archive to gather information on the varied work of women in the architectural profession (December 1973, p. 69), is gathering steam. Those who have not yet submitted work or biographical data may still do so. Contact the Architectural League, 41 E. 65 St., New York, N.Y. 10021. Our apologies to Naomi Leff, whose name was omitted from the list of committee members.

Tricycles and tee shirts

A recent exhibit at the Everson Museum in Syracuse, N.Y., might have turned you on. Twenty-two common items were converted into lamps by E. Kevin Schopfer, a fifth-year architecture student. He sees everything as a lamp, and quotes the late Marcel Duchamp who said "anything is art." Kevin's pieces are made of garbage cans, tee shirts, vacuum cleaners, tricycles—anything. "All you need," he says, "is a few bulbs, sockets, wire and an eye for adaptation."

Tri-garb lamp

Eureka lamp



The sofa that just won't stop

This accordion-like piece of furniture, shown marching out of the truck and into the warehouse, is a sofa from Stendig. It can be zippered into other less lengthy shapes in a matter of minutes, and can be had with arms for those conservatives who insist on it ending somewhere. "Nonstop" flexible seating was designed by Eleanore Peduzzi-Riva, Heinz Ulrich, Klaus Vogt and Veli Berger.

The Sao Paulo Fire

Early in February, a fire in the 25-story Joelma Building in Sao Paulo, completed just a year earlier, killed 189 persons. Perhaps more have died by now since many survivors were critically burned. I arrived here the day after the fire and, talking with other architects, was able to assess the catastrophe.

Most news accounts of the fire, in which two American banking executives died, dwelt on problems that could be traced to general urban inadequacies. As recently as five years ago, fires were a rare occurrence in Sao Paulo, which has never had wooden buildings, so that today there are only thirteen fire stations in the whole city. Difficulties stem largely from the lag in provision of municipal services that any "boomtown" might experience: an understaffed and underequipped fire department; traffic jams that hindered fire truck and ambulance movement; hospitals unprepared to handle large emergencies, especially fire victims; and most fundamental, an archaic building code (1934) which has encouraged the construction of what seems hundreds of cheap office towers here.

The appallingly inadequate building code, which was slowly being revised after another disastrous Sao Paulo skyscraper fire in February, 1972, is the heart of the problem. Although plans for large buildings must be filed with the city, this is basically only for tax purposes. Fire safety provisions, including firestairs, can be minimal and no one ever checks to see if they have been built—the case with the Joelma Building. One of the few tall buildings, to my knowledge, with firestairs is the Copan Building by Oscar Niemeyer. And although structural design standards in Sao Paulo are adequate and the general construction quality is increasing all the time, the Joelma Building has spandrels (providing exterior fire separation) approximately eighteen inches wide. Thus flames easily leapt upward floor by floor.

The announced cause of the fire, overloaded wiring at an air-conditioner located on the twelfth floor, is a problem that could potentially jeopardize users of almost every tall building in the city. For many years Sao Paulo has had an inadequate level of electrical power during its rapid growth. Recent increases in available power have overloaded many installations for which under-sized, lightly-insulated wiring was used. Neither armored cable nor protective conduit is used on branch circuits.

The position of Sao Paulo architects in the commercial building process, not unlike that in cities in developing countries elsewhere, is so weak that they can do little to enforce existing fire safety standards, let alone to cause stiffer ones to be promulgated. It is usually engineers who design such buildings there and, whichever profession, the designers are usually employees of developers who, needless to say, have been against the updating of the codes building. It is expected that when requirements are brought up to modern standards, the increased building costs will substantially retard the pace of construction here. An estimated average of ten permits for large buildings have been issued every day in Sao Paulo for the past fifteen years!

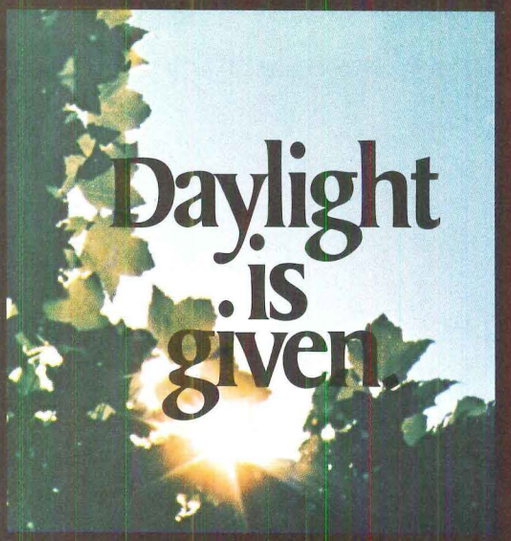
Sprinkler systems are unknown in Brazil. While discussing the fire with local architects afterward, I was told that firehoses are placed in tall buildings but I cannot recall seeing any myself. There is no evidence of water storage tanks on the rooftops of the city's towers. Where office interiors in Brazil used to be relatively free of flammable materials, today they are as full of paper and plastic used in draperies, carpeting, furnishings and partitions as any American office building. Furthermore, plastic flame-proofing materials are thought to have produced gases which suffocated many of those who died in the fire, a problem in U.S. as well.

Maybe now some real progress toward higher standards will be made, especially regarding fire safety standards in commercial construction. Three days after the Joelma fire, two more fires occurred in which lives were lost. There's not much regard for human life in Brazil, it seems to me. In Sao Paulo, business obviously comes first—Donal Butterfield

Donal Butterfield is a New York City architect familiar with Brazil whose "Letter from Sao Paulo" will appear in a future issue.

The fire-scarred Joelma Building (below) is only one of many new Sao Paulo office towers (arrow, top) with inadequate fire escapes. A notable exception is Niemeyer's sinuous Copan Building (above), easy to spot among its neighbors.

continued on page 108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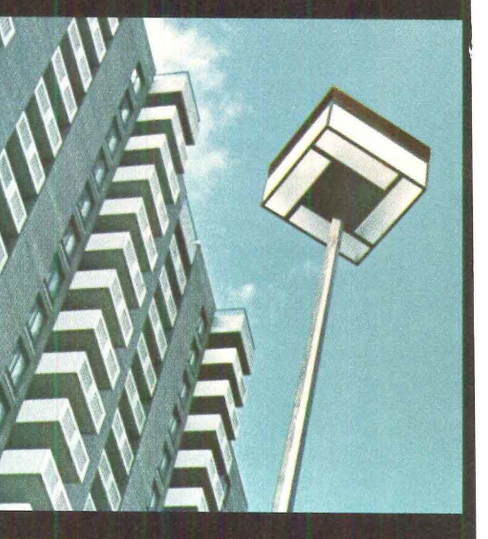

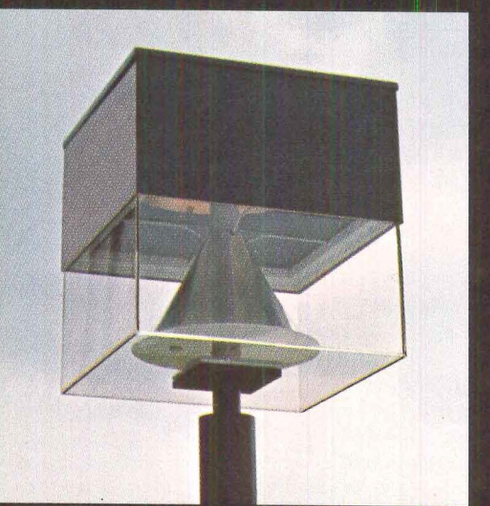

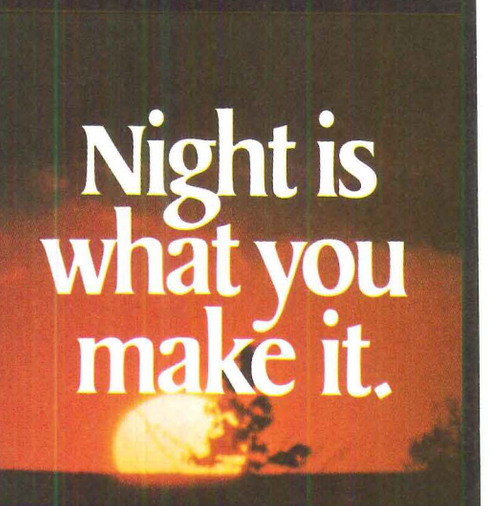
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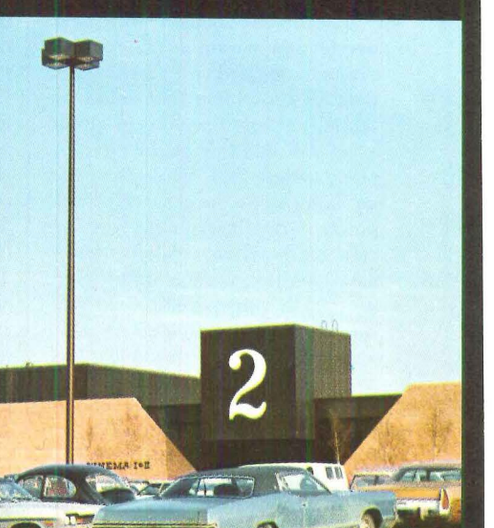
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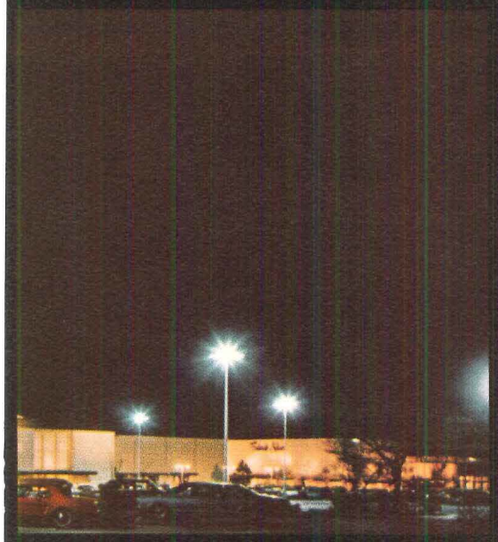

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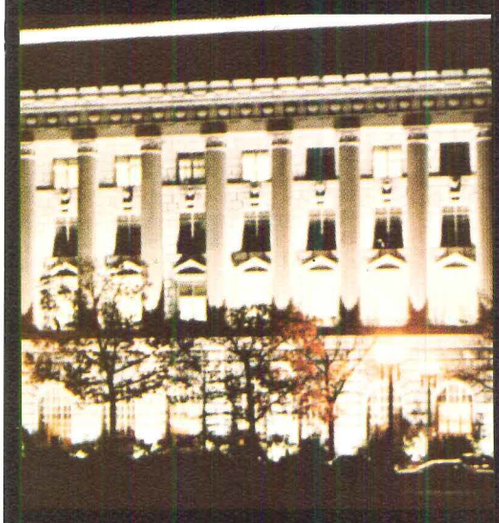

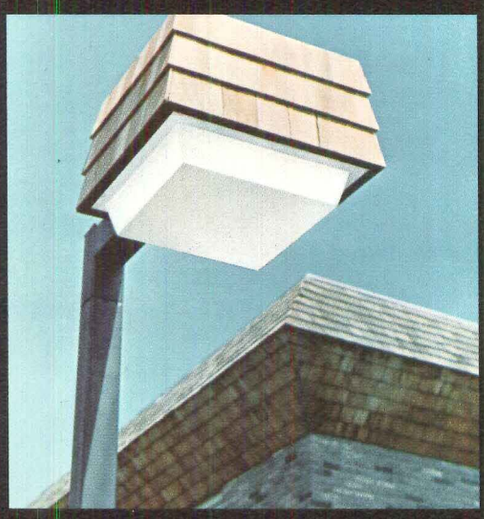

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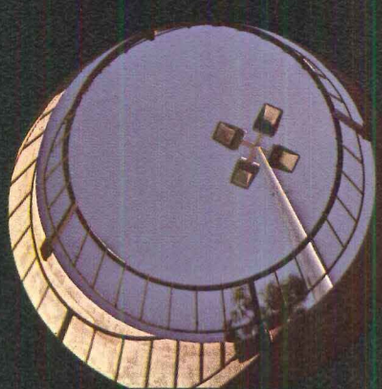

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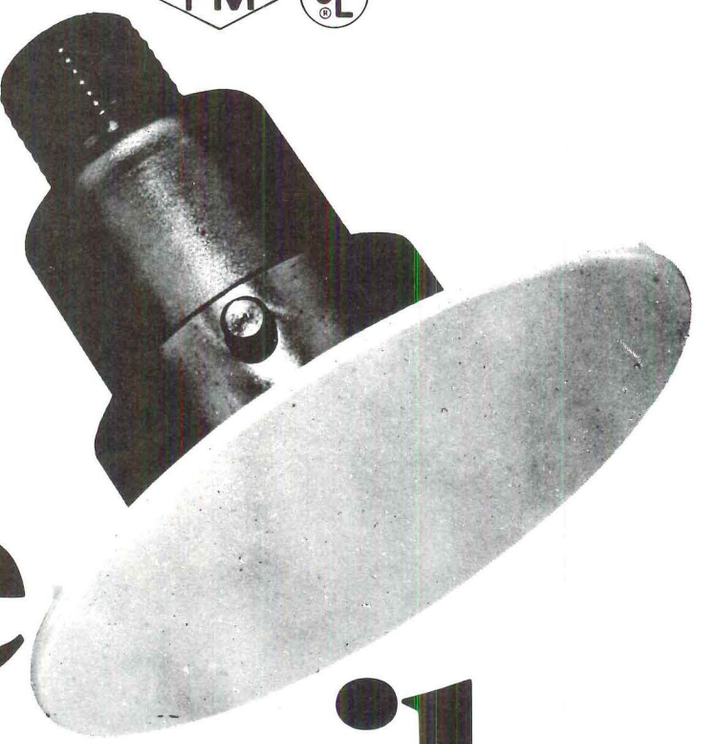

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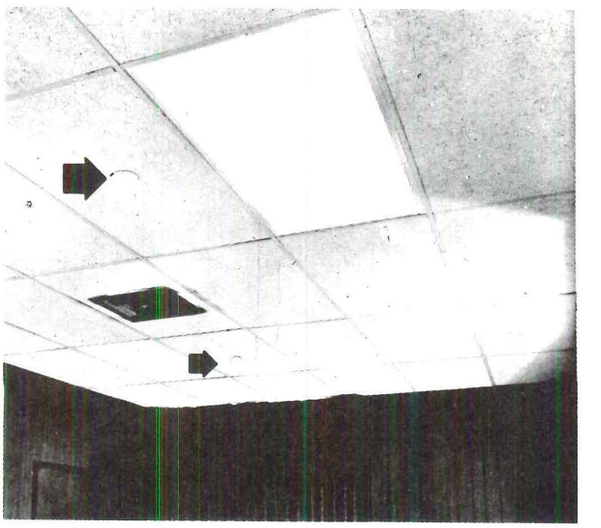

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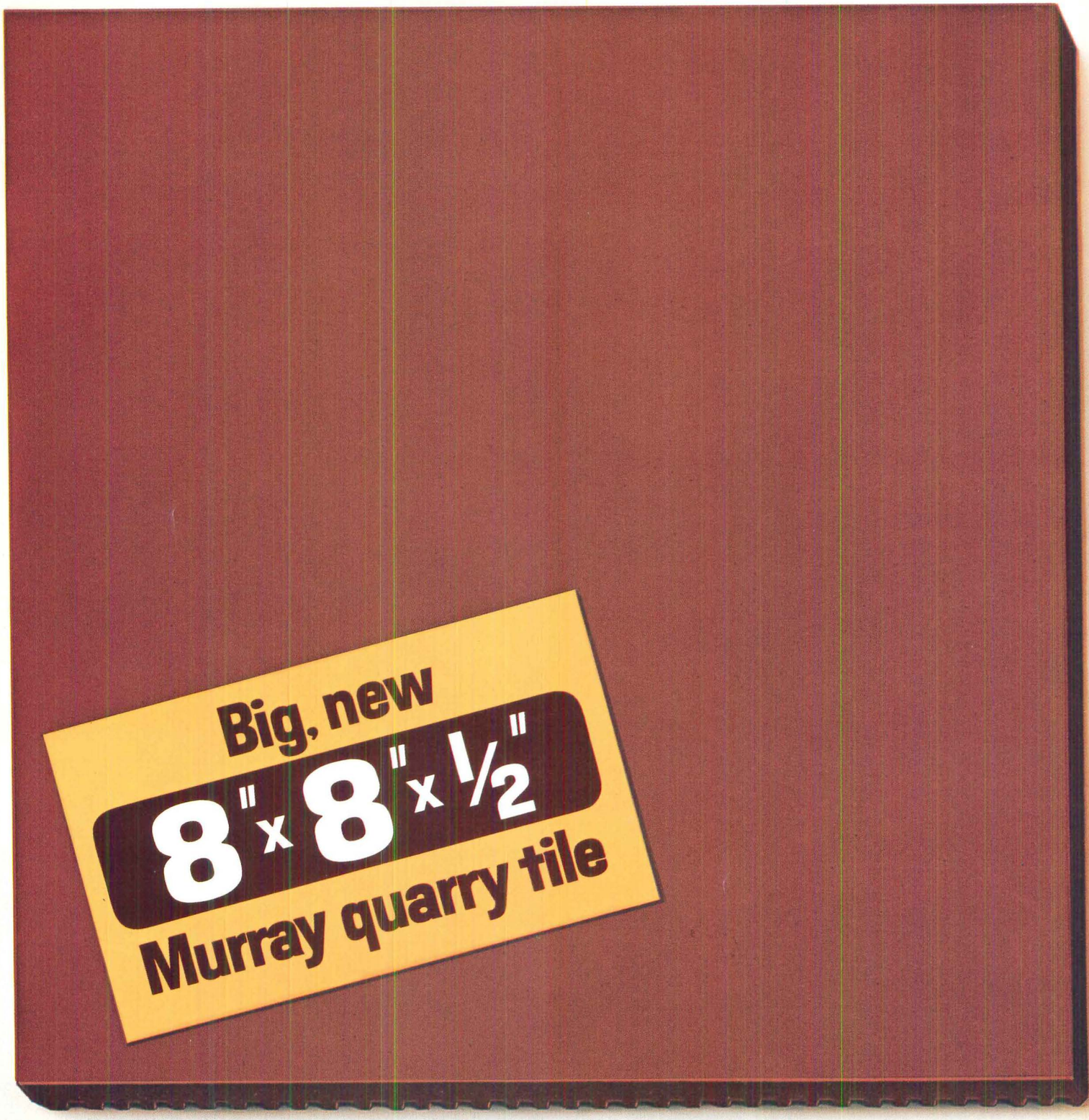

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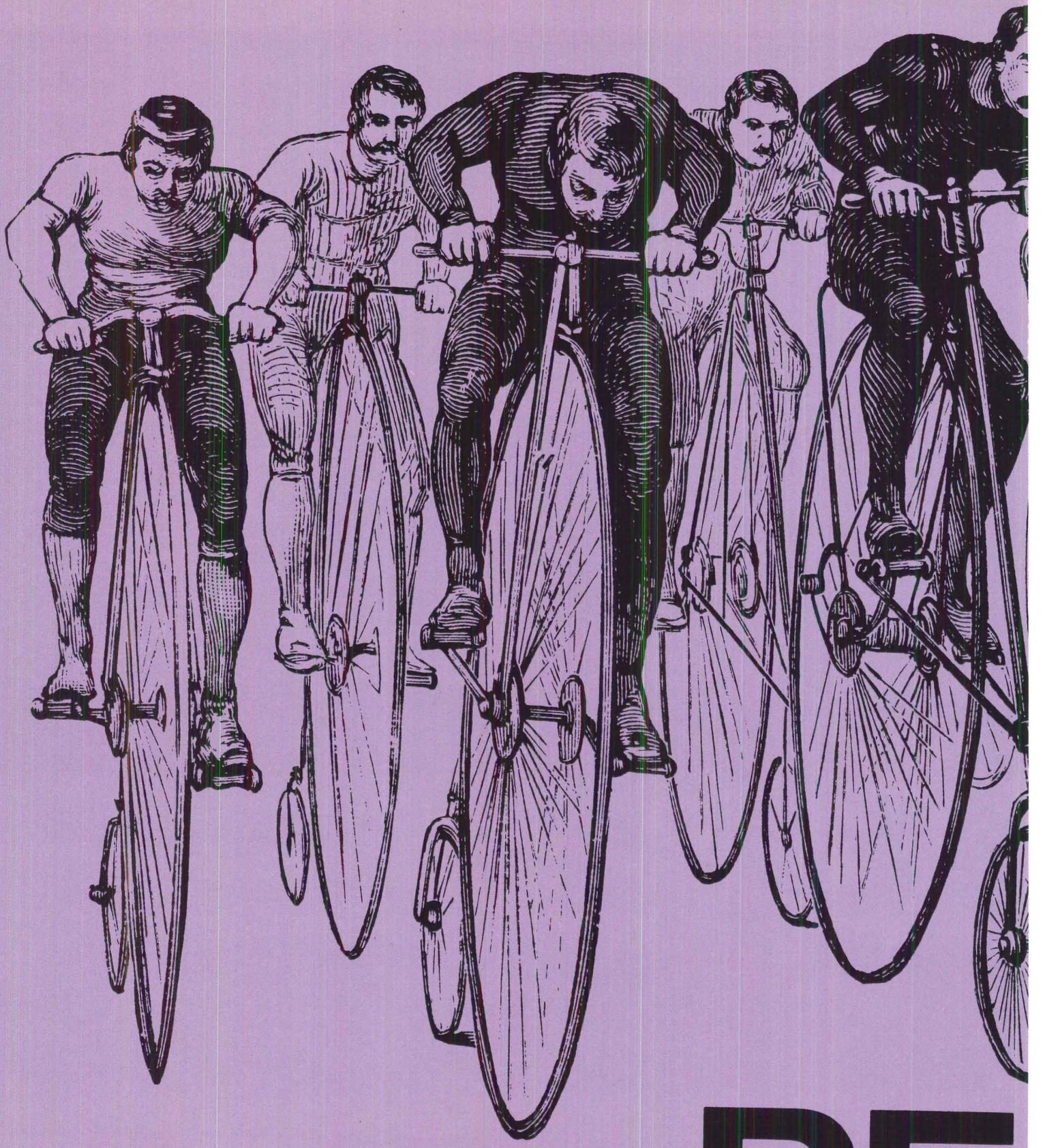

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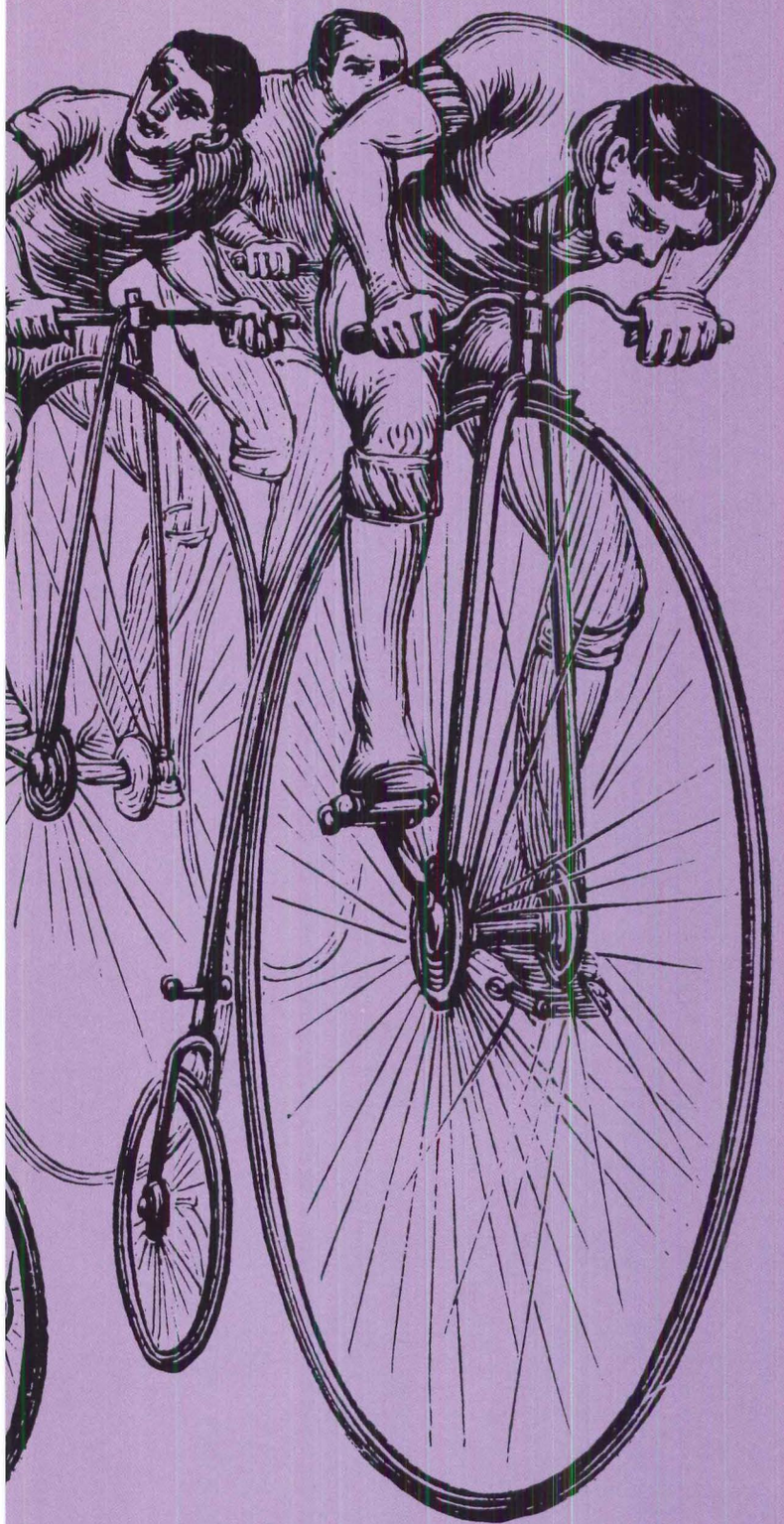


What do we do when, after form has dutifully followed function, function decides to move to the suburbs? Too often, our response has been to demolish the abandoned form—and leave a hole that may, eventually, be filled by a new building; meanwhile, we'll have a place to park our cars.

But now it is clear that the abandoned form may have an integral life of its own worth respecting. As architecture, it may have details and volumes no new construction could afford to duplicate; as a planning aid, it may contribute an inimitable personality to its neighborhood; and simply as shelter, it may be able to serve, with little alteration, a function quite different from its intended one. In fact, it is often when the old and new uses of a converted building are most disparate—when the juxtapositions between past and present are most surprising—that the result is best.

Architects have outgrown their curious missionary zeal which once attached a moral value only to the modern style. We have outgrown as well our prejudices against the admiration of eclecticism, and we have come (with discomforting abruptness) to see the folly of considering our material resources—whether beer cans or office blocks—as disposable and infinitely replaceable.

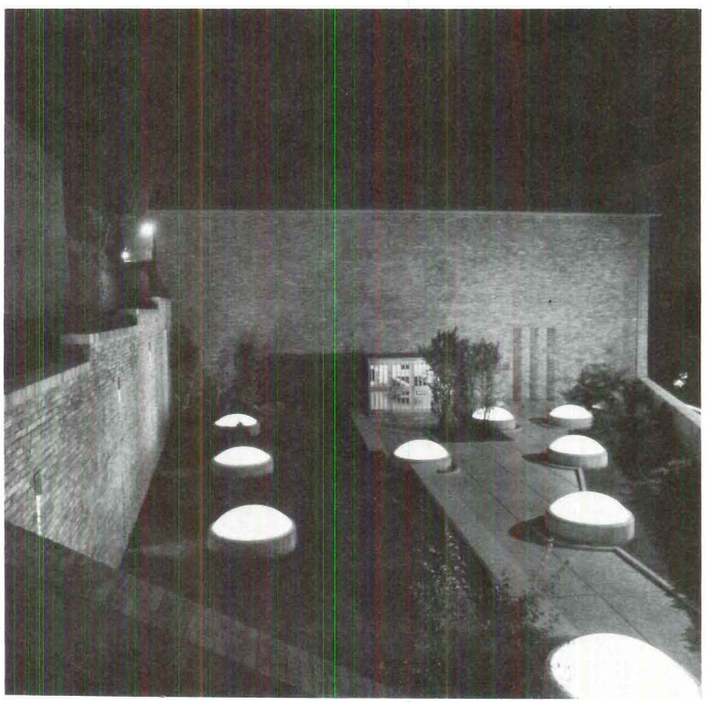
But, perhaps, at the heart of the argument for conversion of existing structures is the radical notion expressed to us by Pierre Schneider (the Paris art critic whose essay is included in this section)—the notion that, in many cases, the best service an architect can render to his client is to advise him *not* to build.

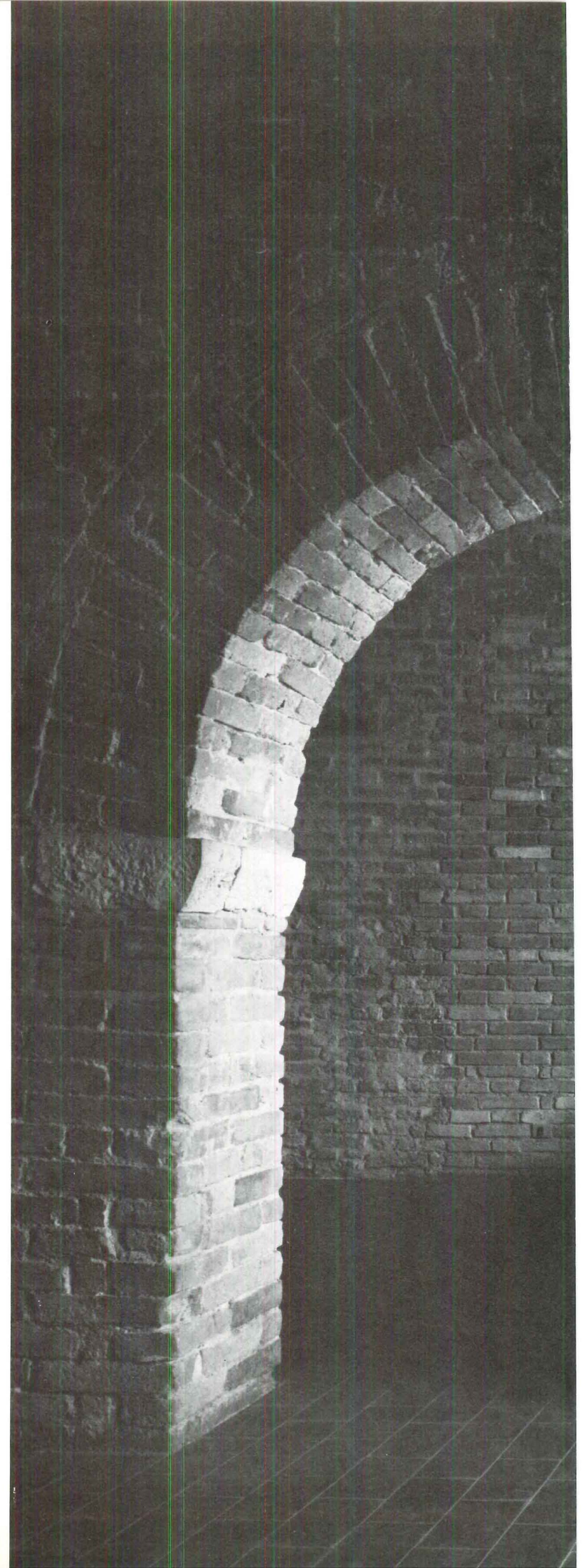
On the following pages we present an international survey of new architecture which has resulted not from new building but from the recycling of our existing heritage. —STANLEY ABERCROMBIE

CYCLING

CONVENT INTO LAW SCHOOL

Urbino, Italy



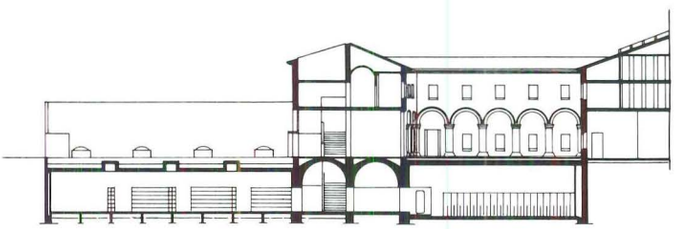


Giancarlo De Carlo, the Milanese architect, has long carried on a love affair with the town of Urbino—perhaps one of the two or three most beautiful hilltop towns in northern Italy. He not only designed and built a remarkable complex of university dormitories just outside Urbino in the mid-1960s; he also prepared a meticulous and sensitive master plan for the town and its region. Designed to preserve the walled town's special qualities, the plan also enhanced them with such provisions as a ban on automobiles. (The plan was published in 1966, in a book entitled *Urbino—la storia di una citta, e il piano della sua evoluzione urbanistica.*)

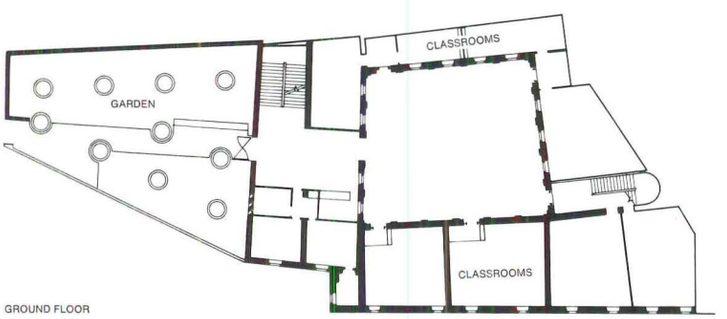
Urbino occupies a very special place in the hearts and minds of urban designers everywhere. Fortified and densely settled, it is a town of convincing form and lasting content. Today, as in the days of the Renaissance, it is a major cultural and intellectual center, a delight and stimulus for all the arts. (Team Ten recently met there—more than 300 years after Federico, the Duke of Montefeltro, invited Piero della Francesca to settle in Urbino. In 1483, Raphael was born there.

De Carlo's special respect for and understanding of the town's ancient forms and structures has already been proven in such new construction as his dormitories atop the Hill of Cappuccini. Here De Carlo reflected the street patterns and building configurations of the old town in the smaller scale of his project, yet somehow provided a modern design idiom. In his newest university projects,

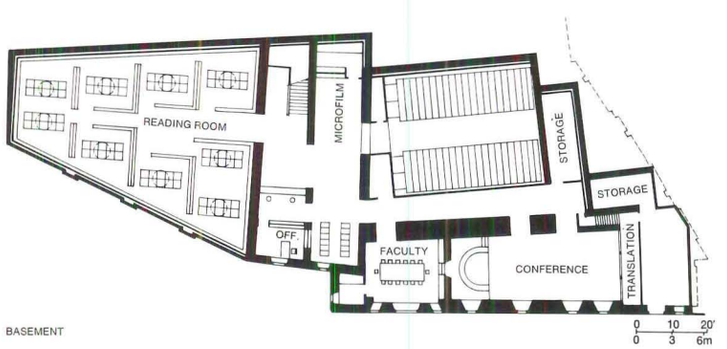
The ancient, arched cellar of the original convent provides a lobby (right and opposite page) for the underground library. The lobby contains a reception desk and seating area and is accessible by a staircase (middle) from the school's main entrance and by a corridor (bottom) that links the library with the conference and library storage areas excavated beneath the convent's courtyard.



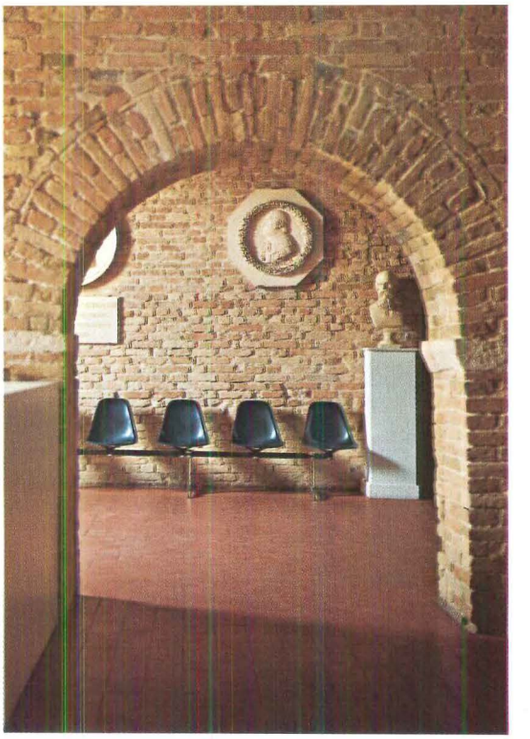
SECTION

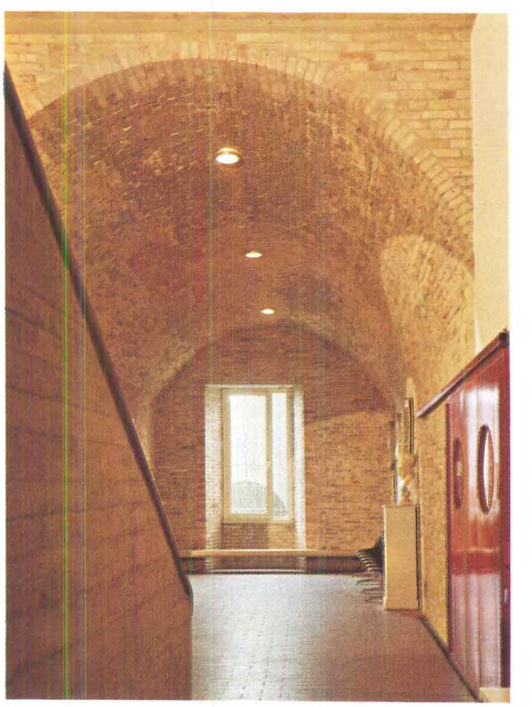


GROUND FLOOR



BASEMENT



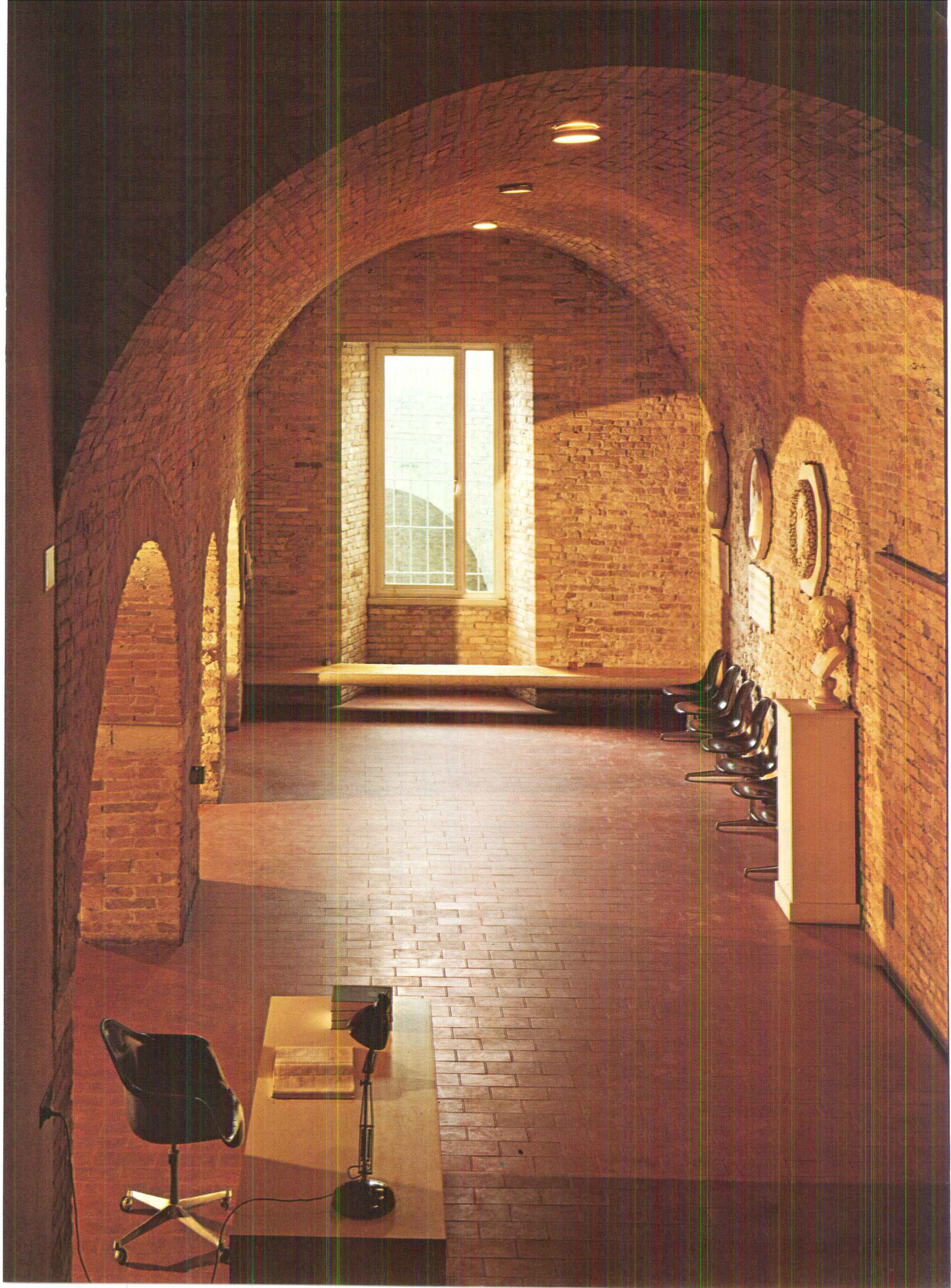


the Faculty of Education and the Faculty of Law, he has gone a step further into the past, providing new facilities by putting new buildings into old ones and so restoring, opening and creating the new within and underneath the old.

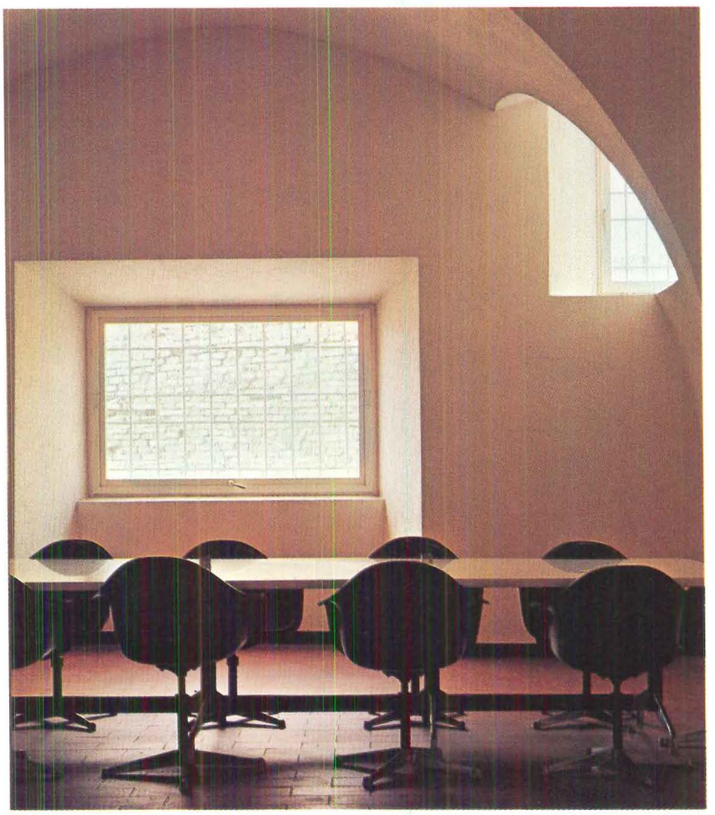
Both the Faculty of Education, which is still under construction, and the Faculty of Law, which was recently completed and is shown here, are in buildings designed as convents in the 17th century. The law school's recent emergence as a university building is only its latest reincarnation; the convent has had many uses and interior changes in 300 years. Most recently, the structure was used as a military barracks, but by the time De Carlo started to work on the project, the building had deteriorated badly; the façade in particular needed structural and esthetic renovation after long years of neglect.

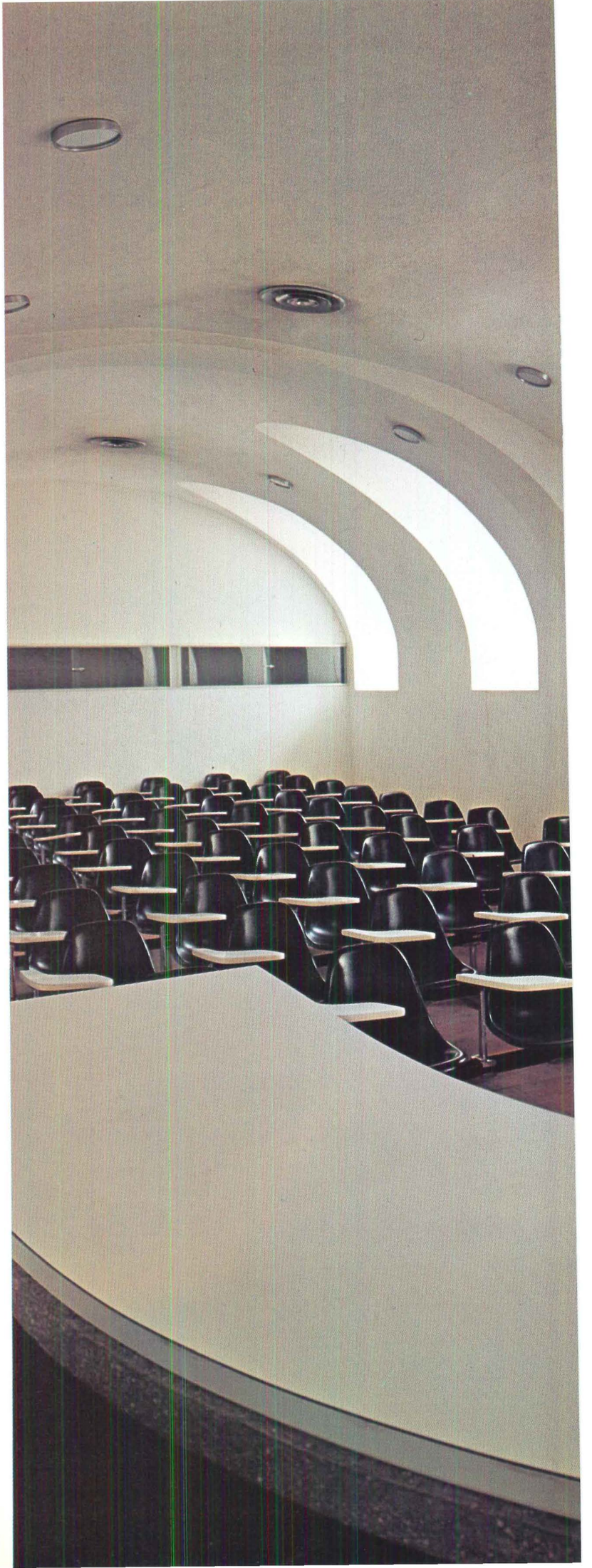
Restoration started with a structural and interior cleanup. The random additions and decorations of centuries were removed, and the architectural integrity of the original structure restored. De Carlo also restored the original layout of the building and adapted it as much as possible to the movements, activities, and mechanical requirements of its new functions. He preserved circulation and access routes between the town and the building, and within the building, without changing the convent's external form.

Today, the law school has faculty offices, lecture halls, administrative and visitor facilities on its ground floor. On a second floor,



A typical faculty meeting room combines the simple forms of modern furniture and the ancient convent arches (below). The conference room (right) has a curved speakers table, its shape the reflection of the convent's curvilinear forms.





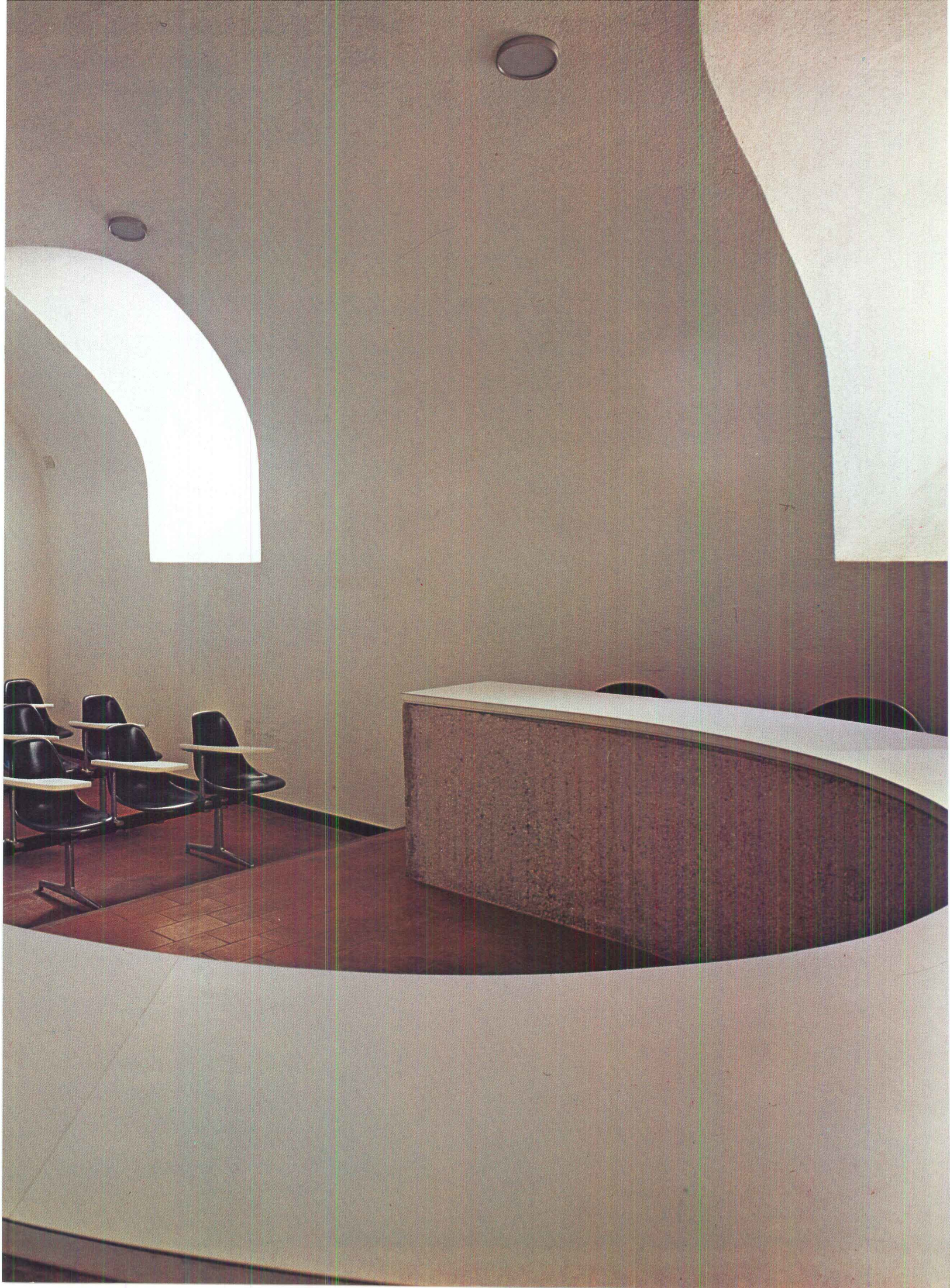
accessible from an upper street of the town, are a cafe and student lounge, more lecture halls, seminar rooms and faculty offices. An interior courtyard has been restored to its 18th century beauty, as has the garden in front of the school's main entrance.

The most ingenious part of the restoration process, however, is largely hidden from public view. This is the new, underground portion of the building, which De Carlo designed to provide additional space, unobtrusively. The only exterior hints of this new area are skylights penetrating the front garden. These provide light for the library beneath. The existing cellar of the convent and the area beneath the courtyard have also been used for the library and provide space for a conference room and book storage area.

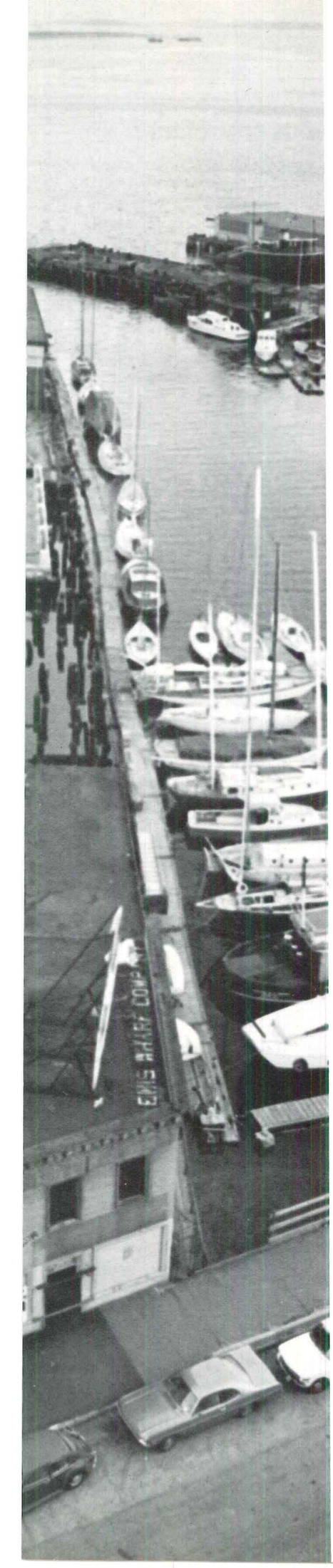
One may have to look hard for the "new" Urbino because it is hidden so carefully. The town outside looks and works as before, and that is its beauty.

Facts and Figures

The Faculty of Law, Urbino, Italy. Architect: Giancarlo De Carlo (Armando Barp, Astolfo Sartori, Lucio Seraghiti, associates). Structural engineer: Vittorio Korach. Photographs: ICF de Padova (color) and Giorgio Casali.



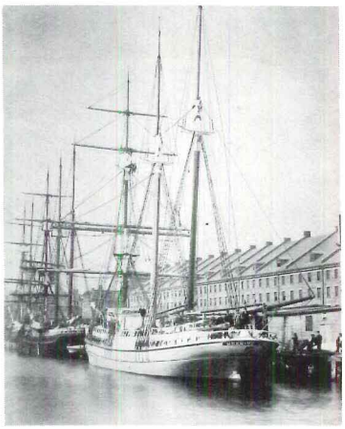

LEWIS WHARF
OWN A SHARE OF
BOSTONS HISTORY
HOME OFFICE
FOR RENT
FOR SALE
723-3480

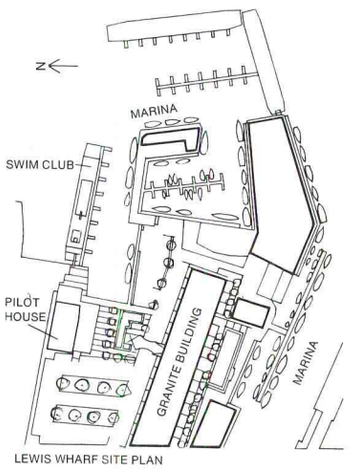


WHARF INTO VILLAGE

Boston, Massachusetts

by Carl Koch





LEWIS WHARF SITE PLAN

Lewis Wharf has provided me with a fascinating and remarkable opportunity to combine in one continuing experience an outlet for all the driving forces of my life—a chance to unite my love for the sea, architecture, family life, and an abiding curiosity as a planner as to how to deal with the confusion of modern life.

In early 1965 my firm, with a group of businessmen interested in reviving Boston's waterfront, bought Lewis Wharf and the adjacent Pilot House. We agreed to rehabilitate it in accordance with the waterfront renewal plan prepared by the Boston Redevelopment Authority. Needless to say, the process took several years and was more educational and traumatic than my years at Harvard.

The granite-faced main building, completed in 1838 and the most prestigious commercial structure of its time in Boston, was divided into lateral bays separated by heavy brick bearing walls. The building was eighty feet deep so that breaking a corridor through the middle and putting in a small elevator lobby divided the upper floors into apartments and offices leaving the ground level for shops and lobby. The structure of the building would be exposed.

The BRA disagreed with us about the building treatment however. We wanted to leave most of the additions made up to 1940. These had taken the form of fifth and sixth story roof alterations to provide more usable space. About two-thirds of both these floors had been added since the building's completion. We proposed to add the remaining third whereas the BRA design staff wanted to see the building restored to its original form. This would have removed, at high cost, nearly one-quarter of the already existing building area. With the help of a design review board, we compromised on a mansard roof instead of the original gable, which permitted us to keep the space for apartments.

Originally we intended to finance the Granite Building through the FHA Title 220 Program. Late in 1965 we submitted a proposal with shops on the ground floor and 104 apartments above. But there were problems. At the time we were the largest rehabilitation project the FHA had ever undertaken and there were no comparable apartments by which to evaluate costs and rents. The first go-round was completed in 1967, eighteen months after our first submittal. By this time building costs had risen to the point where it was necessary for us to resubmit with increased rents and construction costs. Finally a year after that the project, including the increased costs, was approved. But construction costs had again increased so that we could no longer build for the year-old construction allowance. Both we and the FHA were worn out and we gave up in favor of private financing.

At this point (1968), the constantly rising building costs seemed to dictate a change of occupancy to offices so, reluctantly, we adjusted our mix to make a more interesting package for private investors. The plans were redone. Various banks and insurance companies were shown the buildings on the wharf and given up-dated appraisals. On two separate occasions we almost got to the dotted line on insurance company financing. But by late 1970, the shortage of Boston office space had been reversed; almost completely exhausted and discouraged, we took another look at our project.

Carl Koch, FAIA—architect, teacher, sailor—has made important contributions to industrialized housing and now to the recycling of buildings.

The granite exterior and brick bearing walls between interior bays give the main building at Lewis Wharf a massive quality that can be matched today only with reinforced concrete construction. Yet the rich texture and color of the stone and brick, especially at the main entrance, cannot be equaled by modern materials. Elements added by the architect have been treated quietly in order not to detract from the masonry. The balconies use a light steel frame that is self-supporting. Interiors of a typical apartment and a shop (bottom) rely on the exposed brick walls and timber floor structure for their appealing character.

We then decided to go back to apartments on the upper floors—but selling them as condominiums—reserving the second floor for offices and the ground floor and basement as shops. By this time taxes, temporary financing costs, legal fees, not to mention two redesign efforts and a constantly rising budget had destroyed our goal of a middle-income project and had brought us to near bankruptcy. Needless to say, the architects were to receive their first payment only after financing was obtained.

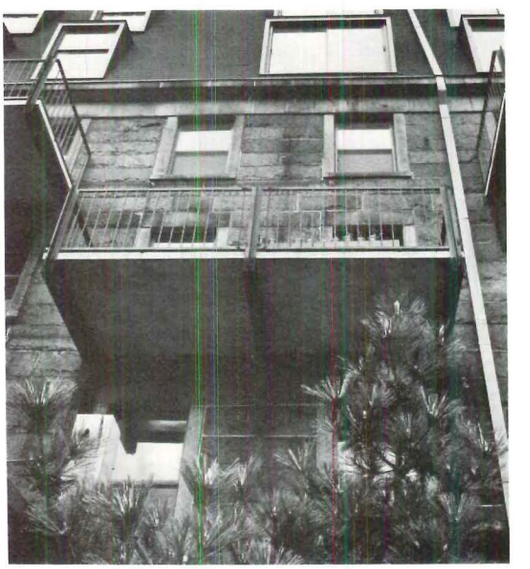
Fortunately Jim Craig, who had been building new hotels for Sheraton and Sonesta, came to the rescue. He agreed to spend nine months to see if, with a fresh face and outlook, he could find the necessary but elusive financing. It was Jim's idea to upgrade the FHA-standard kitchen equipment and to beef up the landscaping plans. Thus we squarely faced the reality that Lewis Wharf had become a luxury project.

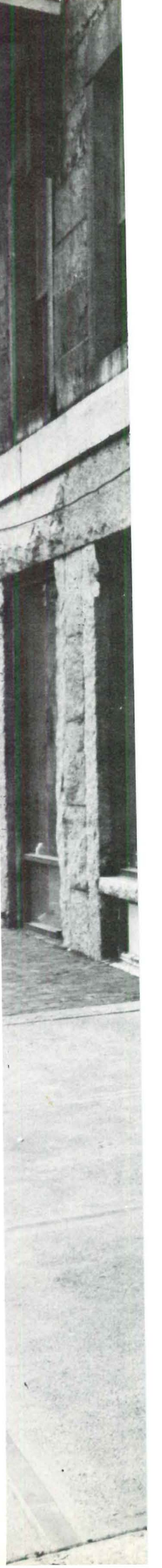
Within the alloted nine months Jim Craig found the Builders Investment Group in Valley Forge, Pennsylvania to take the permanent financing (and half of Lewis Wharf) and the CBT Realty of Hartford to accept the construction mortgages. The financing closed in March, 1972, seven years after the project had started. In addition, both companies have financed the renovation of three other buildings nearby. The Pilot House has been made into three sizeable offices with restaurants on the ground floor and basement. The Tow Boat Building, which had never lost its office tenants through all the project's vicissitudes, will be rehabilitated. The Rosebud Building (so named for its previous vegetable packing tenant) will also become a restaurant.

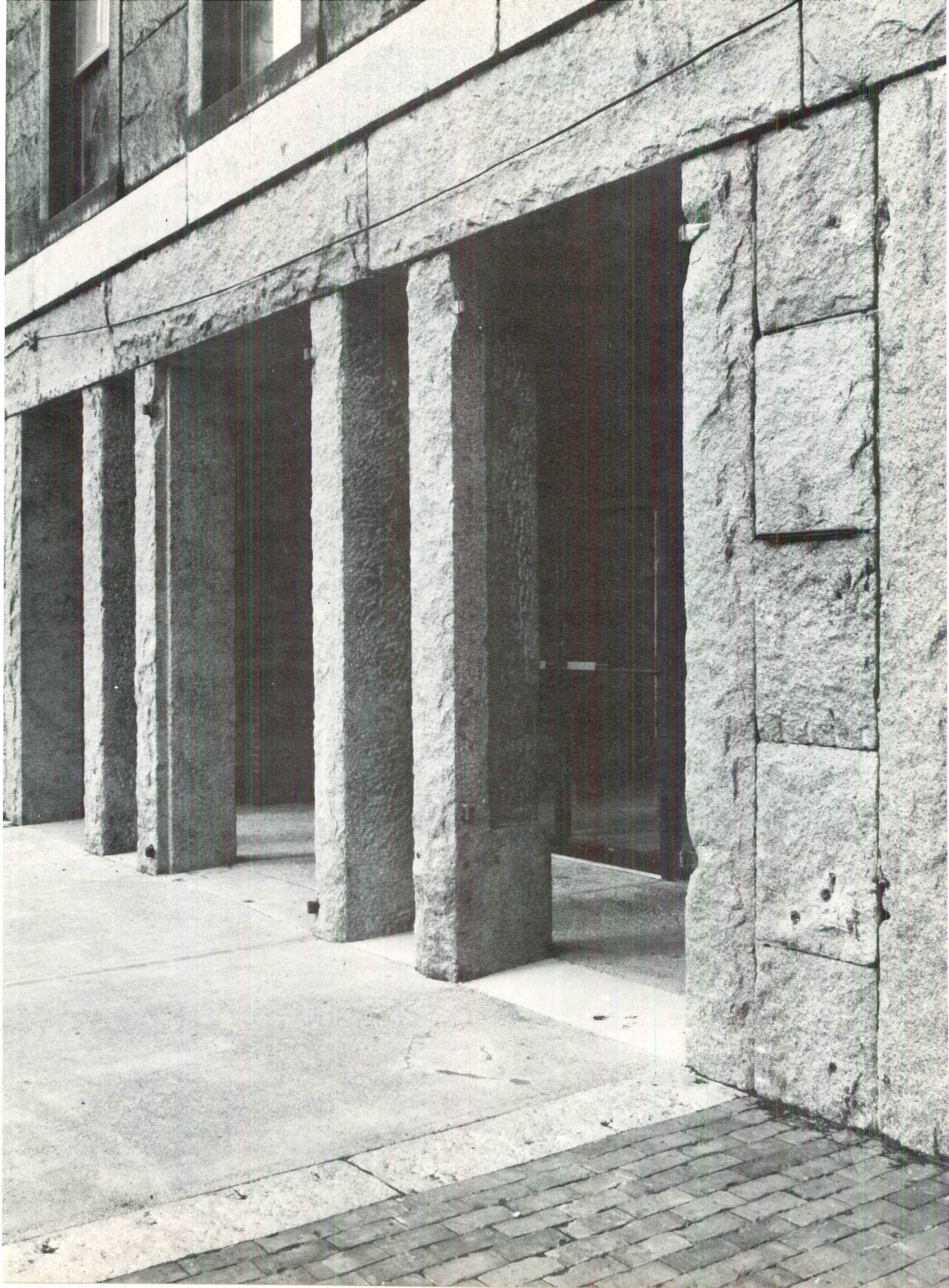
The ninety-four condominiums, as they finally reached the market, range in price from $40,000 for an 850 sq. ft. one-bedroom apartment to $130,000 for the largest four-bedroom unit with the best and highest view of the harbor. The offices are renting for about $9 per sq. ft. and the shops for a similar price plus a percentage of sales. As of February, 1974, we sold sixty percent of the condominiums, rented eighty-five percent of the offices and thirty-five percent of the shops. We are convinced that Lewis Wharf will be the best place to live and work in Boston.

Facts and Figures

Lewis Wharf, Boston, Massachusetts. Owner: Boston Waterfront Development Corporation. Architect: Carl Koch and Associates. Associates-in-charge: Margaret M. Ross and Leon Lipshutz. Engineers: Souza and True (structural); Bay State York Inc. (heating and ventilation); Sam Slavine (plumbing); Harvard Electric Machines Co. (electrical); Shooshanian Engineering Associates (mechanical engineering coordinators). Contractors: Kirkland Construction Co. Inc. (Granite Building); H. Audesse Builders (Pilot House). Building area: 284,432 sq. ft. Building cost (including land, development and fees): $10,872,604.
Building Suppliers listed on p. 133. Photographs: Clemens Kalischer

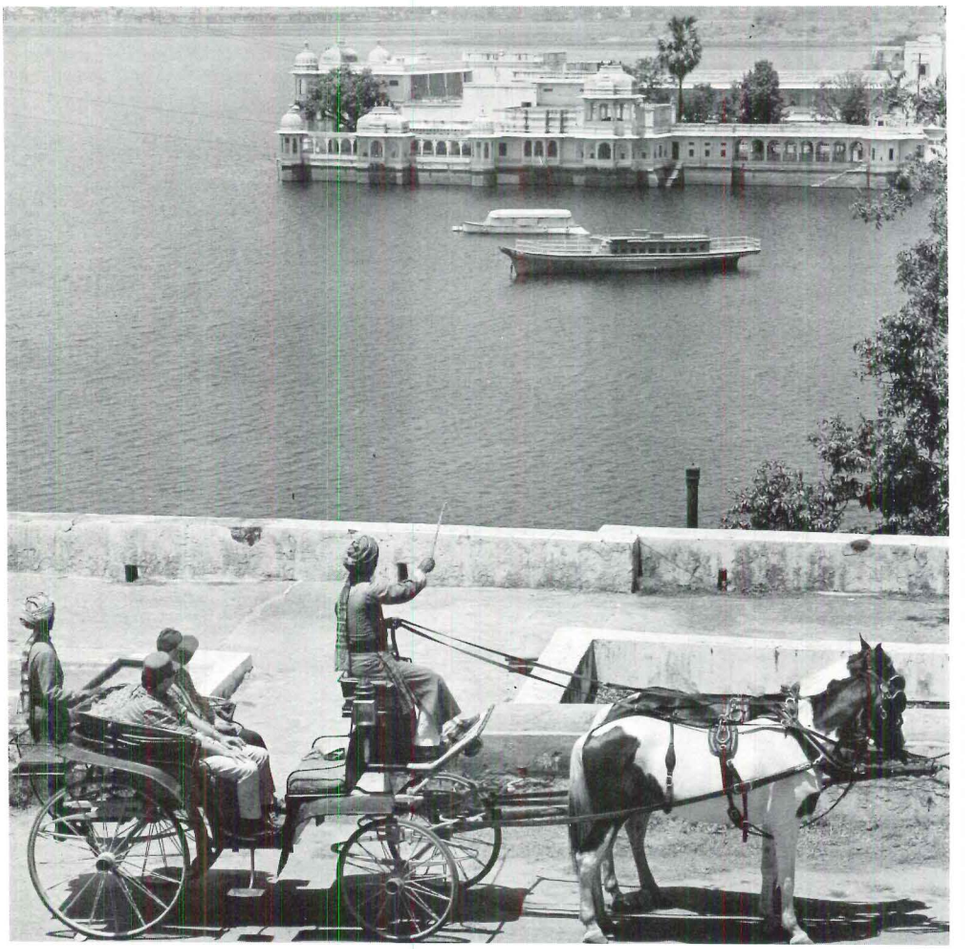






PALACE INTO HOTEL

Udaipur, India



As close as most of us will ever come to the fantasy of being king (or queen) for a day is the delight, in traveling, of coming upon an old palace or chateau which has been democratically recycled into a hotel.

If life as a Shah of Persia is the style for which you were really meant, the splendid caravansarai of Shah Soltan Hossein Safavi in Isfahan has now become the Shah Abbas Hotel, its 160 rooms still rich with treasures of Safavid decoration, its courtyard still bisected by a quiet pool.

Being nun for a night may sound much more restricting, but El Convento in San Juan, Puerto Rico, is the successful transformation of a former convent into a very handsome hotel.

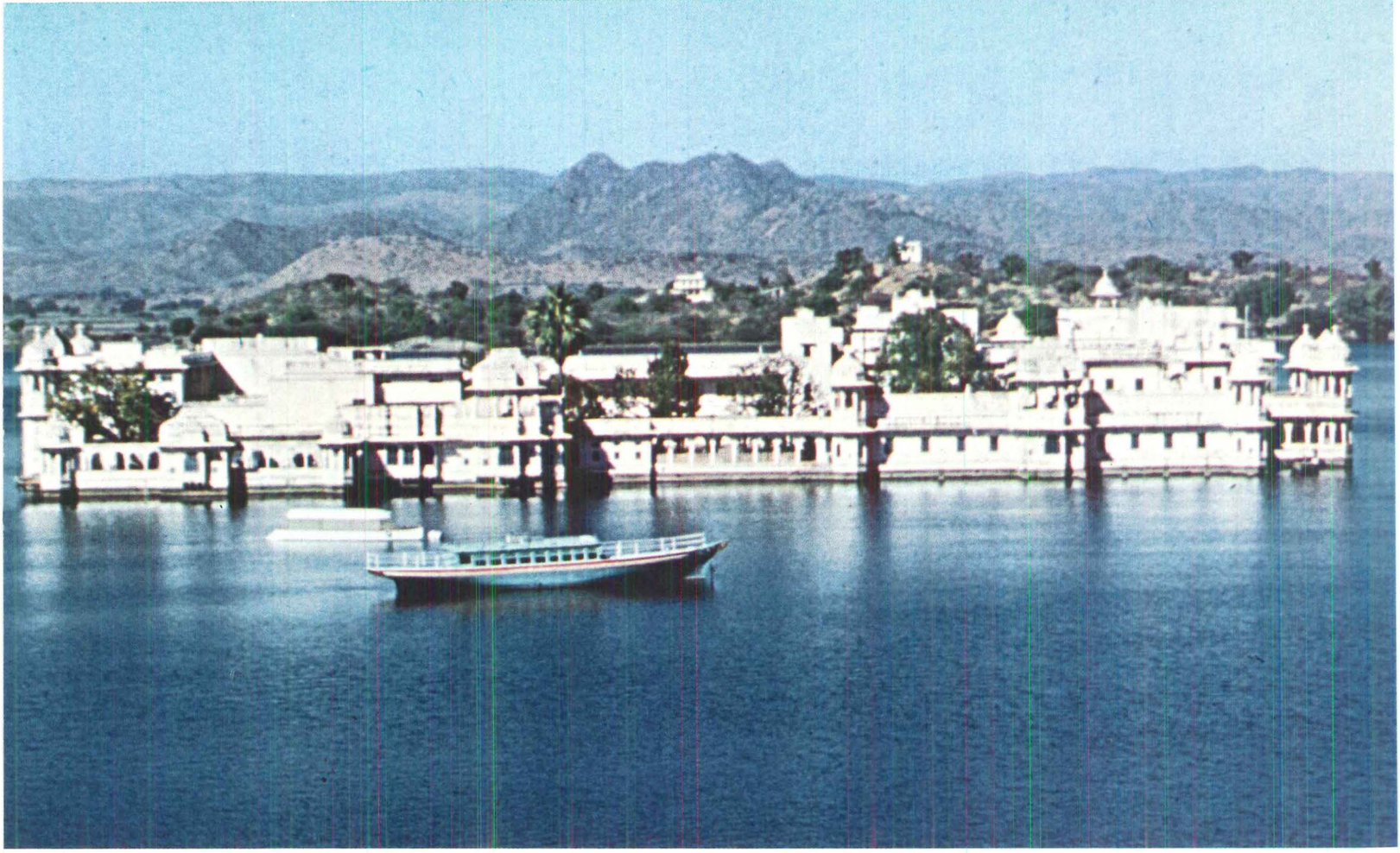
In North Adelaide, Australia, architects Ian Hannaford and Tim Pellew of Hannaford, Pellew, Hodgkinson, Limited, have created the new Old Lion Hotel from a motley 3-acre complex of buildings around a century-old brewery. And on the Copenhagen waterfront, an 1805 warehouse has been converted into the first-class 71 Nyhavn Hotel by architects Flemming Hertz and Ole Ramsgård Thomsen.

Perhaps the most romantic of all such conversions, however, is the example shown here, the Lake Palace Hotel in Udaipur, India. The Lake Palace is on an island in the Pichola Lake, which was dug towards the end of the fourteenth century. In the sixteenth century the lake shore was the site of a provincial capital built by the Mewar ruler Udai Singh, who traced his ancestry back to the sun. Most of the Lake Palace was built in the 18th century and is only one element in a spectacular complex.

It shares its island with the Jagnavis Palace, which was probably begun a century earlier and which is guarded by an impressive row of trumpeting elephants carved in stone. On shore, the City Palace, also primarily seventeenth century, presents a stunning façade of cascading balconies and terraces, once used by the women of the ruler's harem. In the 1800s some of the City Palace's rooms were furnished with tables and chairs made entirely of crystal imported from France.

Glass mosaics are everywhere, enameled peacocks are framed in lapis lazuli, and, within an ornate courtyard of the Lake Palace Hotel, a swimming pool is shaded by mango trees.

Photo credit: Mitter Bedi.



CLIFF HOUSE INTO MUSEUM

Cuenca, Spain

Famous for Gothic folk architecture (of pine frame and white plaster infill) and buildings spectacularly cantilevered over high cliffs, medieval Cuenca was largely abandoned by the turn of this century. A restoration effort in the 1920s failed to reverse its fate, but the town fathers tried again in the 1960s and, with local labor and architects Francisco Leon Meler and Fernando Barja, started renovating. Artist Fernando Zobel, in Spain to house his collection of contemporary, non-objective Spanish art, heard of the work at Cuenca and collaborated with its mayor on a museum (right). Today, Cuenca's museum is the most famous of its kind and its ancient houses are haven to a growing enclave of artists and writers from around the world. Author James Michener visited Cuenca and wrote:

"In July, 1966, events occurred which were to make the city of Cuenca an almost obligatory excursion from Madrid, and I had the good fortune to make mine in the company of a talented Filipino who had been centrally involved in those events, Don Enrique Francisco Fernando Zobel de Ayala y Montojo Torrontegui Zambrano, Harvard 1949, sometimes bibliographical expert in rare books at the Houghton Library in Cambridge, etcher extraordinary and one of Spain's major abstract artists.

Don Fernando drove me ninety miles east and a little south of Madrid through virtually empty land; a few white-walled villages appeared here and there, clean and inviting in their harsh simplicity, and I was once more impressed with how swiftly in Spain one passes from the heart of a major metropolis like Madrid into empty countryside. On this street a fourteen-story apartment building; fifty yards farther on, open land. In Spain prudent people have long learned to live within the safety of city walls. When we did come upon a village I again noted something that I had often reflected on before: that the rural children of Spain all look as if they had been fifty-six years old at birth. How ancient their faces are.

Our route to Cuenca took us through several types of land that could have been a summary of Spanish history. Here the flat lands of Castilla reminded one of how the clever kings of this region had built a nucleus around which to unite the country. Don Fernando suspected that at one point we were close to the upper edge of La Mancha, and when I saw how bleak and empty it was, without a house to be seen in any direction, I appreciated why Cervantes, wishing to poke fun at the pretensions of would-be nobility, had set his knight down in such prosaic terrain. Next we came to the pine forests of Cuenca province, mile after mile of tilted and rocky land, and I could understand how the Muslims, once they had captured such a fastness, were so difficult to dislodge.

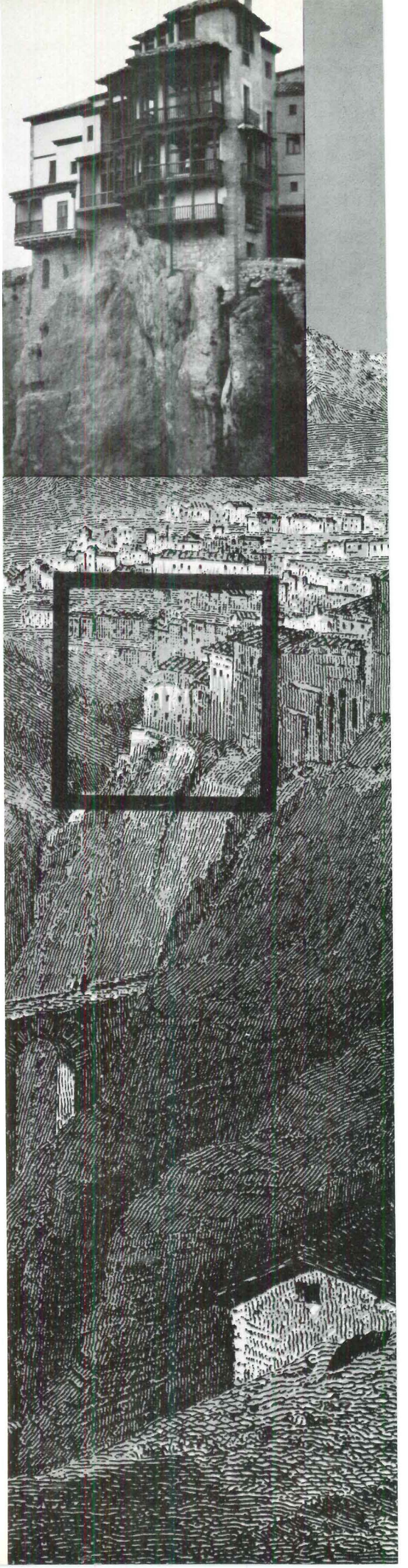
'In some ways a most uninteresting drive,' Zóbel said, 'but if you can imagine the ebb and flow of forces, the movement of kings and peasants, one of the best.'

We passed through two tunnels that served somewhat as the gates to Cuenca and in a short time we saw the distant hilltop city perched above the gorges of two rivers that meet here for a run down to Valencia on the coast. Don Fernando was eager that I see Cuenca at its best, so we stopped the car for me to look up at the remarkable collection of houses perched along the edges of some very high cliffs; they seemed about to fall into the rivers but were kept aloft by sturdy cantilevers set into place some five hundred years ago. Porches and balconies projected well out into space and even from below induced vertigo.

'Cuenca is like the prow of a ship sailing into space,' Zóbel suggested, and his image was appropriate. 'When they first proposed Cuenca to me I couldn't visualize locating here, but once I spotted these fantastic houses, these cliffs, winding streets and the tremendous views one gets, from everywhere, I knew that this was what I'd been seeking.'

As he spoke, we were in the lower town, which dates from relatively modern times, say four hundred years ago, but we left this by a steep and twisting road which carried us upward at a good rate, and in a few minutes we came upon a medieval square and a very old cathedral with a new face. I entered because I had long ago heard of the four remarkable jacent tombs of Church dignitaries dating from the sixteenth century, and these I wanted to see. They were as lovely as I had been told, four high-relief

Photographs by Jackie Curtis.



1. Museum doors of forged iron, for which medieval Cuenca was famous. 2. An ancient Ogee arch and the remains of a Gothic mural. 3. A reading and study area. 4. An exhibition room, including a painting by Rafael Canogar. 5. The main exhibition salon, with the exposed wood frame of the original building. The paintings are by José Guerrero (left) and Antoni Tápies (center); the sculpture is by Amadeo Gabino. 6. A Gothic staircase, buried in previous structural renovations and uncovered accidentally during restoration work for the museum. 7. Painting by Manuel Rivera and sculpture by Martin Chirino. 8. Sculpture by Eduardo Chillida; painting by Eusebio Sempere.

slabs of stone carved with figures of dead prelates, each highlighted by the addition of a few streaks of color which made them seem almost alive. The tombs were delightful and set the stage for what I was about to see.

Don Fernando led me down a side street which ran along one wall of the cathedral, then took me on a cobbled street which ended in a cul-de-sac marked by several medieval doors of handsome design. 'This is it,' he said as he unlocked one of the huge doors and swung it slowly open.

I entered upon a wonderland, something so unanticipated in a remote city like Cuenca that it has become world-famous in less than a year, for it is a museum of Spanish abstract painting set down in three of the cliff houses, so cleverly interrelated with flights of stairs, balconies, strange corners and large exhibition areas that it is a delight to the eye and a challenge to the mind. From the windows one looks off into miles of empty space, with the Río Huécar six hundred feet below in the gorge. Inside, one sees a series of varying rooms filled with handsome paintings by young artists whose reputations have been made not in Spain but in Paris, London and especially New York. One sees the finest work of men whose names are well known in all art circles: Antoni Tápies, whose earthlike canvases speak so strongly of Spain; Antonio Saura, whose works are in most modern museums; José Guerrero, better known in New York than he is in Madrid; Luis Feito, whose work is as modern and colorful as any being done in the world; Eduardo Chillida, whose heavy, powerful sculpture is much appreciated in foreign exhibitions; and Rafael Canogar, whose reputation is the most recent of the Spanish internationalists.

'This is some of the best painting being done today,' Zóbel says enthusiastically as he points to one after another of the fine canvases. 'Only New York excels in concentration of talent. I believe we have more superbly gifted young painters in Spain today than they have in either Paris or London and certainly more than Berlin or Rome. This group of men is going to create the art history of the next quarter-century. Tell your friends who may be interested that these men are as good as Picasso and Miró were when they began.'

As we wandered through what must be one of the world's loveliest museums. Zóbel estimated that there were more than thirty young Spaniards who had a chance to build major international reputations. 'That's what makes this museum so fascinating,' he said. 'The culture of a nation coming into focus in a way it has not done since the early 1600s.' We found chairs from which, if we looked to the right, we saw the spectacular valley or, to the left, a series of brilliant canvases by painters I had not previously heard of. It was a visual feast, but what interested me as much was the conversation.

Zóbel: For the first time in many years Spain is taking its contemporary artists seriously. This is good for the country. Good for the artists.

Michener: But is it not true that at least eighty out of every hundred canvases these men paint leave the country? In Pittsburgh we Americans appreciate this art. In Sevilla you Spaniards don't.

Zóbel: Up to now that's been true. This museum may change the percentages. Spaniards may begin to buy Spanish art, other than Sorolla-like scenes in which colorful fisherwomen sell baskets of clams.

Michener: The other day I had lunch with José Ramón Alonso, the editor, and he said the typical Spanish attitude toward art was that of a friend of his who asked, 'Pictures? We have three pictures. Why would we want more?' Alonso asked him what three he had, and he replied, 'One Velázquez, one El Greco, one Goya.'

Zóbel: He was right on both counts. Families like that won't buy paintings. And you'd be amazed at how many El Grecos and Goyas remain in private hands. Spain has always like paintings, but only the ones they liked, if you understand the contradiction.

Michener: I see less evidence of connoisseurship in Spanish private homes than I would in similar homes in Israel, Japan or Germany.

Zóbel: The basic fact you must accept is the joyous provincialism of Spanish thought. Have you discovered that the Prado is really the most provincial great museum in the world? Only Spanish painting.

Michener: Wait a minute! What about those great Flemish and Italian paintings?

Zóbel: That's what I mean. As long as Flanders and Italy were Spanish colonies we accepted their paintings. That's why

continued on page 122

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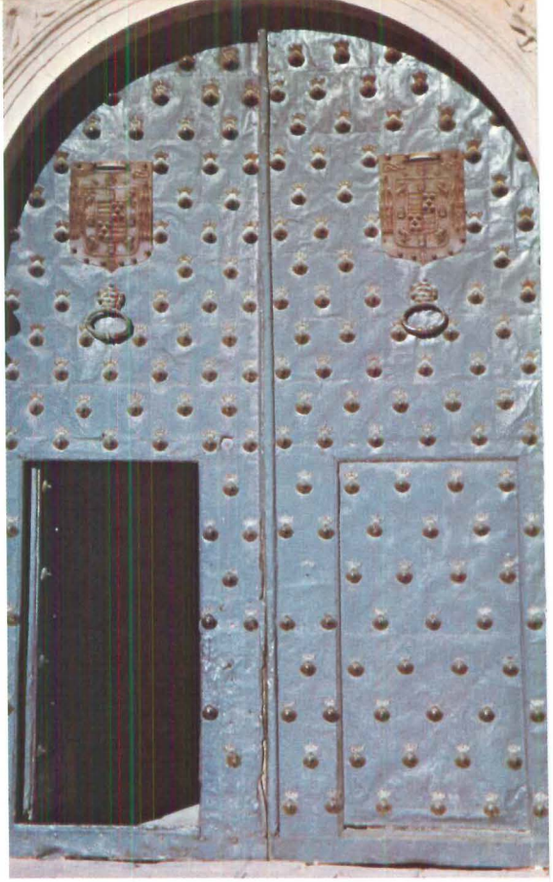

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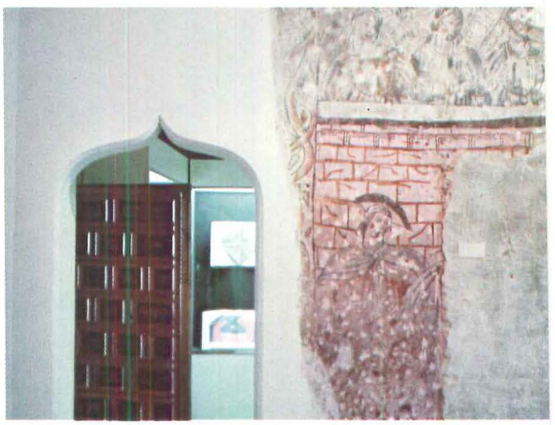

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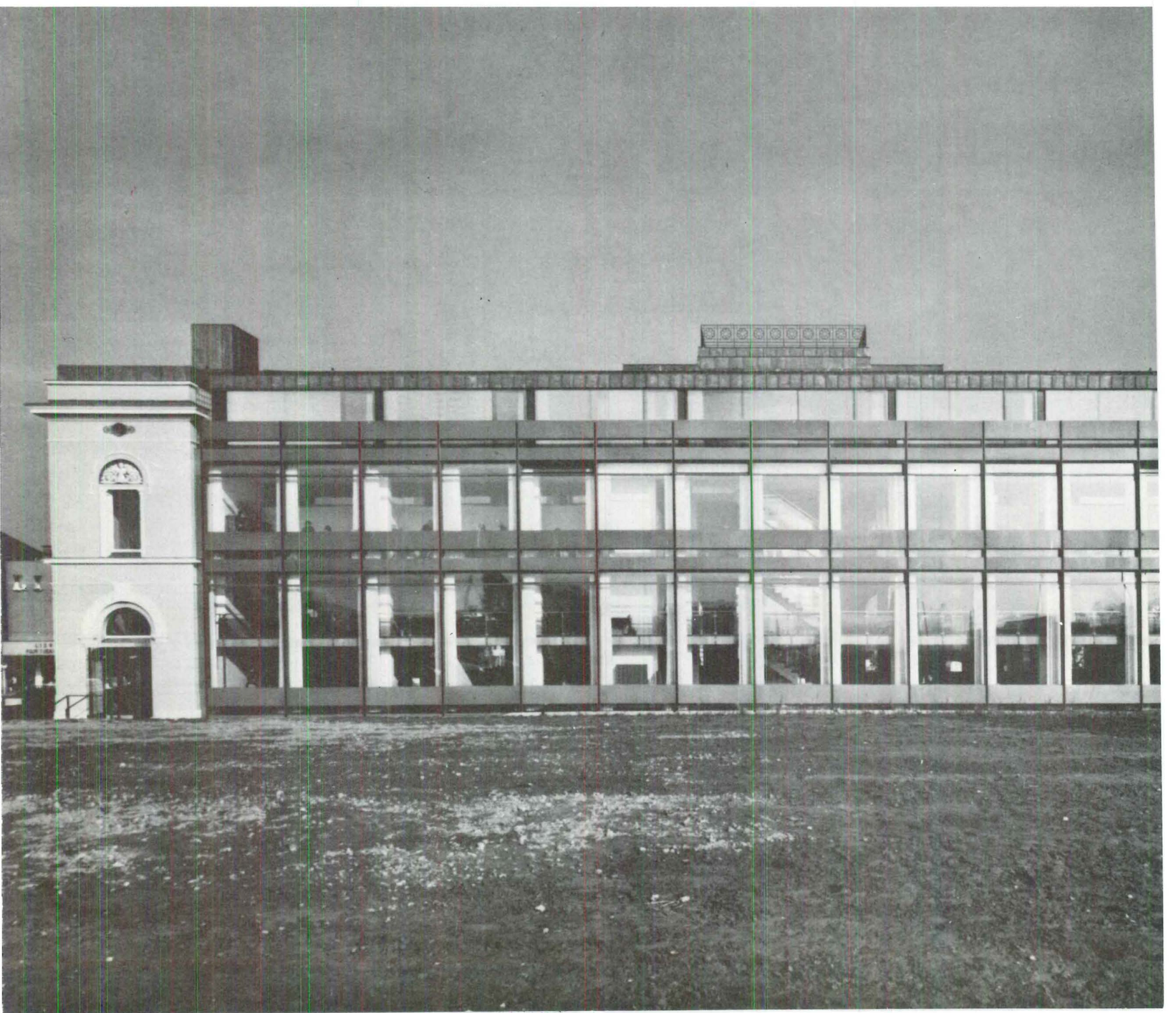
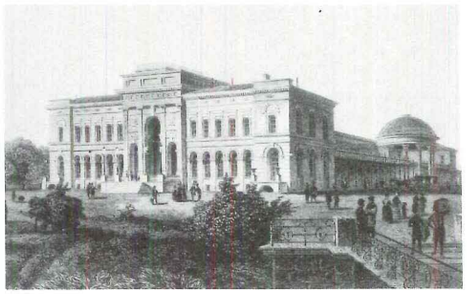


DEPOT INTO BANK

Braunschweig, West Germany



A stylish neoclassic railway terminal of 1845, largely reduced to rubble in World War II, has a new life as the equally stylish headquarters of the German bank which had financed the original construction.

Called the Ottmer Building, it was designed by Carl Theodor Ottmer (1800-1843) and completed after his death. The portion of the building which now remains was the entrance wing, beyond which stretched an impressive concourse (with a side entrance under a rotunda) and the tracks beyond. So little of the station escaped bombing that the German Federal Railways decided to abandon it; after a new station was built in 1961, the Ottmer ruins were bought by the Norddeutsche Landesbank, with plans for a new headquarters building on the property. The bank held a limited design competition, and, although it had in mind a new building, the entrants were given the option of keeping the Ottmer ruins. The winner was architect Hannes Westermann of Braunschweig, whose design called for not just keeping but thoroughly utilizing the shell of the station.

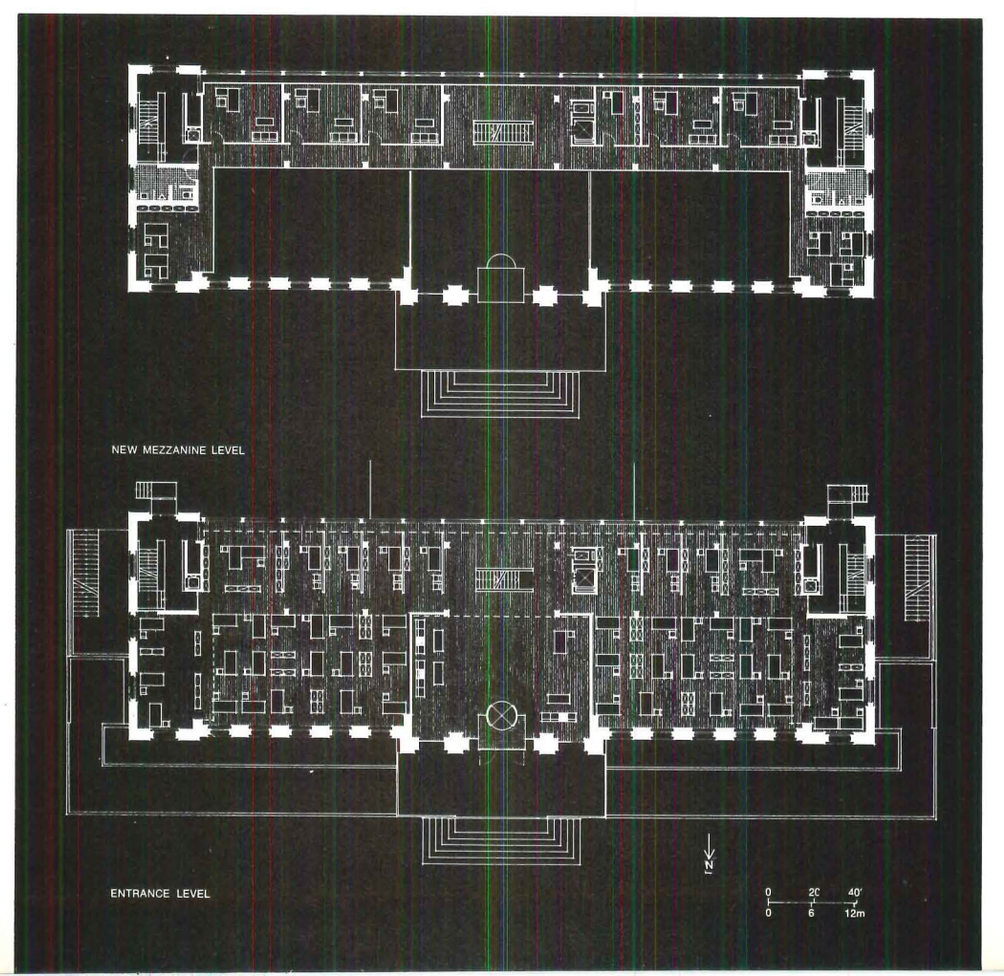
When work began, some structural difficulties were encountered—the vaulted basement spaces were badly damaged by flooding, and the wood pilings on which the building originally sat were dangerously faulty and had to be replaced.

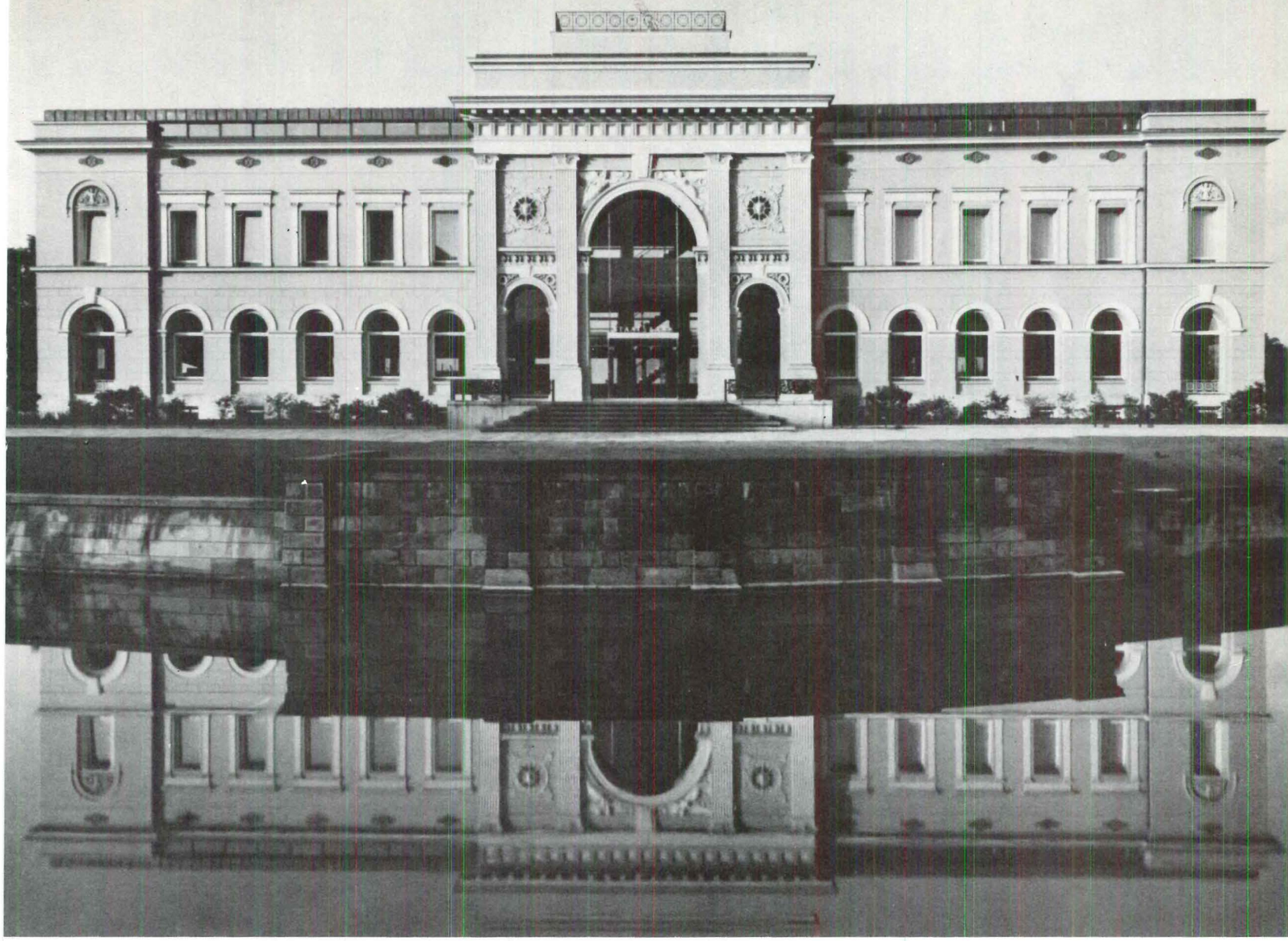
Some exterior changes were also made —a heavy architrave over the main entrance had obviously been an addition to the original design, and it was removed to return the facade to Ottmer's intended proportions. On the interior, a handsome double-height space was created inside the entrance and was surrounded by balconies of the most elegant austerity.

But the greatest architectural change took place on the building's south facade, which had originally been a minor interior partition buried in the middle of the building. Except for some small corner projections, there was, of course, no precedent for its restoration as an exterior wall. Westermann's admirable decision was a well-proportioned but absolutely straightforward and uncompromisingly new curtain wall infill of aluminum and glass.

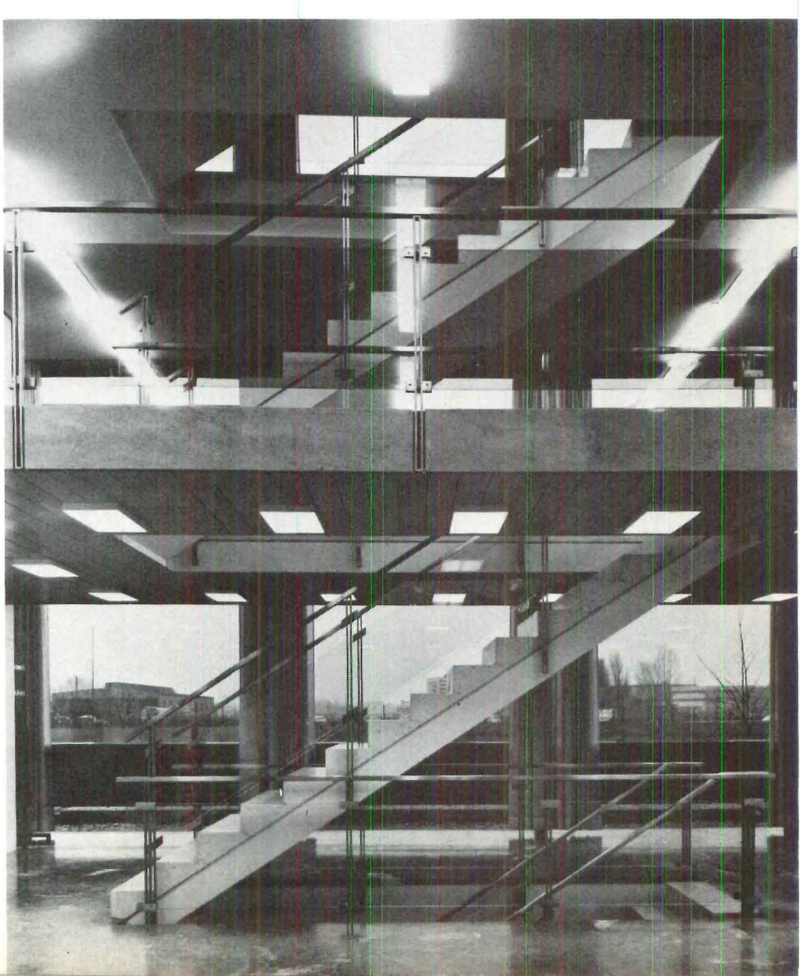
The conversion earned Westermann a 1970 award from the Bavarian Academy of Fine Arts in Munich and, in 1973, the prestigious R. S. Reynolds Memorial Architectural Award.

The 19th century neoclassicism of the Ottmer building is complemented by the impeccable detailing of architect Hannes Westermann's restoration, the most striking element of which is the aluminum and glass south facade, shown on the previous page. At right, a secondary entrance at the side of the south facade, and plans of the balcony and entrance levels. Opposite, the north facade, which suffered less damage from bombs, has been crisply restored. Below right, the new entrance and, on axis with it, a new stair leading to the balcony level.



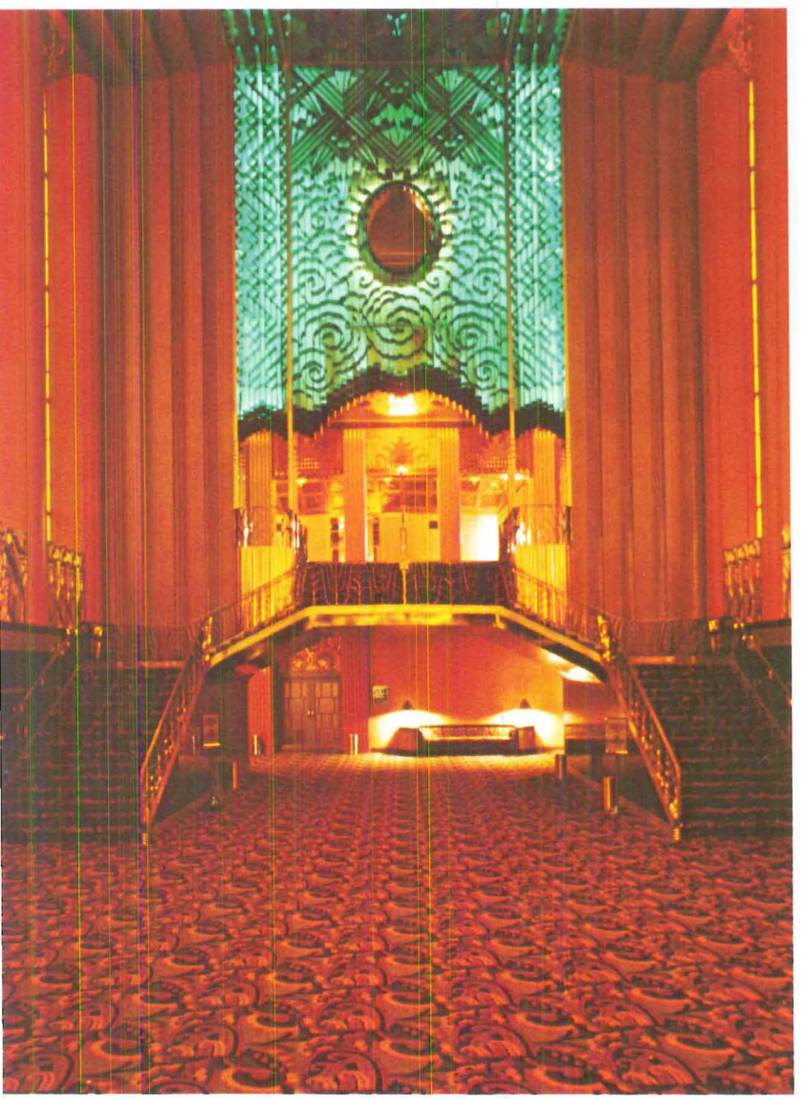


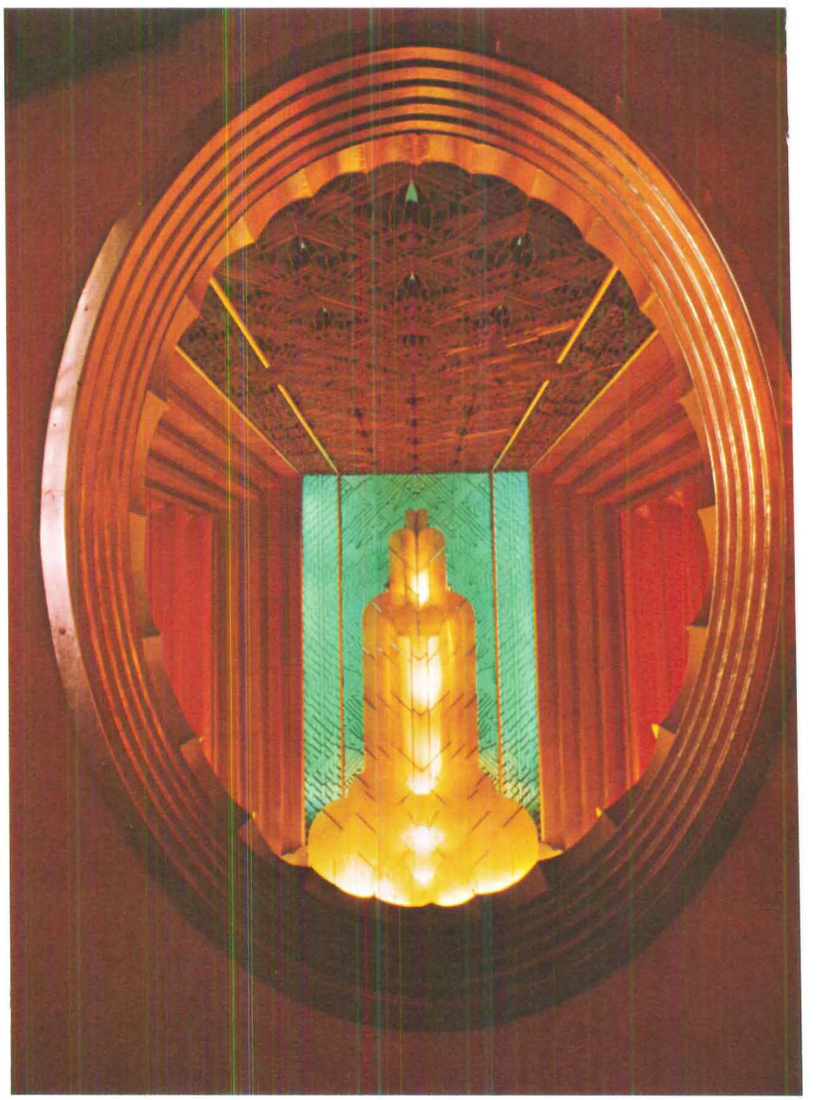

STAATSBANK



MOVIE INTO CONCERT HALL

Oakland, California





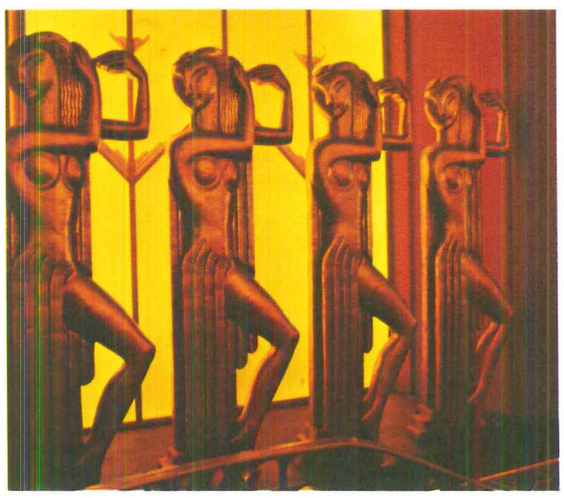
In the United States there have been two recent unhappy trends in building use. First, many of the great movie palaces of the '20s and '30s have been abandoned (or destroyed by subdivision), a destruction especially sad in a country with no "real" palaces. Second, there has been the erection of a rash of expensive Cultural Centers which, as the witless vulgarity of some of them shows, is an architectural idiom we don't manage very well these days, and, as the operating difficulties of some of them demonstrate, is a building type we really couldn't afford, anyway.

The first American city to get the idea that there might be a useful relationship between these two trends was St. Louis. In 1968 its old St. Louis Theater, modeled by Rapp and Rapp on the opera house at Versailles, was restored by architects Wedemayer-Cernik-Corrubia and reopened as Powell Symphony Hall. Powell Hall was followed by Pittsburgh's conversion of its Loew's Penn into Heinz Hall for the Performing Arts, and by similar conversions in Ohio, Florida, and elsewhere.

The latest such conversion is in Oakland, California, and it is exceptional for two reasons: because, like Heinz Hall, it is being paid for solely by donations from individuals and foundations, without tax money, and because the building being converted is such a spectacular period piece. It is listed in the National Register of Historic Places, and the National Trust for Historic Preservation says that it is "considered to be the best example of Art Deco remaining after the Radio City Music Hall." The Oakland Paramount can hardly be called a gem, but it must surely be one of the biggest and most gloriously gaudy pieces of costume jewelry ever conceived.

The Paramount was designed by Timothy L. Pflueger, a respected Bay Area architect also responsible for the Pacific Coast Stock Exchange and the I. Magnin building in San Francisco. It opened December 16, 1931, showing, on the screen, Kay Francis and William Boyd in "The False Madonna," and, on the stage, Fanchon and Marco in something called "Slavique Idea." Dur-

Opposite, the Grand Lobby, looking from the entrance toward the stairs to the mezzanine lounge, and a view from the oval window of the balcony foyer to the 40-foot-high "Fountain of Light" above the entrance. Below, the main floor of the auditorium, and a few figures from the Grand Lobby's gold-leafed chorus line.



Below, part of the balcony foyer. Opposite top, a detail of the proscenium arch. Left, the men's smoking room opening off the mezzanine lounge. Right, looking toward a corner of the auditorium's great curtain from the balcony foyer. Below, two decorative panels from the gilt and black lacquer "retiring room."

ing the next decade, images of Claudette Colbert, Dick Powell, Lupe Velez and Elissa Landi flickered there in happy succession.

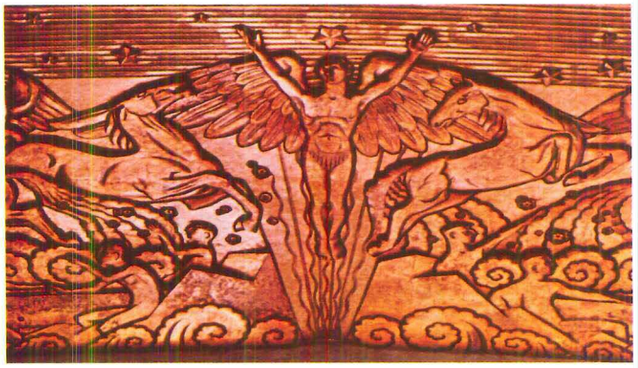
But as Hollywood faded, so did the Paramount. By 1970, it was open only one afternoon a week (for a "shoppers' matinee"), and demolition seemed imminent. A year later the Oakland Symphony Orchestra needed space for its growing audience; in 1972 the Orchestra Association bought the Paramount for $1 million, restored it for a second million, and has a 3000-seat house with a replacement value estimated at $30 million.

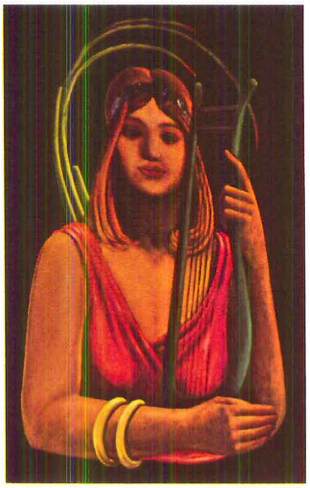
Architects for new construction were Skidmore, Owings and Merrill of San Francisco, with Miller and Pflueger, the original firm as consultants, and restoration work was under the invaluable direction of Anthony Heinsbergen, an 81-year-old designer of over 750 movie interiors, who came out of retirement for the project. New work has been as faithful as possible to the first design. A patch of the badly worn original carpet was sent to Alexander Smith Carpet Mills, the original weavers, and Smith manufactured 3500 yards of duplicate carpet, even though the original dyes were no longer in common use. New seats, by American Seating, are slightly wider than the originals (the standard of comfort expected by audiences having apparently risen—or their girth having increased—in the last forty years), but the new mohair upholstery looks just like the original. The new stage curtain is just like the first one; lacquer and gilt murals have been carefully restored; even a duplicate has been found of the original Wurlitzer organ (which had been sold to a pizza joint).

Its exuberance thus intact, the Oakland Paramount reopened as the Paramount Theatre of the Arts on September 22, 1973.

Facts and Figures

Paramount Theatre of the Arts, Oakland, California. Original architects, consulting on restoration: Miller & Pflueger. Architects for new construction: Skidmore, Owings & Merrill, San Francisco. Original general contractor: George Wagner. Contractor for new construction: M. W. Garing. Photographs: Cathe Centorbe.
Building suppliers listed on page 133.

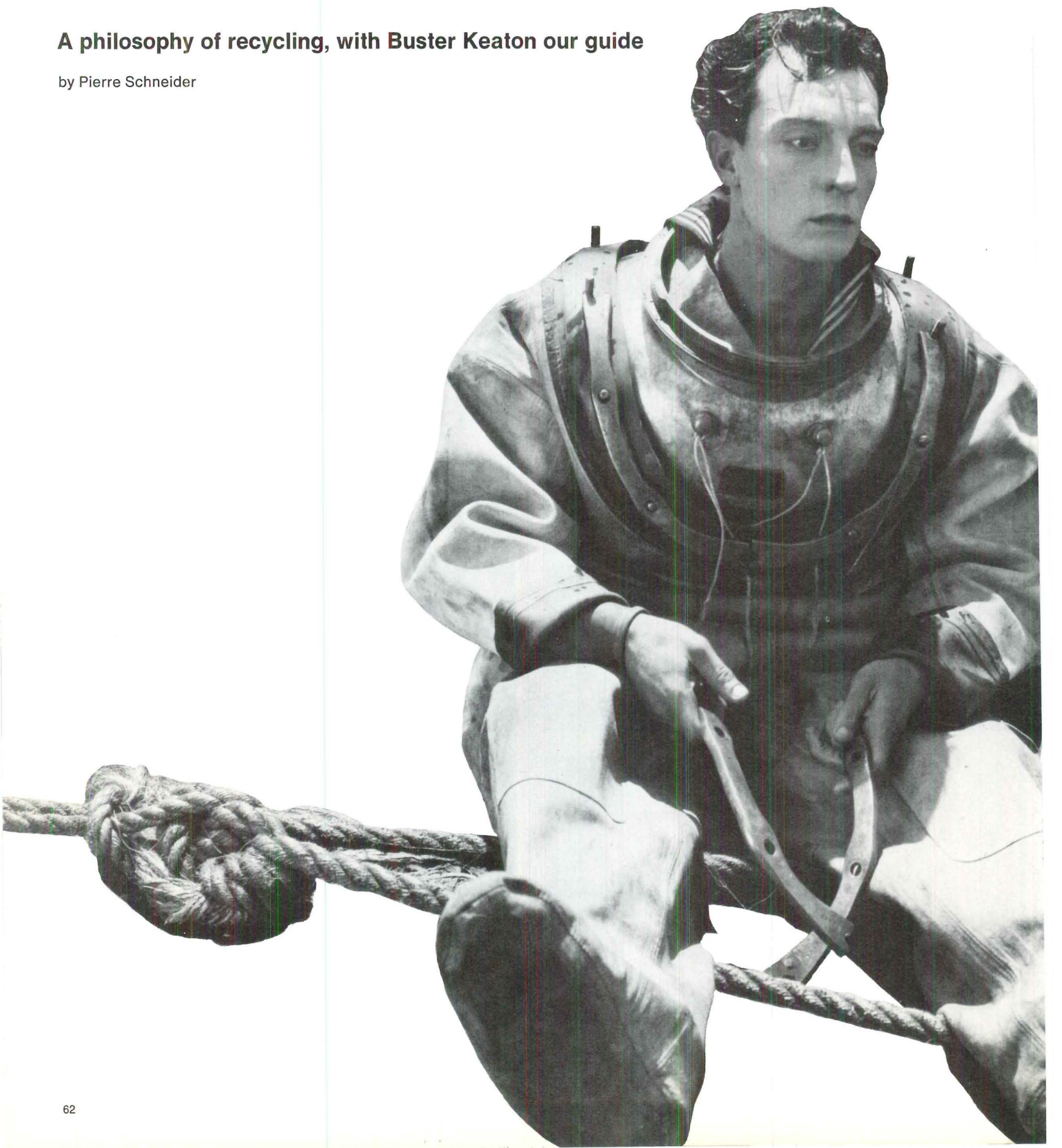




CONVERTING THE

A philosophy of recycling, with Buster Keaton our guide

by Pierre Schneider



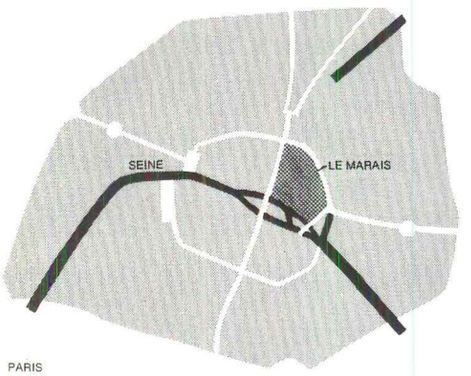
The past is indispensable, the past is intolerable. The consequences of this dilemma are particularly dramatic in the field of architecture and urbanism where it translates itself at once into the brutal alternative: raze or freeze, wasteland or museum. We cannot even find consolation in the thought that one of the terms of the paradox is saved by the sacrifice of the other: to preserve the past alone is to lose it, and to eliminate all but the present is to render its actuality meaningless.

The chief justification given for preserving the past is history. But to claim that a building or a part of town has historical value is to beg the question: what is the value of history? The answer is that history is of value to historians. Conservationists are in fact recruited largely among archaeologists or architectural historians—specialists of the past. When the past seeps into the thinking and (occasionally) into the practice of real-estate men or city planners, it is in the guise propounded by these specialists: as past, i.e.: as tourist-attraction, cultural sugar-coating.

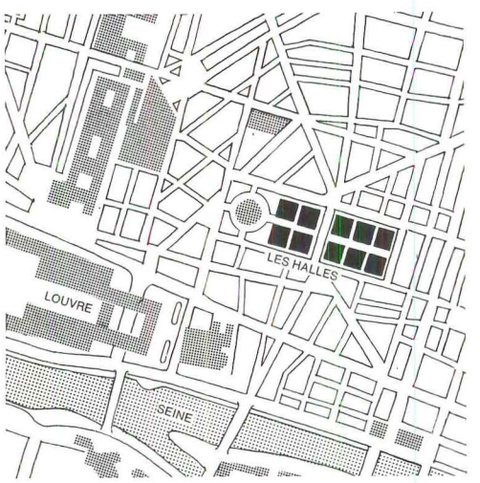
The practical effects of the conservationist attitude are disastrous: isolated from its present context, whatever it be, the finest monument looks fallacious. There is no difference between the Cloisters or the Gardner Museum, which are genuine, and the Neo-Romanesque or Neo-Gothic buildings on college campuses. It isn't a matter of good instead of bad restoration. In a sense, one might even say that the best restoration is the worst, because to resurrect a work's pristine state today is to deny time, which, in the transparent form of the immediate, was incorporated into it at its inception. Integrality, which is the sign of authenticity at birth, becomes, as time passes, the symptom of fakeness, except in that aseptic realm preserved from the acids of contingency: the museum.

I hold no grudge against museums. Like cemeteries, they have their beauty, their necessity. I prefer to see the things I love—and the people I love—deposited in museums (and in cemeteries) as late as possible; and I do not believe that museums should prosper at the expense of life. Yet that is what, in effect, they do. The decision to save a monument because of its historical importance almost invariably entails the condemnation of the 'uninteresting' urban tissue around it. The neatly circumscribed cultural gesture entitles the bulldozers to run amok everywhere else. These architec-

Pierre Schneider was born in Antwerp, Belgium, in 1925. Since 1950 he has been living in Paris, where he is Art Editor of the weekly magazine L'Express. *His books include* The World of Manet *and* Louvre Dialogues.



PARIS



tural orphans (they might be a church, a street) are among the saddest sights of our cities—aborigines exhibited at a fair.

Orphans? Quislings, rather. The historical attitude is responsible for the accelerated destruction of old sections of town, not only because it introduces unjustified distinctions between 'important' and 'unimportant' buildings or areas, but also because it emphasizes the value of stones at the expense of the value of people. The district of the Marais, in Paris, clearly demonstrates this process.

It is the *quartier* richest in architectural landmarks, but also one of the poorest, most densely populated and liveliest. The aristocracy that built its mansions there in the 17th century moved out in the 18th, to be replaced by artisans and workers. By 1950, it had become a slum. Salvation began along conservationist lines. The State, the City, wealthy amateurs restored some of its more admirable mansions: Hôtel Carnavalet, the Rohan-Soubise complex, Hôtel de Béthune-Sully, Hôtel des Ambassadeurs de Hollande, Hôtel Guénégaud. Commercial firms and industrialists were encouraged to set up "prestige centers" in others; in exchange, they were given long-term leases.

By 1965, the restoration of these glorious vestiges had once again made the Marais attractive to tourists—and to real-estate men who began to buy up buildings, to overhaul them shoddily, and to sell apartments at vastly increased prices. Rents soared and the inevitable has begun to happen: the traditional population of the Marais is being driven out—some 20 percent have left in the last two years. The Marais of tomorrow is likely to present the mournful visage of a *chic* residential district, peppered with cultural landmarks sheltering governmental departments and the head offices of private companies. The architects of the Ministry of Culture in charge of the Marais' rehabilitation are now alarmed by this evolution and upset by the realization that their efforts have served as bait for quick and high profit operations. The mistake, as they now realize, was to grant conservation of stones priority over preservation of the population. Measures ranging from municipal purchases and low-cost housing to informing landlords and tenants about the ways to defend themselves against the threat of expulsion could have forestalled speculation and thus prevented mass exodus.

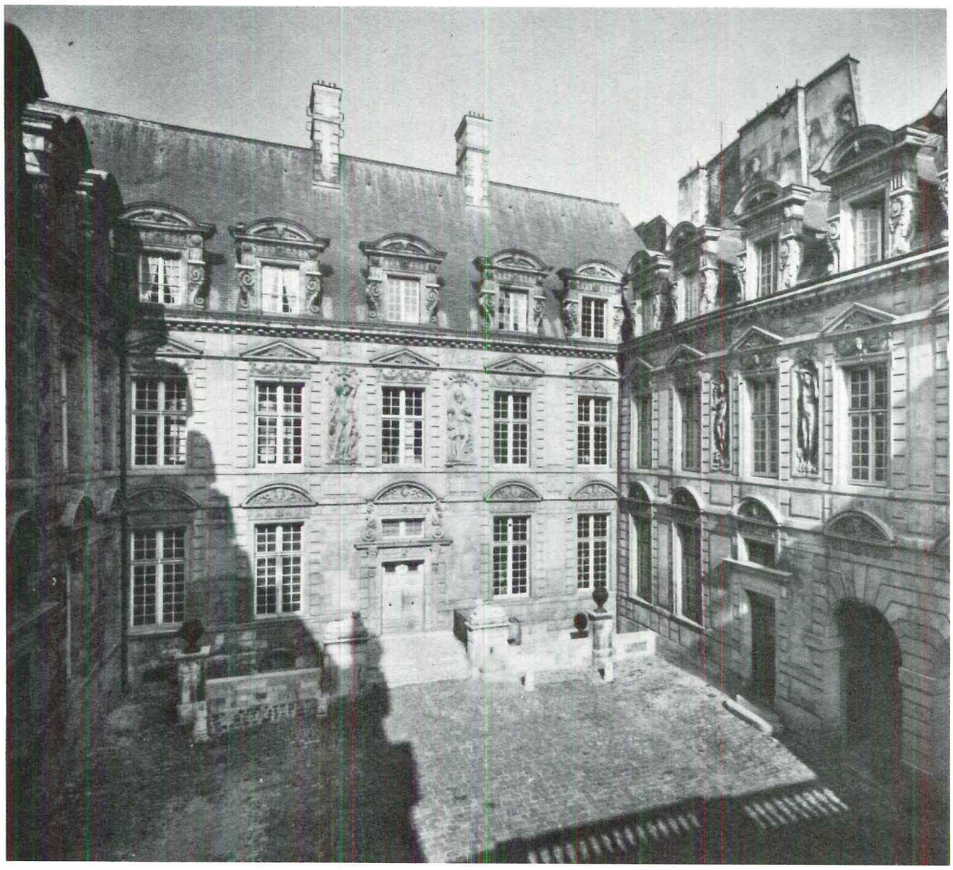
The worst consequence of the conservationists' failure is that it seems to lend weight to the contention of the advocates of drastic renovation that we must choose between the past and the people. Nothing could be further from the truth. Re-use of existing structures is sometimes even less expensive than the building of new ones.

The financial investment required by construction from scratch is such that, usually, private capital must be called upon. The latter's unavoidable concern with productivity automatically spells offices, hotels, luxury apartments. By driving up the price, renovation drives out the people. The example of Les Halles and its neighborhood is significant in this respect. When, in 1968, Paris' central market moved to Rungis, leaving most of Baltard's pavilions and many nearby houses formerly used as warehouses empty, the sudden drop of rents, accelerated by the uncertainty about the district's future, at once caused a new, lively population to move in. The destruction of the pavilions and the consequent need to replace them inevitably led to the farming out of the area to private capital, which no less inevitably produced a project comprising primarily office buildings, shopping centers, hotels, etc. The 'upgrading' resulting from their advent spreads to the surrounding area, thereby causing real-estate prices to rise to a level that only more office buildings, more trade centers, and more four-star businesses can afford. Thus it is not an exaggeration to claim that, whereas architectural progress (renovation) is socially reactionary, architectural conservatism (rehabilitation) is socially progressive. And this, in turn, has felicitous implications, since yesterday's architecture—with the limited exception of museums—is, as noted above, acceptable only when it is not treated as past (as history) but as present—and the present is people.

Conversely, people find the present unacceptable without the past. There are as many examples of that unmistakable feeling of dull anxiety, of gnawing unreality, as there are examples of cities without a past, either because the cities have destroyed it (e.g., the center of Brussels) or because they are new. "Reality takes form only through memory," wrote Marcel Proust. Looking for the Indies, Columbus found America: a map is needed to discover the uncharted. Creation is deviation. Our origins are the seat of energy, authority: inasmuch as the past is the way—our only way—back to the beginning, it is the key to the future. Proust's axiom holds particularly true for cities. If the country falls under the heading of landscape, towns can be defined as timescapes. "Space is time that stays," wrote the 18th century poet Novalis: he might have been speaking about the urban phenomenon. A city without history is as flat and

Hôtel de Béthune-Sully, in Paris' Marais district, built in 1624, is now restored as La Caisse Nationale des Monuments Historiques.

Piazza Navona, Rome, retains the form of Domitian's stadium.



inconsistent as a stage-set or as a language whose vocabulary has been amputated of its etymology, of the meanings which have preceded and, through their sedimentation and erosion, determined its current usage. The present provides the urban language's surface; the past, its density and depth. The present lies in front; the past, in the back: latent rather than manifest, glimpsed rather than exhibited, palimpsest rather than proclamation. Victor Hugo defined the relationship in an essay about Paris: "Underneath the current Paris, the old Paris is distinct, like the old text between the lines of the new."

Hugo's seemingly casual remark does nothing less than describe the sole manner in which the past becomes viable in the present: in the form of interstitial, recessive (as opposed to dominant) presence. To lift the past to the surface by means of systematic restoration or archaeological exhumation is to petrify it (i.e.: to turn it into a museum). The Piazza Navona has long since ceased to be a Roman circus, but the persistence of its oblong shape maintains, in the filigree of the piazza's state today, the echo of its erstwhile role, which unconsciously lends it festive overtones. Even if the resurrection of the ancient circus were feasible, it would shock us as a usurpation: although our age needs to lean on authority as much as its predecessors, it will not accept an authority when it is openly stated and directly imposed. We reject as conscious statement what we welcome as unconscious connotation.

The tiny river Bièvre in Paris, of which Rabelais spoke, has long since been walled up and transformed into an invisible sewer. However, the Rue de Bièvre, which once espoused the brook's meandering course, remains. A certain permanence characteristic of all architecture, but also a city legislation which required that new buildings be aligned on the ground plan of those which they replace, have preserved, at least symbolically, the memory of the vanished river. When I say 'symbolically,' I do not mean 'abstractly': such survivals have effects as tangible, as measurable, as real as does subconscious memory. Examples like the Rue de Bièvre are still numerous in cities that have a past—a preserved past. The figure of a city's streets, squares, gardens perpetuates the existence of the hills, ponds, rivers, woods, moats and roads which preceded its edification. The timescape thus provides the access to, and the preservation of, the landscape. The maintenance of a traditional plan will often do more to conjure up the feeling of nature than the plant-

Westbeth artists' housing in New York by architect Richard Meier is a 1971 conversion from the former Bell laboratories.

Victor Baltard's Central Markets ("Les Halles") in Paris are now largely destroyed. The earliest pavilions were built in the 1850s.

ing of a handful of trees according to a new pattern.

Such residual presence of the past offers two precious advantages: 1) it prevents the historical heritage from stepping into the foreground where it freezes into museum, into tourist attraction, status symbol, object of cultural reverence; 2) it provides indirect, between-the-lines satisfactions for essential needs which can no longer be met directly, since it would be vain to suppose that the lines will henceforth carry any message other than that dictated by economic, social, technological necessity.

How then can we obtain this quality? How do we prevent the past from being destroyed (by renovation) or from rising to the surface (through restoration), which is the present's prerogative? The answer is, I believe, *conversion*. The meaning which I ascribe to this term is illustrated perfectly by Buster Keaton in "The Navigator". The actor, adrift on an abandoned ocean-liner, turns the ship's furnace into kitchen-stove, the kettle into steam-engine, etc.

A building (or an ensemble of buildings) stops belonging to the present when it ceases to accomplish the function for which it was designed. To avoid its slipping into the past, where the alternative will be destruction or museumization, it will be necessary at that point to convert it to a new function.

There is probably no more superb illustration for the workings of conversion than the Teatro Marcello in Rome, or for that matter, than Rome itself. The whole city is —or rather was until a very recent date— the scene of a permanent and ubiquitous process of architectural and urbanistic readjustments, adjunctions, subtractions which, while causing the despair of the archaeological purists, have been the prime factor in keeping the City present, in endowing it with a magic one never encounters in the mummified historical monument.

In a way, however, the case of Rome is misleading: the quality of its monuments, the venerability of its history might induce us to regard the magic as inherent to them, whereas actually it is generated by the very process of conversion. Baltard's pavilions for Les Halles; La Besana, an early nineteenth century hospital in Milan; La Cartoucherie, an armory in the Bois de Vincennes; the L'Aîné warehouses on the Bordeaux waterfront differ in nearly every respect, including architectural merit, yet conversion has turned them into members of the same family. They are recharged and they radiate energy. Les Halles 'made' the memorable performance of "Orlando Furioso" by the company of the Teatro Mobile but

it was also 'made' by them. A similar mutual *mise-en-valeur* occurred between the Théâtre du Soleil's "1789" and the Cartoucherie, between an orchestra directed by Pierre Boulez and the Entrepôt Laîné. La Besana, with its countless pillars and windows is about everything an exhibition gallery shouldn't be, yet the euphoria which it dispenses contributes to the success of the exhibitions held in it more than would ideal conditions of display. (The same, after all, is true for the Louvre, whose effectiveness as a museum stems precisely from the fact that it wasn't designed as a museum but as a place of residence.)

Examples of this sort could easily be multiplied: the Aître Saint-Maclou in Rouen—a fifteenth-century galleried cemetery transformed into school—the 'lofts' of lower Manhattan, Westbeth, Covent Garden, the arches underneath Waterloo Bridge, etc. In every case, the act of conversion seems to engender the same magic, the same contagious energy. This is due partly to the shift of function which, by putting some parts of the building to rest, suddenly upsets our routine blindness and makes explicit their formal characteristics: once the market was gone, the treatment of light, almost as subtle as in Hagia Sophia, became apparent in Baltard's pavilions, just as, with the removal of the sick, La Besana revealed itself an engineer's version of the mosque of Cordoba. Partly, too, it is due to the carry-over, the aftermath, the connotative effects pointed out above in connection with Piazza Navona and the river Bièvre: on the subconscious or symbolic level, we continue to experience the building's previous function, although it may be totally different from, or even opposed to, the new one. We are invited to pass from the linear, logical order of prose to the polyphonic illogic of poetry, for just as prose results from the censoring down of reality to controllable consistency, poetry, far from denying reality, springs from the cultivation of its multiplicity, to the point of incoherence. It is the latter that Victor Hugo had in mind when, speaking about the sedimentation of architectural meanings in Paris, he exclaimed: "What strange events, sometimes accumulated with the incoherence of reality, from which you are free to draw reflections!"

The most important aspect of conversion has yet to be touched upon. Let us consider again Buster Keaton as navigator. What exactly has he done with the steamer on which he is marooned? He has translated an anonymous system into a personal one. He has rephrased an imposed plan as an organic experience. The people of Paris dealt with the Marais, during the nineteenth century, or with the district around Les Halles, between 1968 and 1971, exactly as Buster Keaton had proceeded with his steamship.

In architecture as in city-planning, Keatonism answers an essential need. In a remarkable chapter of *Notre Dame de Paris,* Victor Hugo notes: "during the world's first six thousand years, architecture has been the chief language of the human race." That language was shared by builders and users as long as the technology involved remained accessible to the layman: brick-laying and stone-cutting are comprehensible to the entire community. And this comprehension permitted the almost total identification of habitat and inhabitant illustrated by the works shown, some years ago, in an exhibition called "Architecture Without Architects." This monistic—one is tempted to say: Edenic—phase of architecture was brought to a close by scientific and technological development. From the Gothic age onward, progress induced the emergence of a class of specialists. The Industrial Revolution marked the definitive divorce between builders and users, between the planners and the community.

The consequences are calamitous, for not only have planning and living ceased to permeate each other, but inasmuch as the language of architecture and urbanism is entirely in the possession of the planning function, living is literally condemned to silence, censured, driven underground. The tragic split between the developed and the underdeveloped which progress has provoked thus is found not only between countries and continents, but within our own cities. With this added complication: here, we are the victims of planning even when *we* are the planners. The frontier between the developed and the underdeveloped does not run outside but inside: in our modern cities, the colonial war has become a civil war. For the dimension of living continues to exist even within the planner. "Science says 'we,' art says 'I,'" wrote Claude Bernard: "'We' is a sum of 'I's'" Within the man of progress, the original animal survives, inarticulate. The loudly proclaimed need of the former to drive his car has not eradicated the latter's need for walking: yet while he supplies the former with roads, we deny the latter his needed tracks. Or again, while *we,* the planners, must conceive buildings and cities in terms of generalized, afocal space, *I,* the individual user, need to experience space focally. The terrifying implications of this dualistic pattern become all too clear when we remember that, geographically projected onto the scheme of our cities, it has led to the separation between place of work and place of residence. Indeed, the growing distance between them is like the spatial transcription of the schizophrenia that threatens us as individuals and as groups.

To overcome the division, we cannot go back to pre-industrial monism. To believe in a Rousseauistic return to nature is to daydream, but the assumption that progress has led us to a point where we are about to shed the original animal appears equally foolish: what is often described as a mutation is little more than a mutilation. The dualism must be accepted. And once it is, it becomes obvious that the only way to heal it is to rearticulate the terms of the duality. But how?

The fascination exerted upon us by places that have undergone Keatonian metamorphosis, the joy which they kindle in us are explained by the fact that they provide proof of—as well as a model for—the realistic resolution of the tragic dualism which marks the urban phenomenon today (and by 'realistic' I mean that they do not attempt to eliminate one of the terms of the dilemma). It is as if we saw a bird building its nest with cast-away razor-blades.

Like past and present, the primitive and the progressive are meaningful, productive only in relation to each other. Conversion is the mechanism whereby this rearticulation is achieved. It is high time, therefore, that architects and city planners avail themselves deliberately, as it is their nature to do, of an instrument of which the non-specialized citizenry has made wonderful, instinctive use for some time. Nor should they think that conversion relates only to frivolous matters of esthetics and psychology: by keeping the past present, conversion preserves the future. For pre-industrial schemes that seem hopelessly outdated in the industrial phase may suddenly appear viable again in the post-industrial age: overnight, for instance, a fuel shortage turns turnpikes into nightmares and reactivates streets. "Men perish," wrote the pre-Socratic philosopher Alcmeon of Crotona, "when they are no longer able to link their beginning with their end." As long as we do not forget the art of converting, it needn't happen.

Photo credits: opposite, top, Ezra Stoller, © ESTO; opposite, below: Evelyn Hofer.

MILL INTO STUDIO

Imlaystown, New Jersey

On a morning when he could no longer face another 90-minute commute to New York City, landscape architect Robert Zion picked up the telephone and bought a condemned mill for sale in his own town. Thus began a major restoration project, for the mill and for Zion.

Zion had moved to the tiny, deteriorating town in the early 1960s, but as principal of the architectural and planning firm of Zion & Breen Associates, he found his country homestead relegated to weekend use. Rushing into the city became more and more difficult as Zion grew to know and love Imlaystown and its people. Here he could live more simply and, he felt, more meaningfully. Here his firm could make a difference.

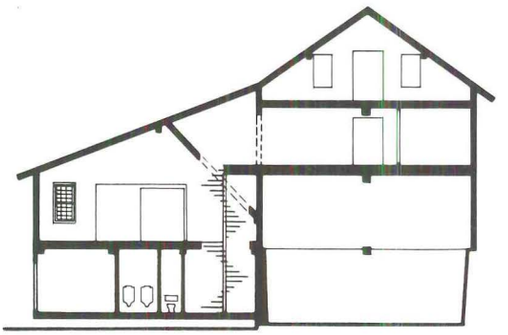
It took a little convincing, but Zion persuaded his partner and associates that country living could improve their lifestyles, and the firm moved its headquarters into the old mill after it was restored. Today Zion rides his horse to work and the firm is buying other Imlaystown properties, hoping to restore and convert them to new uses. The town, which had been near financial ruin, has new hope of surviving.

The mill's renaissance has historical poignancy. Built in 1695, the mill was owned by Richard Salter, a great-great-great grandfather of Abraham Lincoln. In 1898, a fire ravaged portions of the superstructure, but these were rebuilt and the mill continued to operate until 1962.

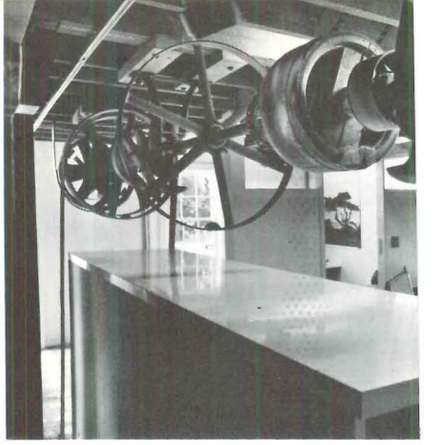
The restoration is actually a double recycling project because Zion & Breen not only saved the building by turning it into office space, but provided for the structure's eventual return to milling. The equipment visible in the photographs is not mere decoration; the offices have been designed to nestle in and surround the existing elements of the mill. The original machinery has been cleaned and reconditioned. Very few pieces have been removed or changed and even the altered portions may be easily restored.

The mill's entrance is particularly dramatic. The front door opens onto a bridge, which Zion & Breen built across the open millrace of the original structure. Crossing this bridge, a visitor can look down on the old, horizontal water wheel, the 1695 stone foundation walls, and listen to the mill stream, which still flows through the structure. The atmosphere is cool and exotic, reminiscent of another time; the space is alluring and deep; it is difficult to move

This page: Entry to the offices is provided by a bridge (lower right), spanning such mill souvenirs as the turbine water wheel, grain elevator gears mixing and storage areas. Similar millworks enhance the upper levels, as in the second-floor reception (top right) and third-floor conference room (top center and top far right).
Pages 72 and 73: A door is carved into the top of a mixing bin to create a second-floor closet (top left), which is "bottomless" because the bin penetrates to the floor below. The entry bridge (center) and circular staircases (bottom) make it fun to move through the building. The drafting room (right) allows the partners above to look on, and the draftsmen occasionally to look outside.



SECTION



past and not stop to daydream a while.

On the far side of the bridge is a door to the office space, which is distributed on four levels. At entrance level is a reception area, partitioned off from the main drafting room at the rear of the building. The rear wall of the drafting area is glass, with wood shutters, and the view includes the mill stream, gardens, woods, fields, and, often, Zion's horse.

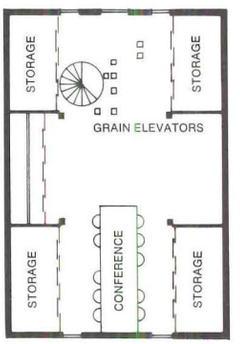
On the second floor is the partners' office and reception area in the front of the building. This area becomes a balcony overlooking the drafting area and the outdoors. A spiral staircase cut into a former grain bin provides access to this area and the third floor. The office closet is actually a mixing bin with a door cut into it.

The third, topmost floor contains a conference room carved out under the eaves. The perimeter is formed by wood shutter doors that conceal storage areas.

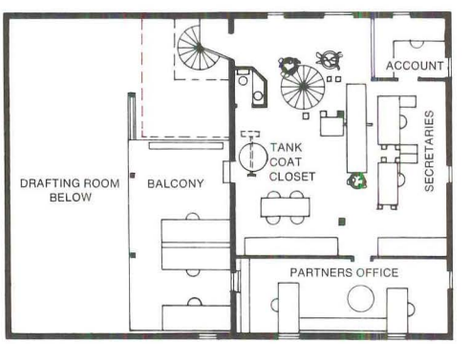
The lowest floor of the building, on a level with the millrace, is a former chicken coop, where Zion & Breen added a floor, outside deck, and casual sawhorse tables and furnishings. This is used as an informal or extra drafting room, as well as an employee lounge area. The amenities include a galley and sitting room.

All of these floors are distinguished by the old mill machinery, which would be fascinating as pure sculpture, but takes on special significance because it symbolizes both the structure's past and its possible future as a grist mill. Where possible, the original structure of the building is revealed and highlighted. Simple furniture and occasional partitions and cabinets of bright colors provide a modern, clean counterpoint to the antique charm. Overall, the building is light, fresh and airy—a constant amusement for the eye.

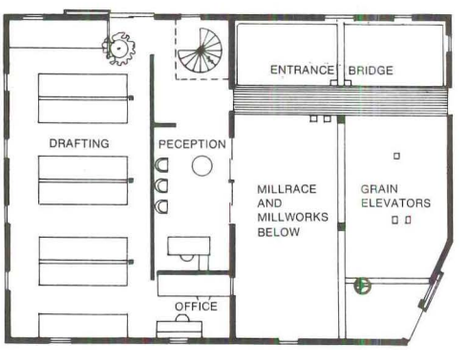
—Marguerite Villecco



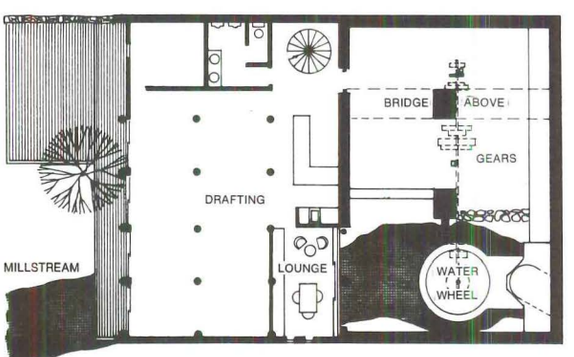
LEVEL THREE



LEVEL TWO



LEVEL ONE

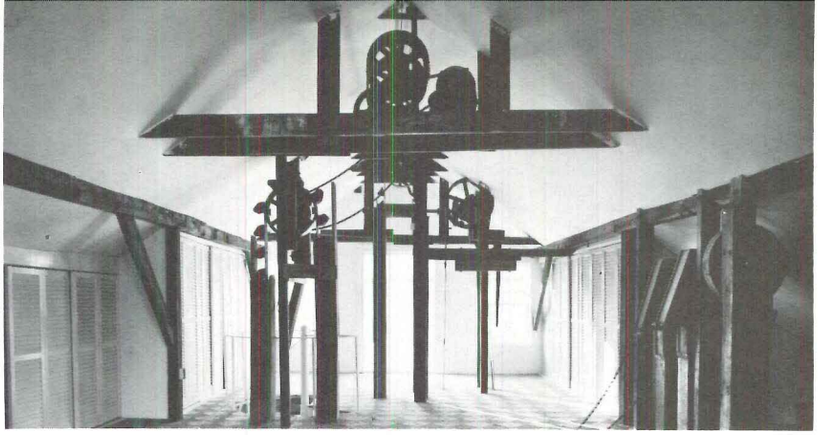


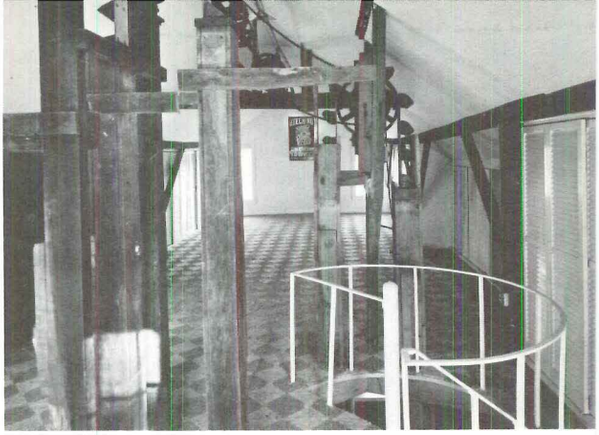
BASEMENT

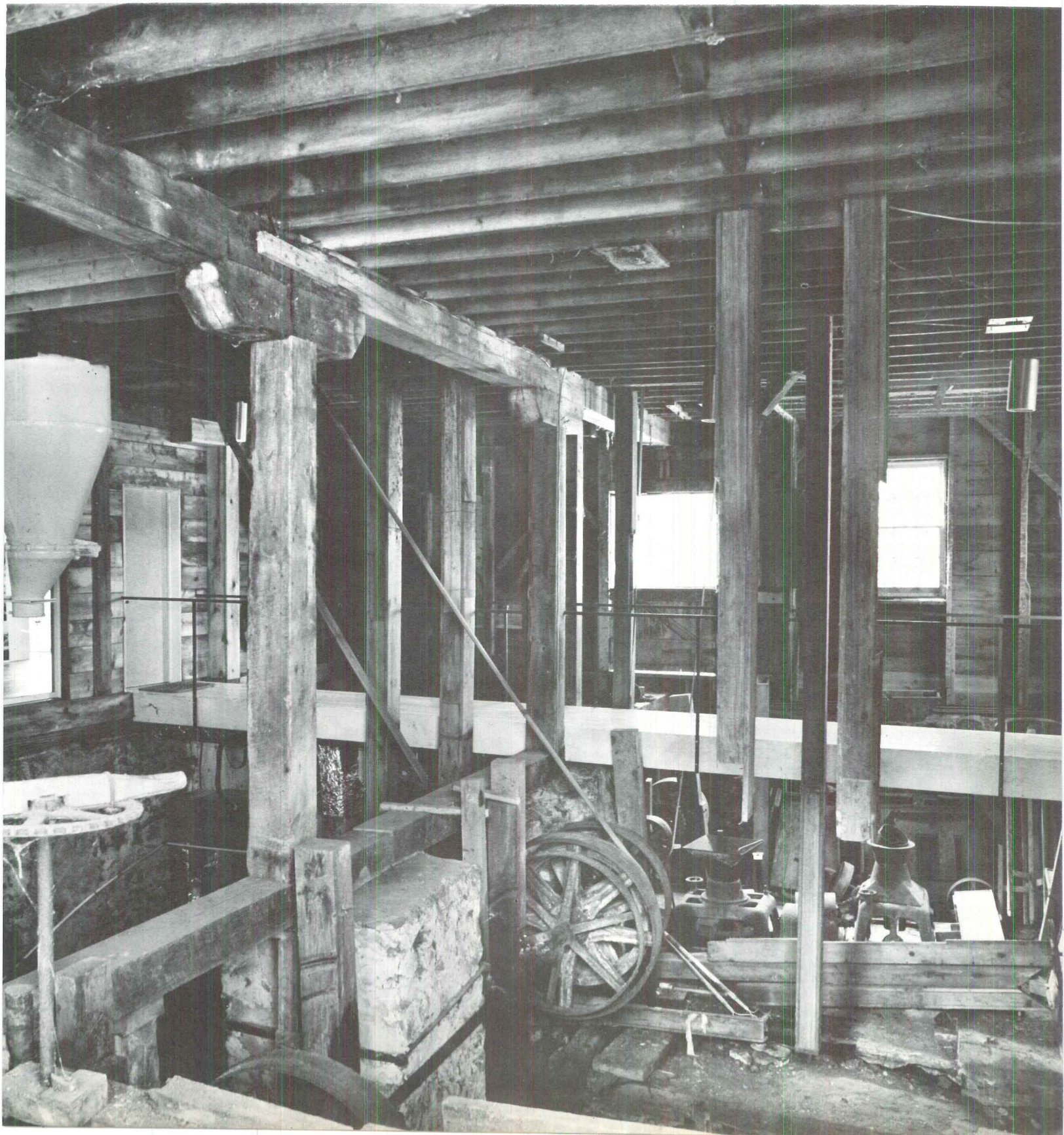
0 20'
0 6m

Facts and Figures

Salter's Mill, Imlaystown, N.J. Owner and architect: Zion & Breen Associates, Inc. (William H. Short, associate architect). Mechanical engineer: Harold Hecht Associates. Design consultant: Morton Levine. Building area: 6,200 sq. ft. Total cost: $100,000. Photographs: Norman McGrath. Building suppliers listed on p. 133.







FOUND SPACE INTO SCHOOLS

A report for the Educational Facilities Laboratories

by James Meier

What do the following buildings have in common: a bankrupt girdle factory in Perkasie, Pennsylvania; a sardine cannery in Robbinston, Maine; a hotel in Louisville, Kentucky; and a post office in Toledo, Ohio? Answer: they are all now schools.

In the United States, the conversion of such found space into schools was recognized as a promising idea in the late 1960s; since then, it has gained increasing attention. Its advantages are largely financial. Advocates of such conversion say that it is cheaper than new construction, an argument often, but not always true, but a more certain advantage is that, because found space can be leased, its use allows hard-pressed school districts to circumvent intransigent voters who may disapprove new school building. Leasing is thus an attractive alternative for many school districts which cannot legally build a school without exceeding their statutory debt limit.

Conversion may also be the right solution for many urban school districts which can find funds for schools in their operating budgets, but not in their capital budgets.

Found space recycling avoids the high costs and headaches involved in the acquisition of scarce sites and in the usually attendant problems of relocation. It also prevents an old building's decay and the usually resultant blighting effect on its surroundings.

From an administrative view point, with rare exception, the time required for planning, acquiring, converting and moving into found space is considerably less than that required for new construction; recycling is thus a more flexible solution to sudden enrollment growth or emergency space needs. Furthermore, buildings which can be converted for school use can just as easily be reconverted to another use when no longer required as schools, therefore avoiding the burden of "white elephant" schoolhouses if enrollment declines.

From an educational viewpoint, advocates argue that found buildings create good educational settings, in that they lack the usual institutional stigma. Being more informal, they are conducive to a more relaxed, open educational ambience, and are more inviting to community participation.

Success in converting found space, however, is by no means automatic. While it is almost always faster to convert an existing building than to construct a new one, there is no assurance that it will be cheaper. A six-story industrial building in Philadelphia, now the home of several innovative and exciting school programs, including the Intensive Learning Center and the Philadelphia Advancement School, has been renovated at a very high cost and is still not completed. It may well turn out that a new school building would have been cheaper.

When extensive renovation is involved, it may be difficult to predict and control costs because it is difficult to know in advance what interior conditions will be discovered. In the case of the Newtown High School Annex in New York City, for example, converted from the Bowl-Away Bowling Lanes, upset girders ("I-

James Meier served on the Fleischmann Commission appointed by former New York Governor Rockefeller to study the quality, cost and financing of state schools. This article is drawn from a study which he is preparing for the Educational Facilities Laboratories, a pioneer in advocating found space re-use, and for the National Institute of Education of the U. S. Department of Health, Education and Welfare.

Eight of the nine buildings housing the Maryland Institute College of Art in Baltimore are not new but have been converted from other uses. One of them is the 1896 Mount Royal railroad station, adapted by architects Cochran, Stephenson & Donkervoet to contain the school's library, cafeteria, sculpture studio and gallery. At the sides of the former waiting room, an intermediate balcony level has been added to gain floor area.
New photograph by John Tennyson.

beam" supports set partly above the floor level) required the unplanned construction of an entire new floor.

For the landlord, re-use is a business venture, so issues of landlord-tenant relationships inevitably arise. In New York City, for example, where long-term leases (10 years or more) are common as a way of amortizing the cost of renovation performed by the owner, the responsibility for numerous problems relating to building maintenance is often a matter of contention. It is difficult to write legal agreements that can compensate for a spirit of cooperation between owner and tenant, and, after all, school children are not always ideal tenants. For school authorities, the message is clear: choose your landlords with caution.

State and local laws may also impede the widespread use of found space as a school building alternative. In most states, a state education agency must approve the environmental health, safety and educational standards of all school buildings. Unfortunately, the standards evolved for new school buildings are not always applicable to conversions. Standards regarding room sizes and proportions, number of stories, and detailed specifications for such things as window sizes, percentage of glazing, etc., are often based on a rigid concept of the educational process and on unsubstantiated assumptions about human comfort.

In addition, a school district looking for found space should check state regulations to see if conversion is permitted at all. Some states consider found space as temporary quarters which are permitted only under "emergency" circumstances; consequently, the purchase of found space for conversion to educational use is, in some locations, of uncertain legality.

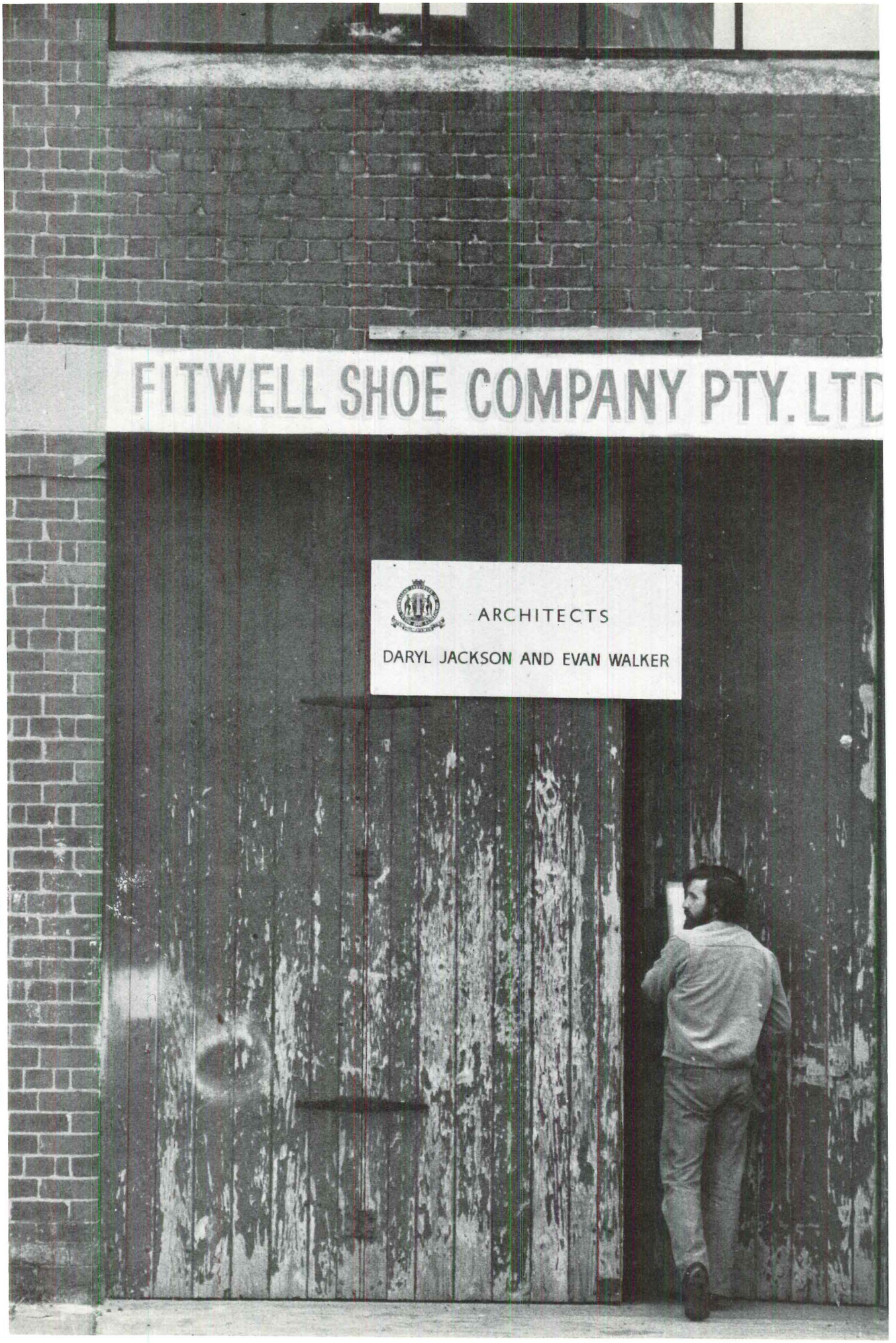
Many state education departments have actively resisted the found space concept by means of laws, and some educators have resisted it through skepticism and indifference. For people who are proud of the symbolic qualities of a school building as a community institution, a found space school may seem inferior. Also, teachers and administrators who function best in the traditional self-contained classroom will find an innovative or experimental facility inadequate. Found space schools function best for those with a flexible frame of mind and a good imagination.

School enrollments on a national scale have reached a peak, and the baby boom of the 'sixties is over. However, this does not mean that no new school space will be needed. Population shifts create needs for new school space in new buildings, and existing buildings—even schools—deteriorate and become obsolete. A double irony is that new, rapidly growing communities with the most acute need for school space lack both the existing building inventory from which to convert and the real property tax base necessary to incur long-term capital debt.

There is, however, a wide market for found space conversion among the rapidly growing community colleges and universities which are less strictly bound by regulations and are better able to innovate.

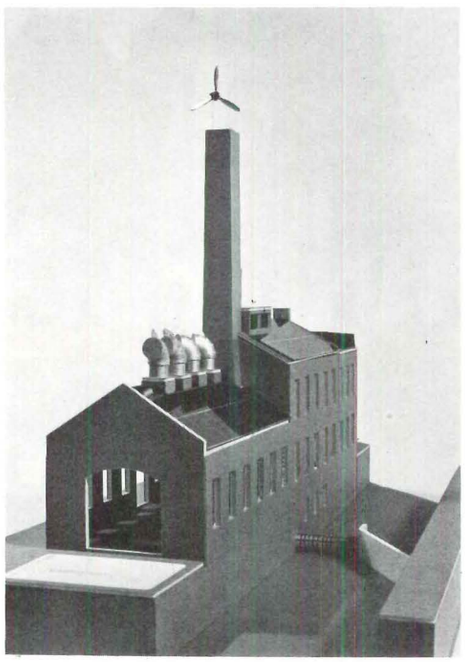
The tight economy and soaring construction costs will probably serve as further deterrents to new school building. Furthermore, the ubiquitous energy crisis has led to widespread material shortages and further price increases. Because new construction uses materials more intensively than does building renovation, it's a sound guess that found space conversion, in the future, will be a more attractive concept than it is now.

RECYCLING NOTES



Fitwell

The architectural firm of Daryl Jackson and Evan Walker has created for itself an office that fits very well indeed into the former warehouse of the Fitwell Company (Proprietary, Limited) in Victoria, Australia. The building is in a mixed area of other factories, Housing Commission apartment blocks, and down-at-the-heels back lanes. Jackson and Walker felt, therefore, that an elaborate upgrading of the exterior would seem pretentious and inappropriate to the building's context. Renovation was largely limited to the building's interior, and the outside, with its original sign still prominent, maintains a piquant continuity with the past which a thorough modernizing might easily have destroyed.



Energy

Refitting, now under way, of a nineteenth-century mill in Providence, Rhode Island, will demonstrate not only building re-use but also energy re-use. It will be heated and cooled by solar energy using heat pumps; its electrical power will come from a combination of photovoltaic solar cells on its roof, a wind-powered generator mounted on the mill's tall stack, and a water turbine on a nearby riverbank. Its design is the joint work of the Research and Design Institute (REDE) and Brown University, and, when completed, it will serve as REDE's headquarters.

Virginity

A recycling resource of an unusual (but potentially important) kind is the amazing work of Signora Rosita Mucci of Genoa, Italy. According to reports of the Associated Press, Signora Mucci, for $425, will administer her special brew of asparagus juice, quartz, egg whites, oatmeal, and other ingredients, thereby (she promises) restoring virility to tired men and virginity to unfortunate girls.

Eat

Vermont's Sen. George D. Aiken (R.) was perfectly serious, he says, when he told 300 farmers that someday stable manure may be packaged and sold as food for human consumption. He carried a cellophane bag of recycled manure made into pellets to prove his point and, while he admitted these were for nourshing the fields, he said they could be "doctored up a bit . . . for our own nourishment if properly fortified and flavored." Meanwhile, two bacteriologists at the University of Wisconsin are working on just this problem. R. S. Hanson and J. G. Zeikus report they have a way to produce bacterial protein from waste materials. Concluded Aiken: "What they don't tell us is whether we should use sugar and cream or salt and vinegar on it."

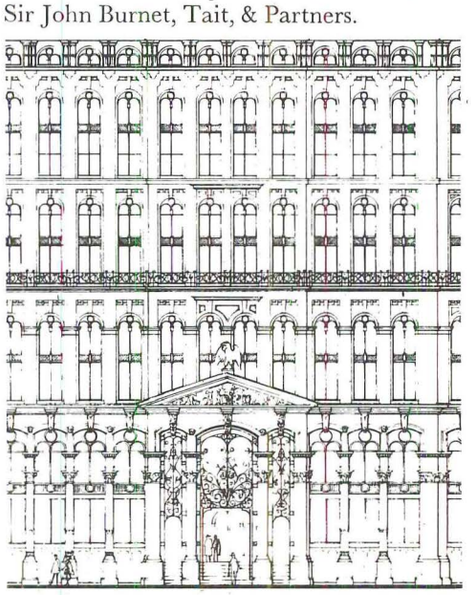
Law

Architects working with existing structures, particularly those of historic significance, often find their work restricted or supported by a bewildering number of federal and state laws. A recent compilation, state by state, of all such legislation in the United States is *A Supplement to Historic Preservation Law* by Jacob H. Morrison. Privately printed by Mr. Morrison, 315 Richards Building, New Orleans, La., the paperbound book is a real bargain at $1.75.

A similar summary, applicable to buildings in England and Wales, is a booklet titled "Protecting Our Historic Buildings, a guide to the legislation," available from the Department of the Environment, 2 Marsham Street, London, SW1. And for Scotland there is "Scotland's Historic Buildings, a guide to the legislation which protects them," available from the Scottish Development Department, Argyle House, Lady Lawson Street, Edinburgh.

Hops

In London's Southwark Street, there is a five story building known as the Hop Exchange, which dates from about 1870. It no longer houses any hop merchants, and would likely have been replaced with new construction if it had not been listed in 1970 as a landmark (and therefore become inviolable). But in this case there was the possibility of simultaneous expansion and restoration: the Hop Exchange was originally *ten* floors high, the top half having been destroyed by fire in 1920. Current plans call for restoring it to its original design, at least on the exterior, thus providing Southwark Street with the unexpected reappearance of a major Victorian building, and its owner with five floors of new office space. Architects are Sir John Burnet, Tait, & Partners.



Scotland

What better place for a tourists' information center than a building which is itself a landmark! This one, at the foot of Stirling castle and overlooking a precipitous drop into the Forth valley, was a private house in the 17th century and an inn in the 19th. Because of its landmark listing, no major exterior alterations were allowed, a restraint which the architects (E. Johnston, N. Groves-Raines, and A. Brown of Edinburgh) have responded to with exuberant cascades of flowing curves on the interior. The building houses a book and crafts sales shop and an information desk on its upper (entrance) level, and exhibition and auditorium spaces below.

A. P. T.

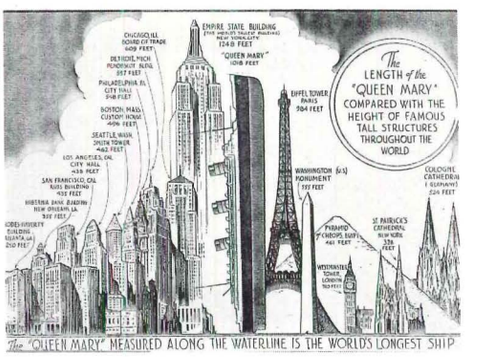
An organization recently formed in Canada is serving a very valuable function as a clearing house of technical information pertaining particularly to old structures —such subjects as the installation of fire protection devices in existing buildings, the use of X-ray technology to determine a building's structure, and methods of investigative probing without destroying the building being probed. The group is the Association for Preservation Technology; its president is Jacques Dalibard, Box 2682, Ottawa, Ontario; and the editor of its informative newsletter is Martin Weil, 400 Stewart Street, Ottawa, Ontario.

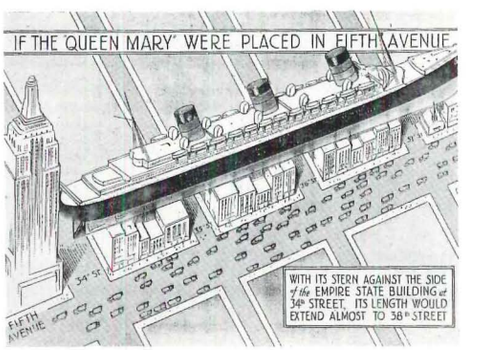
Melbourne

A 100 year old derelict building at 60 Ross Street, Melbourne, Australia, has been at different times a store, a boning works, a small factory, an architect's atelier, and a garage. Melbourne architect Neil Clerehan (a Field Editor of Architecture PLUS) has converted it into a successful art gallery. The walls of handmade brick were braced with new steel tie rods, and, behind a new curved wall enclosing a small sculpture garden, the severe limitations of the building shell (it is only 15 feet wide) were used to maximum advantage by Clerehan: the gallery's new interior is a startling tube of space, finished—ceiling, walls, and floor—in glossy white polyurethane paint.

Queen Mary

When the Cunard Line's Queen Mary was launched in 1934 on Scotland's River Clyde, she was immediately compared with buildings (if she were turned on end, for example, she would be 230 feet shorter than the Empire State Building, 34 feet taller that the Eiffel Tower). Now the famous ship has *become* a building. In her 31 years of sea-going service, she carried more than two million passengers across the Atlantic, but since her conversion into a floating resort, more than three million visitors have boarded her. Permanently moored at Long Beach, California, the Queen Mary now houses, with undiminished style, several restaurants, convention facilities, special exhibits such as Jacques-Yves Cousteau's "The Living Sea," and a 400-stateroom hotel.





Help!

"Everyone says it's a terrific idea," says Mel Kaufman, "but I've abandoned it."

The idea, basically, was to take the fast-emptying loft buildings plentiful in New York City and to recycle them for the middle-income people who are fast leaving the city. Space now barely rentable at $1 per square foot for manufacturing would bring $2-$3 per square foot for housing and still be a bargain.

But the *kind* of housing it would be is what makes this idea so terrific. It would be "loft housing"—with a new bathroom and kitchen built into each apartment, and the rest of the space remaining open. "The new middle-income people live differently today," says Kaufman, who is

in charge of development for the real estate firm, The William Kaufman Organization (and the man behind 127 John Street and 77 Water Street). "People don't want to have some bank or Building Department or insurance company tell them how they should live." New York City has already responded eagerly to this kind of housing—first in the SoHo district, where artists have long been living and working (now legally) in old cast-iron loft buildings, then in Westbeth, where artists' housing was more recently carved out of the old Bell Labs.

Because it seemed so good an idea, and because "everyone" was in favor, Kaufman chose a typical loft building (roughly 30 to 35 feet wide, 90 feet deep) and began to think it through with Claude Samton, an architect already sympathetic to the problem. Samton had been thinking for some time about "participatory housing" and a system of components whereby inhabitants could design their own living units.

Plans were filed with the Building Department, and then came the stumbling blocks. Some 28 violations were cited. The plans showed no exit sign in the basement, for instance, "but it already exists," says Samton. More serious is the requirement that an old building being turned to a new use must be designed as if it is a new building. "It's ludicrous," says Kaufman. This affects such matters as secondary egress, which might otherwise be possible through the adjacent yard. Wooden stairs are another problem, even with a sprinkler system included and even with only a few persons expected to exit from each residential floor, on stairways now considered adequate for 30 to 40 workers per floor.

The whole point of moving ahead quickly with one building was to clear the way for legislation permitting these conversions throughout the city.

But it didn't move quickly—or at all.

"There could have been 10,000 apartments on the market in a few years," Kaufman believes. But there won't be. What there will be—forever, most likely—is a Building Department that rarely believes anything should be done for the first time, or if so, then certainly not now.

Hope

Far more hopeful is a study just completed on a little-known but extremely interesting phenomenon in New York City—the rehabilitation of derelict buildings through tenant ownership in some of the city's most troubled neighborhoods.

The study, *Self Help in the Inner City,* was prepared by the United Neighborhood Houses of New York, Inc. (the settlement-house federation in New York City), under contract with the Borough Improvement Board of Manhattan, and with the assistance of the J. M. Kaplan Fund. Director of the study was Robert Kolodny, an instructor in planning at Columbia University.

As Kolodny describes the emerging movement, there are 12 such projects already finished, 25 in progress, and 100 being planned—for a total of 286 buildings and 8,188 dwelling units. The activity is occurring principally in distressed properties, and in three-quarters of the cases the tenants have taken a leading role in developing the project.

Ownership in and of itself is not the major attraction, Kolodny finds. The tenants' main interest in gaining control over their dwellings is to improve them.

Another of the principal findings: Moderate rehabilitation with tenants in occupancy is a feasible way to upgrade deteriorating buildings. The approach is physically possible without unacceptable inconvenience to tenants or contractor. The combination of low acquisition costs, modest rehabilitation standards and real estate tax exemptions make possible a total development cost of $10,000 per unit and monthly charges of $30 and $35 a room.

Very interestingly, the projects contain a wide range of incomes, with the gap between poorest and most affluent households exceeding $10,000 in most projects. Residents are mostly minority households of low and moderate income; a significant number receive public assistance.

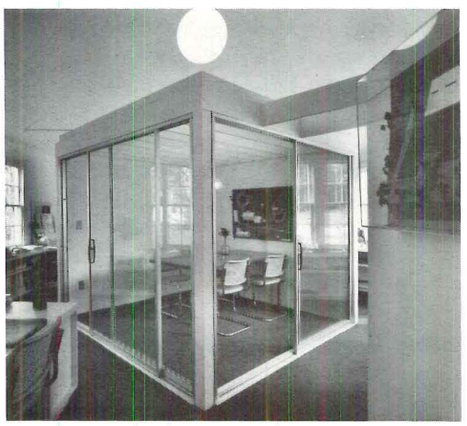
Tenants acting alone can make impressive strides towards rescuing a building from final abandonment, the study concludes, but they cannot move very far towards a permanent solution to their problems without outside assistance. The best way to provide this assistance appears to be a partnership between the tenants and a community organization or nonprofit group.

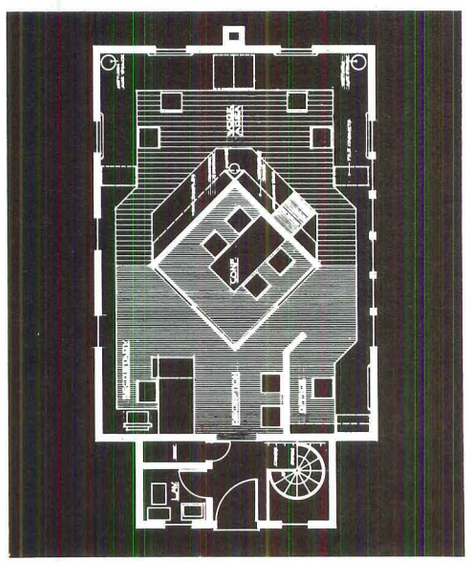
Cooperative conversion *can* work in the inner city, is the message of this report. Cooperative conversion is a means of salvaging housing already abandoned, and a way of preventing abandonment where it is threatened. The remedy of shifting ownership to tenants has been the subject of much theory, Kolodny notes, but only in New York City has it been tried on a significant scale. It should be noted that "abandoned" properties have only been abandoned by their owners, says Kolodny; the tenants continue to run them after the owners have walked away.

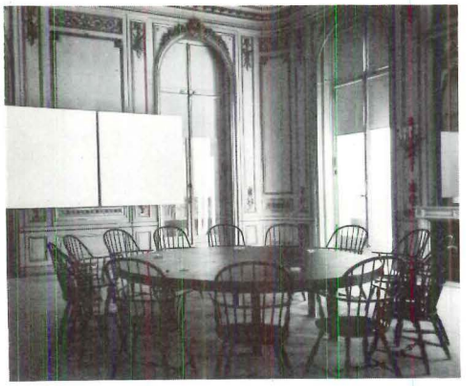
This is an enlightening report, and a very hopeful one. Kolodny gives the details of nine case histories, discusses financing and economics, and analyzes the public policies needed to harness this spontaneous trend in the inner city. The report is available from United Neighborhood Houses, 101 E. 15 St., New York, N.Y. 10003, for $4.95.

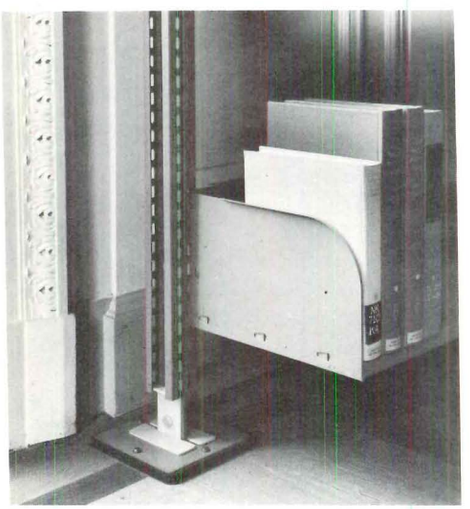
Wilton

A Greek Revival schoolhouse built in Wilton, Connecticut in 1843 has been spiritedly converted by architect A. Robert Faesy, Jr., into his own office. While its exterior is as proper as ever, its interior space is now animated by a glass-enclosed conference room set at an angle that is unmistakably 1970s. The building is one of a group of three owned by the Wilton Historical Society, two of them moved to their present site to escape the path of highway expansion. All three buildings are restored, in active use, and paying rent to the Society. (The other two are an 1829 slave quarters, now a real-estate office, and the 1726 Lambert House, now a showroom for the Hitchcock Chair Company.) Mr. Faesy's associate for the work on his own office was James M. Hancock.









Venturi

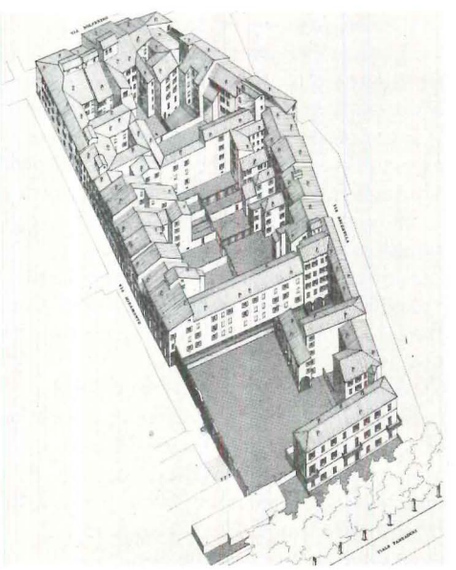
An early work by Philadelphia architect Robert Venturi, and still one of the most striking American examples of recycling, is his 1959 conversion of the Duke mansion on New York's Fifth Avenue for new use by New York University's Institute of Fine Arts. The delicate decor of the building shell remains intact, and the spare, sometimes industrialized fittings and furnishings inside are consciously detached from it, physically and stylistically. The contrast is dramatically blunt.

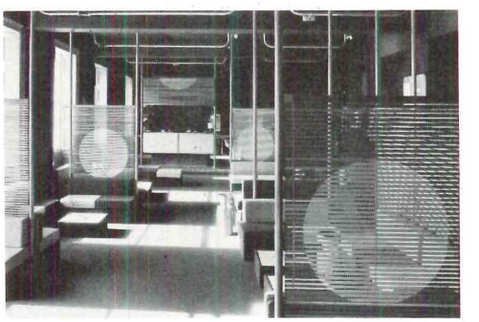
1975

When the Council of Europe met last July in Zurich, 300 representatives from 27 European countries designated 1975 as European Architectural Heritage Year. The Year is intended as the culmination of a three-year educational process in which Europeans will be encouraged in assuring their older buildings a continuing life. This huge task is to be spurred by a series of seminars and by six issues of a special new magazine, *European Heritage*, sponsored by Rank Xerox Ltd. It will be published in four languages and its editor will be the critic and historian Sir James Richards. Details are available from Phoebus Publishing Co. Ltd., St. Giles House, 49/50 Poland Street, London W1A 2LG.

Bologna

The city of Bologna is developing a strong program, probably the most effective in Italy, for recycling. Legal framework was established in the 1930s, and given a great boost in 1971 when a new law was passed allowing the local Communist government to buy real estate below market value. This power, combined with a city-wide development plan approved in 1972, and supported by collected funds of 10 million dollars (2 million from UNESCO), has enabled Bologna to begin a self-regeneration which is impressively thorough. Thirteen areas of the city (primarily residential) have been selected for special attention, and reconstruction, in accordance with strictly prescribed principles, has already begun in five of the areas. The authorities are maintaining low rents in the housing thus rehabilitated, and it is estimated that the entire project will require many years and $60 million.





Trafalgar

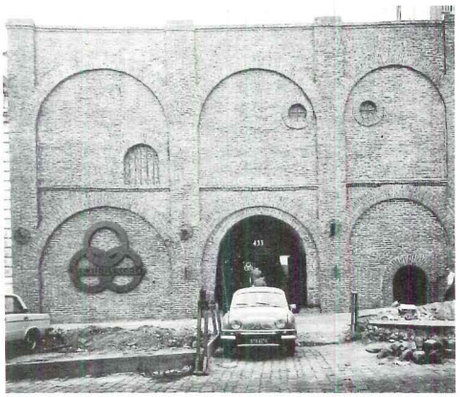
Adjacent to James Gibbs' famous church of St. Martin's-in-the-Fields at London's Trafalgar Square is a more modest building used for forty years as a church school, its area subdivided into small classrooms. Faced with changing needs, the church has converted the interiors to larger, more open spaces for community gatherings, the spaces handsomely subdivided by colorful screens of painted wood slats. Architects for the renovation were Ahrends, Burton & Koralek.

Outdoors

The re-use of old buildings often also entails the re-use of old gardens around the buildings. For many architects who exercise knowledgeable care about the character of historic architecture, the history of landscape architecture remains a mystery. Under the direction of Mr. René Pechère, Architecte de Jardins, 20 Rue du Chatelain, Bruxelles, Belgium, international maps are being prepared which will designate historic gardens deserving particular preservation attention. The mapping is sponsored jointly by the International Congress of Monuments and of Sites and by the International Federation of Landscape Architects.

Michelangelo

During the British invasion of Buenos Aires in 1806, this building in the historic San Telmo district was a hideout for Argentine soldiers; under the government of Gen. Juan Manuel de Rosas, its underground tunnels served as prison cells; later, Carmelite nuns transformed it into a convent; for years after that, it was abandoned. Recycled once again by architect Sergio Enquin, the building now houses an elegant restaurant called (we're not sure why) "Michelangelo."



Fragments

Architectural fragments—pilasters, paneling, newel posts, whole shop fronts—eager to be adopted and put to use again are for sale at The Wrecking Bar, Inc., 2601 McKinney Avenue, Dallas, Texas.

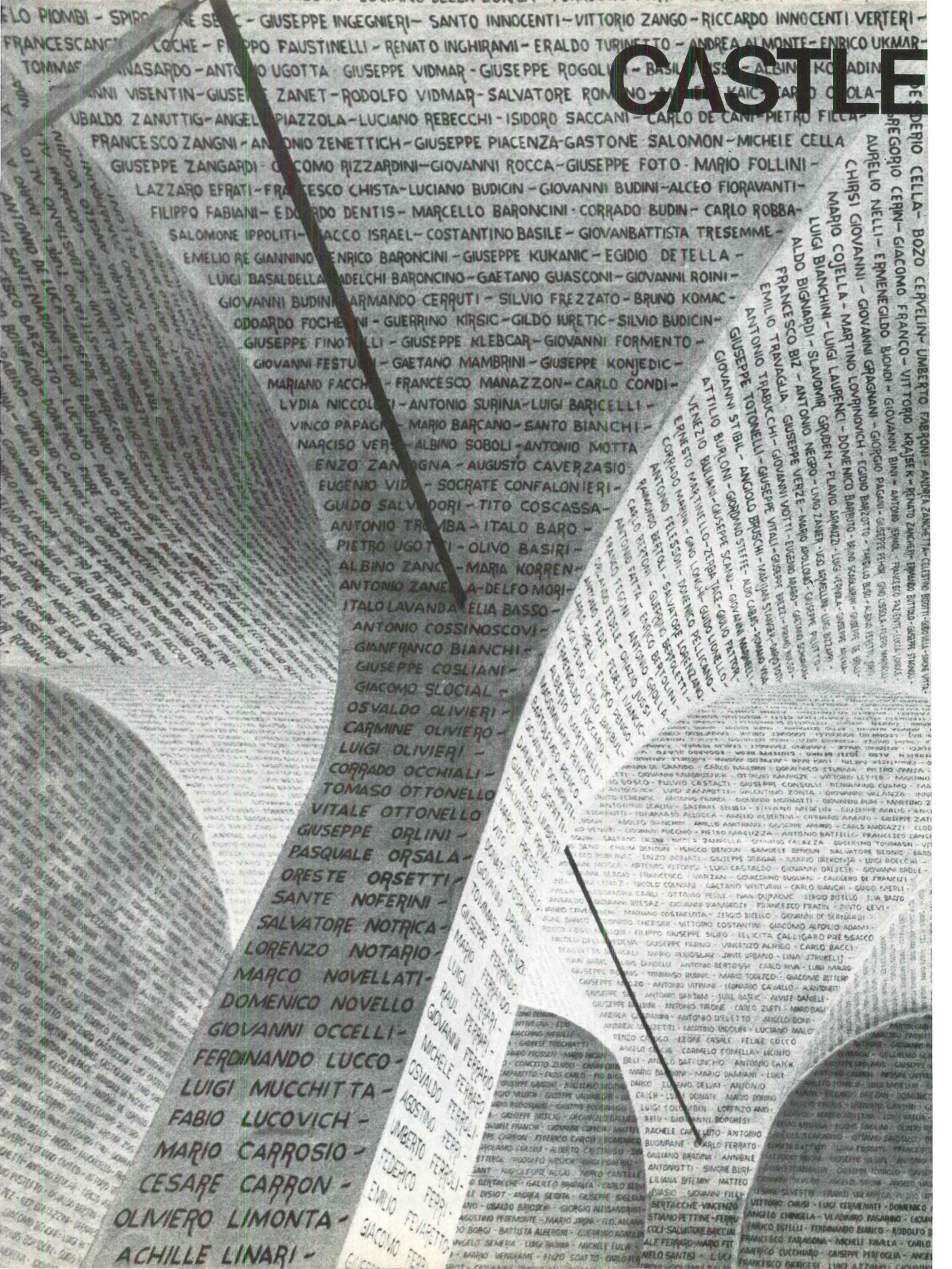
Queechee

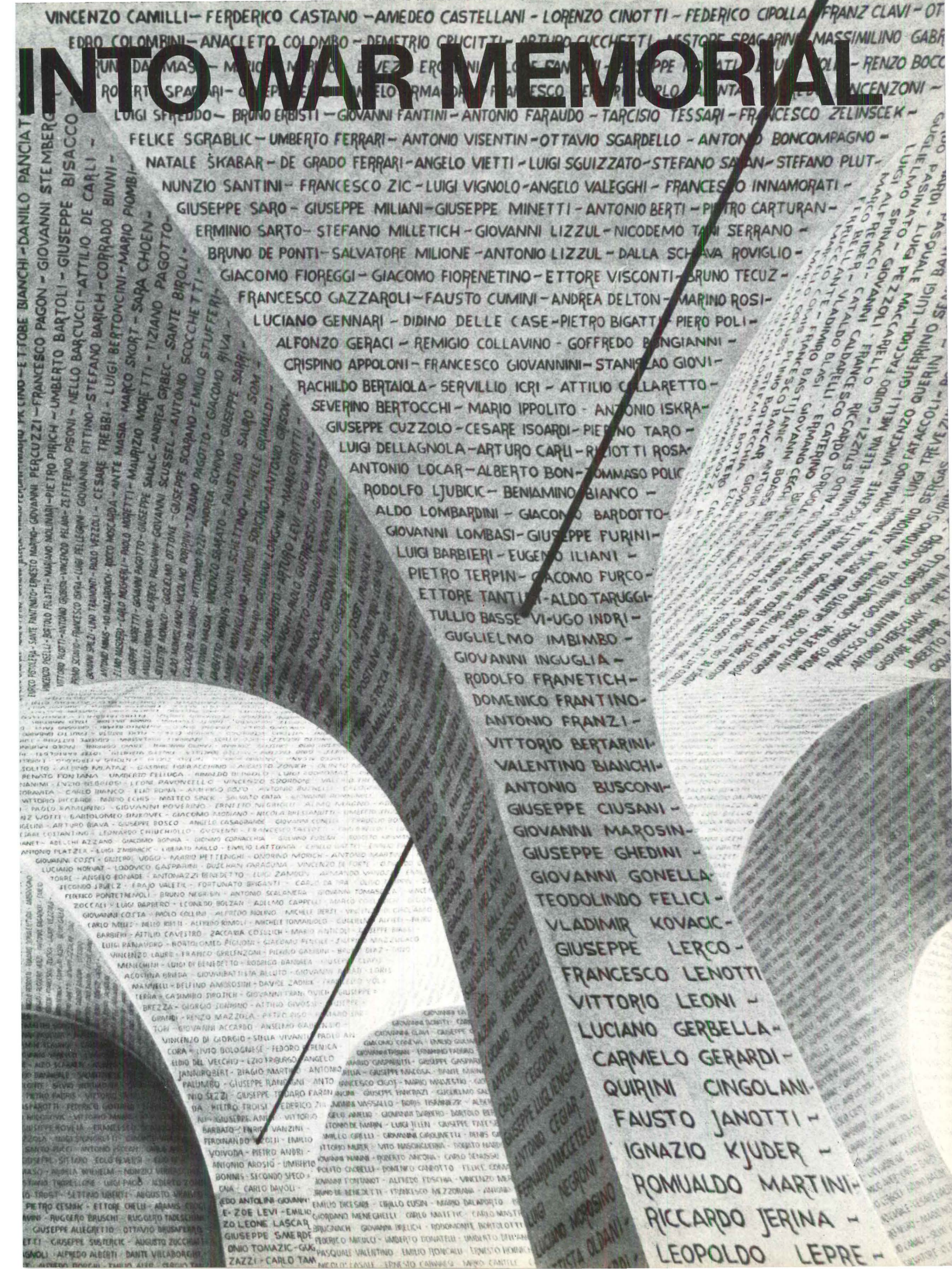
Queechee, Vermont, was a flourishing textile mill town in the last century. When textile manufacturing moved south, Queechee died. But its former mill building, its millowner's mansion, its houses and shops are now being rehabilitated, this time to serve as the commercial center of a completely new town—a planned vacation and retirement community of 6,000 acres.

Arms

A Bavarian castle, once used as an armory, is again filled with the equipment of war—this time as the Bavarian Museum of Arms. The castle is in the ancient walled center of the city of Ingolstadt, on the Danube, and some of its walls date from the 14th century. Around 1800 it was turned over to the military for use as an armory, and in the Hitler regime munitions were stored there. In 1945, however, the turn-of-the-century Arms Museum in Munich was partially destroyed by bombs. The collection—helmets, crossbows, pistols, saddles, cannons and suits of armor—has been homeless since then; now, with new installations underway, it has found an ideally appropriate home in Ingolstadt.

Photographs: Fitwell, Guy Madigan; Wilton, George Cserna; Venturi, Leni Iselin; Trafalgar, John Donat; Michelangelo, Alejandro Leveratto; Arms, Heinz E. Hassfurter. Queen Mary illustrations from the collection of Homer Goodall.


CASTLE


INTO WAR MEMORIAL
VINCENZO CAMILLI – FERDERICO CASTANO – AMEDEO CASTELLANI – LORENZO CINOTTI – FEDERICO CIPOLLA – FRANZ CLAVI – OT
EDRO COLOMBINI – ANACLETO COLOMBO – DEMETRIO CRUCITTI – ARTURO CUCCHETTI – NESTORE SPAGARINO – MASSIMILINO GABR
LUIGI SFREDDO – BRUNO ERBISTI – GIOVANNI FANTINI – ANTONIO FARAUDO – TARCISIO TESSARI – FRANCESCO ZELINSCEK –
FELICE SGRABLIC – UMBERTO FERRARI – ANTONIO VISENTIN – OTTAVIO SGARDELLO – ANTONIO BONCOMPAGNO –
NATALE ŠKABAR – DE GRADO FERRARI – ANGELO VIETTI – LUIGI SGUIZZATO – STEFANO SAVAN – STEFANO PLUT –
NUNZIO SANTINI – FRANCESCO ZIC – LUIGI VIGNOLO – ANGELO VALEGGHI – FRANCESCO INNAMORATI –
GIUSEPPE SARO – GIUSEPPE MILIANI – GIUSEPPE MINETTI – ANTONIO BERTI – PIETRO CARTURAN –
ERMINIO SARTO – STEFANO MILLETICH – GIOVANNI LIZZUL – NICODEMO TANI SERRANO –
BRUNO DE PONTI – SALVATORE MILIONE – ANTONIO LIZZUL – DALLA SCHIAVA ROVIGLIO –
GIACOMO FIOREGGI – GIACOMO FIORENETINO – ETTORE VISCONTI – BRUNO TECUZ –
FRANCESCO GAZZAROLI – FAUSTO CUMINI – ANDREA DELTON – MARINO ROSI –
LUCIANO GENNARI – DIDINO DELLE CASE – PIETRO BIGATTI – PIERO POLI –
ALFONZO GERACI – REMIGIO COLLAVINO – GOFFREDO BONGIANNI –
CRISPINO APPOLONI – FRANCESCO GIOVANNINI – STANISLAO GIOVI –
RACHILDO BERTAIOLA – SERVILLIO ICRI – ATTILIO CALLARETTO –
SEVERINO BERTOCCHI – MARIO IPPOLITO – ANTONIO ISKRA –
GIUSEPPE CUZZOLO – CESARE ISOARDI – PIERINO TARO –
LUIGI DELLAGNOLA – ARTURO CARLI – RICCIOTTI ROSA –
ANTONIO LOCAR – ALBERTO BON – TOMMASO POLIC –
RODOLFO LJUBICIC – BENIAMINO BIANCO –
ALDO LOMBARDINI – GIACOMO BARDOTTO –
GIOVANNI LOMBASI – GIUSEPPE FURINI –
LUIGI BARBIERI – EUGENIO ILIANI –
PIETRO TERPIN – GIACOMO FURCO –
ETTORE TANTI – ALDO TARUGGI –
TULLIO BASSE – VI – UGO INDRI –
GUGLIELMO IMBIMBO –
GIOVANNI INGUGLIA –
RODOLFO FRANETICH –
DOMENICO FRANTINO –
ANTONIO FRANZI –
VITTORIO BERTARINI –
VALENTINO BIANCHI –
ANTONIO BUSCONI –
GIUSEPPE CIUSANI –
GIOVANNI MAROSIN –
GIUSEPPE GHEDINI –
GIOVANNI GONELLA –
TEODOLINDO FELICI –
VLADIMIR KOVACIC –
GIUSEPPE LERCO –
FRANCESCO LENOTTI
VITTORIO LEONI –
LUCIANO GERBELLA –
CARMELO GERARDI –
QUIRINI CINGOLANI –
FAUSTO JANOTTI –
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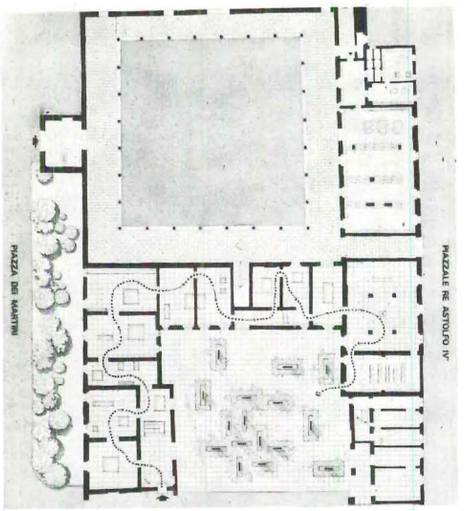
LEOPOLDO LEPRE –



Carpi, Italy

The Pio Castle has formed, since 1,000 A.D., one side of the central square in Carpi, a small town near Modena, Italy; its present structure dates from the fourteenth and sixteenth centuries. During World War II Italy's first concentration camp—a waiting point for deportation to Germany—was established nearby. In 1973 the castle was converted by the Studio Architetti BBPR (Banfi, Belgiojoso, Peressutti, and Rogers) into a memorial of stunning power.

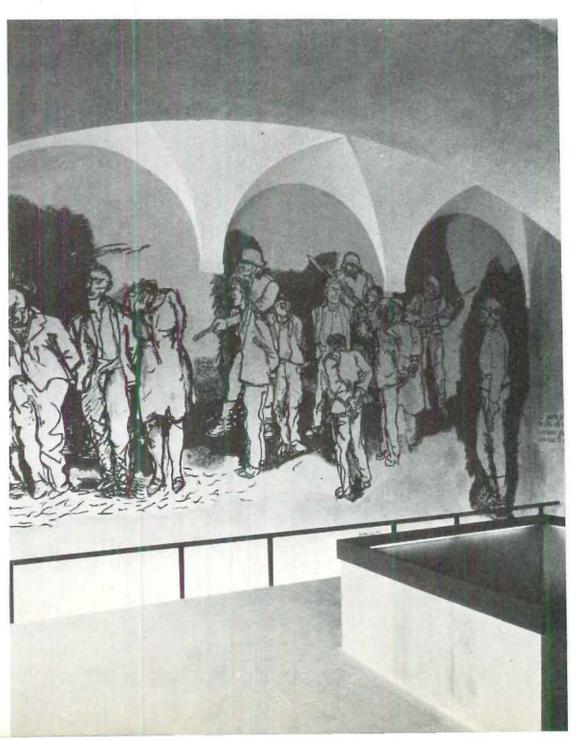
Its impact is not surprising. Before the war, BBPR had been one of Italy's most progressive young firms, commissioned by Adriano Olivetti to prepare a regional plan for the Aosta Valley in northwest Italy, and architects also of the impressive Sun Therapy Colony in Legnano. In 1945, Gian Luigi Banfi, the first "B" of BBPR, was deported to the German concentration camp at Mauthausen and died there. After the war, one of the best known products of Italy's reconstruction was BBPR's Milan monument to the war dead, a geometric construction small, simple, and severe.

The Carpi memorial, designed 27 years later, is more elaborate, utilizing much more literal references, and, as a memorial, even more effective. Its effect comes largely from the contrast between the serenity of the venerable castle, conscientiously restored, and the new, starkly unsparing displays inside it.

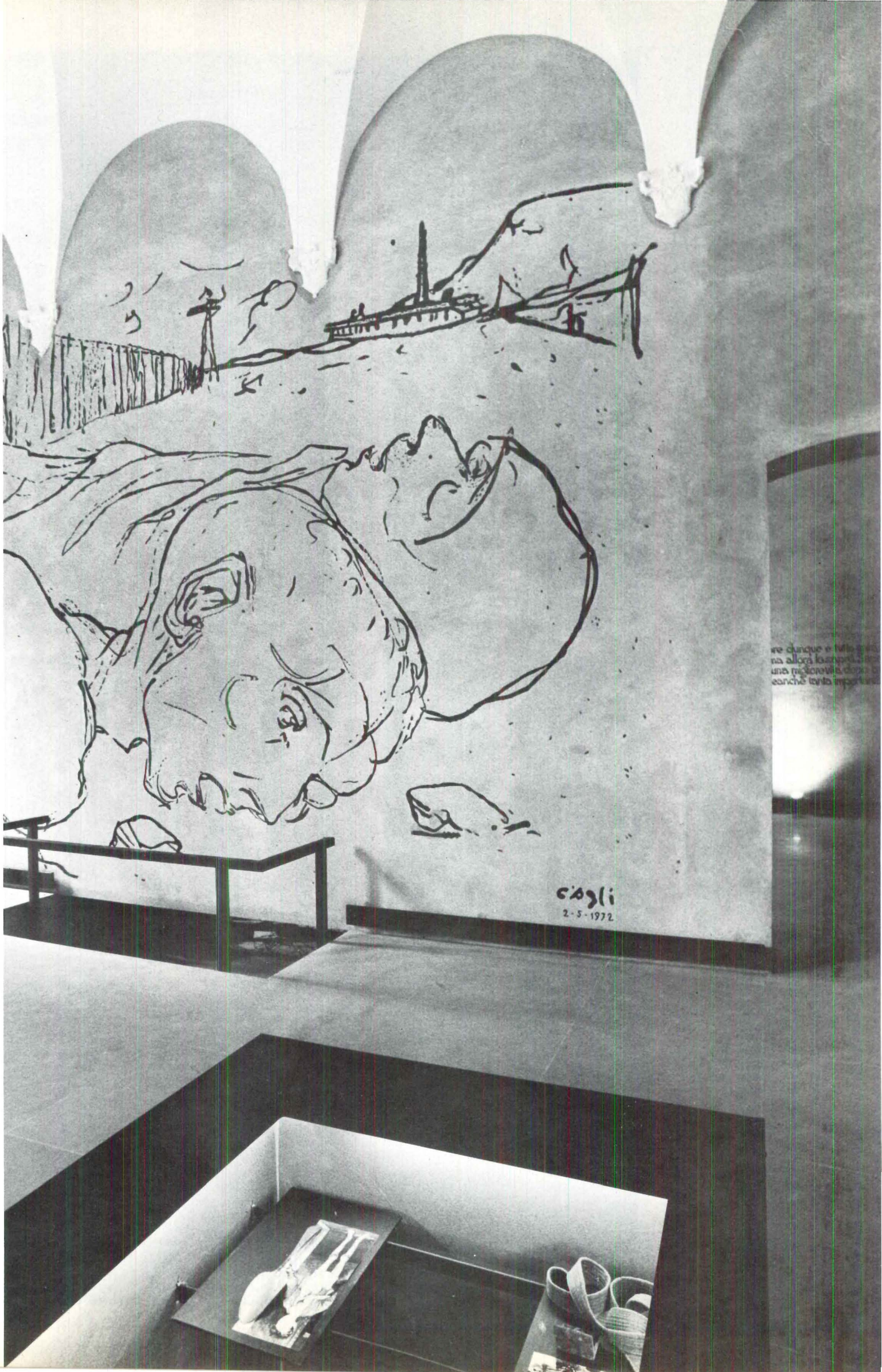
The memorial design was the winner of an international competition, and a collaborator with BBPR was the painter Renato Guttuso. The display cases (or *thecae*), sunk into the floor as reminders of the buried and unburied dead, contain documents and artifacts selected by Lica and Albe Steiner. The murals and graphics on the walls are executed by a local Bricklayers' Cooperative, based on drawings by Guttuso, Picasso, Léger, and others. The result is one of current architecture's strongest—and most poignant—products.

Photographs: Paolo Monti

On the previous pages, the vaults of a large room of the Pio castle are covered with names of the dead. The plan above shows the path of a visitor through the memorial displays. Top right, 20-foot-high *stelae* in the castle's forecourt are engraved with the names of Nazi concentration camps. At center, the second room of the exhibition, with a mural by Longoni and a freestanding display case. Writings at eye level on the side walls are selected by Nelo Risi from the letters of those sentenced to death. Below, a room with a mural by the painter Guttuso, who collaborated in the memorial's design. Far right, a display of implements of torture.



The display cases sunk into the castle floor contain artifacts, photographs, and documents which unsparingly recall concentration camp atrocities. The detail at right is from the display case seen in the room at far right, which, beneath the restored ceiling vaults, also has a powerful mural by Cagli.


Cagli
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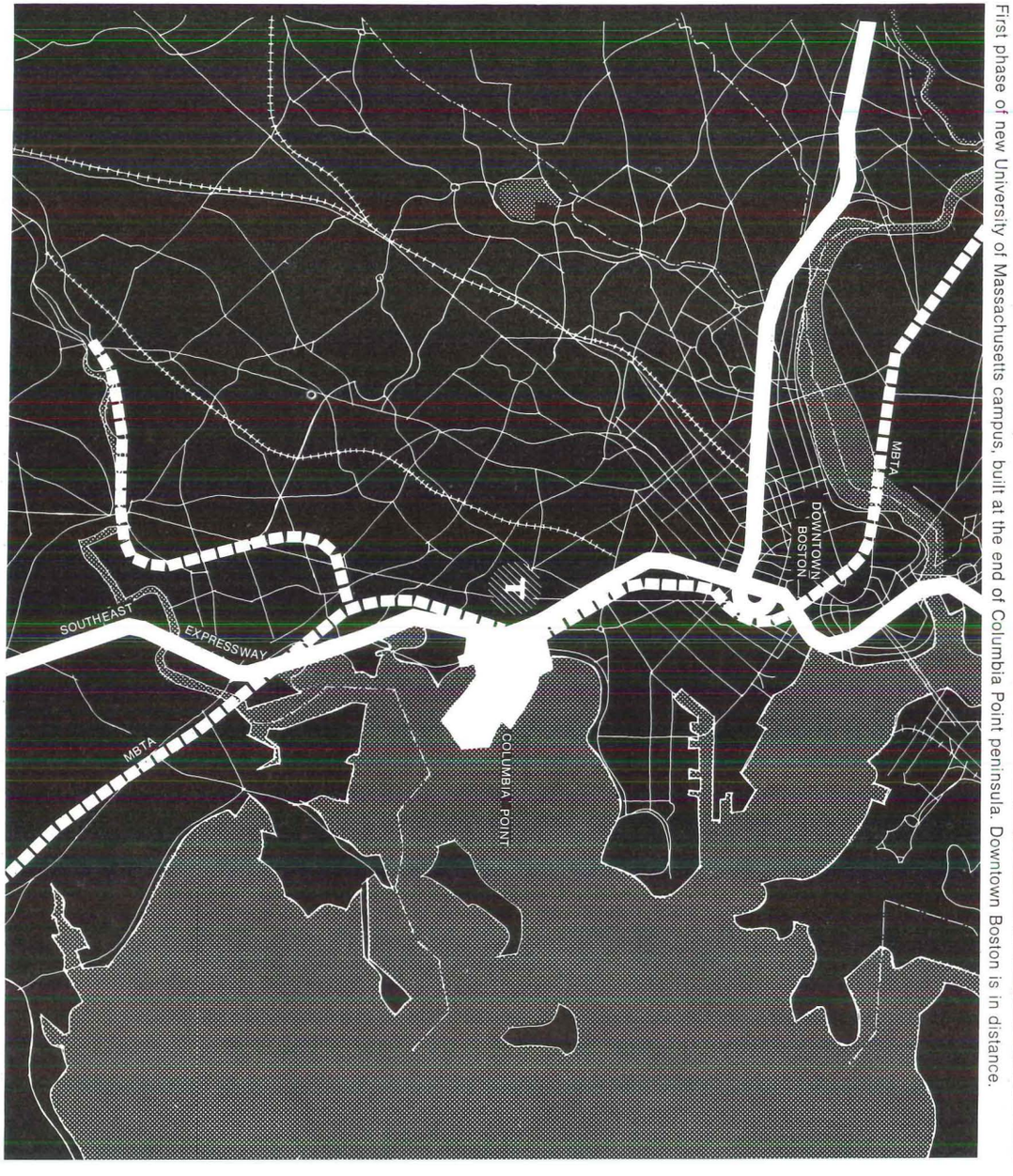
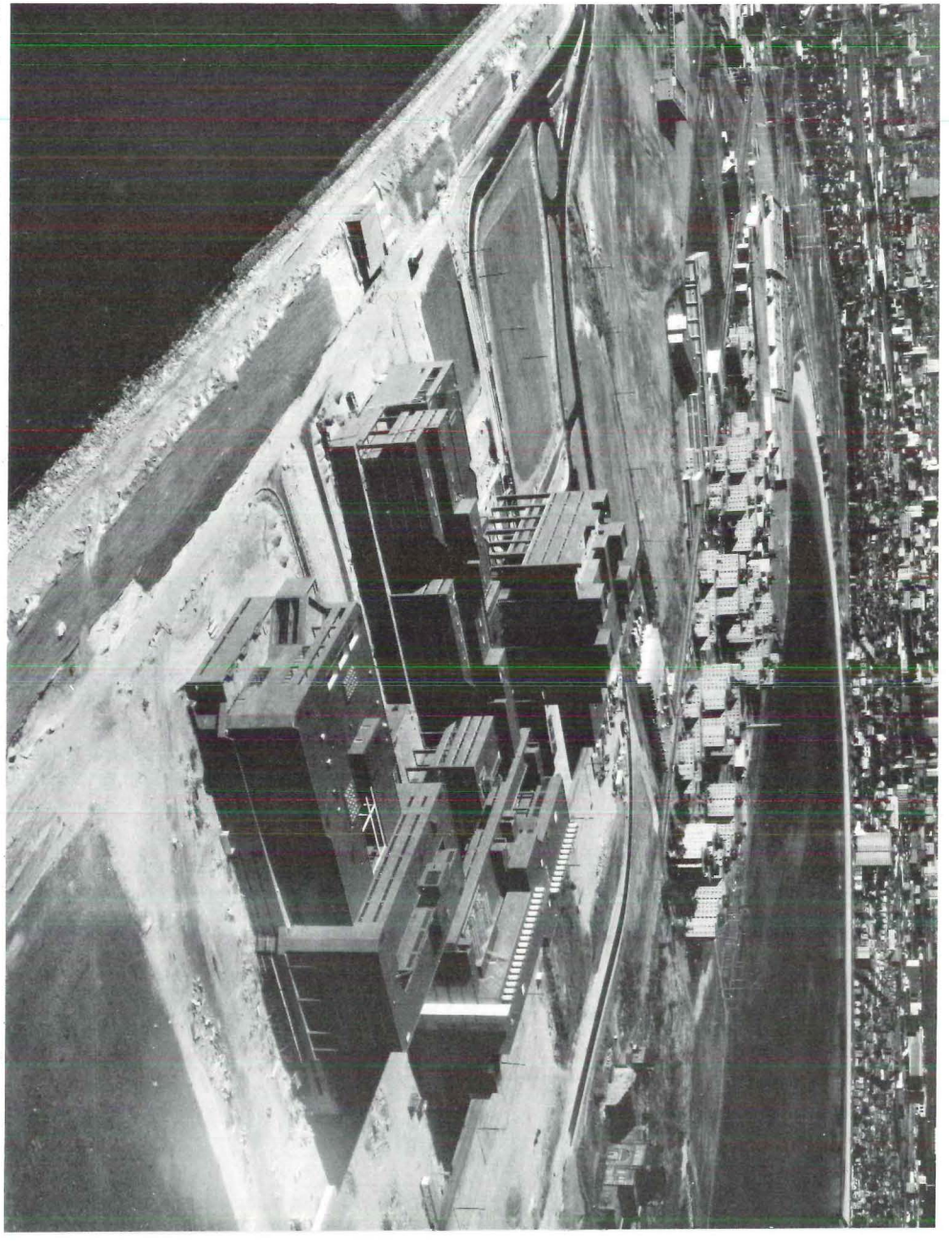
GROWTH OF A UNIVERSITY

The effects and responsibilities of institutional expansion

by Ellen Perry Berkeley





First phase of new University of Massachusetts campus, built at the end of Columbia Point peninsula. Downtown Boston is in distance.

In January, the Boston campus of the University of Massachusetts opened at Columbia Point in Dorchester, on the site of a former dump and next to Boston's most troubled housing project.

At $135 million for this first phase, and at $355 million for the ultimate cost, the campus is the largest building project in Commonwealth history. It is probably the largest project anywhere to use the techniques of "construction management," techniques that helped to get the job done in record time and for almost half a million dollars under the budget. The project also represents an attempt to bring together six independent architects, and by giving them a master plan, a program, and a review process, all of some rigidity, getting them to produce six buildings that would hang together as one campus.

But as a state legislator said to me about this campus, "I've got to get beyond the people issue before I get to architecture." And the "people issue" is what makes the campus of special interest—it is a case study in urban affairs.

Putting the campus here in the first place illustrates a certain kind of decision-making, American style. And a classic kind of protest, American style, surfaced when Dorchester residents feared that students wouldn't be able to commute to this "commuting institution" and would soon want to live near campus, driving out low-income tenants. Housing project residents, too, expected to be forced out—by more direct university action.

University, city, and state managed to overlook the problems for a long time, occasionally denying the existence of a problem while also denying any responsibility for its solution. It has been a standard case of planning, American style—so geared to the crisis of the moment, and so untuned to the realities of other people's actions, as not to be really "planning" at all.

Recently, however, it is possible to believe that U Mass Boston wants to become "a new kind of urban university"—concerned about its neighbors in particular and about urban problems in general. It is also possible to believe that the city and state want to help relieve the problems they have helped cause. This may seem like believing in the Tooth Fairy. But there are pressures, and people of good conscience; and when all else fails, there's always politics.

This is a story without an ending. It is a story of the powerful and the powerless, of negotiation and non-negotiation, of lost opportunities and new chances, the story of all our cities in the 1960s and 1970s. It suggests what might have been, still could be, and ought to be another time.

The sad search for a site

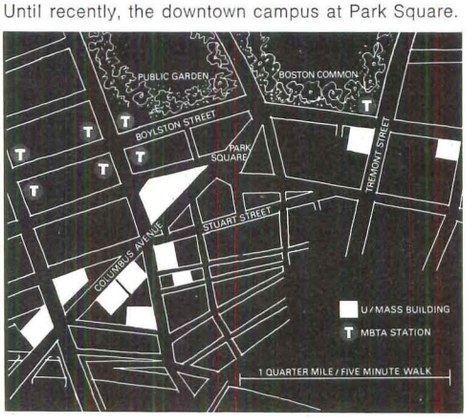
For years, Massachusetts was last in the nation in per capita spending on public higher education; in 1972 it was only 49th. Thus the state university was an agricultural school in Amherst until the 1950s. During the 1960s, the University of Massachusetts quadrupled in size, and it is expected to double again during the 1970s.

A Boston campus was voted into being by the legislature early in 1964, and the search for a campus began that summer. Documenting this four-year search while he was a planning student at Harvard last year, Peter Goodale observed wryly: "While every politician must necessarily endorse the public good of low-cost higher education, none wished his ward to bear the consequences of UMB actually locating there." Each suggested "an 'ideal' location" —somewhere else!

But the admission of real students forced the university to take action. In 1965, it leased the Boston Consolidated Gas Company Building in Park Square, a comfortable office structure with a capacity for 3,000 students and—like a rowboat in the Pogo comic strip—a different address on two different facades. When the place is also known as "U Mass Gas" you need all the prestige you can get, and in Boston where understatement is a sure sign of class, the building is known officially as 100 Arlington Street.

The university soon bought 100 Arlington Street, and outgrew it, and leased more space nearby—in a 19th Century armory, in several nondescript office buildings, and across the street in the Statler-Hilton Hotel, where faculty offices thus had their own private bathrooms. At its peak, U Mass used part or all of 11 buildings around Park Square.

Until recently, the downtown campus at Park Square.



Settling gradually into Park Square only confused the issue, notes Goodale: the Park Square location was fast becoming a *fait accompli*, and the university was getting used to being in the center of Boston.

But by 1967, the university's director of planning and development, Francis E. O'Brien, was working with the planning and landscape architecture firm of Sasaki, Dawson, DeMay Associates to evaluate more than 50 proposed sites. Some sites were dropped quickly; others were pulled out of the running. A city councilman objected to putting Charlestown "at the mercy of real estate operators." Roxbury citizens objected to their own relocation. A hospital and an arena fought proposals for North Station and South Station as thwarting their own expansion. "Dorchester got caught with its pants down," says one resident, only because civic groups were too busy fighting another threat, a World's Fair for the Harbor Islands.

Kay Alexander, of Sasaki, Dawson, DeMay, points out that from the start he considered Columbia Point "too isolated." Alexander's first choice was clearly a downtown site that varied, in different studies, from 15 to 45 acres, 60 to 70 percent of it in vacant land, or air rights over the Massachusetts Turnpike, or parcels where buildings were marked for demolition. Because the site touched Copley Square at one corner, opponents were quick to call it the Copley Square site, with the implication that U Mass and a bunch of scruffy students were about to get their hands on a beloved part of Boston.

The university's consultants, staff, faculty, and students stood virtually alone in wanting the Copley/Turnpike site. Leading the opposition was John Hancock, which "pulled every possible string" (it was described to me) because it needed that acreage for parking for its proposed tower. No parking, no tower. Hancock won and the university lost, but after a great deal of talk about how a city ought to develop, it wasn't clear whether the *city* had won or lost.

A curious part of the opposition was the Back Bay Federation for Community Development, whose executive director, Daniel J. Ahern, said to me, "If we hadn't been involved, the university would be sitting over there right now." Yet Ahern himself originated the idea for a campus at Copley Square, in 1966. According to Ahern, the Back Bay people showed their plan to the university, who thought it was "a good idea." He is understandably reticent about this early position, but as seen in the transcript of a workshop held at the Boston Architectural Center in 1969, Ahern clearly acknowledged authorship of the idea. Today he calls it "outlandish" (five years ago it was merely "not feasible")—among other reasons, the street-car line would have been totally inadequate, and the specialty shopping on Newbury Street would have been "wrecked in two

years." He mentions the liveliness and sophistication of Harvard Square's economy: "Bright students make a difference; they're not so bright at U Mass."

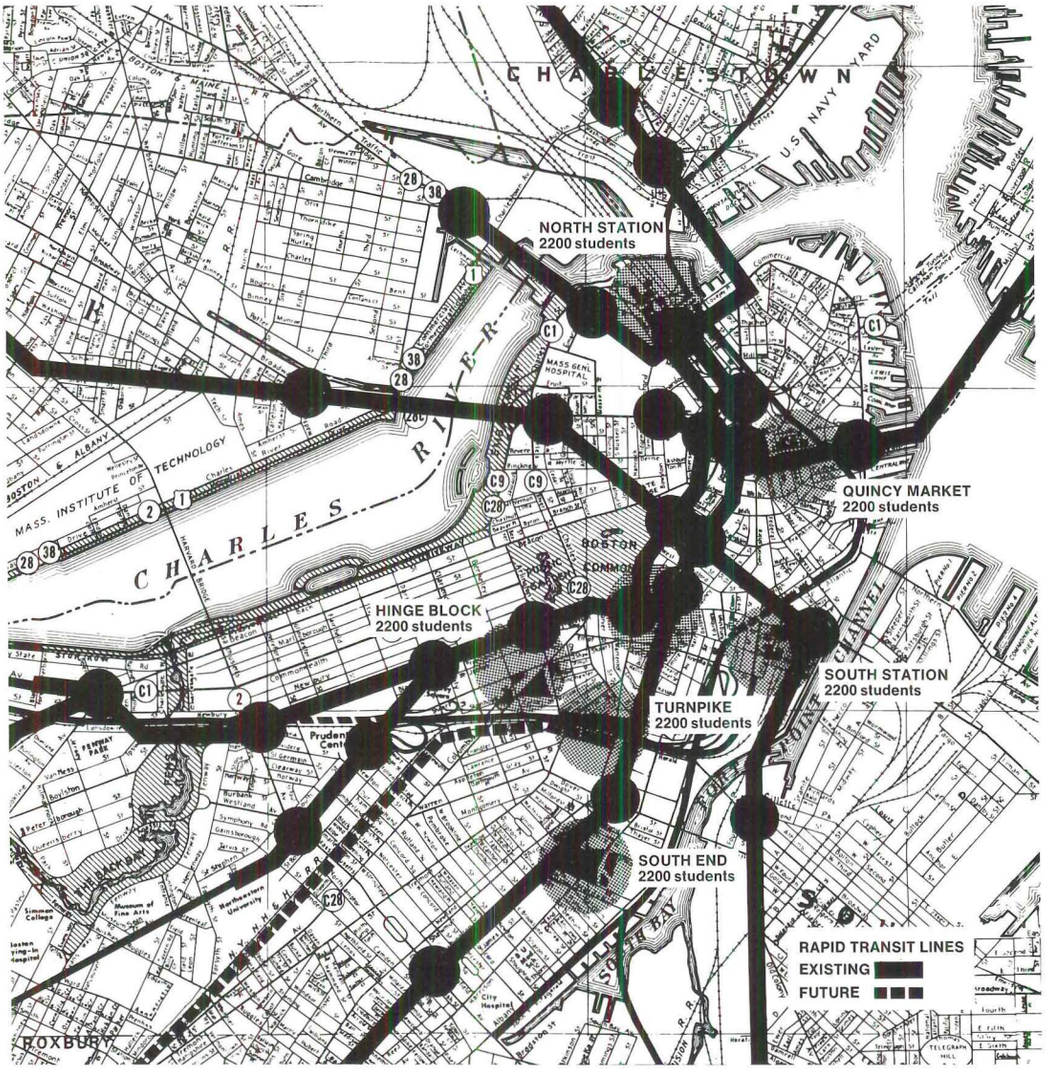
But the real decision, says Ahern, "was made at City Hall; two successive mayors and two successive BRA directors said 'You can't do this to the city.'" Certainly, too, the fear of student activism was a factor. As one councilman expressed it at the BAC workshop, university life should never be put "in large quantities near a dynamite keg," in this case an area "where we have a large segment of our black population in the city." (I have also heard the theory that city officials didn't want students within storming distance of City Hall.)

"Fundamentally, the Trustees were unwilling to make a struggle for a downtown site," says Paul Gagnon, professor of history, and at that time chairman of the planning and development committee of the U Mass Senate. "They didn't want to make a ruckus with people in their social and business circles. We brought in name people—Moynihan, Riesman—to no effect."

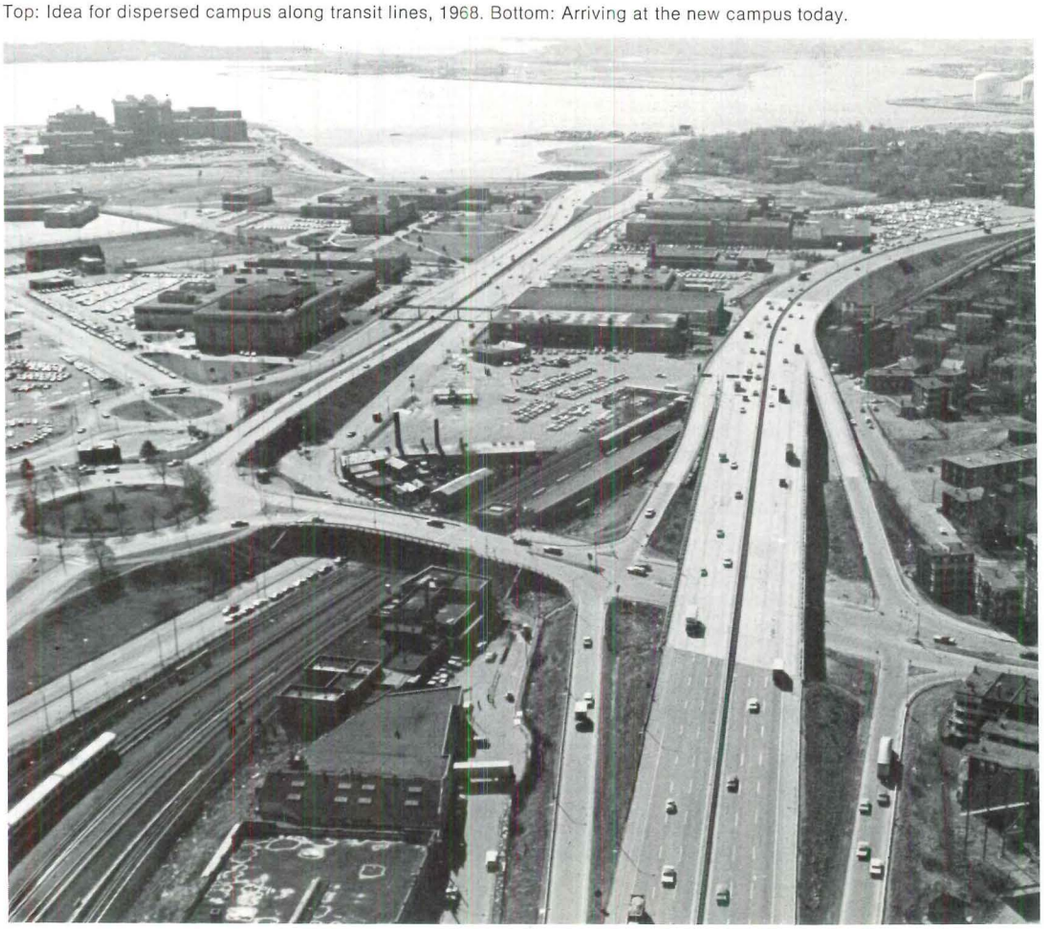
But still hoping for a downtown campus, certain elements of the university made two final efforts, both very interesting attempts to work within the realities. Where *do* you put facilities for 15,000 to 25,000 students who commute from home, usually work part-time and often attend school at night? How *does* the university use the city's great cultural and urban richness? How *does* the university add its own richness to this mix without subtracting from the city's economic vitality?

Both efforts were based on the academic decision to divide the university into colleges, 2,500 students in each. A dispersed campus was a natural. The first plan hinged on three sites (including Park Square), one of them a parcel owned by the Roman Catholic Church. "Cardinal Cushing was induced to offer us the cathedral and its surroundings, a total of about 12 acres," says Gagnon; "then he was forced to renege. Maybe he had to pull out because he'd taken a licking in defending Jackie's remarriage. We don't know." Gagnon wanted to work out a system where the ground level of a building might be a store, the upper levels the university. "Frank O'Brien said it was an idea we didn't have time to wait for."

The other proposal was for "the linear development of the university along the city's rapid transit spine." The proposal was literally a last gasp; the Trustees had just designated Columbia Point the only remaining "prime" site, a dubious honor indeed. But they granted the new chancellor approximately a month to find an alternate core-city location, and Broderick got funds from Educational Facilities Laboratories for a team that included Evans Clinchy, educational planner, and Earl R. Flansburgh & Associates, architects (work was done by Flansburgh and by Wilson H. Rains, an associate).



Top: Idea for dispersed campus along transit lines, 1968. Bottom: Arriving at the new campus today.



Seven academic units were proposed, each to be located around an existing subway station, and each to have *mixed use of sites* and *joint occupancy of buildings* "to assist the city in maintaining and increasing its tax base." Final location of the units would depend on the city's specific redevelopment goals. Flansburgh recalls that O'Brien and the BRA were "very receptive" to the proposal. It made some vivid points —one was visual: a map of the linear Boston campus, and a map of the Amherst campus, roughly the same size. Another was verbal: the word *campus* (field) should be replaced by a word like *forum* or *agora* (meeting place or center) to encourage "integration, constant association and mutual education between students, faculty, and all people of the city."

The Trustees got this proposal in November 1968, and later that month voted for Columbia Point. After two years, says Flansburgh, they were just "tired of the issue."

Why did the university pick Columbia Point? "The Trustees were the ones who set policy," says Alexander, "and the faculty couldn't define an urban university for them—in terms of program, and why location was important." O'Brien, however, makes it clear that "the site was picked for us." He also states pointedly that it wasn't the *university's* decision to have a Boston campus—it was the *legislature's*. He is not the first person whose years in the planning bureaucracies allow him to see the invisible wall sign: "The buck does *not* stop here."

Welcome to Columbia Point

The university's 1973-74 *Bulletin* describes the site dryly: "The new campus of 100 acres is bordered by Dorchester Bay and the Columbia Point Housing Project and is some three miles from the downtown campus. It is near the Columbia MBTA [rapid transit] station." A large photo in the *Bulletin* shows the campus in the distance and a tangle of roadways everywhere else—not an appealing view unless you need living proof of the MBTA station, center foreground (see facing page, bottom).

The photo shows only a corner of the housing project, largest in Boston, with its 1,504 units in a series of 3-story and 7-story buildings, 27 buildings in all. When it opened, 20 years ago, the population was 6.8 percent black; today it is more than 60 percent black. A major current in the air when U Mass got the site was that students and project residents somehow deserved each other, and that each group deserved a not very splendid isolation from the rest of the world.

"The great advantage of putting the university here is that you can no longer shut your eyes to that housing project," says Joan Goody, one of the architects who worked on the campus. Frank O'Brien mentions other advantages of the site: no one to be relocated, no land to be removed from the tax rolls, no high acquisition costs

Neighbors on the Point: U Mass and housing project.

(the price was under $2 million), and no opposition. "We'd been out here talking to people, and at one meeting at the housing project, they took a vote and invited the university to this site." One woman recalls her years of lobbying for the university: "We wanted them for two reasons—we hoped to prevent further low-income housing on the Point, and we expected the university to provide many services. I can see now that we were myopic. In the intervening years, we've seen what students can do when they take over a place like Back Bay, and we've learned that universities are not necessarily humane. We've learned, too, that education doesn't *make* a person humane."

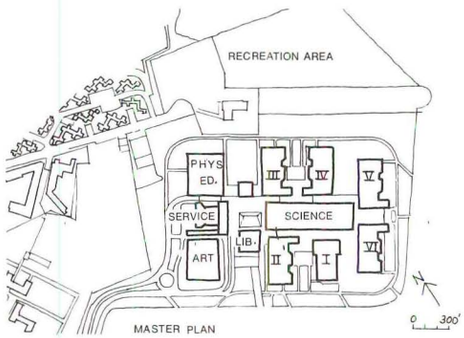
University officials probably share some of the emotions with which housing projects are generally viewed from the outside —fear, disgust, anguish, contempt—but they talk cautiously, hopefully, about the potential for good between the project and the university community, and they point to numerous efforts they are launching in that direction. But students haven't the same interest in public relations, and even a casual conversation reveals less generous attitudes: "There'll be violence, for sure, a lot of muggings." A faculty group calling itself "The Fifth Column" and writing regularly for the school paper gave this answer to one of its quiz questions: "U Mass Boston will achieve national prominence for its high police-faculty ratio." It didn't help matters that an old man was stabbed to death during a robbery near the project last fall. The story was picked up coast-to-coast because the police had first reported him stoned to death by a mob of youths. Yet there was horrified reaction on campus last fall to the suggestion that university police might carry shotguns.

The Boston Housing Authority is trying to work out a system for resident patrol at this project. "Traditional law enforcement hasn't worked," says Mike Hanratti, special assistant to the administrator of the BHA. But he hates to see this project called the Pruitt-Igoe of the East. "It's not the worst one we have, there's a community out there to build on." The vacancy rate is higher than in most projects, he explains, partly because the security is not good; in October, there were 375 vacancies, mostly in small units. "But there are so damn many good people out there, we have to work on reinforcing them and keeping them there."

Out of the ground

"Security was the message we got from the university," says one of the architects; "everything had to be locked up against Columbia Point."

The master plan, too, suggests a fortress. Prepared by Pietro Belluschi and Sasaki, Dawson, DeMay Associates, the plan turns in on itself. Major buildings overlook a central plaza (partly for tradition's sake, partly for wind protection), and a one-way road encircles it all. In contrast, the



Copley/Turnpike studies by SSDA recommended an "open" and "inviting" complex laced with public arcades.

Exactly half the students and faculty were expected to arrive at Columbia Point by car, the rest by skybus from the MBTA station. Except for the skybus (which was never funded), the master plan has been closely followed, although with some reluctance from the six architects hired to do so. The ring road disturbed almost everyone. Harry Weese brought in his own consultant to try to get an interior road, and there was general agreement among the architects that they would have liked time to sit down together and rework the plan. (The road was modified by O'Brien to funnel cars into the central parking at one point and not at every building, although the earlier road can still be utilized.)

The architects *did* sit down together, but never with the luxury of time to spare. An office on Boylston Street was opened in January 1970 for representatives of all parties—the architects, the university, the

state's Bureau of Building Construction, and the project management firm of McKee-Berger-Mansueto. From then on, O'Brien and MBM kept things moving. Schematics were approved by the Trustees in March; preliminaries in April. The first site contracts went out soon afterward, and by the middle of summer (with excavation under way) enough design work had been done for the piles to be bid.

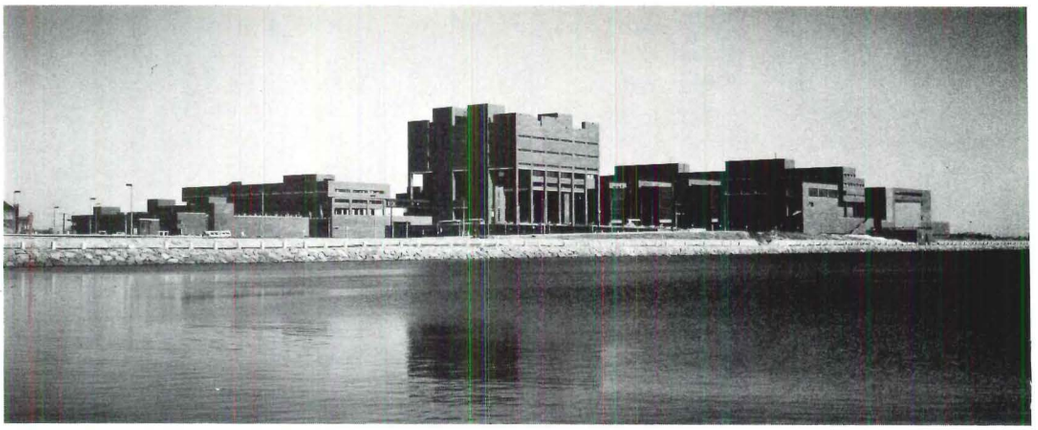
The fast-track operation then slowed up to await solution of the site's methane gas problem. Mixed with oxygen in certain concentrations, the methane produced in an underground layer by decomposing materials would be highly explosive. Under all buildings, therefore, is a blanket of gravel, and a system of pipes to take the gas up to the roofs and expel it. Alternate pipes bring fresh air down below. This system added $1.5 to $2.5 million to the cost of the project, says Robert J. Cantrell, project manager for MBM.

By May 1971, all major building contracts had been awarded, leaving for later such items as carpets, shades, lab equipment, landscaping. "Whenever we could," says Cantrell, "we combined contracts for all buildings—brick, hardware, lockers, lecture hall seating. Altogether, we administered over 100 different contracts"—and managed liaison with outside agencies, hired consultants, provided cost analyses, and handled design review and coordination. A recent article on construction management in *Harvard Business Review* suggests that this service (Cantrell prefers to call it "project management" because it includes the design phase) can cost well over 5 percent of the total project budget. MBM received about $3 million in fees. Architectural fees totalled $7 million.

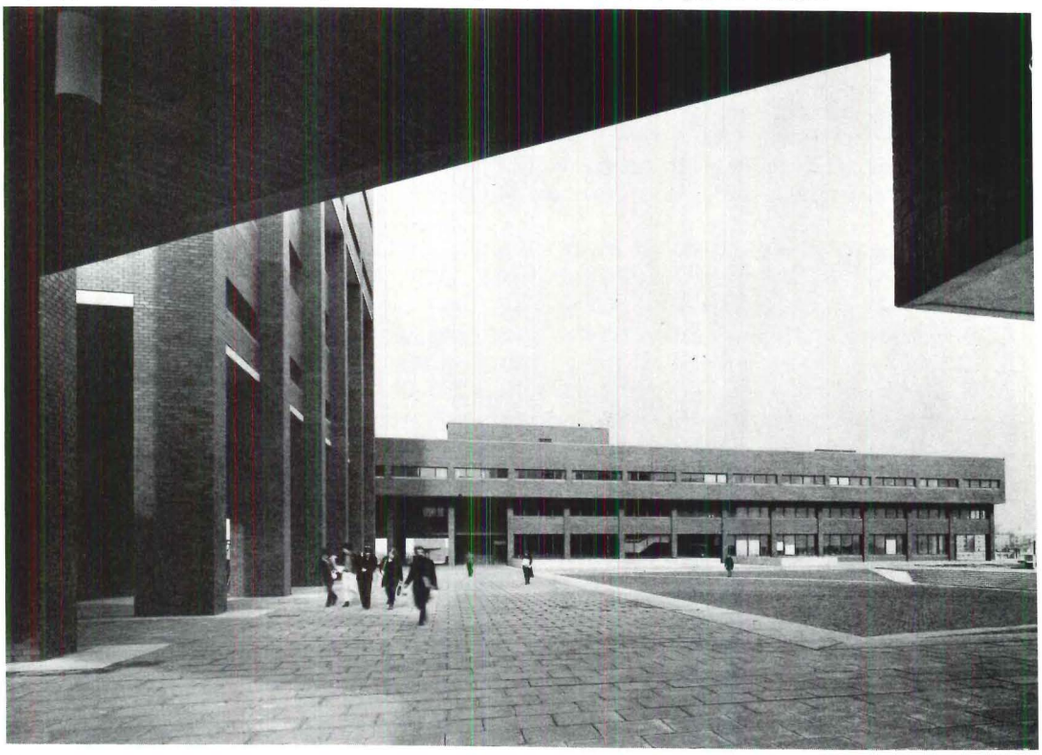
Frank O'Brien is especially proud that this project took "about a year" from start of design to start of construction; he quotes a 2½ year average for comparable buildings. The major time-saving was in design development, he says, giving the architects a firm building envelope as part of the master plan, and an extremely precise program out of O'Brien's office. Paul Dietrich of Cambridge Seven says, "It wasn't a bad program, but we could have made it better. We leap into programming." (Another architect leaped off to interview some department heads when O'Brien was away.)

Even the window area was specified. Because the campus is under the main instrument approach to Logan International Airport, windows had to be double-glazed and limited in size. The sound-proofing is effective, if weird. From inside, I have seen a low-flying plane I could not hear; its shadow sped along the ground, then hung on the side of the next building for an instant, like a Dali clock, all of it inaudible.

From a distance, the buildings look as if they came out of one office. O'Brien mentions Back Bay—variety within the controlled cornice lines and setbacks. Looking at the campus now, he says, "I wish we'd



Top: Approaching the campus. Library is tallest building. Left, Administration; right, two colleges.



Top: Library plaza, Administration at rear. Bottom: College II. Enclosed walks join all buildings.

gotten *more* variety." William L. Rawn III, assistant chancellor for community affairs and physical planning, calls the complex "overbearingly brick" (he smiles). He tells me that when Robert Wood became president in 1970 he asked outside architects for advice on breaking up the "monolithic" quality. Too late.

"It's a first-rate campus," says Rawn, "which it *ought* to be for people who have become used to second-rate things." Peter Edelman, vice president for policy, confesses to having been cynical about this kind of investment until he saw the campus going up, and saw people's reactions to it. "Poor people want shiny things, too. Storefront stuff has storefront quality."

But one student I met is convinced it will only be the suburban kids with cars who will be "dazzled by the labs and the modern architecture and the ocean view." U Mass Boston, he explains, has a special character; "there's no rah-rah here, and half as much bullshit as anywhere else." His friend agrees: "We'll be able to say we went here in the good old days. There's a rumor it wants to become the Harvard of public education."

Who knows how architecture affects people? Last fall I found this message on the wall of a ladies room in one of the shabbier Park Square buildings leased by U Mass: "This is my fourth year here. I really love these old buildings at U Mass and all the people I have met here. I am going to really hate going to Columbia Point." The message struck me as poignant. I thought I knew what she was saying, and knowing no more about her, I liked her.

The impact on housing

It was always considered "essential" to have high-speed, high-capacity transportation to cover the mile between MBTA station and campus. For three years, beginning in 1969, the university requested state funds for a "People Mover." Twice, the Governor took the request out of his budget; the third time, a bill filed directly with the legislature was killed. The message to the university was clear: stick to education.

The Dorchester Tenants Action Council soon articulated the problem as they saw it. Students would not put up with commuting difficulties, and would move to Dorchester in droves. The results could be predicted by looking at any number of areas in and around Boston—eviction of low-income tenants in favor of students (who, in groups, could pay far more for any apartment); conversion of family apartments into smaller units; substantial rent increases.

Small homeowners saw the situation somewhat differently—as their chance to charge the higher rents, or sell out to a bigger landlord. Staggering offers were already being made. (Dorchester is mostly three-decker, wood-frame buildings, 90 percent of it built before 1939.) Dorchester, incidentally, has 177,000 people, 27 percent of Boston's population. It is mostly white, blue-collar, Irish, but there are increasingly more black people, confined to several primarily black areas such as the housing project. Some people thought students moving in would be preferable to black people, and looked toward the university as a savior.

DTAC and another group, The People First, went to the university in November 1971 to ask for help in determining how serious the university's impact would be. (A month later, the university was to release its *Report of the President's Committee on the Future University of Massachusetts,* pointing out, among other things, "the university's responsibility to help develop plans and marshal resources for increasing the housing supply in Dorchester," in order to avoid "disrupting" the local situation.)

The university answered DTAC and TPF that it would gladly work with the community—with a group more representative of the community. Amazingly, DTAC and TPF soon organized 26 community groups ("some of them came in just to keep an eye on us") as the Dorchester-Columbia Point Task Force. The university raised $30,000 from a bank and three utilities, but gave the Task Force control over the funds and over its own consultant.

The Task Force report came out in January 1973 predicting a "major housing impact." Up to 35 percent of the students could be expected to move closer to campus, said Justin Gray Associates, the consultant; the 1980 enrollment of 15,000 students would mean 4,625 students looking for housing in "an already housing-short community." (Enrollment has since been cut back to 12,500.)

Justin Gray Associates found that almost 40 percent of this "impact group" would be willing to live in student apartments on campus. This led the Task Force to two suggestions: one, tentatively made, to admit eligible married students to the housing project "as a lever for obtaining additional funding to make the development habitable again"; the other, emphatically made, to develop student housing *on campus,* not in Dorchester or on any extension of the university site over land or water.

The report also discussed transportation. At the university's urging a year earlier, the MBTA got federal funds for a feasibility study on the People Mover, and that report (by Vollmer Associates) was just finished. A People Mover between MBTA station and campus would work on any of three routes; it would cost $11 million and could be operating by 1976. Buses would serve until then, but a student body of 15,000 would require 22 to 25 buses, with 75 passengers each, on a 37-second headway. The interim solution of a bus shuttle must not become permanent, said the Task Force.

This coalition of 26 community groups ceased to exist soon after the report came out, but today, a year later, responses are still forthcoming on all its proposals—on education and employment policies for U Mass, and on responsibilities to be assumed by city, state and university.

The official response

Last March, for instance, Mayor White issued a policy statement. "The City of Boston is deeply concerned about the impact" of the campus, it began. "I can't believe he's sincere," says a professor at U Mass; "he *put* us on Columbia Point. To have him defend the community now is too much."

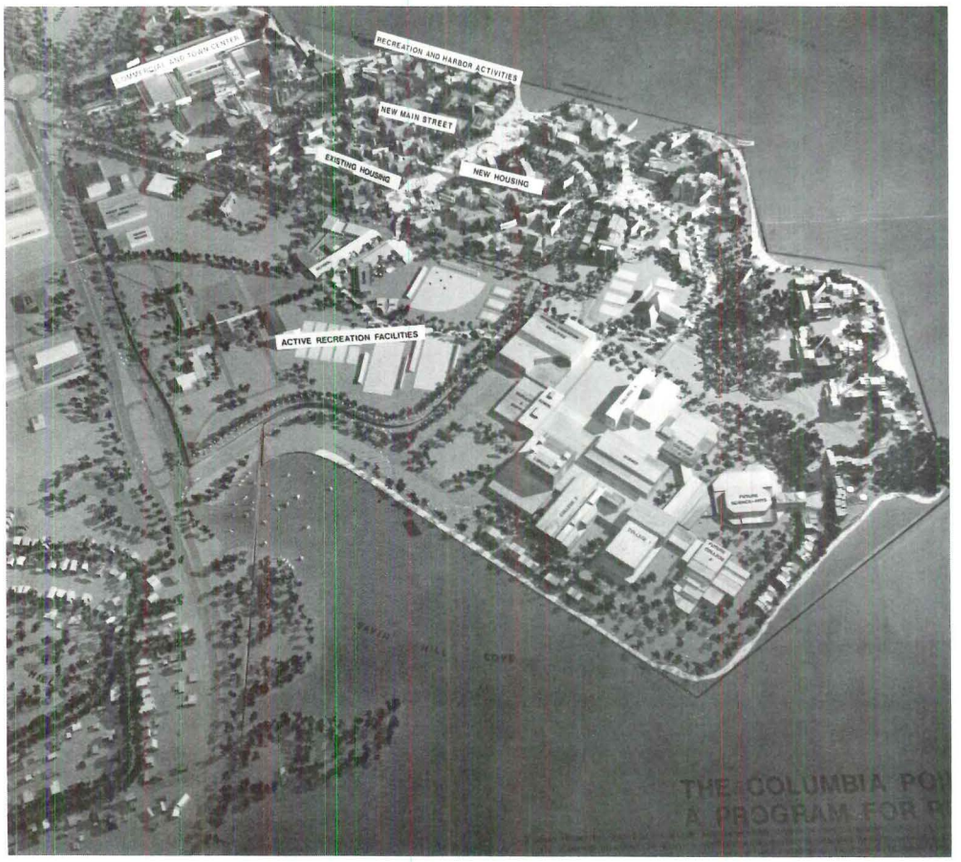
But the city was making points. It had recommended that funds to build College III be denied until the university's effect on surrounding communities could be "better assessed." Also, it had filed a bill with the legislature requiring a master plan for the "physical development and operations" of the Boston campus. If the bill passed (it didn't), any construction contract over $25,000 would need the mayor's certification that the university was making "reasonable progress" on its goals for educational services, admissions, availability of facilities to Boston residents, transportation, housing, parking, etc.

The city offered many ideas to ameliorate the situation, or at least make good newspaper copy. It proposed that students use "some 300 units" of the housing project, and that the state provide funds to upgrade the entire project. (The BHA soon sent a flyer to all tenants: "Do not believe those who tell you that the BHA intends to sell out from under you.") The city proposed that the Columbia Point campus be developed as "the nucleus of an urban university system dispersed throughout the Boston metropolitan area," an interesting idea revived word-for-word from the 1971 *Report of the President's Committee on the Future University of Massachusetts.* The city proposed that its own efforts to safeguard existing housing be intensified; but months later the Dorchester Tenants Action Council said it still awaited real commitment on rent control, code enforcement, etc.

On one matter, though, the city moved firmly ahead: "a committee with joint University, City and community participation" to examine all housing issues related to the new campus. More on this, in a moment.

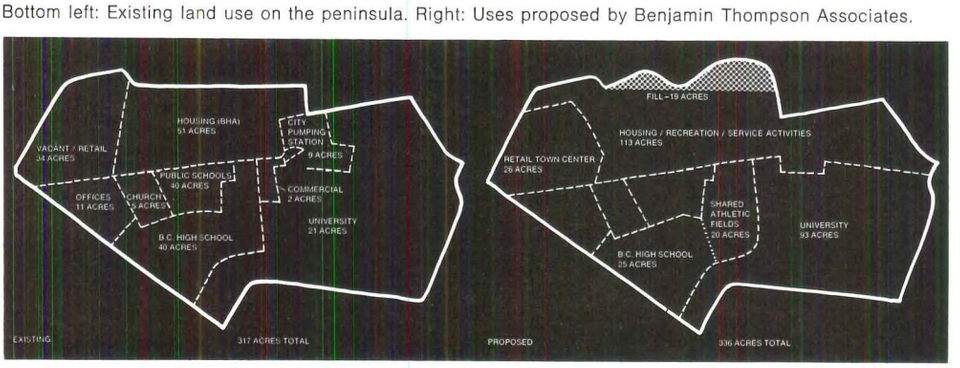
That was last March. In April, the report of the university's Campus Impact Study Group came out. Thirty members of the faculty, administration and student body had been asked to respond to the Dorchester-Columbia Point Task Force. The group represented all political persuasions, said one member, but no apologists for the status quo—"how could there be?"

The CISG vetoed any use of the housing project as "the 'cutting edge' to get rid of



One proposal for the revitalization of Columbia Point peninsula, endorsed by 17 agencies and civic groups.

Bottom left: Existing land use on the peninsula. Right: Uses proposed by Benjamin Thompson Associates.



low-income people." The CISG also vetoed any new on-campus housing for students only, as creating "a campus elite of students removed from the urban setting and its problems"; as funneling any dissatisfied residents right into the adjacent community; and as increasing tensions on the Point by having "two fundamentally different housing situations for two fundamentally different communities." (The CISG didn't rule out *mixed* housing on or near the campus.)

Almost buried in the CISG report was a most interesting idea for "cooperative efforts" between the university and community organizations in Boston, Cambridge and Quincy to build "residential facilities" —not just with housing for low-income neighborhood residents and students, but with "learning and community service centers" for the university.

The Trustees replied to all of this in June, in a 28-point statement on educational opportunity, transportation, housing and community development. Among other things, they pledged "active exploration and assistance to city and community efforts to provide additional housing with no special privileges for students."

Big plans

On January 17, timed to precede the opening of the campus, the mayor unveiled a consensus-backed proposal to "revitalize" the entire Columbia Point peninsula. It would take $125 million in private investment, $25 million in public funds. A model by Benjamin Thompson & Associates showed "one way" it might look. "But don't read this model as a concrete plan," says Nan Robinson, vice president for policy at U Mass. (The university chose the architect and provided his $30,000 fee.)

The mayor's housing adviser, Andrew Olins, says that his office "took the initiative" in bringing these 17 groups and agencies together last summer. "We picked up on a nucleus of civic-leader types and money types that President Wood had put together," then added others. "It was time to stop waging war out there."

Ben Thompson, too, saw himself as a peacemaker, looking for "a unifying dream, something to make people feel proud to live here." He wanted to change the ominous and isolated images of housing project and university alike—make one community. Instead of chain-link fences, it needed a strong connection, a "boulevard."

The revitalization would create 3,000 new housing units and 1,000 units of rehabilitated public housing. Some project buildings would come down. There would be a new "town center," new recreational facilities (especially along the shore), and a major shopping facility at Bayside Mall. (This mall had recently been closed, and the owner, John Hancock, had tried to rezone the property for industrial use and tried to sell it, neither with any success.)

The figure of 4,000 dwellings was chosen

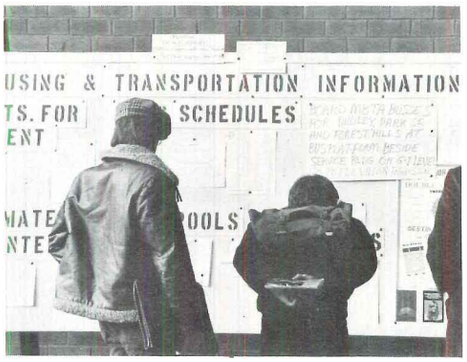
intuitively. "Ben Thompson has an instinctive feeling toward urban settings," says Nan Robinson. Early memos from the mayor's committee also promised to explore the options of 2,000 and 3,000 units, each representing a figure four times the number of low-income units needed. "Our guts tell us that 4,000 is the top figure," says Nan Robinson.

More serious feasibility studies will now proceed. Already there are questions, and Nan Robinson cites several: "whether it will appeal to moderate income in that density, and whether it can sustain that much commercial." A major question is how this revitalization will affect the university's impact on its surroundings—whether students will be able to afford living on the peninsula. The proposal suggests a 25/50/25 percent mix of low, moderate and middle-income people, but the moratorium on housing subsidies makes exact figures uncertain. Interestingly, the booklet on the proposal does not mention any housing "impact," only the "rare opportunity" to develop this much vacant and underutilized land in a "superb" waterfront spot. (There is no mention of the special problems of noise and subsoil.)

Project residents are wondering whether they will get lost in the shuffle, and are looking for a better relationship to the proposal than what they have had—a bus trip to Ben Thompson's office to see the model. Invitations from the city for greater "participation" were late in coming and perhaps never meant to be accepted. Thompson himself says he found meetings "too boring" to attend.

Project residents compare this experience with recent efforts by another architect, Jan Wampler, who was chosen by a tenant task force for the federally-funded Modernization. With money that was not fully spent on bathrooms and kitchens, Wampler and the tenants together decided to redesign one building as a prototype for *real* modernization. They reduced the number of apartments, added community facilities, and made apartments completely flexible by means of portable interior walls. The group met every week for two years. Working drawings have been in HUD's hands since January 1973, and a year later were not yet bid. "They're not stalling," says Wampler; "it's just bureaucracy." No one knows what will happen when bids *do* come in, any day now, undoubtedly over the budget. I am told, however, that the Ben Thompson model does not even have 110 Monticello on it; the building suffered "selective removal"—otherwise known as demolition—for the good of the revitalization.

No one opposes revitalization, but some are cautious about a photogenic product done by a "name architect" in five weeks of work. Even reasonable people suggest that the city did it "to keep the lid on," and the university did it to say "we've done *our* part." It will take hard work to realize



The university advises on housing and transportation.

The chancellor greets the first bus shuttle students.

anything like this revitalization—refining the proposal, finding developers, getting financing, creating a special entity to build it—and it will take some doing to make people believe the proposal itself is for real.

Town and gown

Eleven days after the mayor's press conference, 5,600 students began travelling to Columbia Point. MBTA riders use a free bus shuttle financed by U Mass out of campus parking fees. Unwisely, the buses are not for MBTA riders only—students could park on Dorchester streets or move to Dorchester apartments and *then* take the bus shuttle.

Road improvements near campus were being rushed to completion by the state Department of Public Works. At the crucial intersection on Morrissey Boulevard, the Metropolitan District Commission had for years been working toward an underpass/interchange; in 1972, the DPW suddenly stepped in with a simpler plan, "managing traffic on existing pavement," sorting out traffic at the two circles farther north and working on a total of 13 locations. "There's no need for a 4-in. pipe if there are only 2-in. pipes at either end," says Byron C. Gilchrest, special assistant to the commissioner of the DPW; "now it'll be 3-ins. all around." Unusual for roadwork, the total DPW effort added less than a quarter-acre of pavement, says Gilchrest, and cost $1.5 million, one-third the amount estimated for the underpass. Even more splendidly, it was done in 10 months instead of the four or five years for this kind of project—partly because the work was given top priority and because creative innovations were made in contracting.

For the time being, then, transportation is possible. The new road system is designed for 6,000 students, half of them using transit. The future? Gilchrest says the state has "temporarily abandoned" any plans for the underpass. The long-range solution of a People Mover seems to be moving nowhere, unless a "revitalized" peninsula gets it started. Meanwhile, the university's new Housing and Transportation Office is exploring more conventional transportation, telling students the options while negotiating for changes in routes, schedules and fares.

The university has reduced its ultimate enrollment on the Point from 15,000 to 12,500 and changed its timetable for getting there. Nevertheless, its estimate of an ultimate impact of 1,500 housing units is "inconceivable" to Ellen Feingold of Justin Gray Associates, who found that the Park Square students (less than 5,000 then) were renting *at least* 1,325 units in town.

One hopeful intervention in Dorchester has resulted from the threat of change. Better Cities, Inc., a group of nine federal savings and loan associations in Boston, is choosing Columbia-Savin Hill as one of two sites for a Neighborhood Housing Services program. NHS began in Pittsburgh in 1968 and is now operating or being planned in five other cities. The aim is to bring all homes in a fairly good neighborhood up to minimum code standards; the banks provide operating funds, and agree to make all "bankable" loans and to develop a revolving fund for "unbankable" loans. "It gives the low-income homeowner the wherewithal," says Ellen Feingold, "but it doesn't help those with less roots, who will sell, and it doesn't help the tenants, and it doesn't address itself to buildings now vacant—which don't stay habitable for long." (The city believes the impact area may have 1,500-1,800 vacancies.)

The *Globe* recently quoted John Hancock's real estate director on the impact of U Mass on the area—"it has to be positive from the point of view of real estate." But it isn't positive from everyone's point of view. Donna Finn, one of the organizers of the Dorchester-Columbia Point Task Force, says this: "Already I see Dorchester changing, and if it is for the better it will only be for those who can afford to stay."

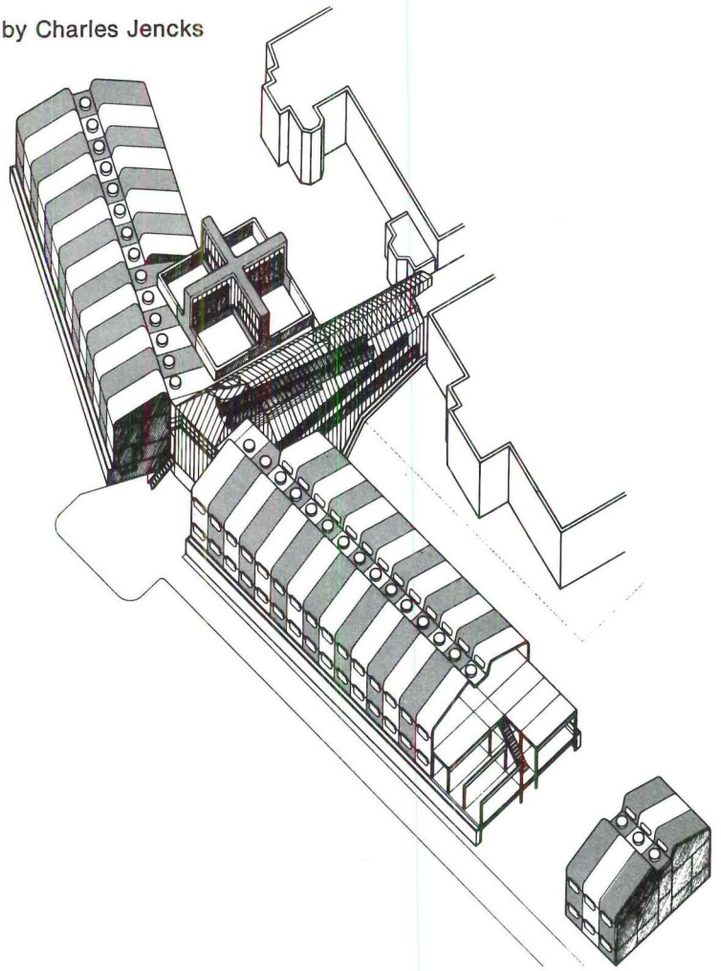
The university is changing, too. It still hopes to build Colleges III, IV, and V (if the state releases the funds), but it now plans to keep 100 Arlington Street "indefinitely" as a staging area for new programs. The interesting idea of residential/educational centers will probably die (not rejected but not pursued, despite the Trustees' support for "further exploration"). "It's low on our priority scale," says the assistant chancellor responsible for physical planning. Too much else to do, true. But this idea would have had a tough time anyway. These would be low-key

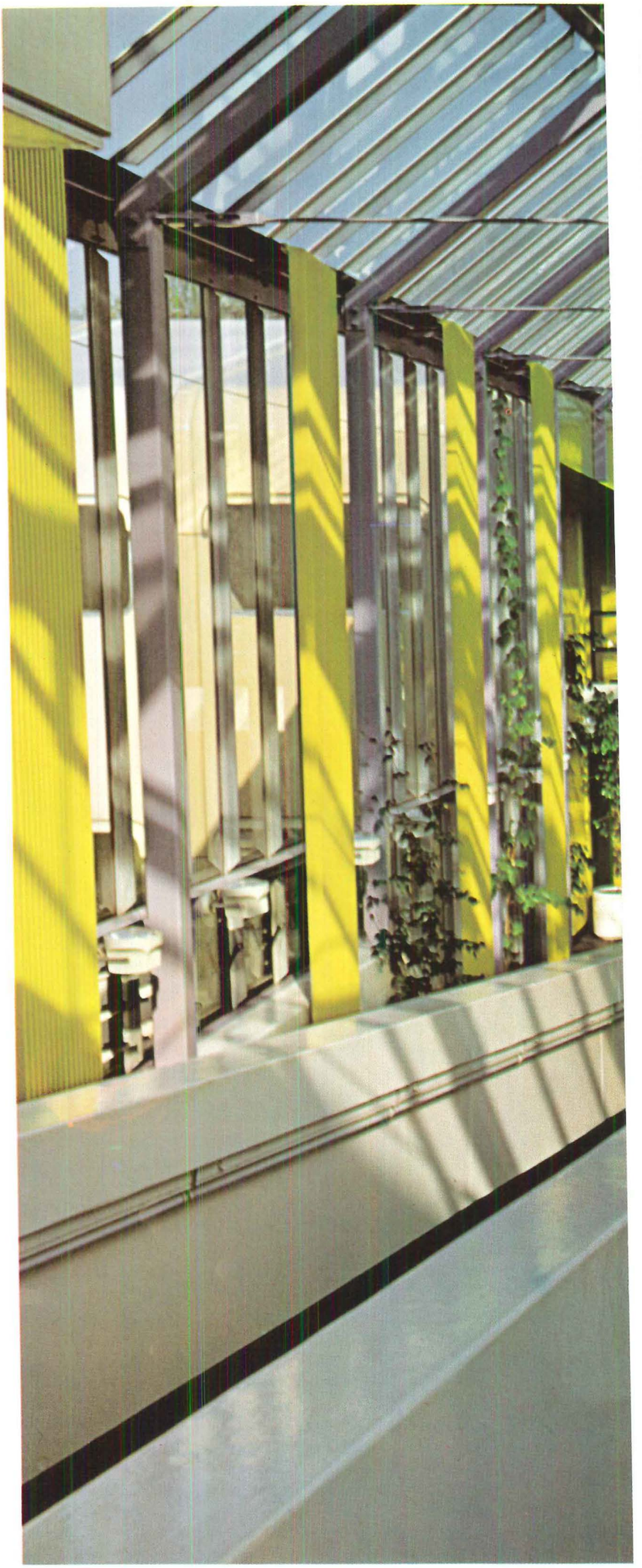
continued on page 118

HASLEMERE

James Stirling's corporate culture machine

by Charles Jencks



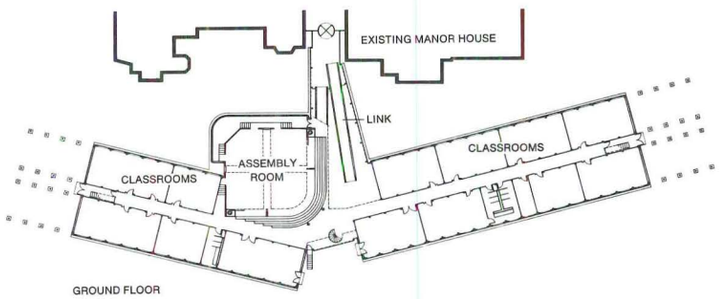


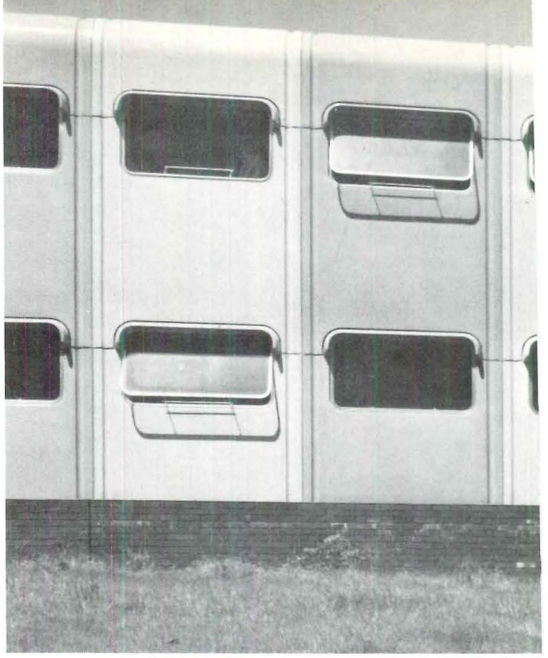
Architecture PLUS *recently made an international survey of buildings commissioned by Italy's Olivetti Corporation. One of them—a training school in Haslemere, England, designed by James Stirling—was a vigorously mechanistic addition to an existing Edwardian manor house. The contrast between old and new was so striking, Stirling's use of fiber glass-reinforced polyester cladding was so innovative, and the technical virtuosity was so laden with implications for the future that we thought Haslemere deserved this closer look.—ED.*

In the late afternoon of June 21, 1973, four hundred British VIP's left Waterloo Station in a specially designed train for Haslemere, located in the stockbroker belt of England's rolling southland. They were not going to a Royal Garden Party, nor Ascot. They had been carefully selected for something else: to enjoy an evening, or "happening" as it was contemporaneously called, the opening of the Olivetti Training Centre, and to take the message of cultivated excellence back to the rest of England. Olivetti's culture campaign had opened with a blitzkrieg, and exactly the right people from the arts, government and industry were there as front line troops. Yehudi Menuhin and Richard Hamilton of the Art Brigade; Directors and Chairmen of BBC, ICI, CBI and Barclays; Viscount Eccles, Paymaster General with Responsibility for the Arts (he exhorted British Industry to enter the fray); and many lesser recruits of the *Culturati*. They performed as predicted. BBC films, radio programs, magazine articles and newspaper features fol-

Charles Jencks is an American-born architect now living in England. He is the author of many books, including Modern Movements in Architecture *and* Le Corbusier and the Tragic View of Architecture.

Plan of new wing shows its relation to the Edwardian mansion to which it is attached. View at top, right, is from the southeast, with the modular classroom fingers extending from the glazed center hall. The colors of the glass-reinforced polyester panels are skin-tones, and the rounded windows are framed in aluminum. Below is an exterior view of the auditorium, with its cruciform superstructure designed to contain the wall panels that can be lowered, automatically, to divide the auditorium into separate spaces.





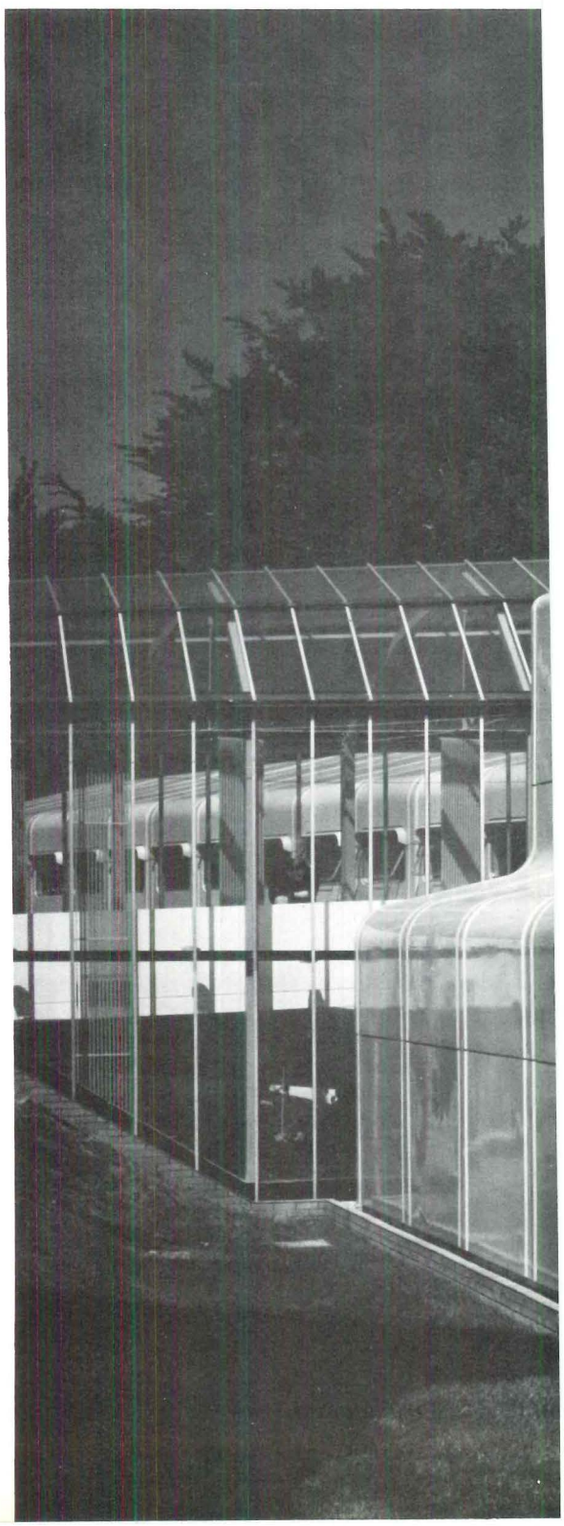
lowed—all free advertisement, unsolicited and graciously given to acknowledge quality.

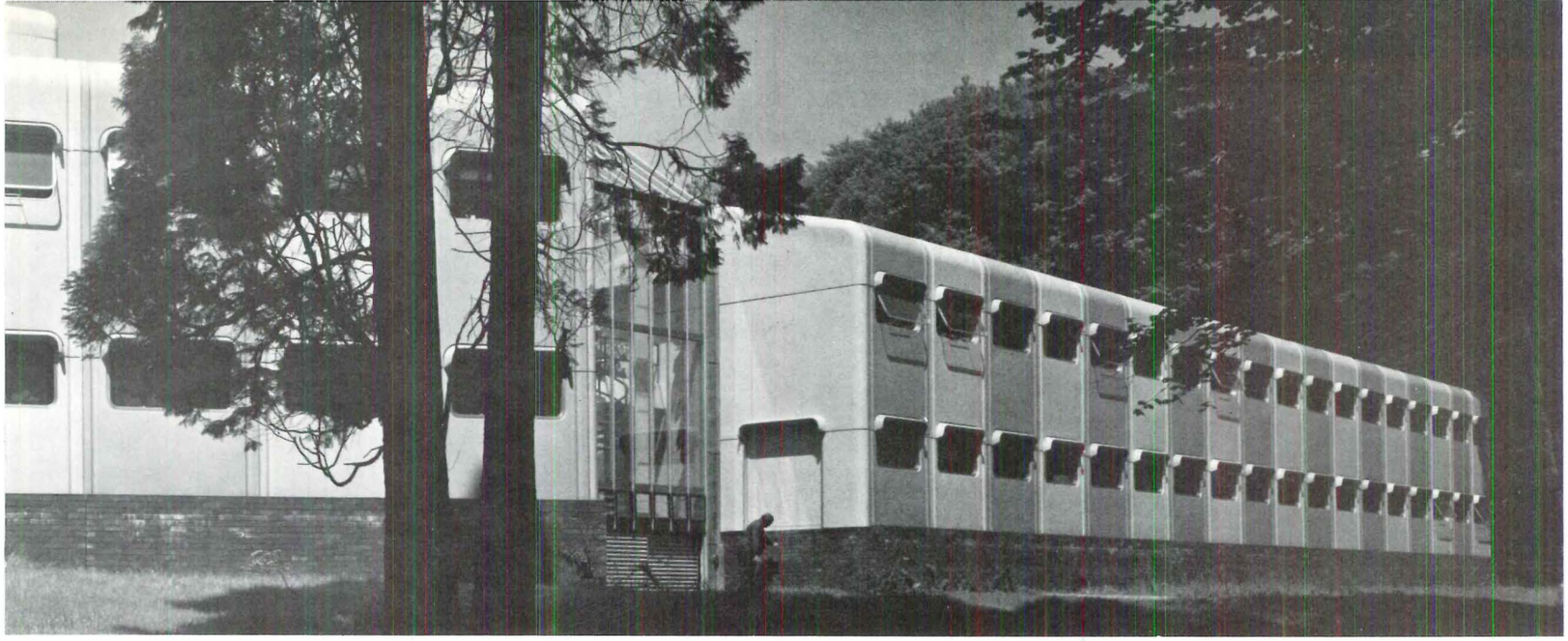
Olivetti had left nothing to chance. Like any forward looking country today, Olivetti knows that Culture Growth Stock is fast and safe in the '70s (a lesson it learned in the '30s); and, like a country, it is organized with Departments of External Relations, a Director of Cultural Relations, P.R. groups and so on. They designed this June "happening" to promote their Corporate Image located midway between technology and art. Chefs from Harry's Bar in Venice were flown in to sing as they prepared their famous risottos, "Bellini" drinks and "Carpaccio" filettos. You couldn't buy a Carpaccio but, if male, were given a Henry Moore lithograph. (Wives got scarves. Has Olivetti's sociologist found Women's Lib less virile in England?) A music program in the new auditorium included the Ambrosian Singers and a "Divertimento for Olivetti machines," composed and conducted by Tristram Cary. It wasn't quite Handel's "Water Music" written for George I, or a Mozart opera commissioned by the Emperor Joseph II; but the idea was there. Following this was a Garden Supper Party with films by Ichikawa, lighting by 150 flickering torches, and a bonfire by tree trunks straight out of a Fellini or Antonioni. But the focus was the new Training Centre designed by James Stirling.

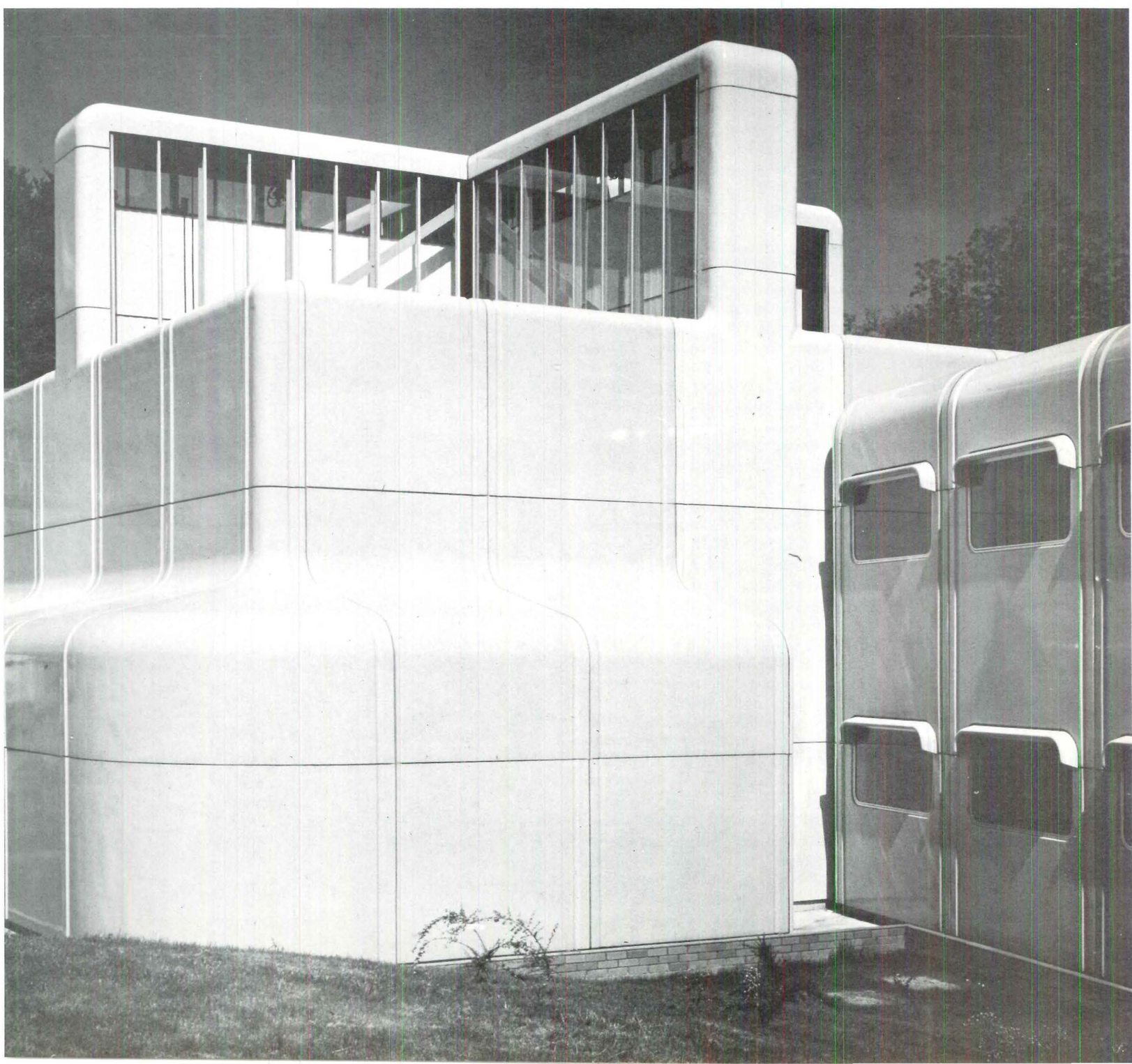
Part of this Training Centre resembles a blown-up piece of Olivetti equipment. Its rounded curves and slick surface recall the "soft-touch Divisumma 18 portable electric printing calculator." It doesn't have the "rubber nipples," the new nice-feel keys of this computer; but it is vaguely sensual, especially around the auditorium which, in skin color tones, slithers and undulates its way to the ground. You want to caress and fondle this auditorium—at least as much as you want to caress and fondle any Olivetti typewriter. In part, this metaphor is sustained by the unfamiliarity of the scale. Since there is no traditional eave, and the homogeneous plastic curves over roof and wall (thus getting rid of the usual separation, including even the gutter) you see this as much like a kitchen blender as like a building.

From their ends, the two plastic wings look like railroad cars or Greyhound buses with their rounded windows and repetitive modules. This is the positive metaphor for those happy to see plastic extended to architecture. However, I've heard these wings condemned as "clipped together caravans" (mobile homes are sometimes plastic in Britain), or "stacked waste-bins" that have pivoting openings for refuse.

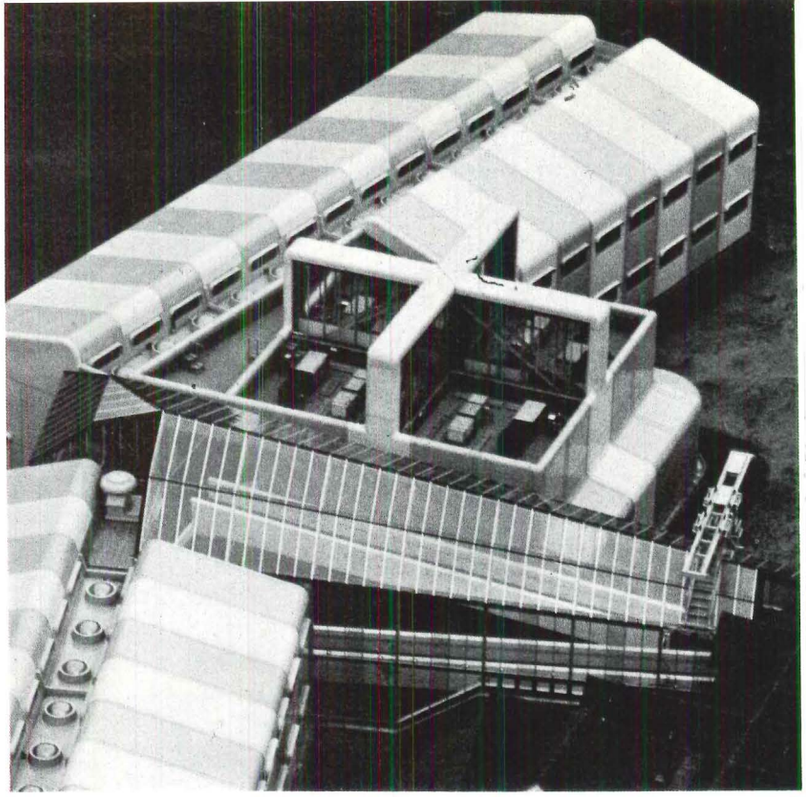
The four main elements of the new building smash into each other in a carefully careless way that is traditionally English. But they have a toughness and uncompromising quality—even a studied inelegance—which is not English at all. Had a Classicist designed it, there would be graceful separations between materials and spaces, doorways with moldings and elegant junctures. Instead, Stirling, with his commitment to the straightforward, has just let things happen. Or so it appears until one studies the repetition of "awkwardness." The glass link flares out from the Edward-







View of the auditorium (near right) explains the superstructure containing vertically retractable walls. Diagrams, below, demonstrate the flexibility of the system. (Center diagram is worm's eye view looking up to the auditorium ceiling.) Bottom diagram also shows the path of the motorized roll-around walls that can further open the auditorium to the central circulation spaces. Opposite page: interior view of the auditorium, looking toward the center hall. Projection gallery is above.



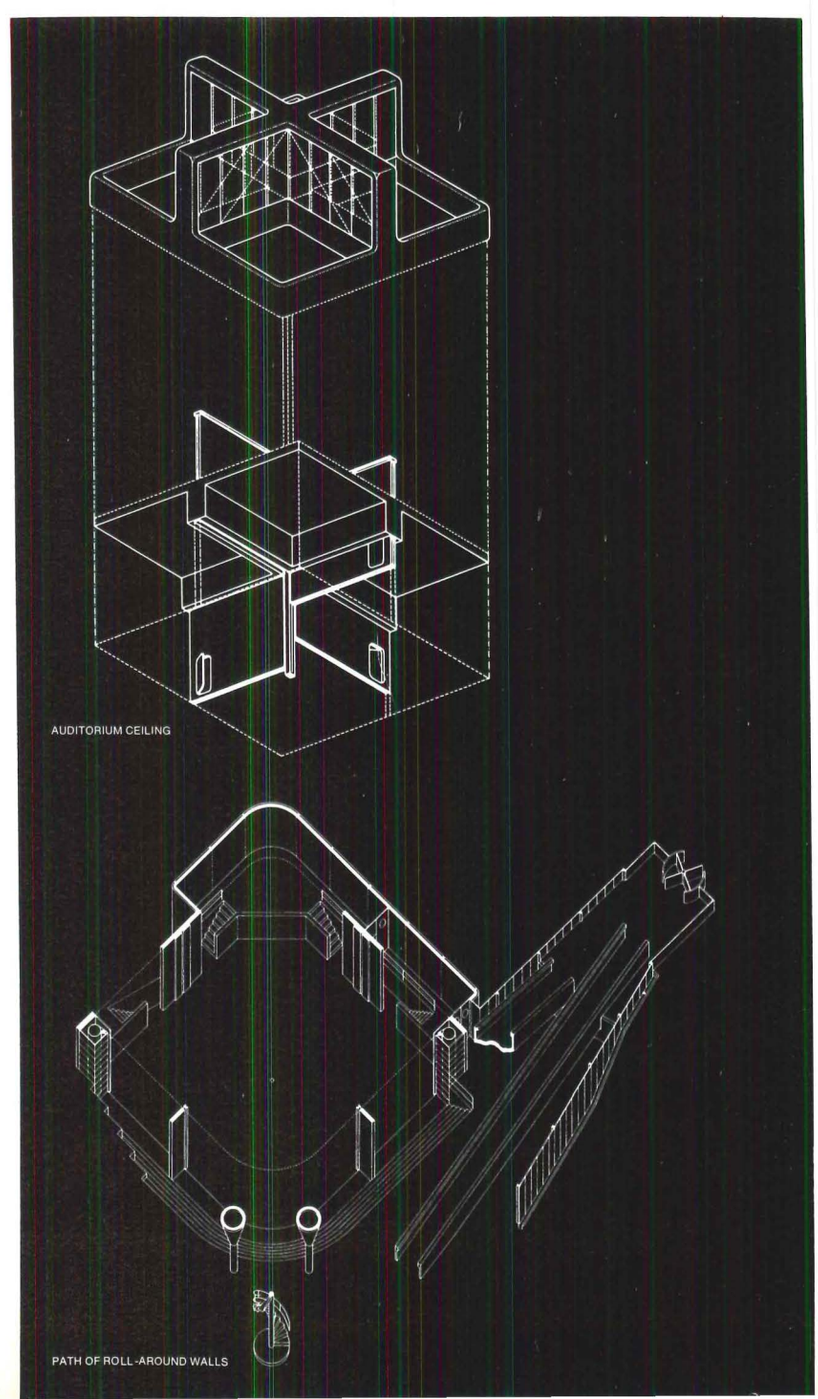
ian mansion at a dissonant angle and frames into the two plastic wings with even more disharmony. The cruciform auditorium bites into one wing leaving wedges of twenty-two degrees. If the wings are railroad cars, then what we see is a train accident.

Stirling might justify these angles for functional reasons since existing trees, contours and expansion requirements all led to them. The plan is similar to the informal topological planning of the Brutalist movement for which growth was a prime consideration. But beyond this is Stirling's particular brandmark, a quality (that can be found in all his buildings) of dynamic dissonance. A comparable feeling in music would be the suspensions and tensions of Stravinsky; in painting, the distortions of Francis Bacon. The effect is tense, elastic and frightening. Perhaps also it communicates the moral commitment of functionalism: a stern asceticism and a preference for truth over beauty. Certainly none of Stirling's buildings are cute, comforting or sentimental; if they have elegance it is in their geometry and order and not in any provision of thick-pile carpets, symmetry or moldings. The modern movement has, for the most part, spurned these values.

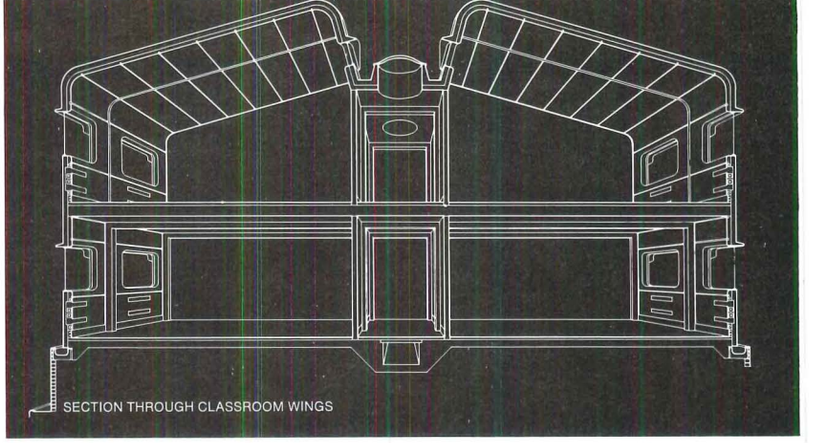
Rather, Stirling keeps his preference for cool surfaces, machine metaphors and vibrant colors. The fin-type radiators of the greenhouse are painted fluorescent lime-green; the ceilings of the corridors are also in high-gloss green; the outside plastic was meant to be in alternating bands of fluorescent violet and lime-green until the local Council forced them to be in creamy blancmange ("Fluorescent colors might frighten the birds").

This is really too bad, since the Training Centre is something of a recreation centre for upcoming Olivettians. Had the wings been in more vibrant colors they might have conveyed a more festive mood, that of impermanent marquees or tents located in a country park. This would have been appropriate to some of the functions located in the context of the existing Edwardian estate—a swimming pool, a sauna house, three tennis courts, a football pitch and bar—country club activities which provide an alternative to the teaching functions in the new building. The Centre as a whole really is a new building type: partly a training school for 150 students (sales and technical personnel, managers, even customers are trained about the new computers), partly a residence, and partly a country club. Perhaps one should think of it as a monastic university for business given over to pleasurable interludes.

To define this complex program, Stirling has adopted a characteristic articulation: the four main functional elements are given distinctive form. Two linear wings, that can be expanded at each end by adding new fiber glass panels, contain the classrooms for sales and technical personnel. The panels, although prefabricated for ease of assembly, had in fact to be knocked into place by hand since the technology was relatively new to England. Another questioned feature: their repetitive nature masks the division into separate classrooms and the conventional structure underneath, which is a precast concrete frame. The other two elements are more radically new in construction and function. The central auditorium can be divided into smaller conference rooms—two, three or four —by automatically lowering partitions from the cruciform ceiling. This is very much the inhabitable Olivetti gadget: audio-visual rooms, fully air-conditioned, serviced and changeable at the press of a button, with spot lights, black extract nozzles and fluorescent lime-green mushroom columns completing the image.



Cross section at right shows the basic organization of the classroom wings. Prefabricated, glass-reinforced polyester wall/roof panels enclose these wings. Skylighting for both the top corridor (with its special rubber flooring), and for the top classrooms is shown in the photo below, and in the roofscape on the facing page. Bottom photo shows the glazed greenhouse-like center hall that links the various levels to each other and to the mansion. The link is topped by a traveling crane used to clean the glass.

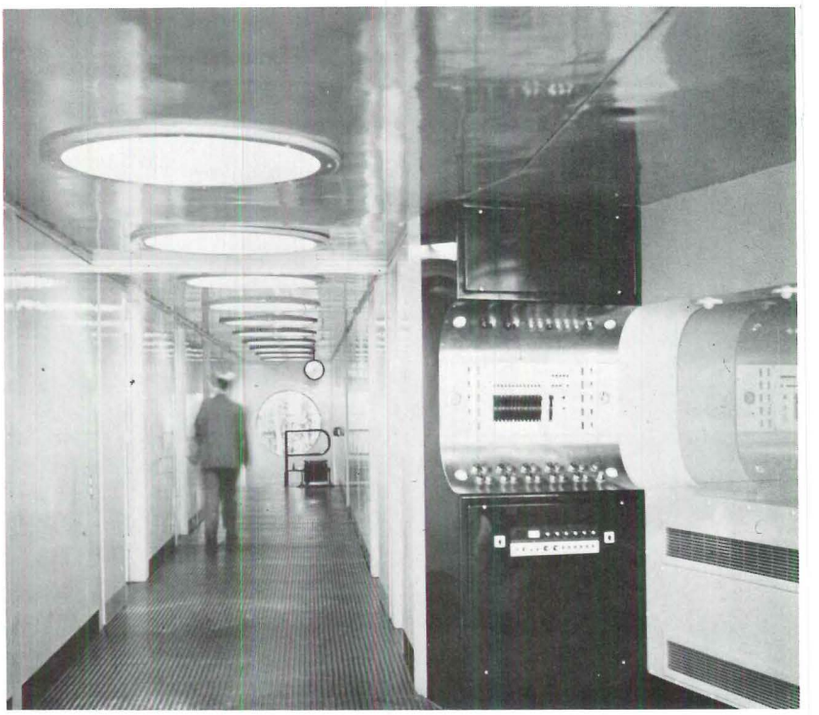


Finally the glazed gallery, a space which can be used for many activities. First of all, it is a marvelous circulation link between both wings and the mansion, a *trompe l'oeil* space which, because it flares out in three dimensions, seems twice as long one way as the other. It is the *Scala Regia* of Bernini with a scissor ramp of Le Corbusier and glazing by Paxton—a kind of greenhouse ship's deck where grey flannel technicians can meet quietly and converse. The space is at once open to the outside wind, rain and natural elements and protected from them. Its spiky angles, filled with light and glistening, give momentary views of greenery.

During the musical opening, this space doubled as an extension of the auditorium, the ramps served as galleries and the stairs as seats. Also the link can be used for exhibitions and, inevitably, for growing creepers and bougainvillea. On the outside sits a traveling crane which cleans the glass, a characteristic Stirling device that recalls his Constructivist sympathies and looks like a piece of space hardware. To put all this complex geometry together, or at least to achieve the intended dissonance, Stirling has once again made use of the axonometric technique which allows him to design in plan, section and elevation all at once. It makes the ideal view from which to see the building—a helicopter perching at 45 degrees to the southern wing. Here you see the total view in the mind of the architect which disciplined the parts.

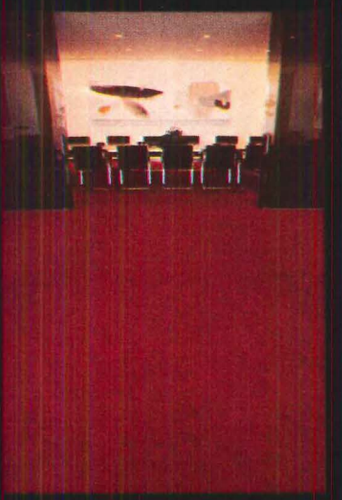
No doubt this new Training Centre is well suited to its job. It looks unmistakably like a clip-together Olivetti machine, it extends the use of new technologies in an artful and unfamiliar way, and hence becomes a fitting symbol of the enlightened corporate policy of Olivetti. The firm stays just ahead of Fiat, Pirelli, IBM or other multinationals as a cultural patron. Probably the motives are mixed. Good art equals good business, and brings the immortality which Renaissance artists conferred upon the Medici. But there is also the recognition, stated by Adriano Olivetti, that the large firm should take responsibility for the social and cultural consequences which stem from its economic decisions. There are, however, some unintended consequences.

When you drive into this 42-acre estate, past exotic trees and rare horticultural species, and see this enclosed plastic tube extending away from the country house, you feel like an intruder at some secret government centre, some meritocratic Think Tank where a super race is quietly planning out your future or perfecting a death ray. It could be the Hudson Institute or 007's nerve centre for counter-espionage. The subtle visual cues of landscape, Olivetti signs, tasteful lighting standards and blancmange plastic confuse the unwary visitor as to whether the complex is public or private. One expects another Olivetti showroom, or the public gesture which Adriano Olivetti intended for all his buildings, but then one finds the private school for the young elite. And private is the word. Unwary pilgrims are unceremoniously shown the door. Contrary to Olivetti's public spirit and policy elsewhere, the managers here are intent on keeping this new building to themselves.



Facts and Figures

Olivetti Training Centre, Haslemere, Surrey, England. Architects: James Stirling and Partner. Senior Assistant: Robin Nicholson. Consultants: Felix J. Samuely and Partners (structural); Dale and Ewbank (services); Polyplan Limited (plastics); Mary Shand (interiors). Quantity surveyors: Monk and Dunstone. New building area: 29,000 sq. ft. Contract sum (1971): $865,000.
Photographs: Richard Einzig; except p. 96 and 102 (top), Tim Street-Porter.



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Q: THE LOBBY. THE CAFETERIA. CAN BE RIGHT FOR THEM

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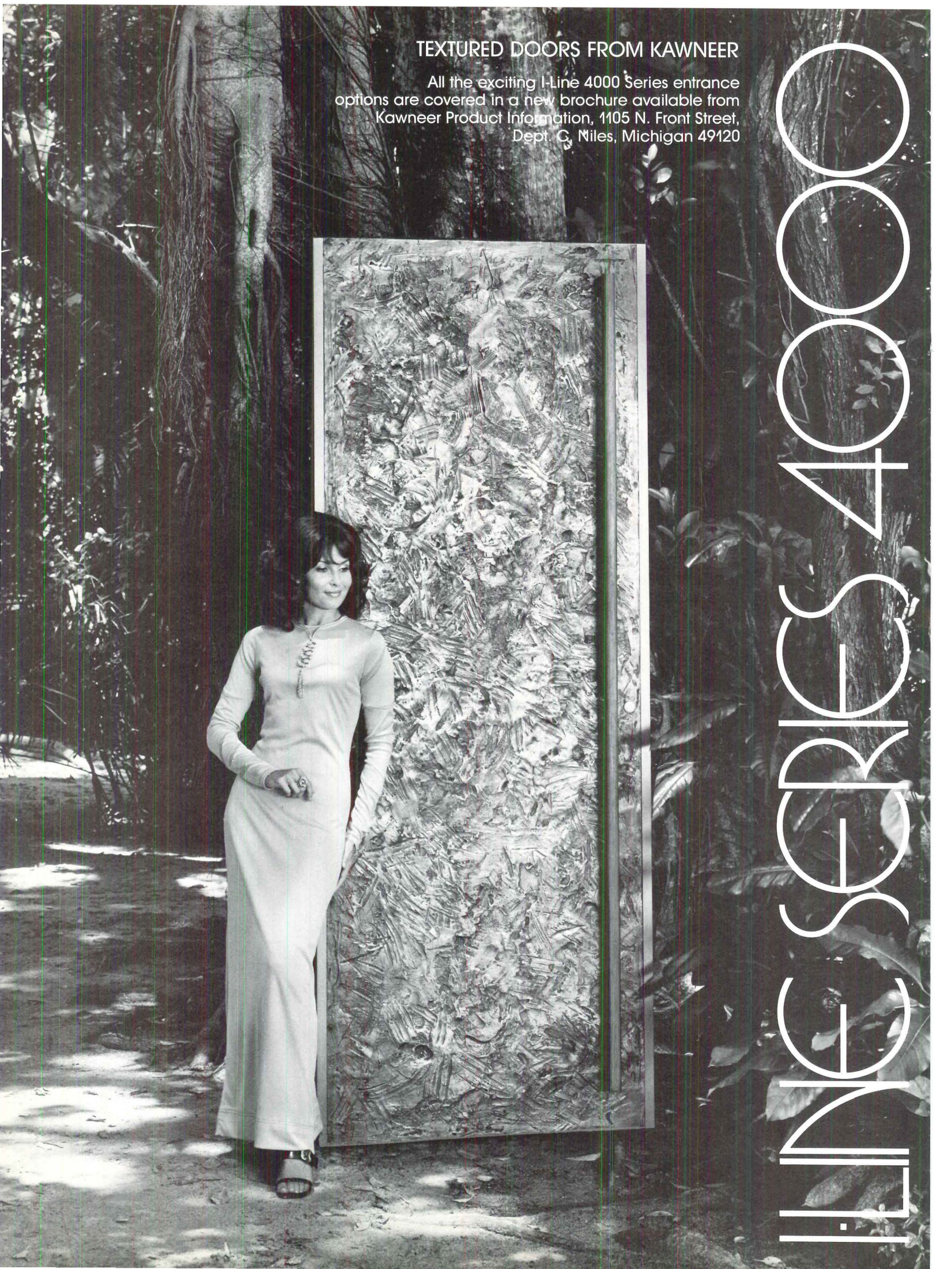
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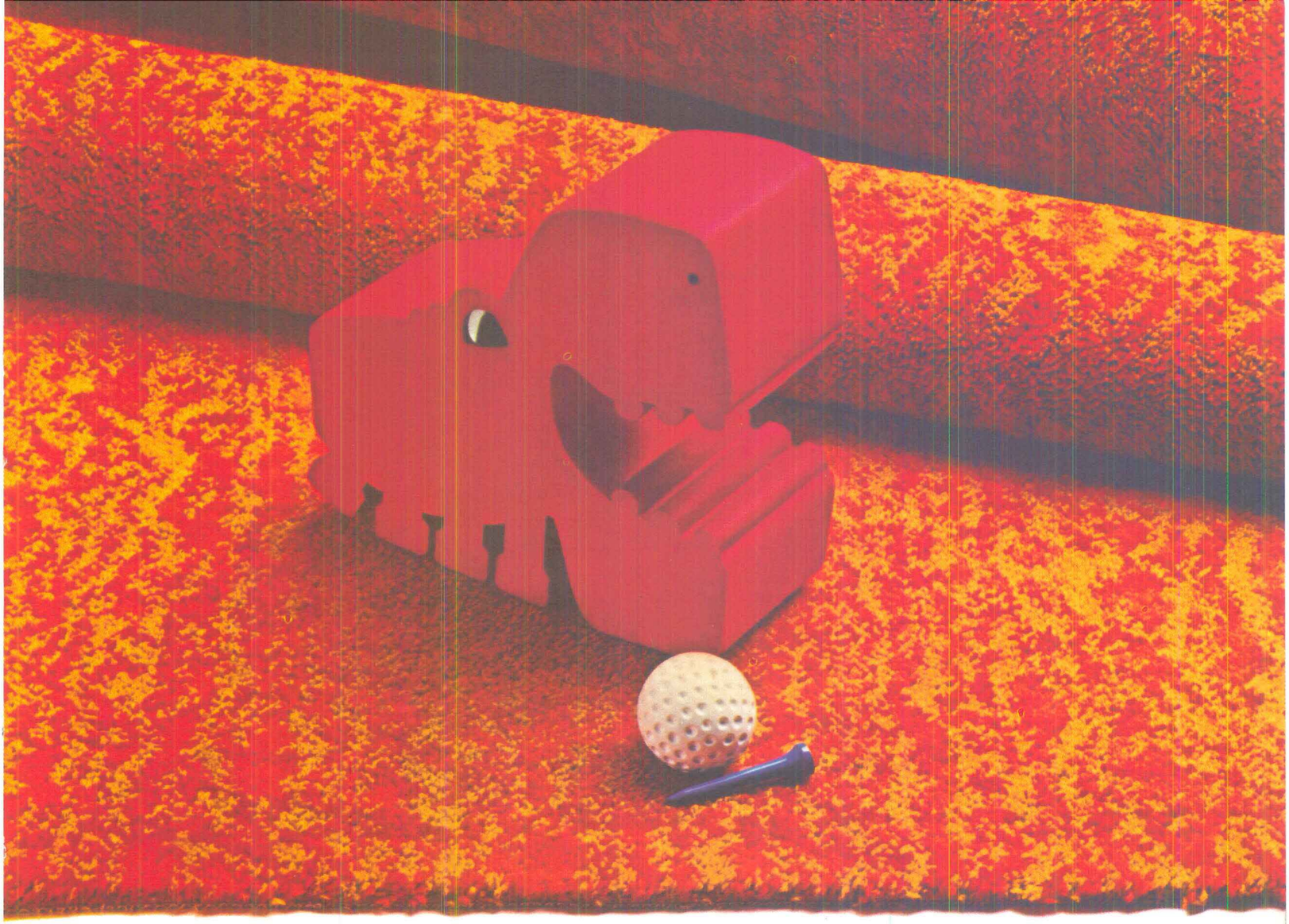

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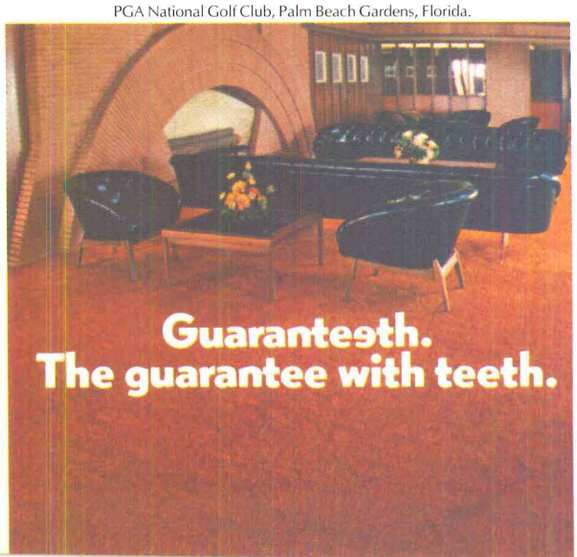

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news +

continued from page 31

Italian turnabouts

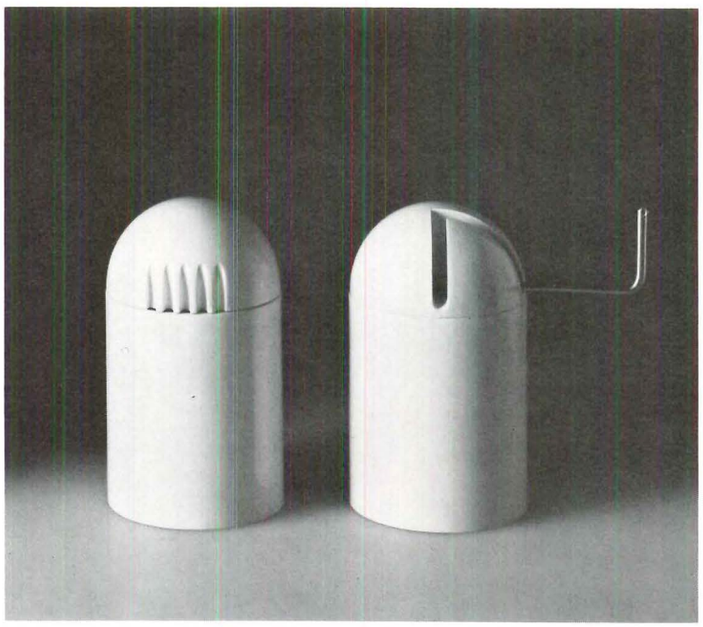
Danese is a unique shop/gallery in Milan which commissions and sells some of the most inventive objects by Italy's leading designers.

Once again, the new Danese products look simple: a salt cellar and pepper mill and an eggcup/candlestick. Once again, they show how designer Enzo Mari approaches a design problem and how Danese presents a product. The salt and pepper pieces which come in sets in either black or white are refreshingly unprepossessing, easy to use, practical to refill, simple to take apart for cleaning and feel terrific in the hand. The material used is melamine and as with all the Danese products is perfectly finished.

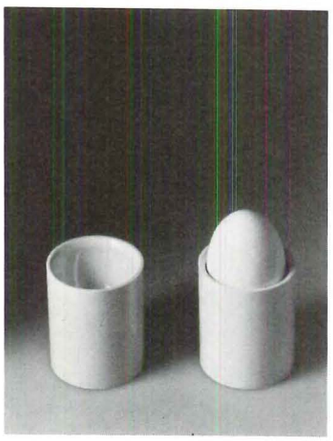
Once again, Mari has rethought the function of ordinary objects. The salt cellar is devoid of holes, but incorporates adjustable slits while the pepper mill is equipped with the most reliable grinding mechanism the designer could find. As for the eggcup/candlestick, which by the way is sold in pairs and packaged according to one or the other of its uses (an indication that even in Italy one does not want to confuse the customer), simplicity is all. The double function is an extra prize, when your breakfast eggcup becomes your evening candlestick.

—Suzanne Slesin

Suzanne Slesin is a free-lance writer on design.



Enzo Mari's salt and pepper (above). Eggcup flip-flops to candle holder (below).



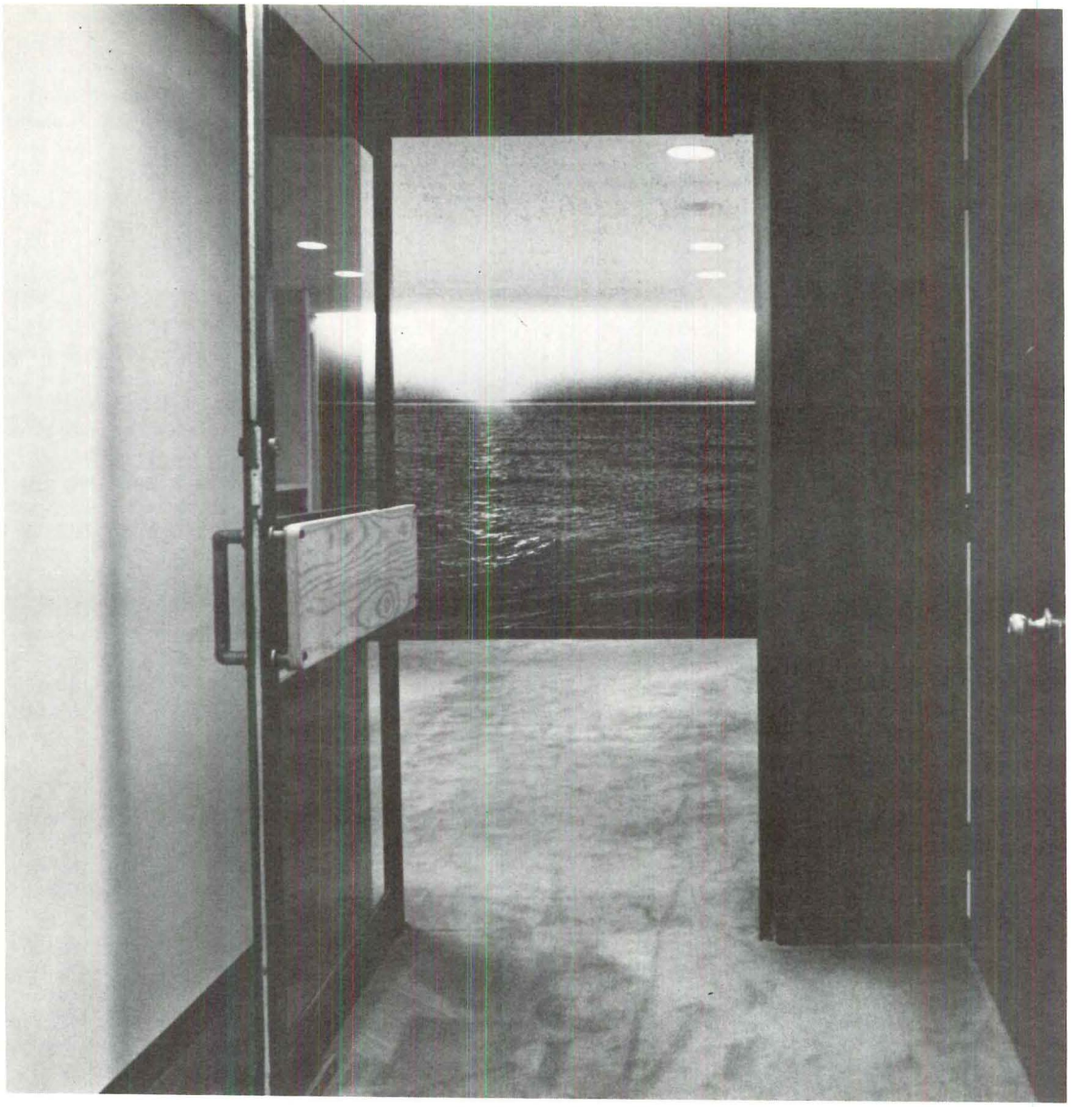
Tiffany glass

Dr. Egon Neustadt, the world's leading collector of the art of Louis Comfort Tiffany, has 10,000 sq. ft. of Tiffany glass sheets which he would like to sell as a unit. Dr. Neustadt found the glass sheets in Tiffany's Corona, N.Y. Furnaces, where they had been lying around undetected for years. Tiffany discovered the correct chemical interaction of metal oxides to produce colors in glass without the use of paints or pigments. When he died in 1933, the secret died with him.

Dr. Neustadt, whose gallery-home in New York has been converted into the Egon and Hildegard Neustadt Museum of Tiffany Art, is the author of *The Lamps of Tiffany,* an encyclopedic book illustrating several hundred of the inventor's exquisite lamps.

Three spaces for an architect

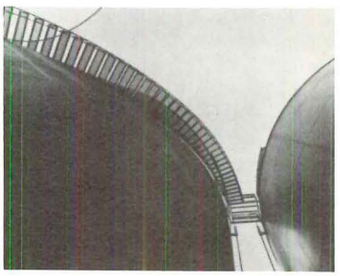
What must be a mark of immortality appeared in a recent *New York Times* Sunday Magazine crossword puzzle: 21 Across has three spaces and the clue is "Architect, I. M."



Mural mural on the wall

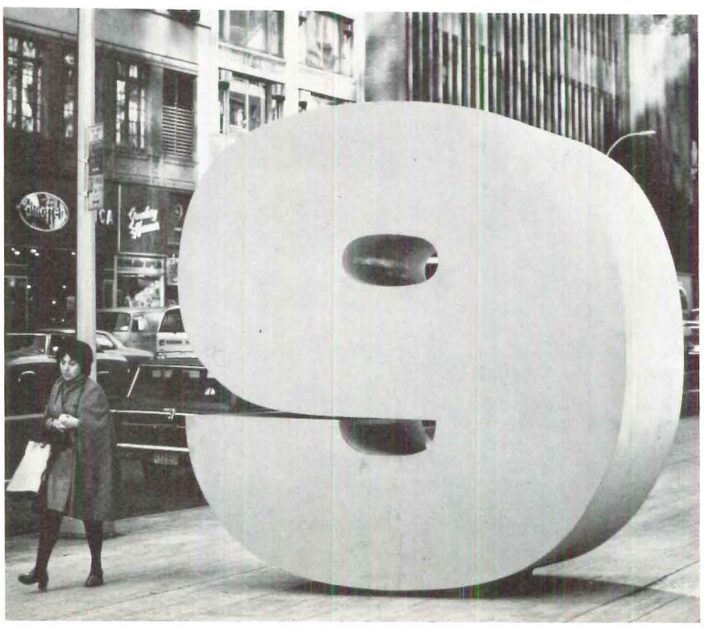
Step through the door and you're by the sea—or a reasonable facsimile thereof. The photo mural in the General Waterworks offices in Philadelphia adds an extra dimension to the ordinary office building corridor. Another mural, in the Sun Oil Company of Pennsylvania, is a worm's-eye view of two gas tanks. And a closed-in room in the Colonial Penn Group Insurance Company has a dizzying view from the bridge.

Elliott Kaufman, a young Philadelphia photographer, created the murals. When last heard from, Kaufman had his tripod under his arm and was crossing the United States photographing every diner in existence.



Red-orange nine

Ivan Chermayeff of Chermayeff & Geismar Associates designed this welded, ¼-in. steel plate No. 9 for the building at 9 West 57 Street in Manhattan. The number is 10 ft. high and 5 ft. wide; and its 6,000 lbs. rest serenely on the sidewalk in front of the building. The sculpture is painted bright red-orange to contrast with the large areas of travertine used in the building. It's a "good address," and can be seen from far up and down the street. And vandals won't rip off a 3-ton nine.



His and hers

The steady increase in the number of women architects has not gone unnoticed in the trade. In a recent fabric show at Knoll International, this classic drafting stool was shown in a gayer mood. The drafting skirt was designed by Betsey Johnson.

Dial-a-bus

In the suburbs of Ottawa, Canada, citizens have a cozy method of door-to-door mass transit. They can telephone for a bus, and for as little as forty cents they can be picked up at the front door by a red and white minibus, and delivered to any place in town. This most pleasant service was started last August and now serves 2,500 people a day.

The Ottawa-Carleton Regional Transit Commission admits that the system does not pay its way, and the authorities don't think it ever will. Nevertheless everyone seems to be pleased, including the bus drivers who are delighted to avoid the monotony of having to drive the same fixed routes over and over, like mice in a maze.

AIA awards for 1974

The American Institute of Architects has announced some of the honors which will be given out at the convention May 19-23 in Washington, D. C. The traditional medals, citations and awards will be as follows:

- Architecture Critic's Medal to Walter McQuade, a member of our Board of Contributors, whose articles have appeared since 1947 in the *Architectural Forum* (when he joined their staff), and in *The Nation, Fortune, Life,* and *AIA Journal.* His own books include "Schoolhouse" (1958) and "The Threatened City" (1967), and he edited the anthology "Cities Fit to Live In" (1972). He is a member of the Board of Editors of *Fortune.*
- Industrial Arts Medal to Ing. C. Olivetti & Company, S. p. A., whose "history of excellence in coordinating all the manifestations by which the organization is known by the public." Olivetti primarily makes business machines, but the buildings around the world it has commissioned to house its offices and factories are masterpieces by some of the world's great architects. (For a comprehensive study of this company's achievements in the field of design, see our September 1973 issue.)
- Architectural Photography Medal to David Hirsch of New York, an architect as well as a photographer, whose photographs consistently show the discipline of a designer's point of view. Hirsch is currently involved in urban design in the mayor's office in Brooklyn.
- Research Medal to Ralph Knowles, professor of architecture and acting dean at the University of Southern California School of Architecture and Fine Arts, who has long studied the effects of climate, new technology and energy consumption on building design and the use and development of land.
- Craftsmanship Medal to Sheila Hicks, designer and creator of wall hangings, whose "textile sculptures" have been commissioned for the Ford Foundation in New York, the Rothschild Bank in Paris, and the Iturbide Palace in Mexico City. The AIA jury calls Sheila Hicks "a consummate artist who has the specific power to liberate her ideas and give them bodily form."
- Allied Professions Medal to Kevin Lynch for his work in urban design and environmental planning. He is the author of "Image of the City" and "What Time Is This Place?", and is a professor in the Department of Urban Studies and Planning at the Massachusetts Institute of Technology.
- Fine Arts Medal to Ruth Asawa Lanier, whose sculptures in various media including woven and tied wire, cast bronze and baker's clay (flour and salt) are well known in San Francisco. Ruth Lanier is a member of the Art Commission of San Francisco.
- Whitney M. Young Jr. Citation to Stephen van Daalen Cram (posthumously). Mr. Cram, who served on the AIA staff, was cited for "tireless and widespread service to minorities and the disadvantaged during his tragically short career."
- The Edward C. Kemper Award, given in recognition of an AIA member "who has contributed significantly to the Institute and the profession," to Jack D. Train of Chicago, recently appointed to a state commission in Maryland to study how architects receive commissions for state work, a subject very much in the news this year.

One woman and nine men outside the architectural profession, who "have rendered distinguished service to the profession of architecture or to related arts and sciences" were elected to honorary AIA membership: R. Mayne Albright, Alan Colby Green, Sen. Ernest F. Hollings, Ada Louise Huxtable, John B. Johnson, Fotis N. Karousatos, James W. Rouse, Philip D. Stitt, Russell E. Train, William G. Wolverton.

Architects from other countries who have been elected as Honorary Fellows (architects of "esteemed character and distinguished achievement who are not U.S. citizens and do not practice in the U.S. or its possessions") were: Luís Barragán (Mexico); Henryk Buszko (Poland); Juan José Casal Rocco (Uruguay); Allan F. Duffus (Canada); Alex Gordon (England); Colin Laird (Trinidad); Dr. Hans Bernhard Reichow (West Germany); André Remondet (France); Dr. German Samper Gnecco (Colombia); Peter Shepheard (England); Michel Weill (France).

- Architectural Firm Award to Kevin Roche John Dinkeloo and Associates of Hamden, Conn. This award is given to a firm in which "the continuing collaboration among individuals has been the principal force in consistently producing distinguished architecture." Both of the firm's partners were formerly members of Eero Saarinen and Associates, of which their own organization is an outgrowth. Among the firm's many honored buildings, are the Oakland Museum in Oakland, California, and the headquarters of the Ford Foundation in New York.
- Architecture Critic's Citation to the Regional Plan Association, New York, for "Choices for '76," a multi-media approach to solving urban problems. Five television shows brought the viewer information on problems of housing, transportation, environment and poverty. RPA is the world's oldest metropolitan planning organization, and deals with the urban crisis in the New York-New Jersey-Connecticut region.
- Citation of an Organization to the New York State Urban Development Corporation for its accomplishments in low and moderate income housing. UDC's innovative approaches have had nationwide impact.

What's Buyline?

A new nationwide telephone inquiry service for U. S. architects and engineers, called "Sweet's Buyline," will be in operation by next fall.

By dialing a toll-free number from any location in the U.S., the caller, within one minute, will be given from a computerized list the name, address and telephone number of his own representative for any of 1300 building product suppliers whose catalogs are filed in Sweet's, with no charge to either architect or manufacturer.

Munich Mall über Alles

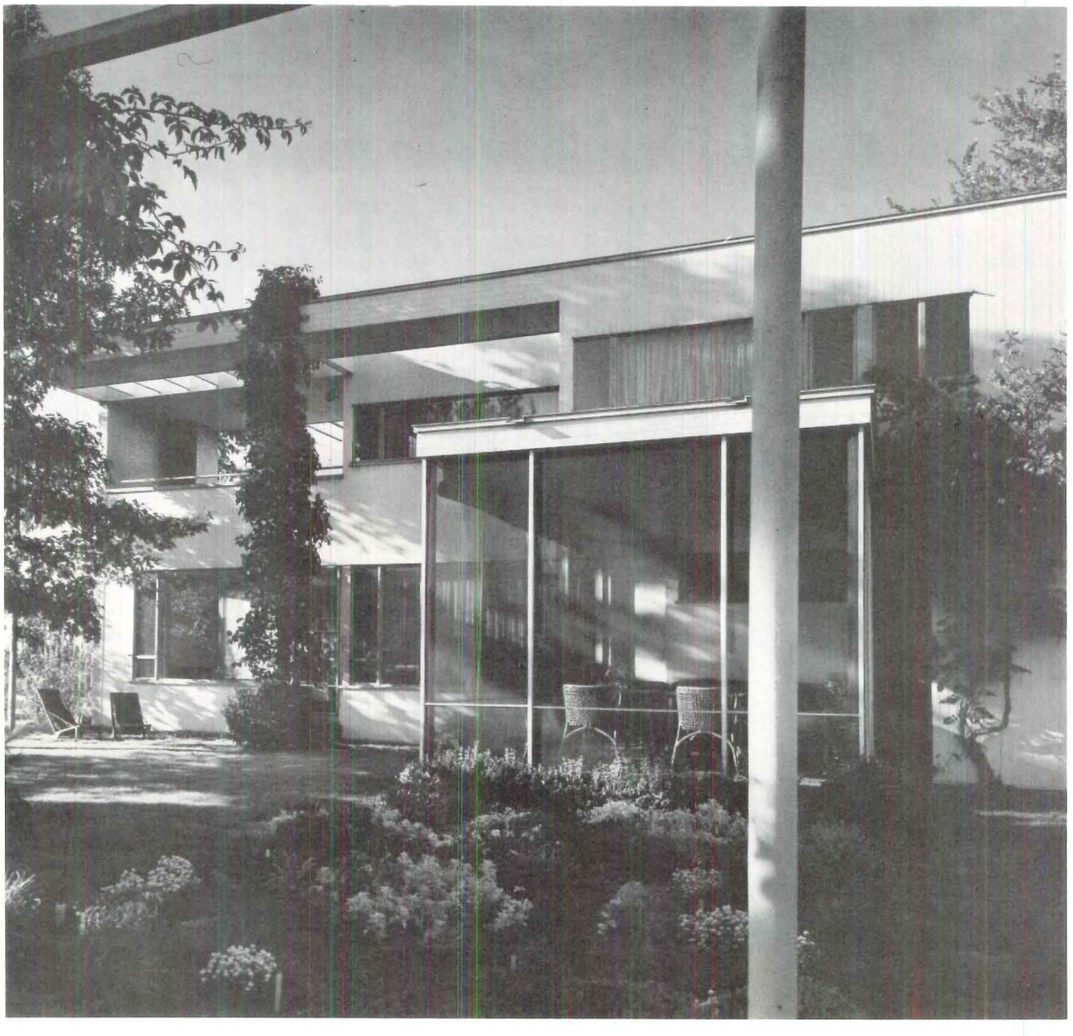
The R. S. Reynolds Memorial Award for Community Architecture, given only twice before (1967 and 1970), will go to architect Bernhard Winkler, in association with architect Siegfried Meshederu, for the pedestrian mall created in the Altstadt (Old City) of Munich. The jury designated that the $25,000 prize be divided, with $20,000 going to Winkler (who has donated it to UNICEF) and $5,000 to his associate. Winkler will also receive an aluminum sculpture by an artist yet to be announced.

The 900-meter mall, which was published in considerable detail in the April 1973 issue of PLUS, is distinguished by varying street widths that extend into numerous side streets and plazas and by a variety of landmark structures. It runs on an east/west axis from the Karlstor (Old City gate), past several medieval churches, to the Rathaus and Marienplatz. The entire stretch is enlivened by a variety of arcades, shops, restaurants, beer gardens and landscaped seating areas. Seven fountains provide entertainment for young and old alike.

Cars had long dominated Munich's Altstadt when the city made its first move to clear the zone in 1963. A 1965 planning study documented the negative impact of cars on the area and, in 1966, the city council announced a design competition for a permanent pedestrian mall and plans to integrate it with an improved public transportation system for Munich. The deadline was the 1972 Olympics.

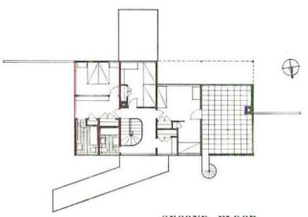
The Reynolds award, which is sponsored by Reynolds Metals Co. and administered by the American Institute of Architects, will be presented at the AIA convention in May. The awards jury consisted of architects I.M. Pei, Charles W. Brubaker (president of Perkins & Will), and Henry Steinhardt.

The first award in 1967 went to Cumbernauld New Town, Scotland; the second in 1970 went to the town of Beersheba, Israel.



Gropius preservation

A monument of modern architecture is to be preserved for the public. Walter Gropius' own house, in Lincoln, Massachusetts, designed in 1937 during the partnership of Gropius and Marcel Breuer (shortly after they arrived in the United States and established a practice), is in use now by Gropius' widow. Mrs. Gropius has generously offered to will the house, complete with its original furniture made in the Bauhaus workshops and imported from Germany, to the Society for the Preservation of New England Antiquities. The famous house, an adaptation of Bauhaus style to traditional New England building materials, will be the Society's first 20th century acquisition. Jose Luis Sert is chairman of the Society's committee to raise funds for the house's future maintenance. Above left, the Gropius house's entrance facade, combining a wall of glass block and an industrial spiral stair with traditional white-painted wood siding. Below, the garden facade. Glass areas facing south are shielded by roof overhangs. Dining and living areas open to each other, but can be divided by a curtain. The dining area and the study are separated by a second angled wall of glass block. —S.A.



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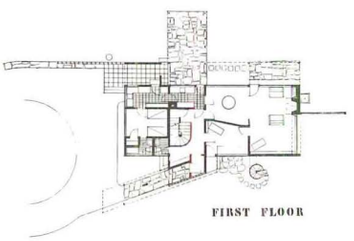
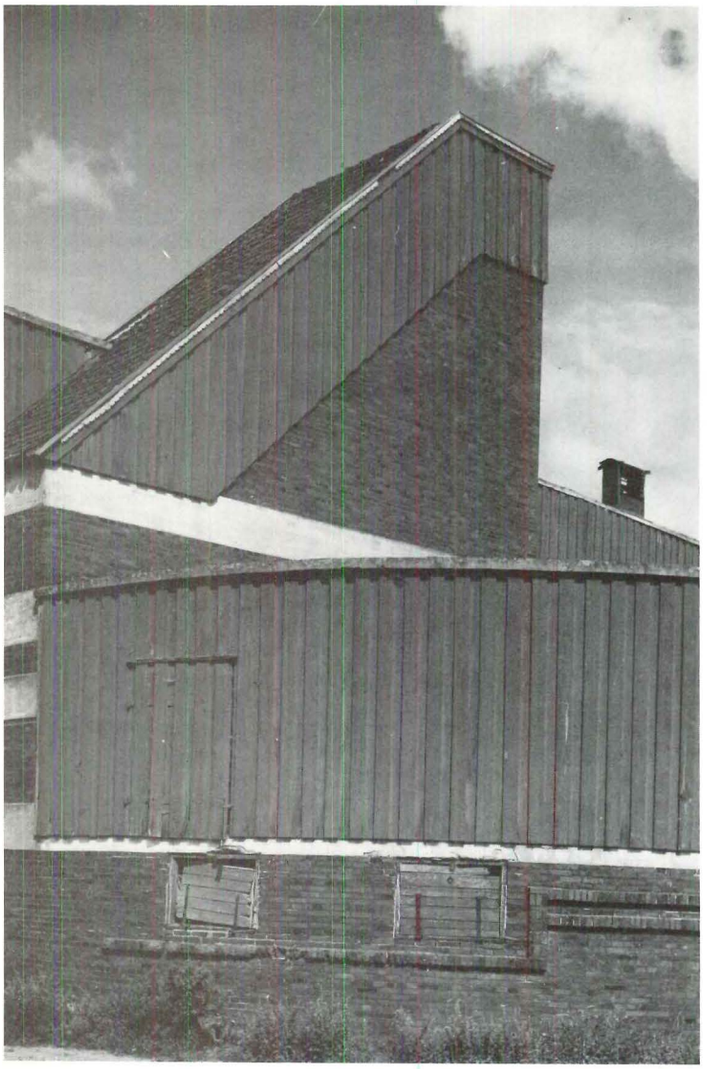


FIRST FLOOR

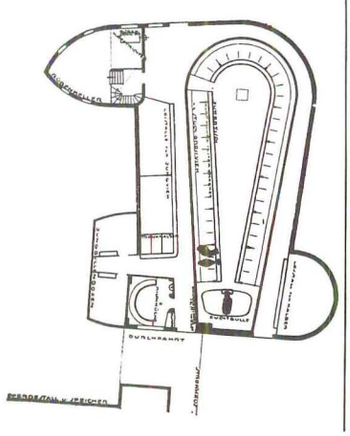


Cow Palace threatened!

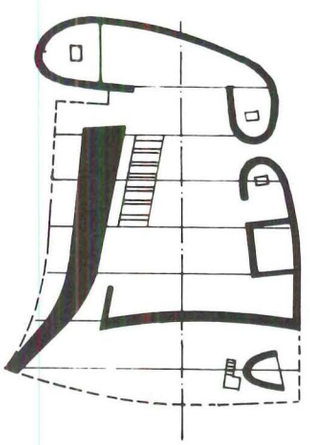
Hugo Häring's famous farm structures at Garkau, in Schleswig-Holstein, are likely to be destroyed to make way for a vacationers' condominium complex unless a current fund-raising effort is successful. Häring, who died in 1958, was like Scharoun outside the mainstream of the International Style—and the significance of his work is only just beginning to dawn upon a new generation of less dogmatic architects. The farm buildings at Garkau were completed in 1925, and the best of these—a cow barn—is remarkably similar in plan to (of all things!) Le Corbusier's Chapel at Ronchamp, designed 25 or 30 years later! There are two other buildings—a barn and a wagon shed—but the cow palace, now sadly neglected, is the most interesting. The photo above shows it.

The State of Schleswig-Holstein is expected to contribute at least 100,000 DM, but much more is needed to do the job. If you want to contribute, send a check to Eberhard Zell, Architektenkammer Schleswig-Holstein, Düsternbroker Weg 77a, Germany. (Is Elsie Borden listening?)

Plan of Cow Palace



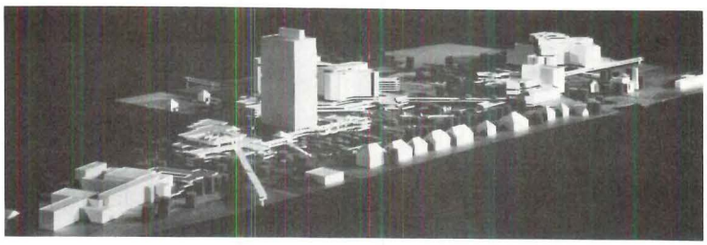
Plan of Le Corbusier's chapel

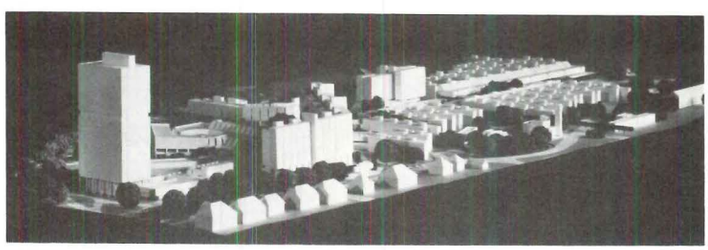


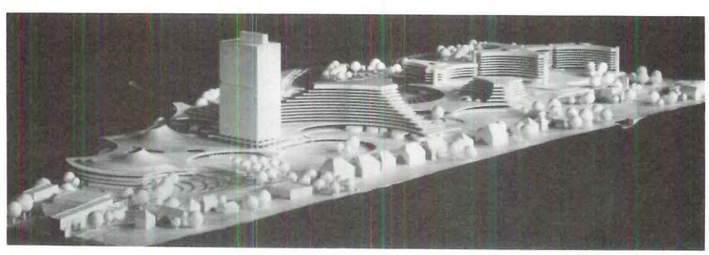
Four Firsts

A year ago, the Bonn Government announced a competition for the design of facilities to house the Federal Diet, Federal Council, and various Ministries. An important aspect of the competition, in the eyes of its organizers, was the manner in which the submissions related to the existing buildings of the City of Bonn.

The results are now in, and they are clearly inconclusive: instead of selecting a single First Prize and several runners up, the Jury selected Four Firsts—not "First Prizes," exactly, but four entries of first quality, as it were. From top to bottom, the premiated entries were submitted by the following architecture firms: W. & S. von Wolff & Schneble (Konstanz); Behnisch & Partners (Stuttgart); Brunnert, Mory, Osterwalder & Vielmo (Stuttgart); Hecker, Wolf, Gruppe 4, Poppe & Rudel (Freiburg). Each of the firms was awarded 60,000 DM. The models are pictured below—take your pick.—D. S.





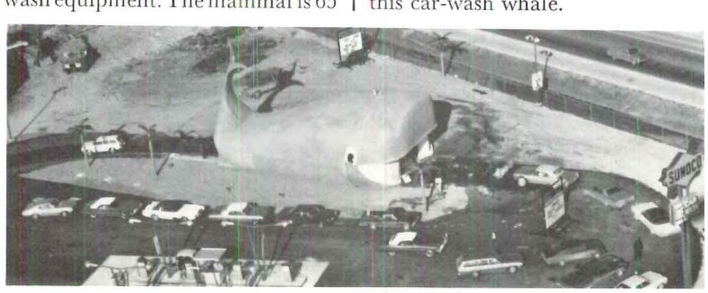


(Top) W. & S. von Wolff & Schneble; (second) Behnisch & Partners; (third) Brunnert, Mory, Osterwalder & Vielmo; (bottom) Hecker, Wolf, Gruppe 4, Poppe & Rudel

Moby Dick in Buffalo

The builder of this self-service car wash in Buffalo, New York, is planning to create a mold of this concrete whale, mass-produce it in bright-colored fiber glass, and sell it as a package complete with car wash equipment. The mammal is 65 ft. long, 30 ft. wide and 38 ft. high.

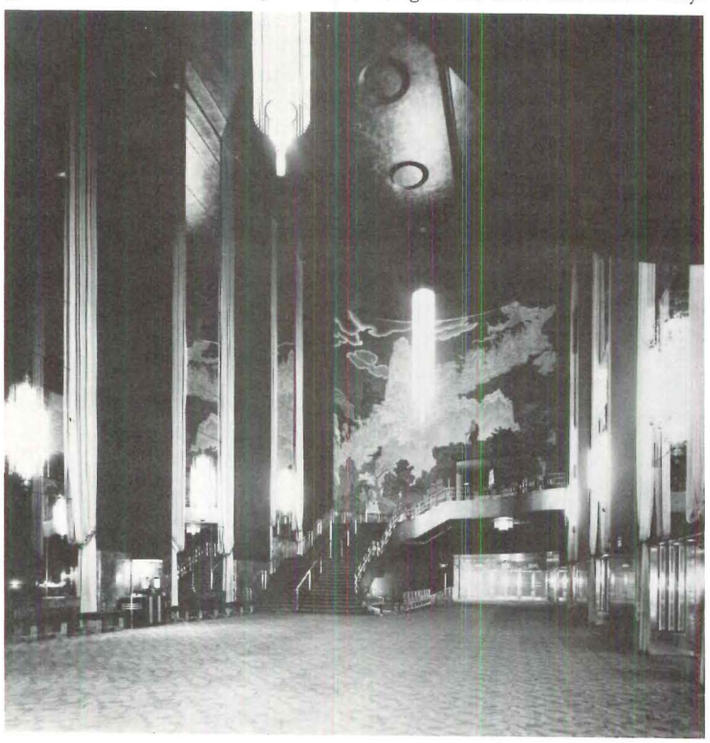
We have seen an ad for this whale in a recent British magazine. While the U.S. is accustomed to seeing buildings that look like ducks and elephants, we are not sure whether England is ready for this car-wash whale.

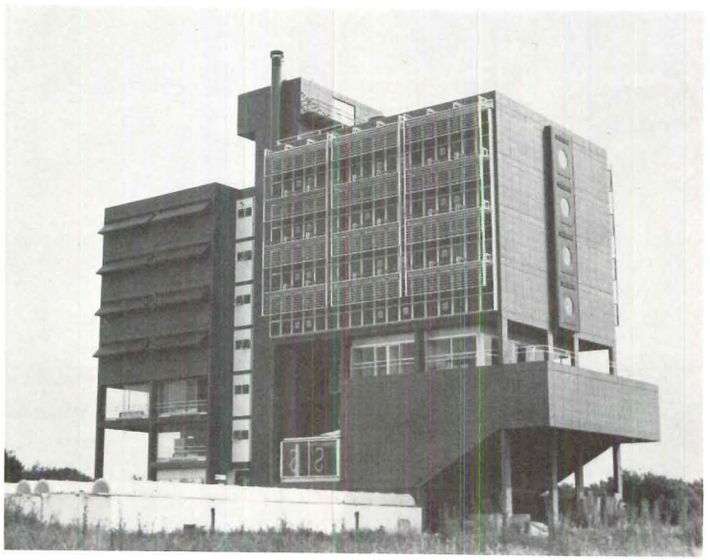


Deco lives again

Art Deco, the classical, symmetrical, rectilinear (and often downright grotesque) style that thrived from 1910 to 1935, had a brief but enthusiastic comeback in February. Radio City Music Hall, itself an *Art Deco* temple, was the scene of the New York Art Deco Exposition, the biggest display of *Art Deco* since the famous Paris Exposition Internationale des Arts Decoratifs et Industriels Modernes of 1925. A shortening of that title gave *Art Deco* its name, which previously had been *Art Moderne*.

Radio City's great stage (it takes five miles of cable to lift the main curtain) had a five-day orgy of the more exotic films of the thirties. As "Gunga Din," "Garden of Allah" and "King Kong" reeled on inside the huge theater, nostalgic visitors bought up the frosted mirrors, bronzed-nude ashtrays and plastic jewelry in the lobby bazaars. There were dozens of merchants in tiny cubicles with their wares, a miniature Portobello Road, but the best thing in the show was Radio City.

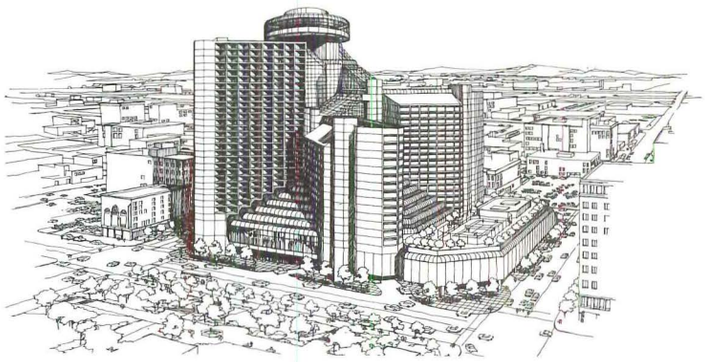




La Plata, Argentina

The new Science building for the Central Institute of Research of the National University of La Plata was designed by the Associated Architects Baudizzone, Diaz, Erbin, Lestard, Traine (now deceased), and Varas.

The building is a box, with a glazed side and a closed side corresponding to the very different design requirements of laboratories and classrooms. On one side the building is open and sunny, and houses offices, classrooms, social rooms, and the library. On the other side, the building is closed, and contains the laboratories with equipment requiring special atmospheric conditions.—L. A.



The return of the pyramid; inside, atriums replace tombs in new Hyatt Regency

Kansas City, Mo.

A $50-million hotel with 1,000 rooms is to be built in downtown Kansas City. Four interconnected towers with stepped roofs (the highest one 27-29 stories) will rise to varying heights and will surround an atrium space 290 ft. high. A glass-walled revolving restaurant encased in structural concrete will sit on top of an elevator shaft.

The design is basically a pinwheel with the four towers projecting off the central atrium. At the first nine floors, the atrium will take on the appearance of a pyramid. Above that the atrium space becomes square and rises another 200 feet to the restaurant. Because of the pyramidal shape at the lower level, elevators will start inside, continue upward through atrium space, pierce the roof and pass alongside the towers. The elevators will be made of clear acrylic sheet, and lined with tiny twinkling lights.

Windows and clerestories will be solar bronze glass. Reinforced concrete, sandblasted to expose the aggregate, will form the façade.

The architects are Welton Becket and Associates, with associate architects Horner & Blessing.

The visions of Malcolmson

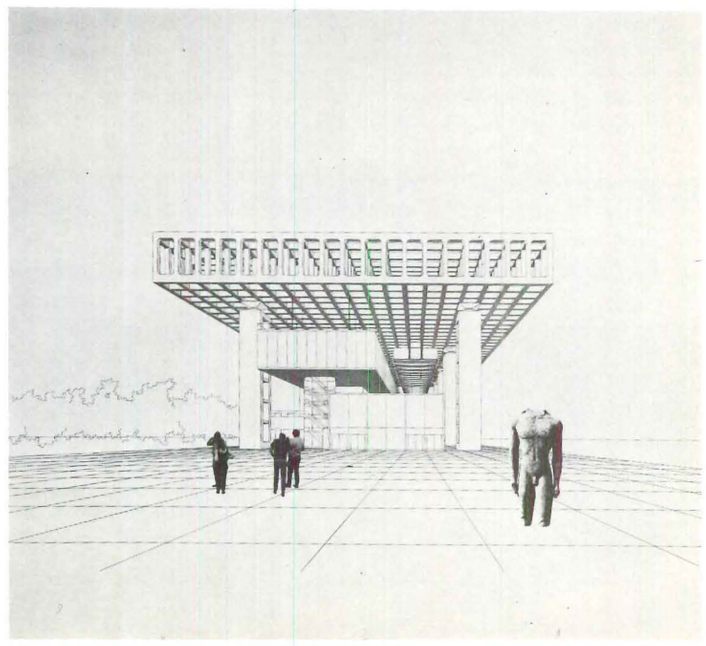
The International Exhibitions Foundation will show, at its annual meeting in April in Washington, D. C., an exhibit of "Visionary Projects" by Reginald Malcolmson. Dublin-born architect/planner Malcolmson, who is the dean of the College of Architecture and Design at the University of Michigan at Ann Arbor, is generally recognized to be one of today's leading visionary architects.

Mr. Malcolmson practiced architecture in Ireland before going to the U.S. In 1947 he did graduate studies with Mies van der Rohe at the Illinois Institute of Technology (IIT), and later became a member of the faculty there.

The show, which will be held at the American Institute of Architects headquarters in Washington, D. C., consists of 46 photographic panels, and breaks down into five categories: linear cities, suspended buildings, extensible buildings, industrialized houses, and the use of color in buildings.

Konrad Wachsmann, the space-frame genius, wrote the foreword to the catalog of the exhibition.

Project for a School of Art and Architecture 1969-71

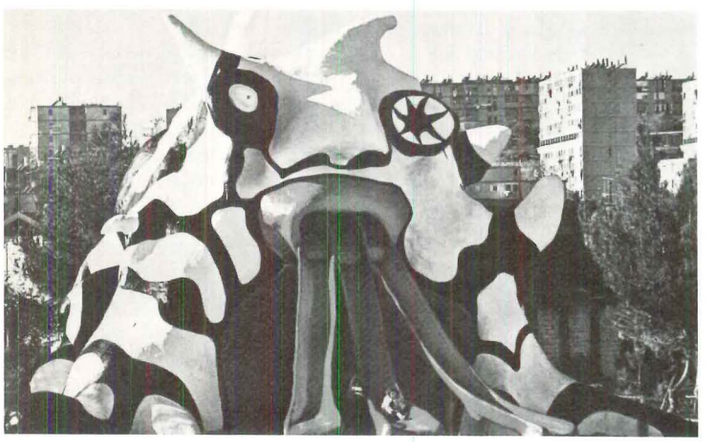


Monsters and big mamas

An exhibition of some of the creations of sculptor Niki de Saint-Phalle was held in February and March at the Galerie Alexandre Iolas in Paris. Her out-size outdoor sculptures are displayed in several countries; they are for climbing on, jumping off, having drinks inside of—totally touchable. "The Monster," a huge multi-colored sculpture in Jerusalem is a playground, with three tongues as slides.

A reclining woman, 82 ft. long, called "La Hon" (She) was constructed at the Museum of Modern Art in Stockholm in 1966. The "woman," nicknamed "Gigantesque," was designed in collaboration with Jean Tinguely, and contained a cinema, a bar, slides, a lovers' nest, lots of stairs, and an aquarium. She was destroyed, alas, at show's end.—Betty Rocher.

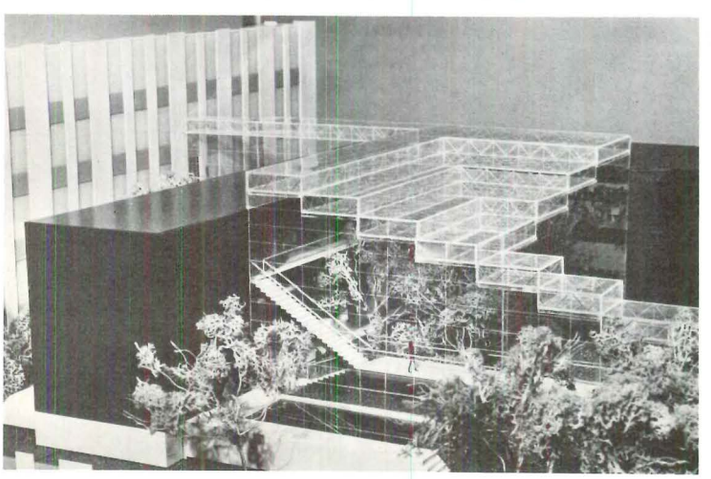
Poster for the Saint-Phalle show (above): *The Monster* with slide-tongue, in Jerusalem (below)



RCA's greenhouse

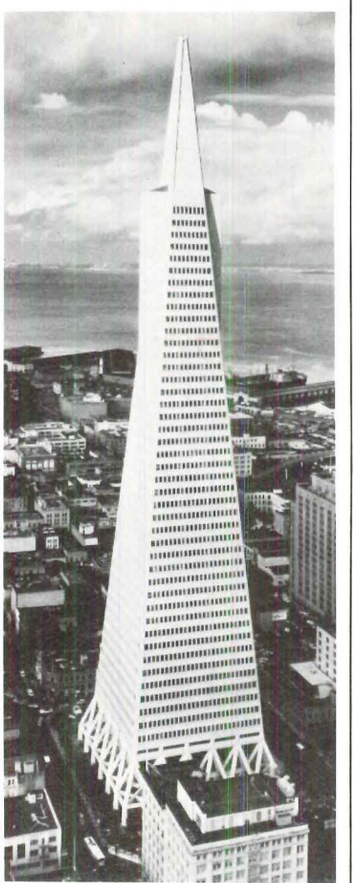
The Radio Corporation of America is going to build itself an (almost) all-glass Conference Center up on a 12th floor setback on the west side of the RCA Building—the centerpiece of the greatest modern urban complex on earth, Rockefeller Center.

The Conference Center will be linked to the 12th floor of RCA's office space inside the existing tower, and it will contain boardrooms (with elaborate electronic communications equipment), executive dining rooms, and related facilities. Its location is an existing garden-terrace, and the designers (Marlys Hann and James Maguire, of the industrial design firm of Ford & Earl) have incorporated existing and new planting in their structure. Moreover, they plan to heat and cool the entire place with solar energy—so this little greenhouse will be a full-scale lab for much advanced RCA technology. When this has been explored in greater depth, we will publish the project in detail.



Woodman, spare that tree!

We have been informed that an "entire grove of redwood trees in a half-acre pocket park" has been planted around the base of the 853-ft. Transamerica Pyramid Building in San Francisco. The redwood is an immense sequoia tree in the pine family, native to California. These trees, called "nature's own skyscrapers," are expected to grow eight feet a year; at that rate, in about 106 years. . . .



Australia

An international tourist village, with its buildings designed in the style of various countries, is to be built in the city of Shepparton, in northeast Victoria. The 58-acre village will start off with European, Oceanic and Southeast Asian buildings, and graduate to typical architecture of the U. S., Canada, Asia, the Middle East, South America and Africa. A spokesman for the Shepparton City Council says, reassuringly, that construction advice is being sought from various embassies.

The site is flat, at present, but plans call for a canal to be dug, and a 42-acre island to be created. The village will rise on this island; Italian gondolas and Chinese junks (and whatever else will float) will transport visitors along the canal. A vineyard will rise from the hills created by earth from the canal.

Cost is estimated at $2.25 million, 40 percent to come from the Victoria State Government.

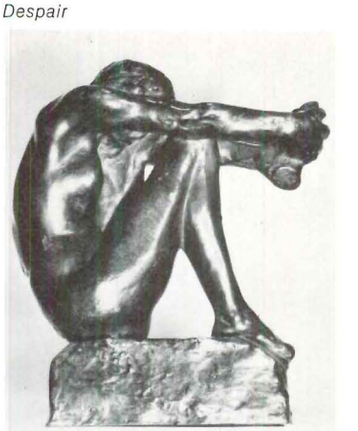
Auguste Rodin's sculptures

The world's greatest private collection of Rodin sculptures was recently given to three museums, California's Los Angeles County Museum of Art, Stanford University, and New York's Museum of Modern Art. The donor, investment banker B. Gerald Cantor, announced his gift of 127 Rodins, and some portraits of Rodin by Bourdelle, Troubetskoy and Soudbinine.

The Los Angeles County Museum received 29 bronzes, including "The Monument to Balzac" which will be installed in front of the museum. Eleven other pieces will go in an outdoor sculpture garden being designed around them.

The Kiss

Despair



Stanford University was given 88 sculptures in bronze, plaster, clay and ceramic, and some drawings and personal memorabilia. Accompanying this gift was Mr. Cantor's vast reference library on Rodin.

The MOMA received a series of ten bronze studies for the "Monument to Balzac".

All the gifts will be reunited briefly in 1976 when they, together with other Rodins still in Mr. Cantor's possession, will form a major Rodin exhibition scheduled to open the new wing of the National Gallery in Washington, D.C.

People

• Tom Wolfe, author of "Kandy-Kolored Tangerine-Flake Streamline Baby" and other irreverant writings, showed a number of his drawings through March at New York's Tunnel Gallery in a show called "Mother Was Wrong and Other Illustrations of Our Times." Many of the drawings illustrated his barbed stories.

Tom Wolfe

Debutante in Blue Jeans

• Alexander Calder, 76-year-old American sculptor who has made his home in France's Loire Valley since 1948 has been named a Commander in the French Legion of Honor.

• Jaquelin Robertson, former director of Manhattan's Office of Midtown Planning and Development, spent part of last winter lecturing and living in the Archbishop's Palace known as Festung (Fort) Hohensalzburg, which serves the American Seminar in Salzburg, Austria.

• Richard Meier, New York architect who has just returned from a term as Resident Architect at the American Academy in Rome, has been commissioned to design one portion of a new museum of modern art at the Villa Strozzi in Florence. Alvar Aalto of Finland and Hans Hollein of Austria will design other portions.

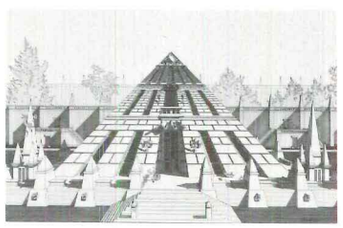
• Alfonso Ossorio, world renowned artist and art collector, whose own outrageous house in East Hampton, New York, was shown in our last issue, has installed a security system to protect

Ossorio in front of *Between*

that house, which functions as a combination home, museum and studio. The main feature of the system is its ability to define the nature of the emergency—vandalism, fire, smoke, or freeze-up—and automatically notify a communications center. The manufacturer's press release photo shows Ossorio standing in front of "Between," one of his own works.

• Gordon Baldwin, a west coast artist, functions in his spare time as the mayor of Bolinas, California (pop. 200), an unincorporated village one hour's drive north of San Francisco. An exhibition of Mayor Baldwin's ink drawings ended March 2 at the Shepherd Gallery in New York. A one-time architecture student at the Harvard Graduate School of Design, most of his drawings are black and white optical illusions of architectonic structures, whimsical and intricately drawn.

Dragonwyck

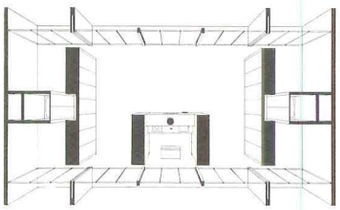


• Lewis Davis and Samuel M. Brody, partners in the New York firm of Davis, Brody & Associates, will hold Davenport Professorships for Visiting Designers at the Yale School of Architecture this spring.

• Dr. Whitman Bassow has been named Executive Director of the Center for International Environmental Information, newly established by the United Nations Association of the USA in cooperation with the UN Environment Program. The center, located in UNA headquarters in New York, will gather and disseminate information on all issues concerning the environment of the earth.

• Ivan Chermayeff, the New York graphic designer whose house in Cadaques, Spain, was published in our December 1973 issue, has rented the place to a Barcelona film company which intends to use it as a set. "I hope it's a love story and not a film where people are thrown down the forty-five-degree staircase," he said.

• Stanley Abercrombie, a Senior Editor of this magazine, and a practicing architect, received a "mention" from the New York Chapter, AIA, for a house he designed (in collaboration with Paul Vieyra). The plan (in perspective) is shown below. The jury commented that the house "would have appeared daring in 1953, but in 1973 it is looked upon as serene, pleasant and undemanding"—thus demonstrating the trendy vacuity of architectural juries. In another judgement handed down by this same jury a "mention" was awarded to a house that "appears to have a questionable relationship to the site, but is a piece of conceptually, rather than perceptually determined design" . . . whatever that may mean.



Obit

Harris Armstrong, whom *St. Louis Post Dispatch* Arts Editor George McCue called "a member of the diminishing breed of the architect who walks alone," died in St. Louis at the age of 74 in December. Mr. Armstrong, a pioneer of modern architecture, designed many buildings and houses in and around St. Louis. His career began at the age of 19 when, with no design education whatsoever, he designed a house for his parents in Edwardsville. When he couldn't figure out how to get the kitchen out of the center of the house, he gave up the project and went to night school to study architecture.

In 1936 he designed his first modern building—a dentist's office

Dentist's office, 1936

in Clayton—for which the French Government gave him a silver medal. Among his buildings in the St. Louis area are the laboratory building at Washington University, the former Scruggs-Vandervoort-Barney department store, the $7-million engineering building for McDonnell Douglas at Lambert Field, and the Federal Building in Kansas City.

His design for the Jefferson National Expansion Memorial, a massive pylon, won fourth place in the competition won by Eero Saarinen's arch.

• David Alfaro Siqueiros, Mexican muralist and political activist, died in January at the age of 77. His life, artistically and politically, was an adventurous one; most of it was spent fighting for social justice. While a student in Paris in 1920 he met Diego Rivera. They, together with Jose Clemente Orozco, founded the Mexican school of mural painting which reached its peak during the '20s and '30s. This art form was chosen by the trio as being "social art," dedicated to the people. Siqueiros once said, "To paint for the people, you don't use a brush, you use an airgun." His huge murals, startling in color and violent in subject, depicted oppression of the Latin American peasants.

• Richard Hughes Waddell, owner and director of the Waddell Gallery in New York, died in February at the age of 50. He was the grandson of Charles Evans Hughes, onetime Chief Justice of the Supreme Court. Mr. Waddell was a member of Tuskegee Institute and his highly experimental gallery frequently held benefits for civil rights causes.

Photographs: Page 25 John Donat. Page 26 (top left) John Donat; (bottom left) Day S. Johnston. Page 27 (left and bottom) Archives d'Architecture Moderne, Brussels; (top) Peter Blake. Page 110 Courtesy, Inst. for Envir. Action. Page 30 (top left) Jim Hedrich, Hedrich-Blessing; (top and middle right) Robert Reece. Page 31 (top) *O Construcao em Sao Paulo;* (middle) Jim Morgan; (bottom) Donal Butterfield. Page 108 (top and middle) Aldo Ballo. Page 109 (top) Elliott Kaufman; (bottom right) Oliviero Toscani. Page 115 (top left) Rollie McKenna. Page 116 Mannen-sha.

Footnote

A few years ago, Taro Okamoto, well-known painter-sculptor, and creator of the giant sculpture, "The Tower of the Sun" at Expo '70, met a man in a bar who asked him to become president of the Zeppelin Club. Dreamily Taro remembered when in 1929 his father (a reporter) took him along to interview the captain of a zeppelin. Nostalgia overtook him and he accepted the offer. Taro dreamed of painting a zeppelin, giving it eyes, so that it would look like a big animal floating in the sky, a big innocent toy. A year later the man came back and said, "We are going to fly a zeppelin and you can paint it." The actual painting of it wasn't as easy as dreaming about it. The zeppelin (of German make, shown here flying over Kobe, Japan) is 56 meters long, 19 meters high, 16 meters wide, has a delicate skin and no internal supports.—Y. U.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New York 979 3rd Ave.
Miami 274 NE 67th St.
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GROWTH OF A UNIVERSITY

continued from page 95

projects in low-key places, and as the vice president for policy said to me, in another context, "the state builds expensively, for political reasons."

If not in terms of buildings, the university is reaching out to the community in other ways. The new chancellor, Carlo Golino, believes that the urban university has its responsibility (and challenge) in urban problems, just as the land-grant college had its responsibility (and rationale) in agrarian problems.

A greatly expanded Office of Grant Development and Community Services is headed by Jacob Getson, whose background is in painting, gang work and Model Cities. His department maintains two field offices in Dorchester (one in the housing project), and is making serious efforts to get university jobs and contracts for local people. The department is writing various community-oriented funding proposals: for a housing assistance corporation, for a comprehensive-day-care operation, and for the revival of a once-important local theater where Ray Bolger and Fred Allen made their debuts. The university has helped social service agencies on the Point to coordinate their services, and has supported a local civic group in its efforts to get the Neighborhood Housing Services program. Among the ideas coming up: workshops in urban problems, tutorial programs, a university/community newspaper.

The university gets something from all these efforts, no doubt (it could get an 1,800-seat theater), but it also gives, and a community sensitive to being manipulated seems ready to believe in the sincerity of people like Golino and Getson.

Getson believes there is no other university operating in this way toward its community—as a broker, not as a direct sponsor of projects. "In a few years, things will begin to happen and *we* won't have had to do them." He considers what is already going on: "At a time when public programs are on the decline, there's probably more happening in this 'impact area' than anywhere else. This institution is the catalyst, for both good and bad reasons. The city should be seeing how other institutions could be leveraged to do things."

Responsibility and change

That's the story thus far, the story of a city growing and changing, and of people trying to keep up with it. "A typical case of bad planning," say observers, "an utter lack of coordination, a lack of city planning in the best sense of the term." The years have been marked by "procrastination" and "ineptitude" in the bureaucracies, and by arrogance among the decision-makers: "they didn't plan *around* people, but over and through them."

Why does it take so long to acknowledge the problems and act upon them? "The university doesn't *have* the problems—other people do," says one professor. "It's unconscionable that the university took so long to act, but they've finally begun to move." He gives large credit to the new chancellor, and to a Monitoring Committee that took up where the Campus Impact Study Group left off. (He is, in fact, a member of this committee.)

"Unconscionable" is a word that would lose its punch if applied with appropriate frequency to everyone's inaction. The city's recent concern, therefore, might better be called "encouraging" (if politically suspect). The legislature's concern is not encouraging: the past session saw five bills filed and ignored—bills for a master plan and an MBTA spur to the campus, for relocation benefits to those displaced because of the university, for housing near the campus, for student housing *on* campus, and for funds to cover the extra costs of soundproofing, special foundations and methane gas protection.

A year ago, the Task Force urged everyone to face responsibility for what lay ahead. The city must accept the community's efforts to hold itself together as a valuable asset and not an irritant, wrote Ellen Feingold. The state must accept "the changed reality of the university, and support the provision of compensatory education, housing and transportation facilities with the same commitment it earlier supported the construction of the educational facilities." Basically, a problem caused by the public sector must be solved by the public sector, says Ellen Feingold; she and others call for the assistance, too, of those in the private sector responsible for putting the campus here.

All public participants are now urging joint responsibility: the city says it "cannot and will not" solve the problems alone; the Trustees ask for all agencies to cooperate, and for neighbors to become "partners" not "adversaries." In fact, recent months have seen the beginnings of some productive relationships.

Maybe nothing positive could have happened until the situation was seen as a crisis. (Some, of course, still deny that any "situation" exists.)

Crisis-response could be affected by two changes, both being proposed in Boston. The first is a change in attitudes and actions, as suggested in a *Housing Policies* report soon to be released by the Boston Urban Observatory. The chapter on housing and institutions, representing the views of staff members Louise Elving and Tee Taggart, points out the "dual impact" of institutions—upgrading and stabilizing an area, but also destroying the existing community and forcing out low-income residents. The city must use a whole range of strategies to maintain its stock of low-income housing and protect the rights of existing residents; in the inevitable conflict among different interests, the low-income residents shouldn't invariably lose, says the report. Low-income residents have been saying this, too, for a long time, but this report may make the message more audible to ears that were, until now, totally deaf.

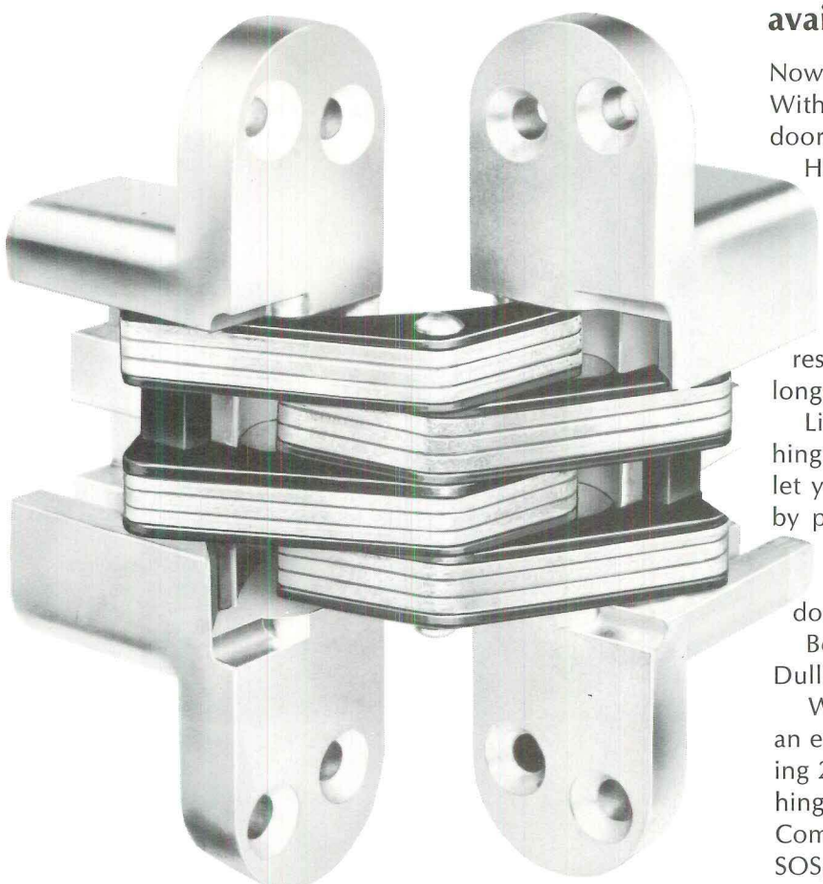
A second change was offered in a bill before the Massachusetts legislature last session—"one of the few efforts I know of," says Tee Taggart, "to develop an *urban growth strategy* as opposed to a *conservationist only strategy*. It appears that Congress will adopt the latter, and most states will follow suit." The bill was part of Governor Sargent's efforts to reorganize state government, and called for a "resource policy management council" in a new Department of Community Development. The bill didn't pass, but can be considered a "weathervane for the future," says Tee Taggart, for a means by which an area impacted by public investment could be designated "a 'critical area' warranting state regulation and subsidies."

At very least, this arrangement would require impact studies of the broadest kind, in the case of U Mass Boston exploring the impact of the new campus on existing higher education (as well as on the surrounding community and the city as a whole). In fact, a study on higher education done for the Massachusetts Advisory Council on Education in 1973 urged "no additional capital construction" for public higher education for the next five years, recommending instead more effective use of all existing facilities. And a week before classes opened at Columbia Point, Governor Sargent went on record against further expansion of the public system while the private system has vacant seats and financial difficulties.

U Mass defends its growth, of course, claiming that its mission is quite different from that of the private universities. One professor, acknowledging the recent efforts of U Mass toward its neighbors, says, "But there has been no action on the real mission of this university, and the real political battle on campus"—the acceptance of more 'educationally disadvantaged' students (giving them special help before and after admission), and more students from Boston schools and low-income families. The mayor supports this direction; the university is still struggling with it. (The university is also wrestling with the major issue of a traditional liberal arts direction *vs.* a more "relevant" training. The unique College of Public and Community Service—College III—combines the two approaches, but throughout U Mass Boston, the dust has not yet settled.)

continued on page 122

NEW! Hinges that hide... a lot longer



Extended-life invisible hinges now available for high frequency doors

Now you can expand your hinge hiding horizons. With two new, extended-life, large commercial door hinges from the invisible hinge company.

Hinge Models 218 and 220 now have nylon links and bushings at all wear points (Patent Pending). The molybdenum disulfide-reinforced nylon is visible in the black areas in the open hinge shown at left. But when the hinge is closed, the nylon results in just one more invisible feature: longer life.

Like every Soss Invisible, these rugged new hinges are completely hidden when closed. They let you create clean architectural lines unbroken by protruding hinges. And their longer life lets you add this invisible beauty on high frequency doors and on doors with automatic closing mechanisms.

Both hinges are available in Dull Brass US 4, Dull Bronze US 10, and Dull Chrome US 26D.

Write for all the details. We'll also include an extra copy of our catalog in Sweet's, featuring 20 styles and models of the tamper-proof hinges that hide. All from Soss Manufacturing Company, Division of SOS, Consolidated Inc., P.O. Box 8200, Detroit, Michigan 48031.

Now you see it.

Now you don't!

the SOSS Invisibles

Architects: Skidmore, Owings & Merrill,
New York, N.Y.

Structural Engineers: Paul Weidlinger, New York, N.Y.
Weiskopf & Pickworth, New York, N.Y.

General Contractor: Turner Construction Co.,
New York, N.Y.

Structural Steel Fabricator/Erector:
American Bridge Division,
United States Steel Corporation,
Pittsburgh, Pa.

Exterior Structural Steel
Fabricator/Erector:
Soule Architectural
Products Division,
Soule Steel Corporation,
San Francisco, Calif.

Flame shielding concept proves feasible in exposed steel high-rise building.

To prove that flame-shielding works, tests were conducted on a full-scale mock-up.

There's a new, economical way to fire protect exposed steel. It's called flame-shielding and it eliminates the need to cover exterior surfaces with fireproofing material.

This new concept was utilized in a high-rise office building for the first time in the One Liberty Plaza Building, New York City.

Months of elaborate testing resulted in the "Board of Standards and Appeals of the City of New York" granting special permission to use exposed steel without conventional fire protection. The tests convinced them that flame-shielding really works.

The flame shields, attached to the flanges of the spandrel girders, deflect flame outward—away from the girders—preventing it from curling back onto the exposed steel surfaces.

Spanning 47'6", these spandrel members consist of 70-inch-deep built-up steel girders with 14 gage steel sheet flange shielding. The girder, as a structural member, supports cladding, frames for fixed and vertically pivoted windows and a portion of the floor construction. Cladding for the column and flame shielding for the spandrel flange is galvanized sheet steel while the spandrel girder steel is ASTM A36.

Spandrel girders, cladding and sash are weather-protected by a three-coat paint system.

New ideas invited!

A vast research program preceded the design of One Liberty Plaza. The architects were encouraged to delve into any aspect of architecture which excited them. The result is a building which incorporates many new concepts—and a fund of ideas for future use.

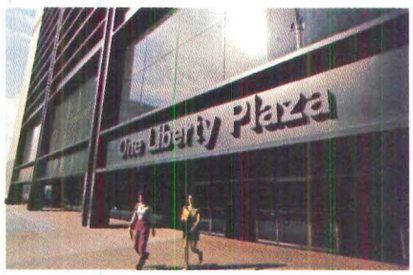
One aspect of the research covered internal wind bracing. Four schemes were evaluated to determine the best possible combination of internal and external bracing. The resulting pattern produced an optimum framing system for the 54 story building—and cut the steel weight to 25 lbs. per sq. ft., with no columns in the perimeter office space.

Rental space increased by 10%

A Split Core with central corridor was selected in place of a Perimeter Corridor System. Choice of this system increased rental space by 10%.

Spaciousness results from an entirely column-free interior. This allows completely flexible arrangement of office space in which a modular partition system can create walls at will.

One Liberty Plaza is an imaginative example of how architecture and structure can blend to produce a building that makes economic sense, functions well and is pleasing to look at.



"Nine new looks at office buildings"

This fascinating report on the nine research programs that preceded the design of One Liberty Plaza, shows in detail how the best systems for this building were arrived at. For a copy of this report or for any other details, call our nearest sales office and ask for a USS Construction Marketing Representative. Or write U.S. Steel, Box 86, Pittsburgh, Pa. 15230.

USS TRADEMARK United States Steel

UNIVERSITY

continued from page 118

What next? It is too late to spend this $135 million worth of construction in a different way.

It is too early to know the real impact of the new campus, both on its surroundings and on the workings of the university itself.

It is just about time for the architects of Boston to begin taking the campus apart brick by brick (not literally, of course). One architect is already spluttering: "More goddam brick laid here than anywhere else this century and there isn't a good brick detail in the place." Even some of the architects who worked on the campus admit that the buildings could have been better—more flexible, less conventional—without the triple constraints of a fixed master plan, fixed program and fixed schedule.

Despite new techniques—in project management and in collaboration among the architects—the campus seems to be a survivor of an earlier time, looking especially dated in comparison with the freshness of the dispersal idea of 1968. "A modern monastery," one architect calls the campus. It also seems to be an imposition on students who want to be people first, integrating their studies with the rest of their lives. These students are already rushing constantly from home to school to job, and hoping to have time to explore the city in between.

It is not at all too late to pursue the idea of dispersed facilities, for one thing; also to work with other universities toward joint use of the city's total resources; to try to gauge positive and negative impact of any further development (including the revitalization of the Point); and to find better ways to protect those who suffer—as some invariably do—when change occurs.

And finally, it is never too late to learn from the unraveling of this whole shaggy episode in the ongoing life of one city.

Facts and Figures

University of Massachusetts Boston, Columbia Point Campus. Owner: Commonwealth of Massachusetts. Master Planning: Pietro Belluschi and Sasaki, Dawson, DeMay Associates, Inc.; Kay Alexander, Project Director. Architects: College I: Haldeman & Goransson Associates; Ake Goransson, Principal-in-charge. College II: Cambridge Seven Associates; Paul Dietrich, Principal-in-charge. Science Center: Anderson, Beckwith & Haible; William Haible, Principal-in-charge. Library and Plaza: Harry Weese & Associates; Ben Weese, Principal-in-charge. Administration Building: Goody, Clancy & Associates; John Clancy, Principal-in-charge. Central Service & Supply: Wallace, Floyd & Ellenzweig; David Wallace, Principal-in-charge. Civil Engineering: Charles T. Main, Inc.; David Carpenter, Engineer-in-charge. Project Management: McKee-Berger-Mansueto, Inc. Cost of Phase I: $135 million.

Photographs: Page 88 (top), Aerial Photos of New England, Inc. Page 89, Ellen Perry Berkeley. Page 90 (top), Earl R. Flansburgh & Associates; (bottom), Courtesy of Boston Globe. Page 91, 92, and 122, Steve Rosenthal. Page 94, Harper. Page 95, Philip A. Stack.

CLIFF HOUSE INTO MUSEUM

continued from page 52

we have Bosch and Titian. Because we thought of them as Spaniards. Once the colonies broke away, to hell with them and their painting.

Michener: You believe then that this group of artists will be able to make a living by painting in Spain? And selling to Spaniards?

Zóbel: They already are. Every painter you see on these walls makes a good living right now. And they don't have to teach in art schools or colleges the way your painters do in the States.

Michener: They make a good living, but doesn't it come from sales abroad? Do Spaniards buy?

Zóbel: Yes, they do. In the old days, all you could sell was the kind of romantic subject matter done by Zuloaga and Sorolla. You're right that Picasso and Miró never sold in Spain. And Spanish families would have found it inconceivable to buy something like a Cézanne or a Paul Klee, because those men were not Spanish. Even today no one would buy a Francis Bacon or a Willem De Kooning or even a Morando. But they are beginning to buy Spanish works. And I am proud that this museum has had something to do with that change!

Zóbel had a right to be proud. That morning the Spanish government had convened a gathering of notables at which he was made a member of the Order of Isabel la Católica in gratitude for what he had accomplished in Cuenca, for not only had he personally paid for the heavy expense of converting the cliff houses into a museum, with splendid marblelike floors and much clean and freshly painted wall space, but all the canvases in the museum were also from his private collection. 'Fifteen years ago I did a simple thing,' he said as we finished our conversation. 'I looked about me and saw that Spanish painting was good . . . very good. So I began to collect it. And now the world confirms my judgment.'

The paintings which I had been admiring, by artists I did not know, seemed to support his argument. There was a fine, swinging op art construction by Eusebio Sempere, only forty-three years old; a clean and hard collage by Gustavo Torner, forty-two; a most imaginative portrait of a group of men by the Equipo Crónica (Chronicle Team), a pair of twenty-five-year-old Valencians who collaborate on such excellent work that they must become internationally popular; and what pleased me most, a wonderfully poetic white canvas by Manuel Mompó, forty and also from Valencia . . . .

Part of the museum structure is leased out to an excellent restaurant, and as we finished our dessert of coffee and ice cream garnished with roasted and delicately flavored walnuts, a friend said of Zóbel, 'He and his group are the avowed enemies of corsi.'

I thought, from the way the word was used, that Corsi must have been a competing painter. 'No,' my informant explained, 'It's the most in-word in Spanish society today. You can kill a man with it by saying at a cocktail party, "Cayetano tries hard but he's painfully corsi." ' It means cheap but pretentious, kitsch but heavily pompous. Cuenca is the battleground of the Spanish mind in its war against everything that is corsi.

Some dozen major painters have taken up residence in the cliff houses of Cuenca. Travelers come from all over Spain to the Museum. In summer students flock to the exquisite valleys that surround the town, camp out and work during the daytime in the fine museum library. In autumn artists and townspeople alike climb down from their cliff to work in the fields, gathering, by means of delicate brushes, the golden pollen of a lavender flower on which the economy of Cuenca partially depends, for this is the saffron capital of the world. And each day the message of this unusual museum reverberates through Spain."

Letters

continued from page 22

I am going over and over your article, "Hill Town on Long Island." For us architects, who have been in the past used to having bland photographic coverage of buildings, it is kind of refreshing and hopeful to see a new critical trend taking shape and being permitted by Architecture PLUS. . . .

Only good can develop, I feel, out of taking a stand. It can only improve our future work and make our consideration for editorial purposes more meaningful.

Y. S. BAHRI
Architect, Peekskill, N.Y.

The comments about Old Westbury are pertinent and *needed.*

CHARLES COLBERT
Architect, Metairie, Louisiana

Congratulations on your excellent coverage, especially Stanley Abercrombie's article on Old Westbury. I know this is a sensitive issue, but I have never understood why architecture has not been subjected to the same criticism as have the other arts. Perhaps if this kind of analytical article were a regular feature, it would be more easily accepted by the profession.

PAUL WILLEN
Architect, New York, N.Y.

Omission

We greatly regret that Mr. Rafi Samizay was not credited as co-author, with Stanley Ira Hallet, of the article "Nuristan's cliff-hangers" (December issue). The University of Kabul architecture students responsible for the drawings are Bashir Ahmad, Ghulam Sarwar, Yasin Badr and Soroya Zaka.—ED.

Greetings

The revue *Art and Architecture* is happy to send you its best wishes. I am sure that Architecture PLUS will have the growing success that it deserves.

A. H. ECHRAUGH,
Director, Art and Architecture
Teheran, Iran

I should be very obliged to you for sending me your publication which I consider the best architectural journal.

SEREDIUK IGOR
Dean, The Architectural Faculty
Polytechnical Institute, Lvov, USSR

Your magazine of Architecture PLUS is so very useful for my activity, I am much obliged to you.

VLADIMIR PERCEAC
Architect, Pitesti, Romania

Women

Congratulations on an excellent article by Doris Cole, "The Education of Women Architects" in your December issue.

What a pleasant surprise to see the photograph of none other than Professor Albert E. Simonson former Dean and Chairman of the Division of Architecture at the Rhode Island School of Design, an architect loved by so many thousands of students who studied under him.

When Professor Simonson passed away in 1961 he was truly missed by all his colleagues and friends.

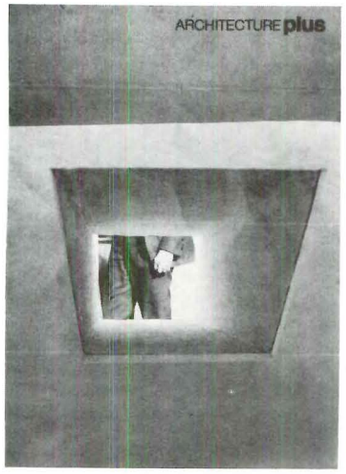
ALBERT COSTA, JR.
Architect, Boston, Massachusetts

Enjoyed the December article, "Education of Women Architects." *Hated* the cover: see my version!

A faithful reader.

JUDITH CRUTCHER
Architect, Mill Valley, California

P.S. I started in a class of 400 at the University of Oregon, and was the only woman, out of twelve, who graduated in 1960.



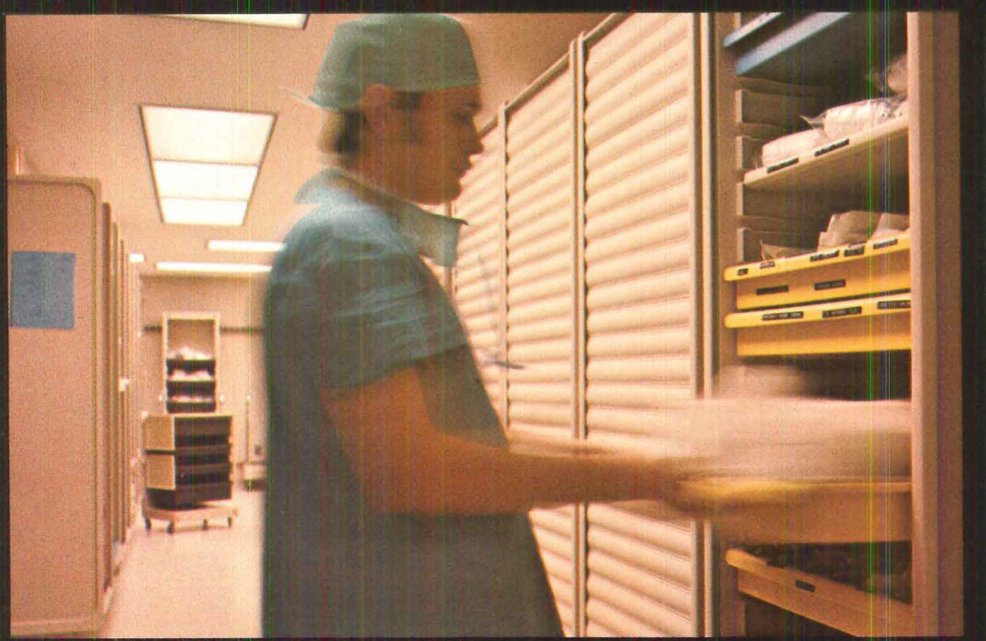
As a new subscriber to your magazine, I am impressed by the quality of your work. But I was distressed to find the cover of the December issue as sexist as many of the trade ads in the ordinary trade magazines. Anything colorful would be eye-catching in that window.

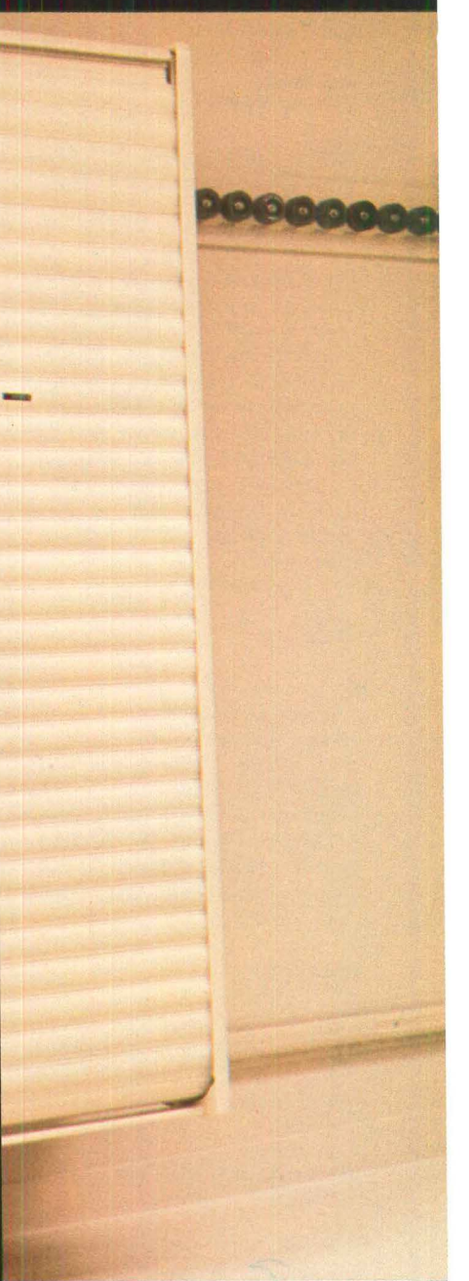
ELIZABETH CHASE
Knoxville, Tennessee

It so happens that I (a male) happen to be vastly more interested in the Women's Liberation Movement than most of the women I know. It also happens that my editorial staff has several first-rate people in key positions who happen to be women. It never occurred to our Art Director (a woman) or to me that Ivan Chermayeff's teenaged daughter (pictured on the cover) was anything but a spot of bright color in an amusing photograph.—ED.

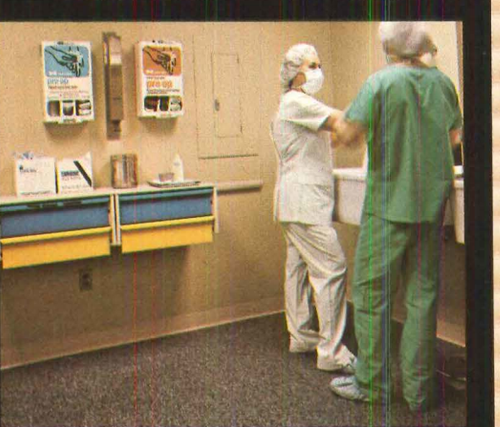
In about three years, a few companies will be willing to spend two million dollars to copy Herman Miller's Coherent Structures.

But why wait three years to solve today's problems?

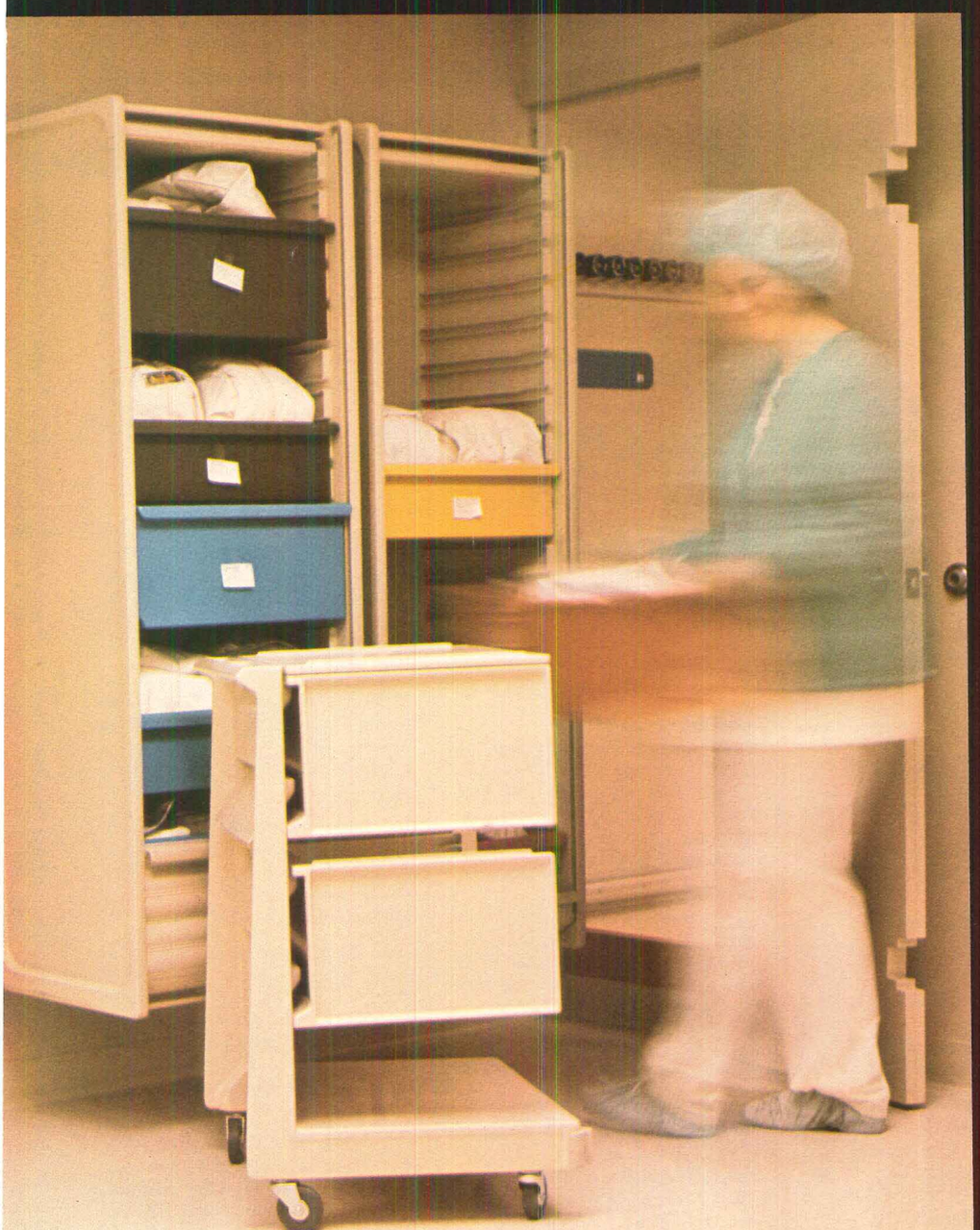


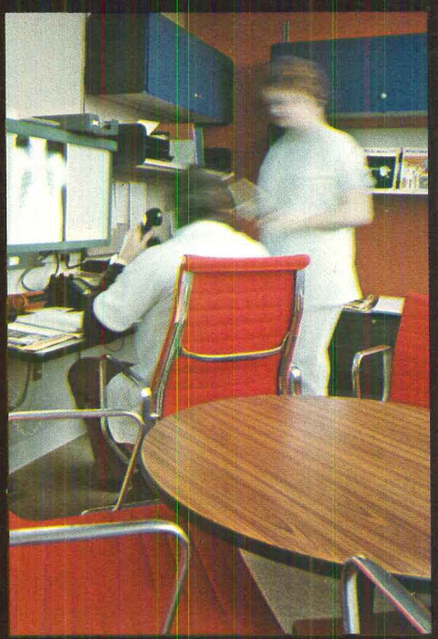


Coherent Structures at work in some of America's leading hospitals.



herman miller coherent structures





For further information, write Nancy Jacobs at the Herman Miller Health/Science Group, Zeeland, Michigan 49464. Or, call toll free: 800-253-3091.

Product Literature

To obtain the literature described below, circle the corresponding number on the Reader Service Card in the back of this issue, print your name and address and mail. It is necessary to affix proper postage if the card is mailed outside the United States.

AIR DISTRIBUTION
A comprehensive, 388-page catalog that provides complete information on their full line of air distribution products has been announced by Titus Manufacturing Corp.
Reader Service Number 200.

AUTOMATED SYSTEMS
A digital building automation system providing computerized capabilities ranging from basic monitoring to fully programmed management of all building functions has been developed by Robertshaw Controls Company.
Reader Service Number 201.

BUILDING MATERIALS
The Portuguese Trade Office has available color brochure featuring the products of several manufacturers in Portugal. Included are ceramics, glass, iron fittings and trimmings, marbles and cork.
Reader Service Number 202.

E. L. Bruce Co., Inc. offers new catalog covering all Bruce building products including Texcen doors, hardwood floors, panelings and moldings, and ceramic tiles and marble.
Reader Service Number 203.

BUILDING SYSTEMS
A brochure from Armco Building Systems explains design details for self-framing metal building systems.
Reader Service Number 204.

Technal International S.A. of France has prepared color pamphlet describing the Technal® and Secural® systems designed to meet a wide variety of requirements in the field of architecture, such as windows, doors, partitioning, and suspended ceilings.
Reader Service Number 205.

CALCULATORS
Summit International Corporation announces a hand held electronic computer that changes U.S. standard weights and measures into metric measurements, while doubling as a five-function miniature calculator with memory.
Reader Service Number 206.

A new "slide rule" calculator that determines how much thermal resistance is required for specific design conditions is now available from Mobay Chemical Co., Division of Baychem Corp.
Reader Service Number 207.

CERAMIC TILE
The Tile Council of America, Inc. has published an extensively revised 1974 Handbook for Ceramic Tile Installation. The handbook provides quick reference details and a means for standardizing installation specifications for ceramic tile.
Reader Service Number 208.

A 20-page full color catalog released by United States Ceramic Tile Company illustrates more than 170 individual colors, textures and designs of ceramic tile.
Reader Service Number 209.

Agency Tile, Inc. offers new catalog and price list covering their complete line of ceramic tile for floors and walls.
Reader Service Number 210.

American Olean Tile Company has issued a 36-page brochure showing their full product line of ceramic tile, including Murray quarry tile, ceramic mosaics, glazed wall and floor tile, scored designs and Primitive tile.
Reader Service Number 211.

COATINGS
A new white spray flat coating that will not rust steel, yet is water dispersible, is being marketed by Continental Products Company.
Reader Service Number 212.

DOORS
A new catalog of entrance, interior and other doors has been issued by the Lumber, Plywood & Door Division of St. Regis Paper Company. Complete descriptive charts of all styles are given with the color illustrations.
Reader Service Number 213.

J. Zeluck, Inc. has created a line of entrance doors guaranteed for a lifetime. Any size, thickness or design is available. A 50-page booklet is offered.
Reader Service Number 214.

The Britannia, a carved entry door portraying a heraldic lion reminiscent of medieval English royalty, has been added to Simpson Timber Company's international line.
Reader Service Number 215.

Commercial and residential doors from U.S. Plywood, illustrated along with product details, price guide and factory services, are featured in 16-page information brochure.
Reader Service Number 216.

An illustrated brochure describing Marlite solid and hollow core doors, designed to meet easy maintenance and good appearance requirements, now is available.
Reader Service Number 217.

Amweld Building Products offers specifications catalog covering their complete line of metal doors and frames.
Reader Service Number 218.

Insulated traffic doors designed to save heating/refrigeration costs and engineered to meet OSHA requirements for safety are detailed in 4-page 1974 condensed catalog issued by RubbAir Door Division.
Reader Service Number 219.

A fully illustrated catalog on Jamisonic® sound reduction doors is available from Jamison Door Company. The catalog contains a detailed listing of door construction, design, features, and a guide for architectural specification.
Reader Service Number 220.

ELEVATORS
Otis Elevator Company is introducing new models of pre-engineered elevators designed to offer individuality as well as economy for buildings up to 30 stories.
Reader Service Number 221.

FIBERGLASS SHEET
Information and literature are available from Kal-Lite Division, Kalwall Corp., on a new high grade, fiberglass reinforced plastic sheet that can easily stand temperatures ranging from −30°F to +250°F.
Reader Service Number 222.

FIREPLACES
American Fireplace Company, a division of Fireplace Corporation of America, announces "The Statesman," a free-standing fireplace with a distinctively shaped decorator-colored hood.
Reader Service Number 223.

FIREPROOFING
Albi Manufacturing Corporation has prepared a product brochure describing the advantages of Albi-Clad, a versatile fireproofing material for structural steel.
Reader Service Number 224.

FLOORING
The Westinghouse Architectural Systems Department has published a comprehensive description of its computer room access flooring components, including specification information and color installation photos.
Reader Service Number 225.

FOUNDATION SYSTEMS
The All-Weather Wood Foundation System, a below-grade pressure treated plywood wall, is detailed in a new 16-page brochure from the American Plywood Association.
Reader Service Number 226.

FURNITURE
Steelcase, Inc. introduces a new concept in contemporary wood desks and credenzas that combines advanced metals technology with the natural beauty of wood.
Reader Service Number 227.

Stendig has created a "designer's survival index 1974," a unique wall poster showing a major portion of the Stendig contract line of furniture.
Reader Service Number 228.

GLASS
Pilkington Brothers, Ltd. of England offers a full-color brochure describing and showing installations of their Armourfloat® suspended glass assemblies.
Reader Service Number 229.

HARDWARE
Special purpose fasteners that reduce assembly costs in modular, mobile and metal building construction are featured in a 12-page selection guide available from Elco Industries, Inc.
Reader Service Number 230.

HEAT RECOVERY EQUIPMENT
Full information and complete specifications are available from Industrial Air, Inc. for their recently announced heat recovery unit, the Thermotran. Pre-engineered and packaged for minimum on-site installation work, it will recover up to 75% of otherwise wasted heat energy from building or exhaust air systems.
Reader Service Number 231.

INSULATION
An application and specification guide to aid in the use of rigid, lightweight, urethane foam insulation roofing panels is offered by Apache Foam Products.
Reader Service Number 232.

Installation and specification information on insulation corkboard from Portugal is available from Corticeira Amorim, LDA.
Reader Service Number 233.

LIGHTING
The Lighting Products Division of Plastics, Inc. announces the release of a new 8-page brochure describing the company's products.
Reader Service Number 234.

Dura Steel announces their new Super Spheres line, a collection of 80 ceiling fixtures featuring square, round, triangle, diamond and six rectangular shapes in five contemporary colors.
Reader Service Number 235.

MASONRY
A pamphlet from Tnemec Company, Inc., detailing modified epoxy coatings for exterior masonry surfaces, contains photographs and descriptions of applications on poured-in-place and pre-cast concrete, masonry block, brick, and stucco.
Reader Service Number 236.

PANELS
Marlite Division, Masonite Corporation, offers information on their new Neapolitan paneling, a reproduction of matched marble slabs on hardboard paneling.
Reader Service Number 237.

continued on page 132

Our Elongated Toilets Give You Something To Cheer About All Year Long!

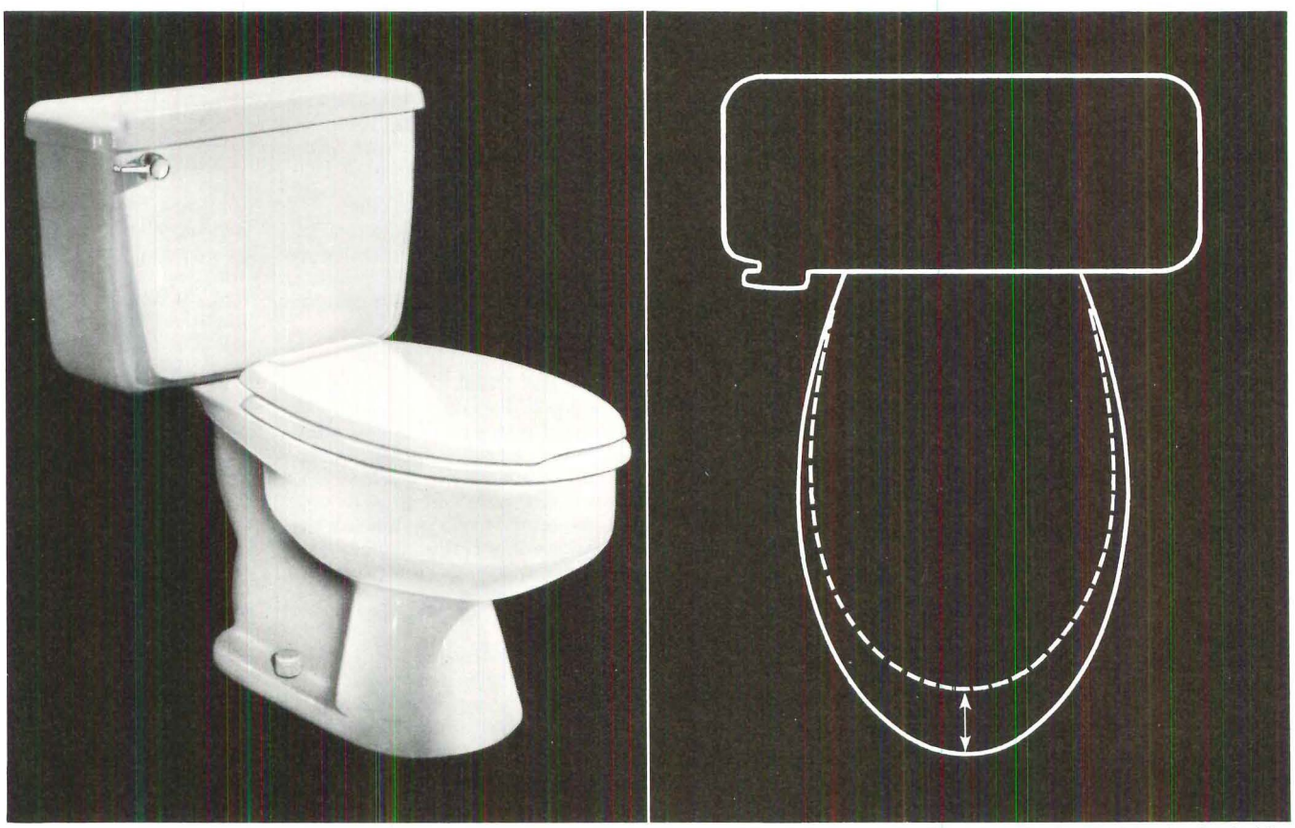
The larger water area means better sanitation. Easier cleaning. The elongated shape – more comfort. All points that score with your customers. But you've got to tell 'em to sell 'em.

Re-modeling jobs? It's a natural. Roughing-in is the same as regular toilets.

Pocket the extra profit. All along the line. Cadet, Compact, Luxor, Glenwall, Carlyle and Yorkville toilets come with elongated bowls. There is even an elongated Water-Saver Cadet that uses 1/3 less water.

Talk it over with your American-Standard distributor. He's in the business of fielding winners.

The Original Super Bowl



AMERICAN STANDARD
PLUMBING / HEATING

Product Literature

continued from page 130

Maybeck grilles, a design collection of carved panels, are announced by Forms and Surfaces. The panels are available in natural or dark brown redwood unfinished, light natural oil finish, or dark walnut oil finish.
Reader Service Number 238.

Exotic hardwoods from the Amazon rain forests are now available for the first time in the United States through Peruvian Panels. The collection features a wide selection of wood varieties, color, and pattern.
Reader Service Number 239.

Marlite's new fiberglass reinforced polyester panels have been designed specifically to meet the requirements of meat and food processing areas, as well as cold storage plants.
Reader Service Number 240.

AllianceWall Corporation offers a new 16-page catalog containing a special section on insulated porcelain-on-steel panels designed to reduce a building's heating and air-conditioning requirements.
Reader Service Number 241.

PARTITIONS
An 8-page illustrated brochure describing Marlite's movable partitions and open plan systems now is available.
Reader Service Number 242.

ROOFING
Koppers Company, Inc. has prepared booklet on red cedar shake and shingle roofing. Details on design, specification and installation of Koppers fire-retardant shakes and shingles are included.
Reader Service Number 243.

SAFETY PRODUCTS
More than 100 safety products for personnel, equipment and area protection are featured in a fully illustrated catalog from Singer Safety Products, Inc.
Reader Service Number 244.

SEALANTS
A new brochure explaining all aspects of the Seal of Security Program has been published by the Chemical Division of Thiokol Corporation. The program is a cooperative effort between Thiokol and leading sealant manufacturers to assure the high quality of polysulfide base sealants. Specification, performance, and joint design, width, and movement criteria and data are provided in chart and graph form.
Reader Service Number 245.

Acme Highway Products Corporation makes available literature on Acmaseal® compression seals, designed to assure durable water-tight sealing on a wide variety of construction, contraction and expansion joints.
Reader Service Number 246.

SEATING
OMK of London offers colorful pamphlet on the Omkstack stacking and linking chair. The chair, ideally suited for use in lecture halls or any area where temporary seating is required, can be stacked 15 high and is available in green, yellow, red, white and black.
Reader Service Number 247.

A new seating group has been designed as the beginning of a 15th anniversary "Continuing Collection" to be introduced throughout 1974 by Helikon Furniture Co., Inc. The armchair group was created to be useful in an almost unlimited variety of contract and residential interior spaces.
Reader Service Number 248.

Sport Seating Company offers information on its new line of contour-molded, modular spectator seats for both indoor and outdoor arenas and/or stadiums.
Reader Service Number 249.

SECURITY SYSTEMS
A new booklet highlighting the importance of thinking about a security system before a building is completed is now available from ECO Security Corporation, a subsidiary of Hager Hinge Company.
Reader Service Number 250.

SIGNAGE
A six-page catalog of glow-in-the-dark exit and other safety signs that offer specific advantages in the face of power outages has been announced by Canrad-Hanovia, Inc.
Reader Service Number 251.

SOUND SHIELD ENCLOSURES
Keene Corporation's Ray Proof Division has issued a new catalog on sound shield enclosures for hospitals, schools, medical and industrial applications.
Reader Service Number 252.

STAINLESS STEEL
A guide to the selection and application of stainless steel is now available from Republic Steel Corporation. The brochure describes the advantages of stainless steel over competing materials and details the selection of stainless finishes and thicknesses commonly used in architectural applications.
Reader Service Number 253.

STORAGE SYSTEMS
A manual designed to provide architects with an introduction to automated storage and retrieval of filed material and its significance in the initial planning of a building has been published by Supreme Equipment & Systems Corporation.
Reader Service Number 254.

An illustrated color bulletin is available from Aurora Steel Products, describing the company's recently introduced Quik-Lok Open Shelf Filing System.
Reader Service Number 255.

The varied uses and compatibility of a full line of steel shelving systems in nearly any application are reviewed in a catalog offered by Penco Products, Inc.
Reader Service Number 256.

STRUCTURAL SYSTEMS
Laminated wood structural systems for clear-span circular buildings are featured in literature prepared by Koppers Company, Inc.
Reader Service Number 257.

TENNIS COURTS
Allied Chemical Corporation/Paving Materials Department has announced the availability of its Tech-Tone® system of construction materials for tennis courts and play areas.
Reader Service Number 258.

WALL COVERINGS
B. F. Goodrich has prepared a 145-page book introducing their new line of Korelle residential vinyl wall covering. Florals, plaids, and designs for children's rooms are featured.
Reader Service Number 259.

Furcotex, Inc. has announced release of comprehensive information on new editions of their three-dimensional, genuine bronze wall and floor tile, and vertical surface covering.
Reader Service Number 260.

The Martin-Senour Company is introducing a line of 354 full-chromatic, extra-strength paint colors. The deep tones are latex based for durability, ease of application, and fast-drying capability.
Reader Service Number 261.

A color brochure and specification sheet covering their line of decorative wall cork is available from Dodge Cork Company, Inc.
Reader Service Number 262.

WALL SYSTEMS
The Kalwall Corporation has developed a translucent wall system with insulation values so low that heat from the building's occupants and lights can be all that is required to maintain 68°F temperatures.
Reader Service Number 263.

WASHROOM EQUIPMENT
The Charles Parker Company has released its 1974 color catalog containing illustrations and descriptions of their complete family of washroom equipment.
Reader Service Number 264.

A brochure highlighting sink tops, bowls and various accessories is offered by Just Manufacturing Company.
Reader Service Number 265.

Bradley Corporation, Washroom Accessories Division, has issued a catalog of its toilet and bath accessories lines for commercial, institutional and industrial use.
Reader Service Number 266.

WATER TREATMENT
Degremont of France offers descriptive brochure showing installations of their water treatment systems in various industries, including agricultural and food, paper and board mills, refineries and petrochemical plants, steelworks, and atomic power stations.
Reader Service Number 267.

Book Review

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Anthrophysical Form: Two Families and Their Neighborhood Environments by Robert L. Vickery. The University of Virginia Press, Charlottesville, Virginia, 1972. 81 pp., illustrated. $9.75.

A comparison of the daily life of a single family in the upper-middle class Parkview Place enclave of St. Louis with that of a family in Vastrapur, a village of five hundred people near India's textile city of Ahmedabad. A concluding chapter, vaguely based on the preceding environmental research, contains suggestions for, among other things, tax reform.

American Building: The Historical Forces that Shaped It by James Marston Fitch. Schocken Books, New York, 1973. 350 pp., $4.95 in paper.

A new reprint of Prof. Fitch's 1947 book which looks at American buildings in their historical and social contexts, without the usual emphasis on "style," and which Douglas Haskell, writing in *The Nation,* called "indispensable."

Building Suppliers

SALTER'S MILL
Architects: Zion & Breen Associates, Inc. (Materials and manufacturers as submitted by the architects.) *Concrete & Cement:* Allstate Concrete Co., Allentown Cement. *Brick, Block & Stone:* Best Block Co. *Floor & Deck Systems and Materials for Built-In Desks:* Weyerhaeuser Plywood. *Roof Materials:* Royal Wood Cedar Shingles. *Thermal Insulation:* Owens-Corning Fiberglas. *Fenestration:* Hopes Steel Windows, Woodco. *Glass:* PPG. *Interior Partitions & Ceiling Materials:* National Gypsum Gold Bond. *Doors:* Hilite, Mamco. *Hardware:* Stanley, General Lock, Inc. *Interior Materials:* H. H. Robertson, Formica. *Paint:* Pierce, DuPont, Benjamin Moore. *Electrical Ducts & Wiring:* Keystone Columbia, Inc., Edico Wire, Ettcoflex Wire. *Electrical Equip:* ITE Imperial Corp., Bryant. *Lighting:* Lightolier, Prescolite, Abolite, Moe, New Mode. *Plumbing Fixtures:* Mansfield. *Piping:* Phelps Dodge. *Unit Heaters:* General Electric, Singer. *Unit Ventilators, Radiators, Convectors:* Singer. *Heating Valves, Piping, Controls:* Honeywell. *Air Conditioning Compressor, Fan Unit, Unit Air Conditioners, Diffusers, Ducts, Pumps:* General Electric. *Special Fans & Ventilators:* Miami Carey. *Intercom Systems:* Durane Triumph. *Radio & TV Systems:* Lafayette. *Fire Protection Equip:* Amerex Fire Extinguishers. *Water Coolers:* General Electric. *Wood Shutters:* Mamco. *Kitchen Equip:* Acme. *Finish Flooring & Carpeting:* Far Eastern Commodities. *Paper Dispensers & Holders:* Watrous. *Door Signal:* Edwards.

PARAMOUNT THEATRE OF THE ARTS
Original Architects: Miller & Pflueger. *Architects for New Construction:* Skidmore, Owings & Merrill. (Materials and manufacturers as submitted by the architects.) *Scaffolding:* Patent Scaffolding. *Seating:* American Seating Co. *Upholstery Fabrics:* Piedmont Plush Mills, Franciscan Fabrics, Inc. *Carpets:* Montasco Co., Alexander Smith, Angelus Carpets, Heskett's Carpet Coliseum. *Auditorium Floors:* Swinerton & Walberg Co. *Orchestra Shell:* Stagecraft. *Acoustics:* The Sono-Ceil Co. *Glass & Tile:* Oakland Terrazzo, Newell Tile. *Air Conditioning:* Commercial Air Conditioning, Air Filter Sales & Service. *Curtains & Drapes:* Marvin C. Burkman. *Awnings:* Brampton Co. *Alarm System:* American District Telegraph. *Fire Escape:* Eandi Metal Works. *Plumbing:* Champion's Plumbing & Heating. *Sprinkler System:* Grinnel Co. *Marquee:* Modern Neon. *New Furniture:* Pacific Woodworking Co. *Communications System:* Swanson Sound Service Co. *Roofing:* Star Roofing Co., Western Roofing. *Stage Lighting Equip:* Holzmueller Corp., Kliegl Brothers. *Stage Equip:* United Studios. *Concrete:* Kaiser Sand & Gravel. *Masonry:* Pete Paletta, Inc. *Reinforcing Steel:* Allied Steel. *Miscellaneous Iron:* Eandi Metal Works, Inc. *Hollow Metal:* Forderer Cornice Works. *Sheet Metal:* Apollo Heating & Sheet Metal Co., Inc. *Millwork:* Union Build-In Fixtures. *Gypsum Drywall:* Larry Larson Drywall, Inc. *Roll-Up Doors:* The Cookson Company.

LEWIS WHARF
Architects: Carl Koch & Associates, Inc. (Materials and manufacturers as submitted by the architects.) *Waterproofing:* Richard Moore Roofing. *Concrete & Cement:* Boston Sand & Gravel. *Structural Steel:* Southeastern Metals, Inc. *Fenestration:* Season-All Industries, Inc. *Glass:* Eagle Glass Company. *Elevators:* Armor Elevator Co. *Doors:* Weyerhaeuser, Republic Steel. *Hardware:* Schlage. *Interior Materials:* Albre Tile & Marble Co. *Paint:* California Products Corp. *Electrical Equip:* Federal Pacific Electric Company. *Standby Emergency Power:* Onan. *Lighting Fixtures:* Henry Wolfers Co. *Plumbing Fixtures:* Kohler. *Heating Boilers:* Cleaver-Brooks. *Unit Heaters & Air Conditioners:* Whalen. *Heating Valves, Piping, Controls:* Jay R. Smith Mfg. Co. *Air Conditioning Compressor, Fan Unit:* Westinghouse, Marley. *Diffusers, Ducts, Pumps:* Weil. *Special Fans & Ventilators:* Porter, New York Blower, Acme. *Intercom Systems:* Bell Telephone Co. *Radio and TV Systems:* Seaboard. *Sprinkler System & Fire Protection Equip:* Northeast Sprinkler Co. *Mail Boxes & Chutes:* Bommer Spring Hinge Co. *Kitchen & Laundry Equip:* Maytag, Frigidaire. *Carpeting:* Amtico. *Compactor:* International Dynetics.

Advertising Sales Offices

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