



FORUM





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## FORUM

A monthly review of events and ideas.

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Everything at Simon Fraser University near Vancouver either grows from, or plugs into, a central spine. By Forum correspondent Donlyn Lyndon.

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## PUBLISHER'S NOTE

Even though this is not an anniversary for the new FORUM, it does mark the completion of the first calendar year of publication suggesting, therefore, some kind of review. I have been looking over the first seven issues, along with the proofs of this one, and my impression is that the editors have been reasonably faithful to their original intentions.

They began in April, you may recall, with a statement of some of those intentions: to talk more about urban design and less about single buildings; to be a critical and "aggressive" observer of the architectural and urban scene; to publish buildings in progress or after a period of use-testing, not necessarily when freshly completed.

The ensuing issues have differed markedly one from another—compare the processional quality of the Le Corbusier issue to the more syncopated rhythm of the one you are about to read, for instance—but a pattern is emerging that is a fair match of the April prospectus. The FORUM is paying consistent attention to urban design. The editors are being critical, often aggressively so, on scales ranging from individual buildings, to collections of buildings (Sixth Avenue), to the plans and skylines of entire cities (San Francisco and Washington). They appear to have some difficulties restraining themselves from rushing major works of architecture into print, but they have, as promised, done some before completion (Salk Laboratories) and some well after (Marina City).

There is a pattern, but there is no rigid mold. I never know quite what the character of a given issue will be until it is in production. I suspect the editors like it that way. They seem fond of surprises.

\* \* \*

We just received a pleasant one: the announcement that Christopher Alexander's article "A City Is Not A Tree" (April and May) is among three winners of the 1965 Kaufmann International Design Awards for "the most effective statements dealing with the field of design, published in periodical or occasional form within the past five years." The other winners are Lewis Mumford and the *New York Times's* Ada Louise Huxtable.

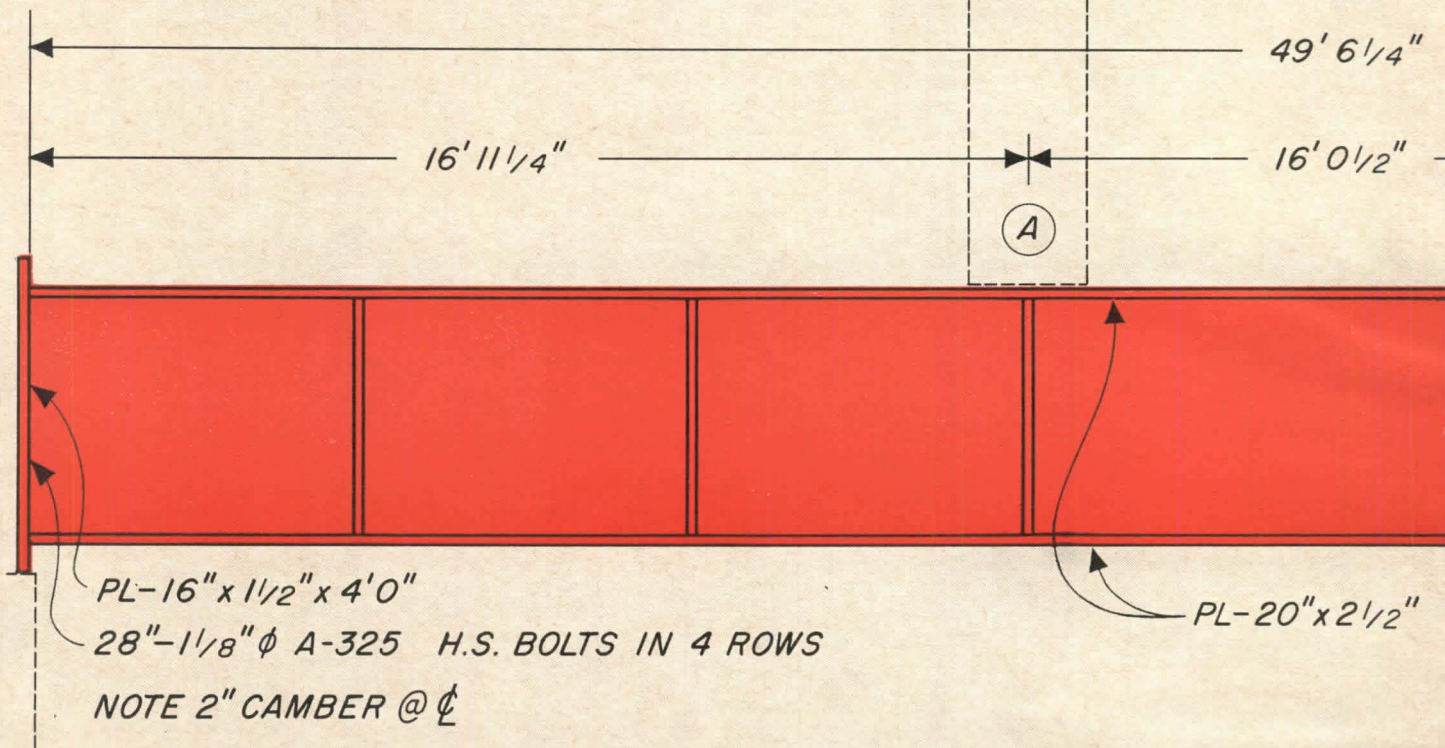
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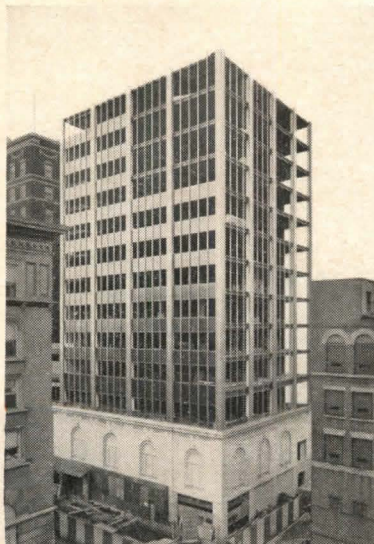
Cover: Facades along the main street of Columbus, Indiana (pages 40-49). Color by Alexander Girard; photograph by Balthazar.



**SCHEMATIC DRAWING  
USS "T-1" STEEL GIRDERS  
FOR BLISS TOWER,  
CANTON, OHIO**



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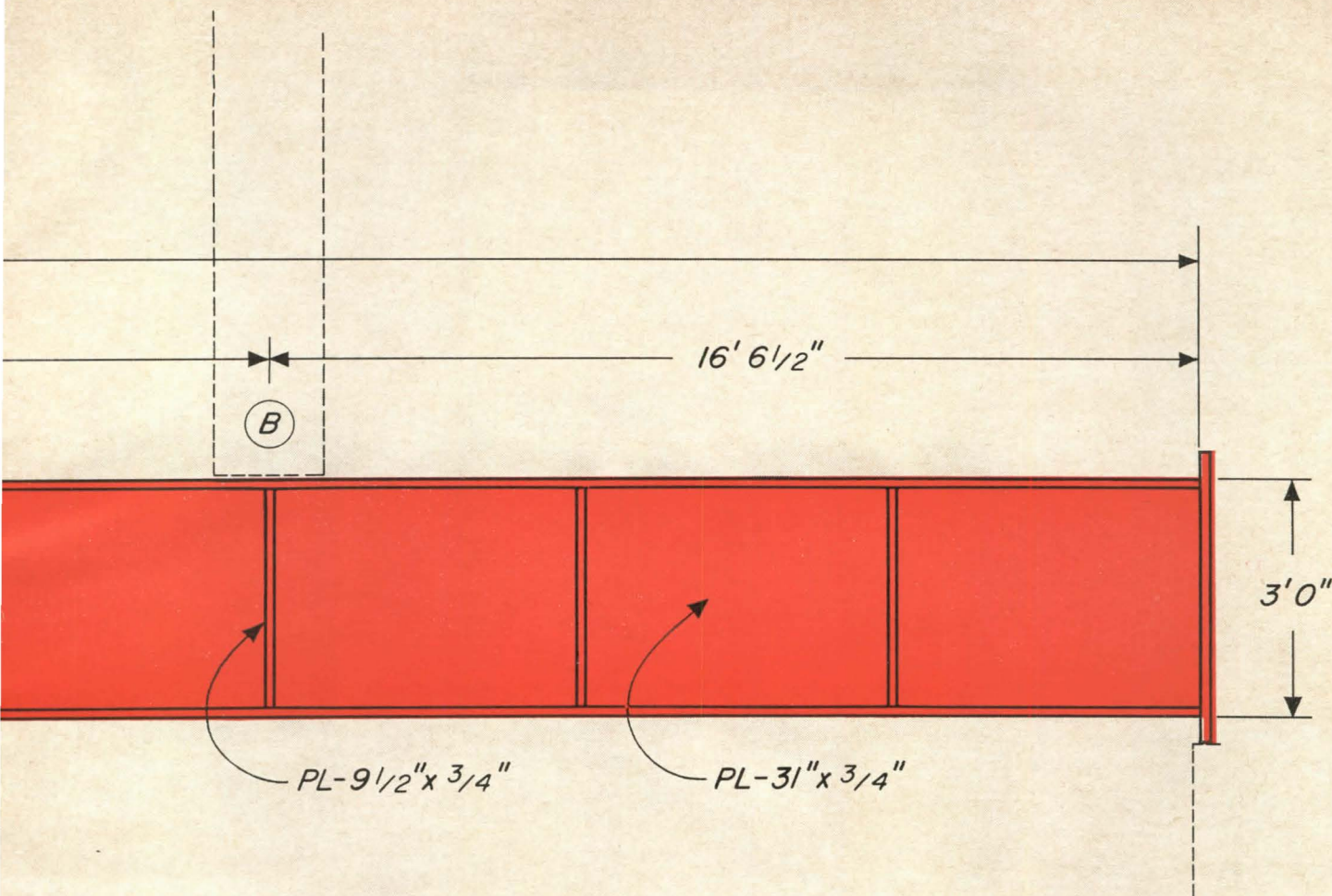
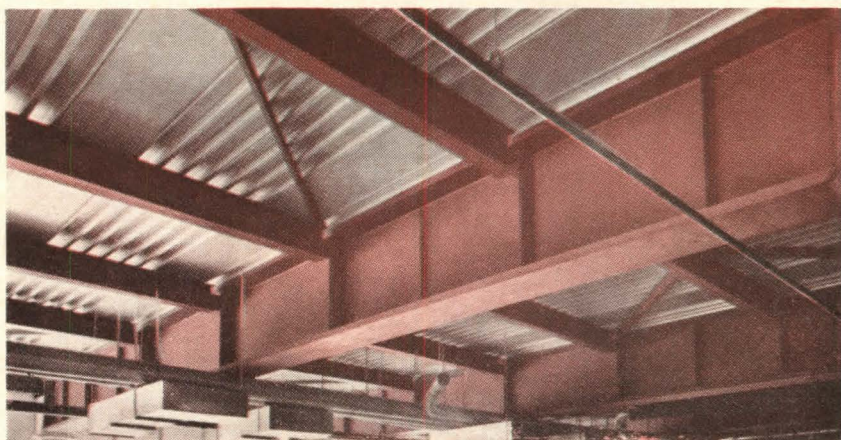


Diagram of girder construction. Columns are placed at points A and B to support the 10 floors above.

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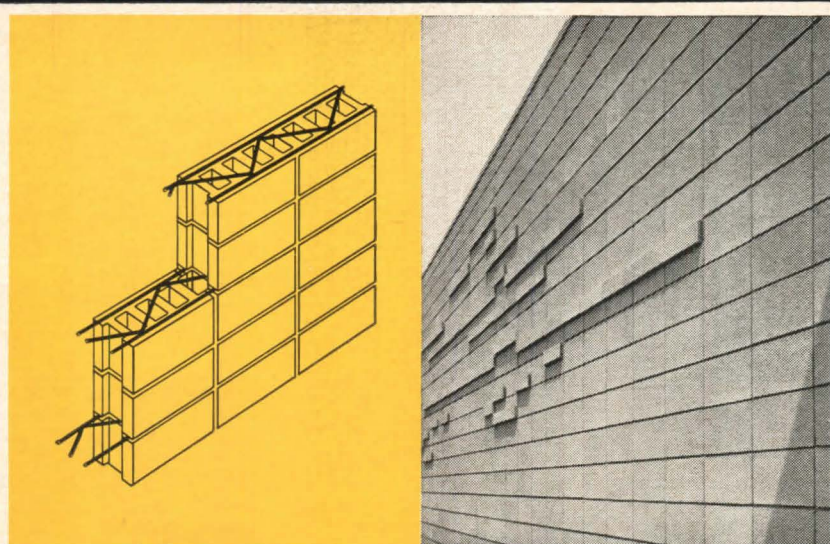


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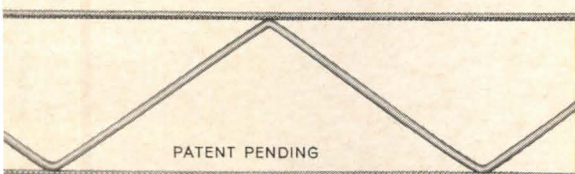




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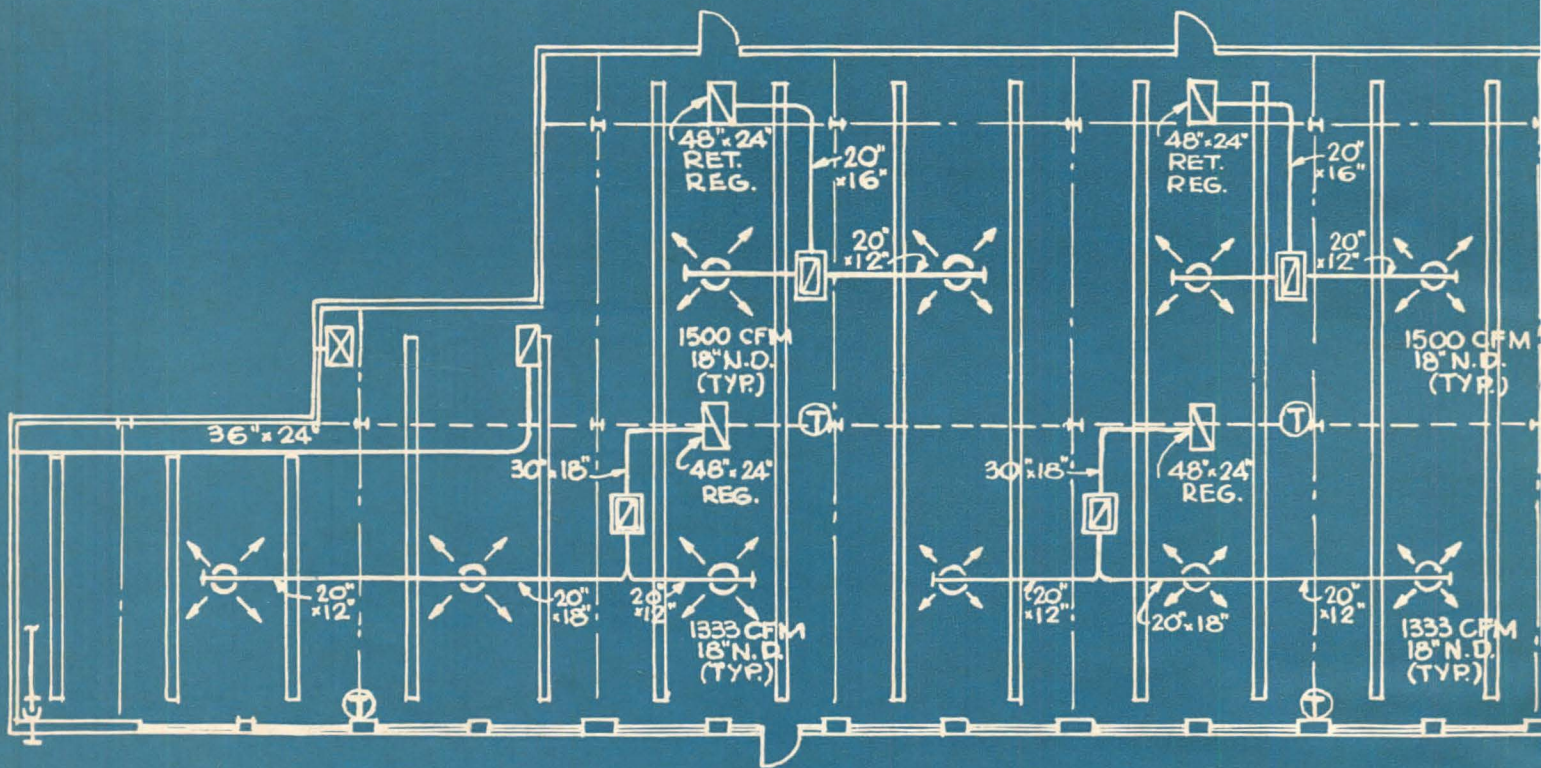
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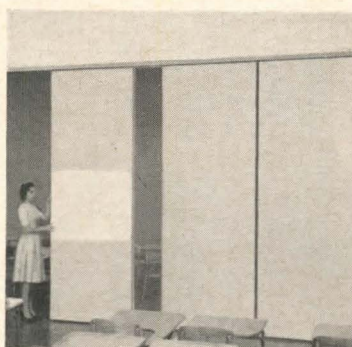
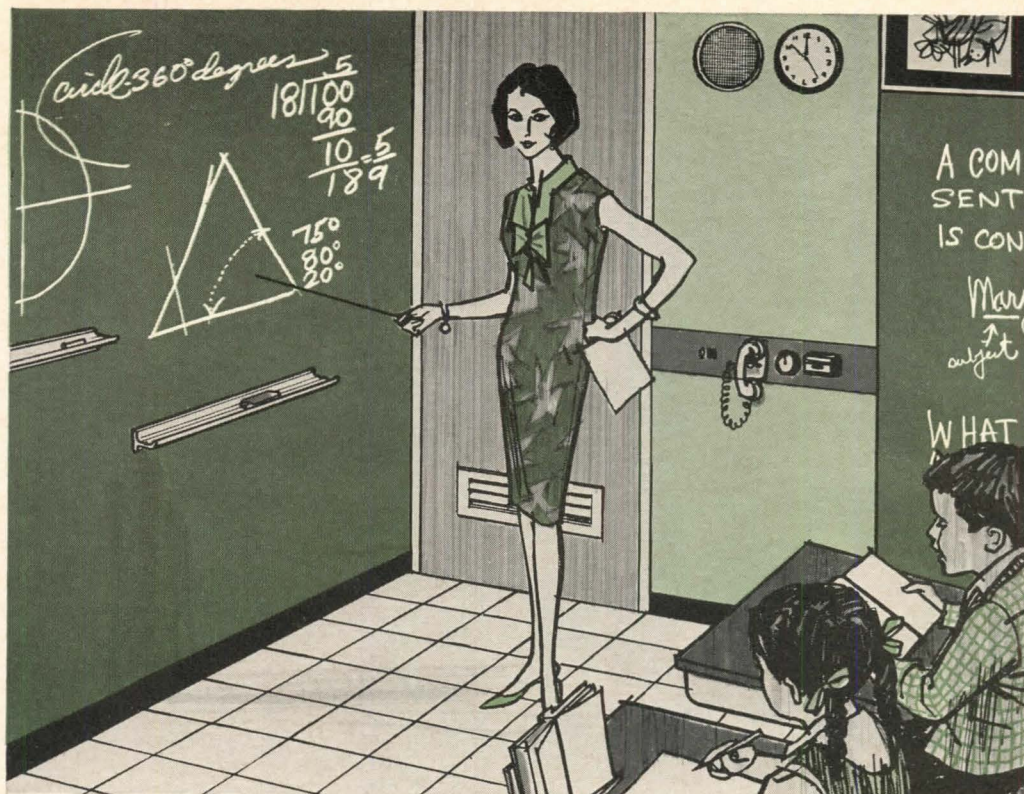




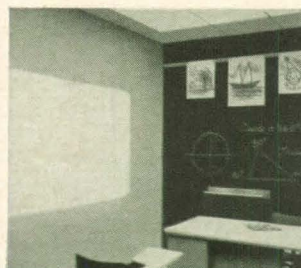




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# FORUM

WASHINGTON, December 1, 1972—Speculation increased today that President Lyndon B. Johnson might appoint a secretary for the Department of Housing and Urban Development as the final act of his second full term of office.

The report was heard from several sources at the farewell party held by the skeleton staff of the Department for Dr. Robert Weaver, who reached the mandatory retirement age for government service last month. Dr. Weaver had served as non-titular head of the Department since its formation in 1965.

Meanwhile, the General Services Administration announced the award of a \$750,000 contract for the dusting and general refurbishing of the Housing and Urban Development headquarters building in Washington. The action was considered further evidence that appointment of the secretary



might be imminent. The building (above), designed by Marcel Breuer and considered an outstanding example of Mid-1960's Modern architecture, has stood empty since its completion five years ago.

Dr. Weaver's retirement removed his name once and for all from the list of candidates for the secretaryship mentioned by usually reliable sources. The list, at last count, had grown to 172 names.

The leading candidate currently is reported to be Mayor Beauregard O'Malley of Middletown, W. Va., whose main street runs directly along the Mason-Dixon line. Mayor O'Malley has been chairman of the local chapters of the Citizens' Council and the Congress of Racial Equality, and on the national level has served as a director of the American Conservation Council and the Save the Billboards League.

During the past years, the De-

partment has been operating in much the same manner as its predecessor agency, the HHFA. Additional Great Society programs relating to urban affairs have been carried on by a task force headed at the cabinet level by Secretaries Udall and McNamara, and under the day-to-day direction of Sargent Shriver. Shriver reportedly had been offered the secretaryship, but declined it on the grounds that he was reluctant to give up his responsibilities as head of the Peace Corps, the War on Poverty, and the recently established Pedernales Valley Authority.

## THE HEADLESS HUD

The secretarial guessing game might not go on quite that long, but last month it had gone on long enough to be a serious embarrassment to Dr. Weaver and other top members of the HHFA staff. Dr. Weaver and such department heads as William R. Slayton of urban renewal and Marie McGuire of public housing deserve somewhat better treatment, and the Department of Housing and Urban Development deserves a more auspicious beginning.

Dr. Weaver has been criticized for weak administration of HHFA and for lack of leadership in urban affairs. His detractors say that he has sometimes seemed too willing to respond to the myriad of pressure groups that assail the agency, some of which have friends of long standing inside its offices.

Dr. Weaver's backers point out that he has demonstrated a vision of the nation's urban problems that is both comprehensive and precise. His appointments have been generally good, they say, and such programs as urban renewal and FHA have undergone long-needed reforms.

The most hopeful interpretation that can be put on President Johnson's protracted indecision is that he is making great plans for the Department, and wants to complete them before settling on the man who will carry them out. The wall of Johnsonian secrecy parted long enough last month to reveal the identity of the advisory group he has called on for help, and it contained some impressive names: Robert Wood of MIT, Charles Haar of Harvard, Walter Reuther, William Rafsky, Edgar Kaiser, Whitney Young, Ben Heine-man, and Chairman Kermit Gordon. Unfortunately it did not contain the names of either architects or professional city planners.

It is even more unfortunate that



the process of planning and decision did not go on before, instead of after, Congressional approval of HUD. The spectacle of delay already has reduced the potential effectiveness of Dr. Weaver, should he get the job, and of the Department, whoever its secretary turns out to be.

## TECHNOLOGY

### BLACKOUT

LeCorbusier, proprietor of the vision of vertical cities, had recognized their dependence on machinery. But he had faith in technology to keep the machinery, and the vertical city, moving.

A similar faith was shattered for 30 million Americans last month when the northeast's electrical power, and thus technology, failed. The only urban machinery that kept moving were motor vehicles, generating their own power, but they too stalled by the thousands when electric gasoline pumps refused them nourishment.

Everything else stopped: elevators, trapping an estimated 15,000 between floors of New York office buildings; subways and interurban trains, trapping 800,000 under Manhattan alone; and lights. The dependence of urban civilization on electric power became sickeningly apparent in the first few moments. So did the vulnerability of the vertical city to disaster.

Disaster did not come. There was little panic, and there were few fatalities. The last was counted six days after the blackout, when the body of a man was found at the bottom of an elevator shaft in a New York hotel, still clutching a candle. He had mistaken the shaft for a stairway, and thus was doubly the victim of technology.



## POLLUTION

### CLEAN WATER IN NEW YORK

While other money-raising measures were being trounced, New York's voters gave overwhelming 5-to-1 approval last month to Governor Nelson A. Rockefeller's proposal for a \$1 billion bond issue to eliminate water pollution in the next six years. In Washington, the resounding vote was seen as a clear answer to a question that has been bothering policy makers and legislators alike. It now appears clear that people not only dislike dirty water but are willing to pay to clean it up.

The total bill for cleaning up New York's streams will come to nearly \$1.7 billion, when the contributions of local communities are counted in, making the program one of the major public works projects in history. But if the plan succeeds, its impact will be felt in virtually every community in the nation. Rockefeller, by proposing the plan, and the people of New York, by approving it, took a big gamble and in the process put the Federal government on the spot. The big bond issue will raise enough money to pay the state's share of the clean-up campaign—but it will also raise enough to prepay an expected Federal contribution of half a billion dollars.

The only catch is that there is nowhere near that amount of money now available in the Federal water pollution program—and Congress has not even agreed in principle to repay states that put up money they hope eventually to get back from Washington. The Democrats in Washington thus are going to have to admit they are less interested in cleaning up pollution than Republican Rockefeller. Or they are going to have to put up the massive Federal share of the amount needed to clean up pollution, not only in New York, but throughout the country. For a change, it's nice to see a state press for Federal action, rather than vice versa.

### SEWAGE DISPOSAL FROM NEW

The New York program is basically a simple one from an engineering standpoint: build more highly efficient sewage treatment plants. But the Department of Health, Education and Welfare has just made two grants which may help eliminate one of the biggest and most troublesome sources

of pollution: storm waters that overflow, carrying raw sewage into the streams.

One grant will permit study of a plan to drill a tunnel 10 to 20 miles long under Chicago. When it rains, storm waters would drop into the tunnel, generating electricity as they fall. When the storm passes, the water would be pumped up and run through a sewage treatment plant. The other grant will permit study of a plan in which small plastic pipes would be run through the big existing sewers. Big pipes would carry storm waters while devices like household garbage disposal machines would grind up sewage and pump it through the small pipes to the treatment plant.

Soon, under a new law, \$20 million a year will be available for study and experimentation on this problem, offering some hope that man may find a way to avoid being engulfed by his own refuse.

## REVERSALS

### MONUMENTAL REGRESSION

The Roosevelt family is reportedly circulating a new design for a Franklin D. Roosevelt Memorial to replace the competition-winning scheme rejected last June. The new design, said to be in the same vein of "historic realism" as the Sam Rayburn House Office Building, is by Architect Eric Gugler and Sculptor Paul Manship.

Gugler is responsible for the Theodore Roosevelt Memorial now under construction (below) on an island in the Potomac. It will be graced by Manship's statue of Teddy (above, right)—30 ft. of granite and all corn, but well suited to Gugler's setting.

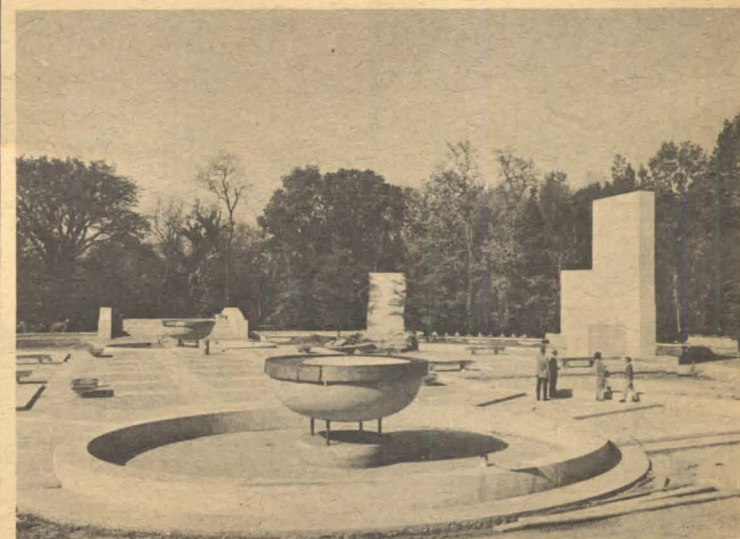


The Gugler-Manship design for the FDR Memorial has been shown to various senators and congressmen, Park Service officials, and Udall—everybody, it seems, but the press. It is said to include a seated statue of FDR wearing a Roman toga, reflected in a pool and surrounded by formal gardens.

### BACK TO THE BOARDS

The AIA acknowledged last month that it was indeed thinking of scrapping the competition-winning design for its new headquarters and starting over on a larger site.

It announced that Mitchell/Giurgola Associates, the competition winners, had been asked to present "new feasibility and schematic studies" at the December board of directors meeting. The board is expected to recommend





switch to the AIA convention in Denver next June.

One possibility is purchase of the demon building next door to the AIA's present headquarters, which the announcement said "would permit construction of a large new headquarters building without crowding either the Octagon or the intervening evergreen garden." The remark seemed to place the AIA on the side of critics who claimed that the Octagon would be overwhelmed by the Mitchell/Argola building.

The *Washington Post* placed itself on the other side. A *Post* editorial called the AIA's possible change of mind "unfortunate," and said: "Such uncertainty after a much-heralded design competition is bound to reflect unfavorably on the architectural profession and bring the value of architectural competitions into question."

AIA President Morris Ketchum Jr. replied in a letter that the competition was conducted merely to select the architect for the new headquarters, "which must have been news to the competitors. On former ground, Ketchum concluded that "a new solution may be even better, with more freedom of land use."

## INS & OUTS

### TIRRINGS AT GSA

The General Services Administration is beginning to show convincing signs that it means to take seriously President Johnson's admonition that "the best possible contemporary architectural thought and skills be applied to the design of Federal buildings." In October, GSA Administrator Lawson B. Knott Jr. announced the creation of an architectural advisory panel to help in the selection of architects and pass judgment on their designs (November issue). Last month, he announced that a real architect had at last been named GSA's Commissioner of Public Buildings.

The new appointee is Casper F. Hegner, who comes to GSA from the Veterans Administration, where he served the past three years as manager of construction operations. He is a former partner in the firm of Smith & Hegner, Denver. At GSA, Hegner will direct more than 23,000 employees, among them Architect Karel Fasko, Assistant Commissioner for Design.

As for the advisory panel, "This

is no free ride," Hegner said. "I consider these men my brain trust for architectural design and I expect to work them just as hard as I can." The AIA was delighted. "We believe his appointment and the effective use of the advisory panel promise the attainment of high standards in the architecture of Federal buildings," said a statement issued from the Octagon.

### DUTTON'S DEPARTURE

It was a long time coming, but no surprise, when W. C. ("Bud") Dutton quit last month as director of the National Capital Planning Commission. Though Dutton has held the post only since September, 1963, it has long been obvious that he and the Commission, especially its chairman, Elizabeth Rowe, were at loggerheads over plans and policies.

The Commission's power structure has given it a conservative bent. It prefers not to make decisions until absolutely necessary, and then tends to reach conclusions that ruffle the fewest feathers. And Chairman Rowe has injected herself into the minutest, day-to-day workings of the staff, exercising what one observer called "pocketbook vetoes" as she goes along. Dutton soon became fed up with the arrangement, as had his predecessor, William E. Finley.

Things may be better now—for the Commission, if not for planning in Washington. Dutton's successor is Charles H. Conrad, a 15-year staff veteran who is not likely to rock the boat.

## UPS & DOWNS

### TAWNY LIPS ALOFT

Braniff International, the airline company, will soon be competing with rainbows for atmospheric attention. Architect Alexander Girard has given the firm a new physical look, not only on its flying stock, but on practically every feature that it shows to the public: ticket counters, interiors, maintenance crews, stewardesses.

For the planes (below), Girard has specified white wings and tails,

and one of seven different colors on the fuselage: orange, dark blue, light blue, beige, ochre, turquoise or yellow. A new Girard-designed "BI" logo will appear on the tail. The stewardesses are being "re-



styled from head to toes" with new Pucci uniforms with plastic rain-domes, "ear-skimming" haircuts, and makeup described as "transparent tawny skin, tawny pink lips, dramatized eyes." Turbulence ahead!

### ST. LOUIS COUP

The Spanish Pavilion of the New York World's Fair (below) will be saved after all. It will reside in St. Louis on a site near the downtown sport stadium in the shadow of the Gateway Arch (see page 29).

The deal was completed in Madrid last month by St. Louis Mayor Alfonso J. Cervantes,



whose name probably did not hamper the negotiations. The 90,000-sq.-ft. building is a gift from the Spanish government, but it will cost an estimated \$4 million to dismantle, ship to St. Louis, acquire the site, and re-erect. Cervantes expects to raise \$1 million from private contributions and to float a bond issue for the other \$3 million.



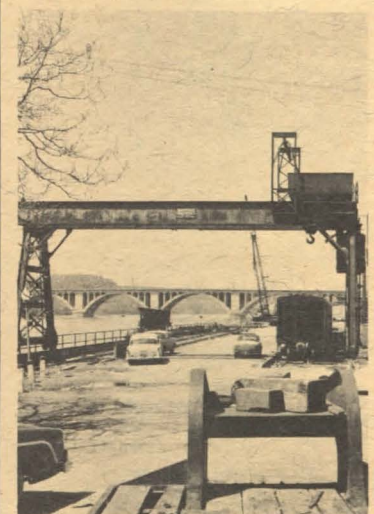
## PARKS

### THE DAM AND THE RIVER

A Potomac Valley Park, stretching all the way from Washington to Cumberland, Md., will probably be the key feature of the proposals President Johnson will present to Congress next year to carry out his hope of making the Potomac (below, at Georgetown) a model of conservation for the nation.

In the view of Interior Department planners, the park along the river's bottomlands would serve two purposes. It would preserve an area they assume will become, by the year 2000, an urban open space. But they would also like to see the government acquire the 58,000 acres that would be flooded if the controversial Seneca Dam were ever built above Washington.

"Personally, I think we should avoid making irrevocable decisions



for future generations unless they are absolutely essential and unless we are completely certain that the decision we make is in their best interest," Assistant Secretary of the Interior Kenneth Holum said last month. "A decision to build Seneca now will force an irreversible decision on our heirs. I would prefer to avoid that decision. By the same token, if we do nothing, in 10 years the area will be so completely developed that economics will make it impossible to use the area to serve whatever public purpose may prove to be most desirable in the future."

In Maryland's Prince George's County, meanwhile, the County Commissioners hurried ahead with plans to become the first local government to legislate scenic beauty by granting tax credits to property owners who set their



property aside in easements for conservation, open space, historical and wildlife preservation and scenic purposes. One immediate effect of the ordinance would fit right in with the broader proposals for the Potomac: it would permit the protection of more than 20 miles of river shoreline between the Woodrow Wilson Bridge and the Charles County line—an area where the voice of the bulldozer is being heard in the land.

#### VIRGINIA'S COMMON WEALTH

In a report entitled "Virginia's Common Wealth," the Commonwealth of Virginia's Outdoor Recreation Commission has come up with a plan to begin to meet the state's needs for recreational facilities up through the year 2020.

Like most states, Virginia has taken her vast open spaces for granted. Of the present nine state parks, six were inherited from the Civilian Conservation Corps and only three have been built by the state. And what's worse, most of the recreational areas are in the mountainous western part of the state while most of the people—and most prospects for future growth—are crowded into the eastern area between Washington and Norfolk.

During the next decade, the report says, the state—with help from the Federal government's new Land and Water Conservation Fund—should buy up 36 new park areas and develop 20 of them, keeping the rest for development as the state grows. The cost: \$64 million plus additional millions for access roads and the contributions of regional park authorities.

To delighted officials at the Department of the Interior's new Bureau of Outdoor Recreation, the Virginia plan, with its detailed recommendations for financing and legislation, looked like a model that other states might well copy as they seek to meet the recreational demands of their rapidly growing populations.

## PARKLET

#### ZONING SETBACK

A "parklet" in front of a new office tower on 42nd Street (top) is an unfortunate side effect of New York's setback zoning regulations adopted in 1963. Architects Emery Roth & Sons didn't want to disturb "the architectural lines" of the building by putting gratings on its walls, so they ran the air intake pipes un-



der the required plaza and made the grate an integral part of a 30-ft. "free-form" planter, complete with two honey locust trees and a bed of ivy.

The whole thing resembles leftovers from a demolition project but, according to David Durst, partner in the firm that operates the building, the parklet "may become a trademark of office buildings of the future." It's almost enough to make one wish for a return of the wedding cake.

## DISCOURSE

#### MORNING AFTER

The morning after the power blackout (page 10), the Regional Plan Association of New York held its annual meeting. The speakers, perhaps sobered by their experiences of the night before, showed a healthy disrespect for grand and sweeping solutions to metropolitan problems.

William B. Shore, RPA's information director, maintained that "metropolitan government cannot be justified solely to effectuate metropolitan planning." Shore said that the alternative of "pluralism or the unstructured meshing of all sorts of governmental agencies" works.

"Perhaps it works because it is backed by a shotgun in the corner which Americans have never hesitated to reach for," he said. "The shotgun is the right to appeal to a higher level of government when a lower one fails to redress our grievances."

Laurence A. Alexander, editor and publisher of the *Downtown Idea Exchange*, contended that "the traditional 20-year planning period is inappropriate, at least

to downtown." Twenty years, given today's rates of change, "is more time than the mind of man can grasp . . . A downtown plan of 20 years ago, when read today, is like reading Jane Austin: it describes a non-existent, though often charming, society."

James Marston Fitch, professor of architecture at Columbia University, acknowledged that comprehensive planning at the metropolitan level is essential "if we are to reorganize our urban environment along more satisfactory lines." He praised RPA for its current efforts to develop a regional plan for New York. "Yet this plan," he said, "even when completely elaborated, will be far from actual, human-scaled design. That will have to be developed at a micro-environmental scale."

#### NOISY SKELETON

A rattling skeleton in the closet of the National Association of Housing and Redevelopment Officials refused to be ignored at the organization's 1965 biennial conference in Philadelphia. The skeleton was that of the Administration's rent supplement program, which Congress passed but left without funds in the final days before adjournment (November issue).

NAHRO had opposed the rent supplement program in Congressional hearings. The action pleased those of its members narrow enough to see the program as a rival to public housing, but it embittered others who recognized the program's great possibilities.

The split could be felt in the conference corridors, but was kept off the podium. A 12-page, single-spaced policy resolution to guide

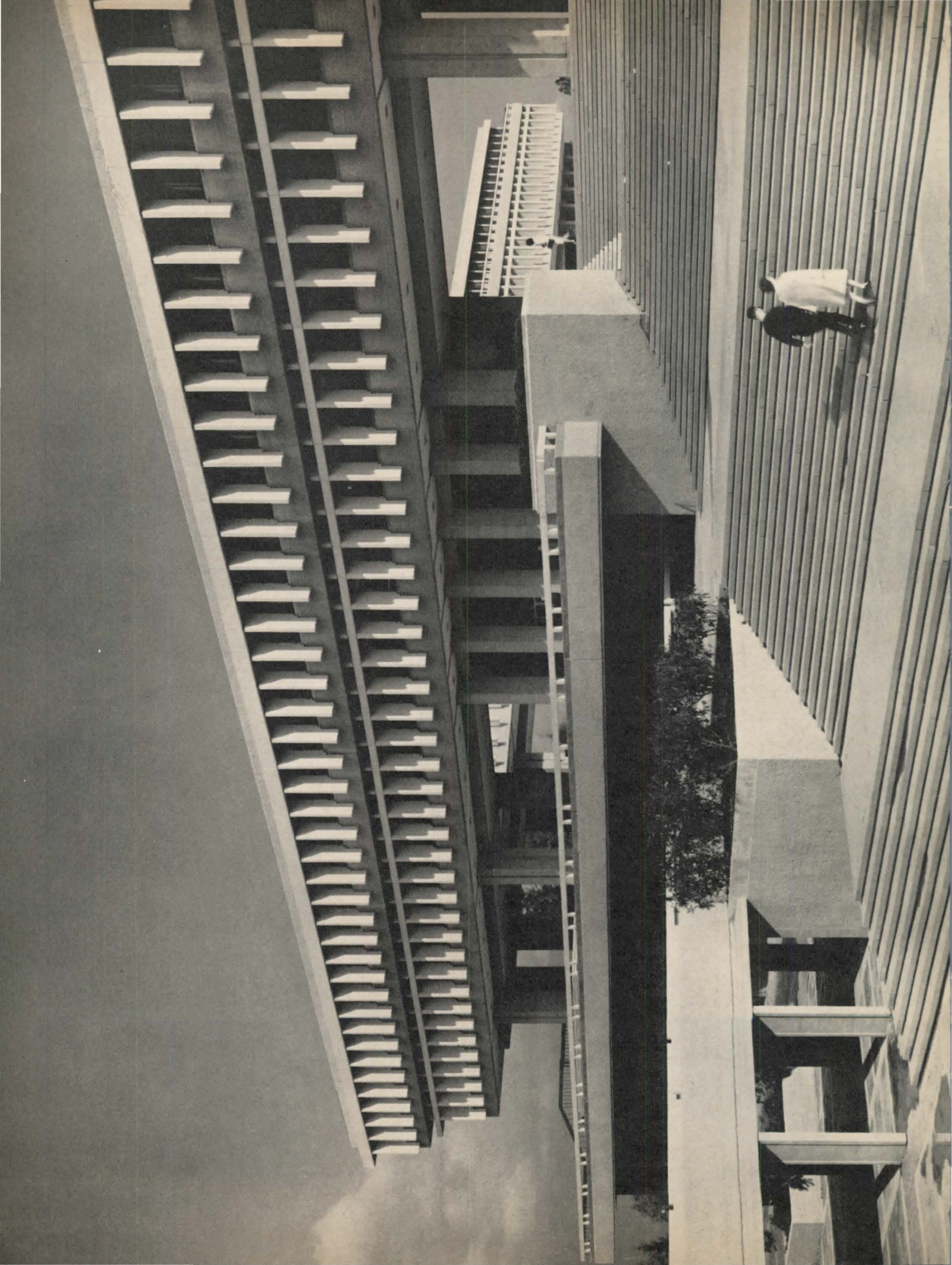
(continued on page 61)



***In Canada, the continent's first single-structure campus***









# A continuous mall is the spine of Simon Fraser University

BY DONLYN LYNDON

The established universities of North America have gone through several waves of physical change. First came noble buildings spotted in the landscape, then skillfully arranged complexes adorned with hopeful costumes of culture, and most recently particularized buildings not always related to a community image. The architect building on their campuses today is torn by conflicting claims of context, departmental clients, and his own stylistic conscience.

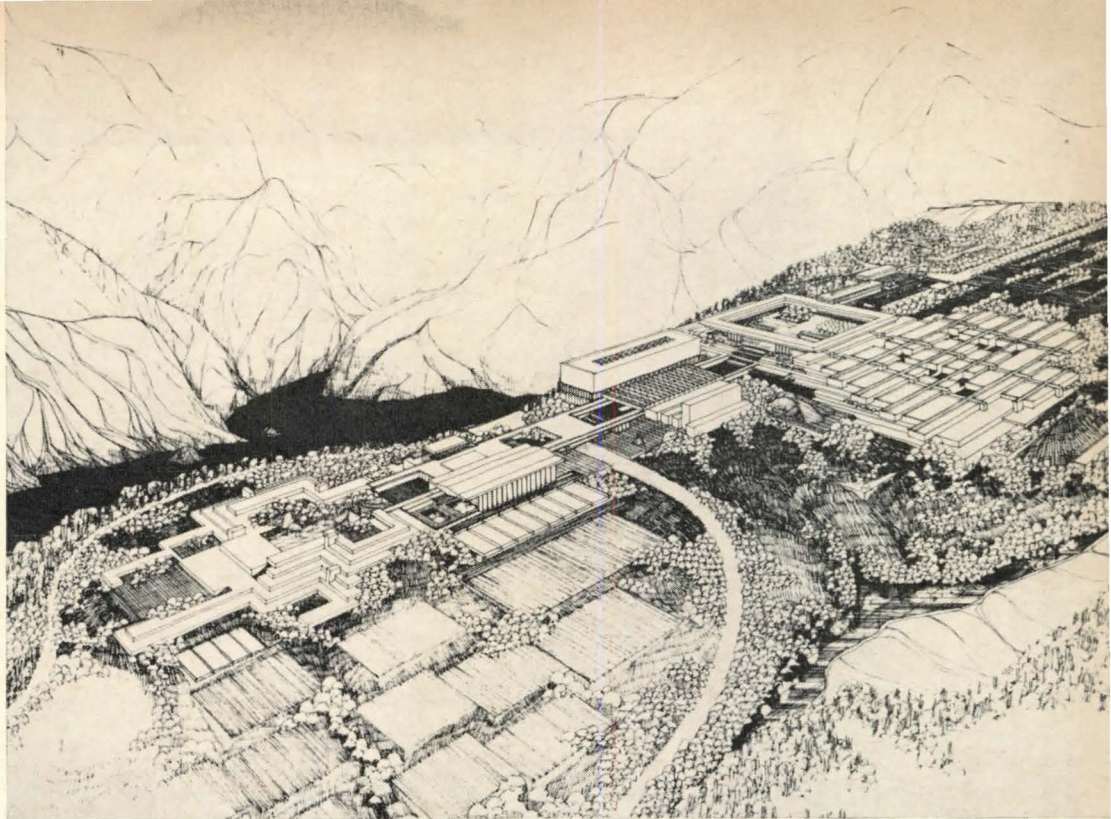
The architect building a new campus from scratch is free of some of these conflicts, but he has problems of his own. Those responsible for Foothill College (first with the least), Chicago Circle, and now Simon Fraser University, have been asked to re-examine the very nature of higher education, and to create an instant image of campus.

In the case of Simon Fraser, located on a forested ridge east of Vancouver, B.C., and built according to a competition winning scheme by Architects Erickson/Massey (1), the image is dominated by a mall structure that bridges between two peaks. Locked in the structure are two levels of pedestrian passage, two levels of parking, student union facilities, and public spaces.

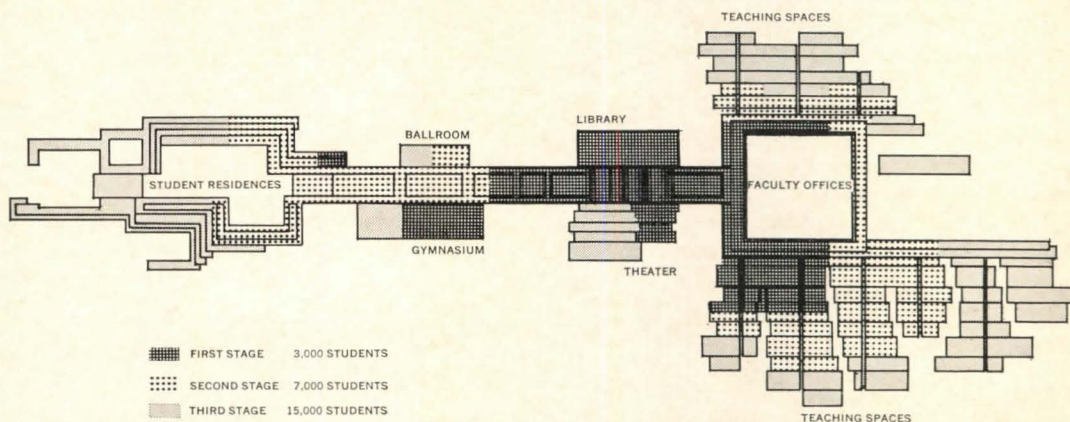
At one end of the mall are dormitories, and at the other, in the air-borne quadrangular building shown opposite, faculty offices. Such major items as the library, theater, and gymnasium are plugged into the spine, as the British comic books say, and classrooms and lecture halls are terraced down the hillsides from the faculty quad. The first stage construction (2 and 3) includes most of the spine, all of the plug-ins, approximately three-quarters of the quad, and a single lonely dormitory.

Mr. Lyndon is the Forum's West Coast correspondent and chairman of the University of Oregon's department of architecture.

1.



2.



3.





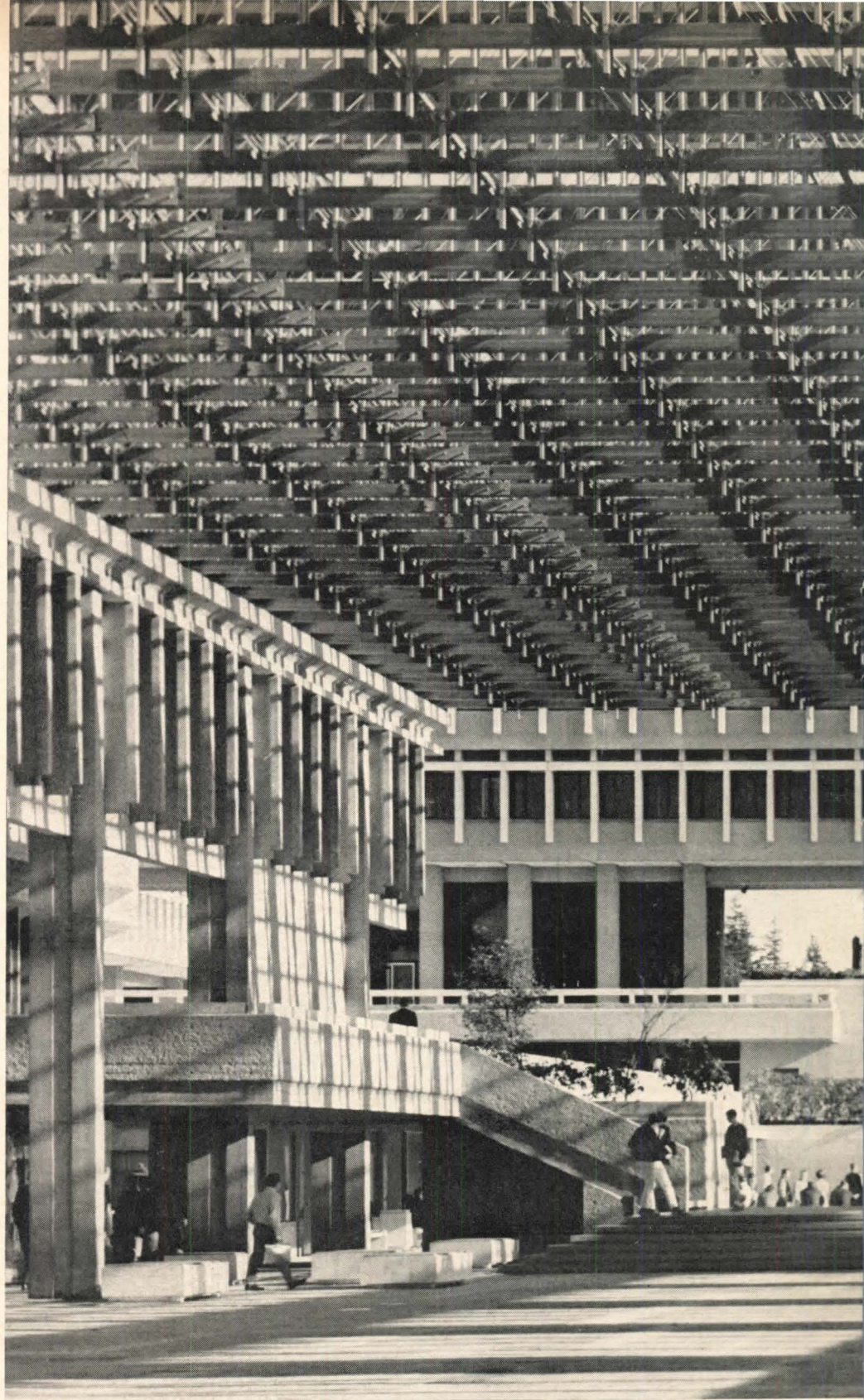
The architects' statement of intent for Simon Fraser begins with the words "Unlike any previous university," and they are very nearly accurate. It goes on to say that Simon Fraser is a "translation into architecture of the expanding fields of knowledge that defy traditional boundaries . . . and of the university community as one in constant interchange."

As this implies, the facilities of Simon Fraser, like those of Chicago Circle (September issue), are organized by function rather than by discipline. The architects assure us that the idea of use-zoning derives "more from a basic approach to education than from architectural objectives." It was nevertheless of obvious architectural utility. Grouping specific spaces has enabled Erickson/Massey to make the university a single place, marked out against the landscape.

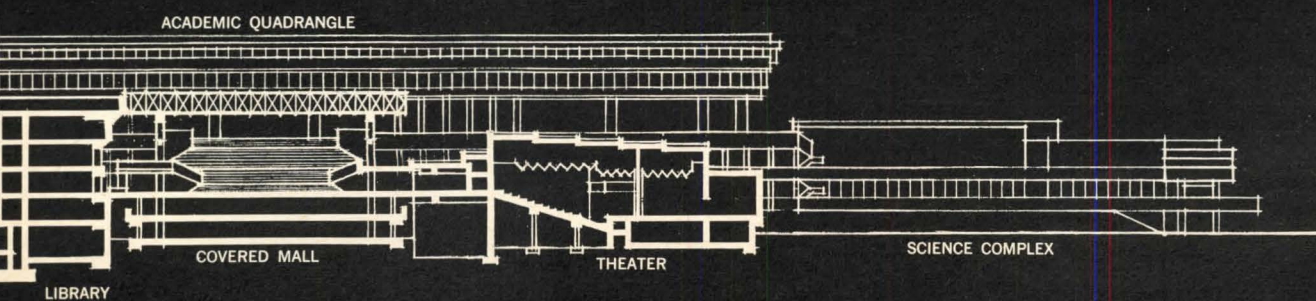
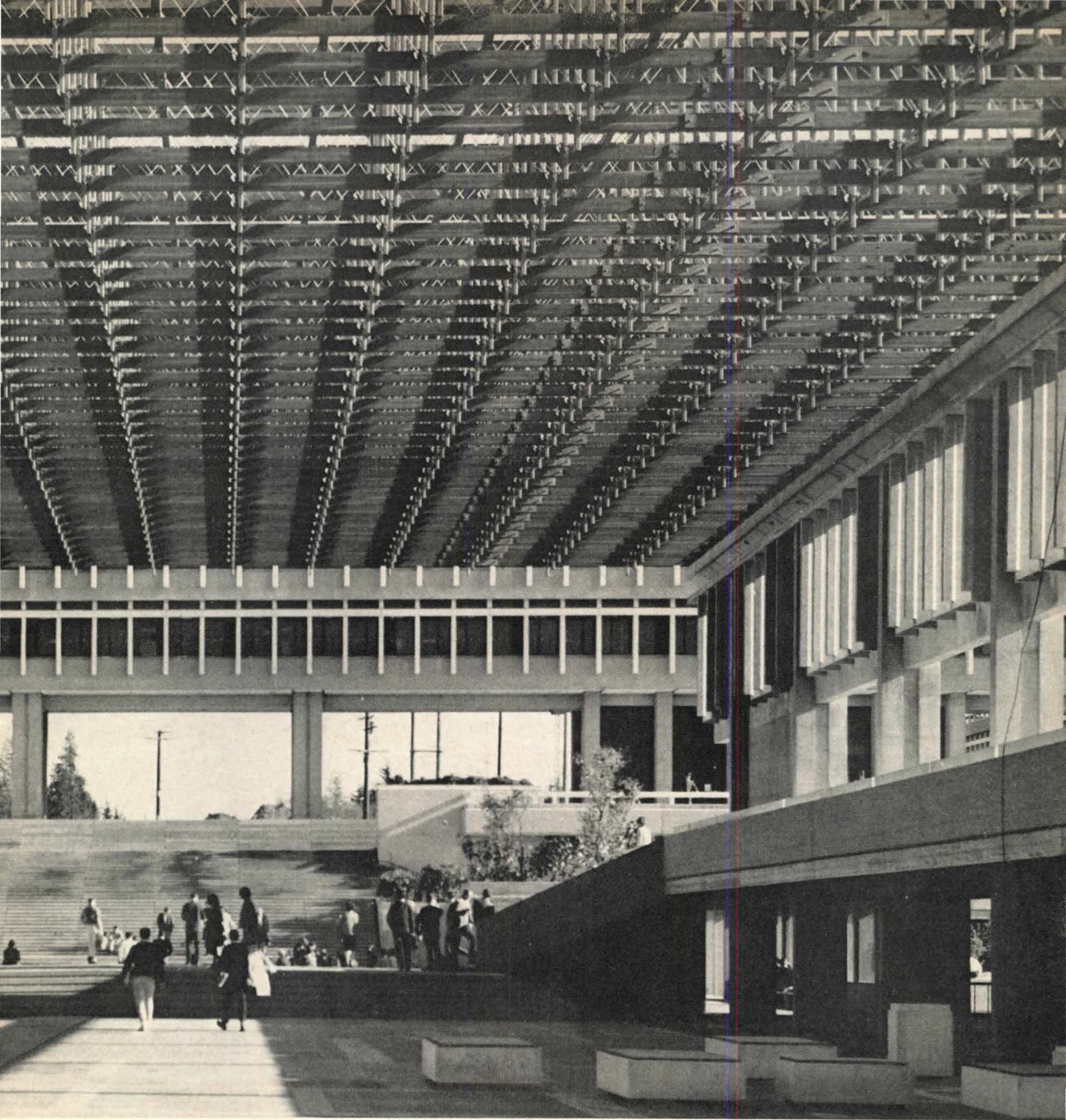
The letdowns, such as they are, resulted from the manner and the speed of the project's execution. The university gave separate contracts to the four other competition winners to carry out the quadrangle, the first lecture-laboratory terrace, the library, the theater, and the gymnasium. Erickson/Massey acted as planners and design coordinators, and themselves did the mall and dormitory.

The competition results were announced in the summer of 1963, and the first increment of the campus went into operation this fall. The extraordinary schedule allowed little time to revise or refine design decisions. Some of the other architects fell into pitfalls, either clinging quixotically to the initial diagrams or making revisions without time to adjust them to the whole.

Quite understandably, the mall structure which Erickson/Massey carried through is most effective in taking the generative idea to reality. The mall—and particularly the great, space-framed outdoor room that is its centerpiece (right)—is a direct expression of their concept of a dignified community learning from both informal and formal interchange. Obviously they could best know their own intentions.









**Beneath the spine is  
parking, atop it a  
procession of spaces**

Entry to the mall is at the point where the access road intersects the continuous structure of the campus. Vehicles disappear into a transportation center (1) and the lower level parking garages, and from there on Simon Fraser belongs to the pedestrian.

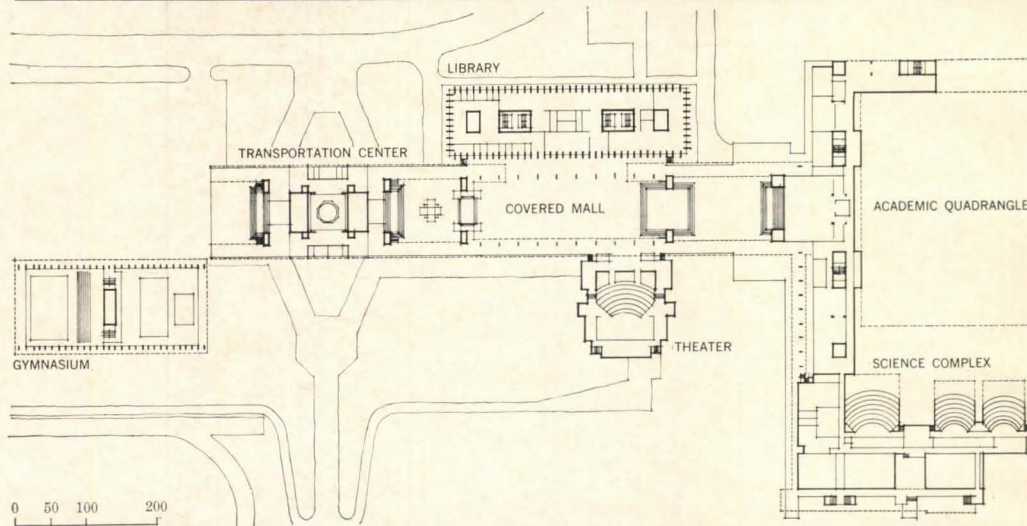
Passage from the transportation center to the campus proper is up and through a multilayered space in which stairs, rooms, a bridge, and a skylight interlock. It is covered by a student lounge from which to peer down through a domed oculus (see section) to the cascade of steps and scurrying people.

At the top of the stairs is the mall itself, bounded on either side by colonnades glassed against the wind, carrying an upper level of circulation that is continuous with the academic block beyond. And ahead is the glass-covered, wood and steel space frame, designed by Jeffrey Lindsay, providing shelter both for informal gatherings and university ritual.

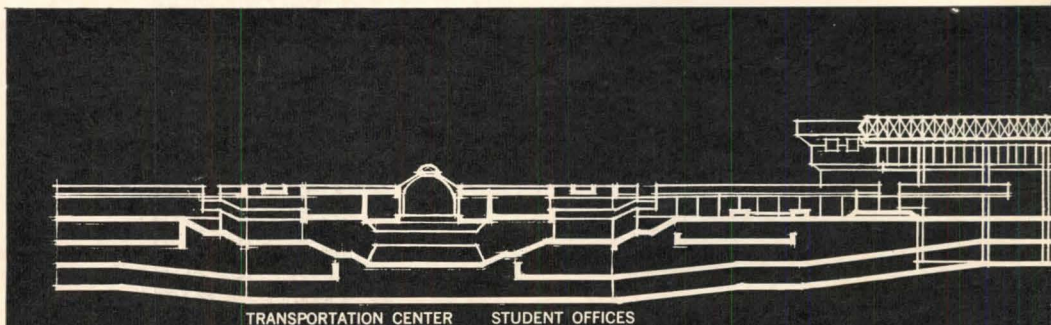
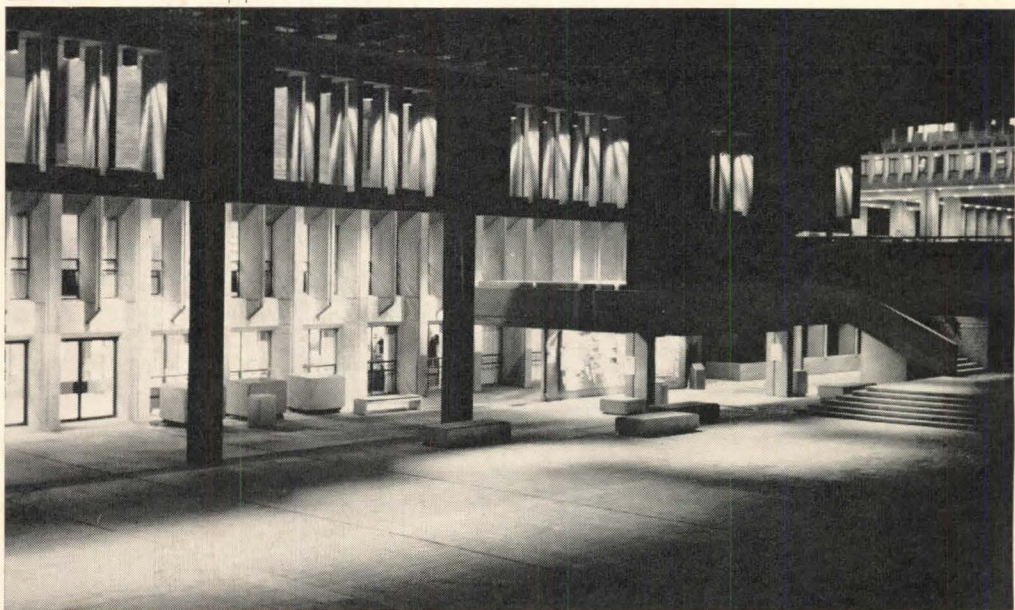
The space frame is supported (somewhat hazily) on a pair of three story "rails" forming aisles on either side of the central space. One aisle serves as entry to the library (2), the other gives access to the theater. The overlapping of major, minor, and adjoining structures at this point creates a visual surround of great intensity, penetrated by openings that frame magnificent views.

At the far end of the mall, platforms and stairs lead ceremoniously up to the academic quadrangle. When its fourth side is completed, this building will enclose an essentially quiet and meditative space, a level above the class and lecture rooms and a level below the faculty offices. (At present teaching spaces are mixed with the offices. Of the terraced class and lecture rooms, only the science complex has been built.) Even now, the gestural character of the U-shaped concrete ring at this scale is sufficient to make a powerful mark for the university on the site.

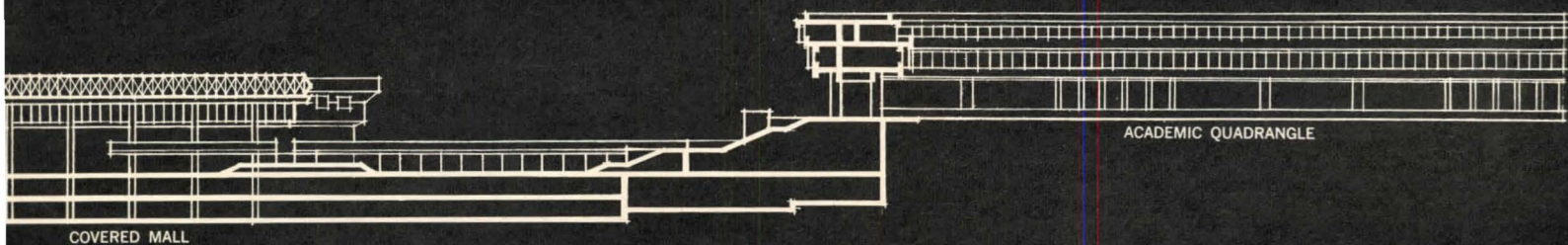
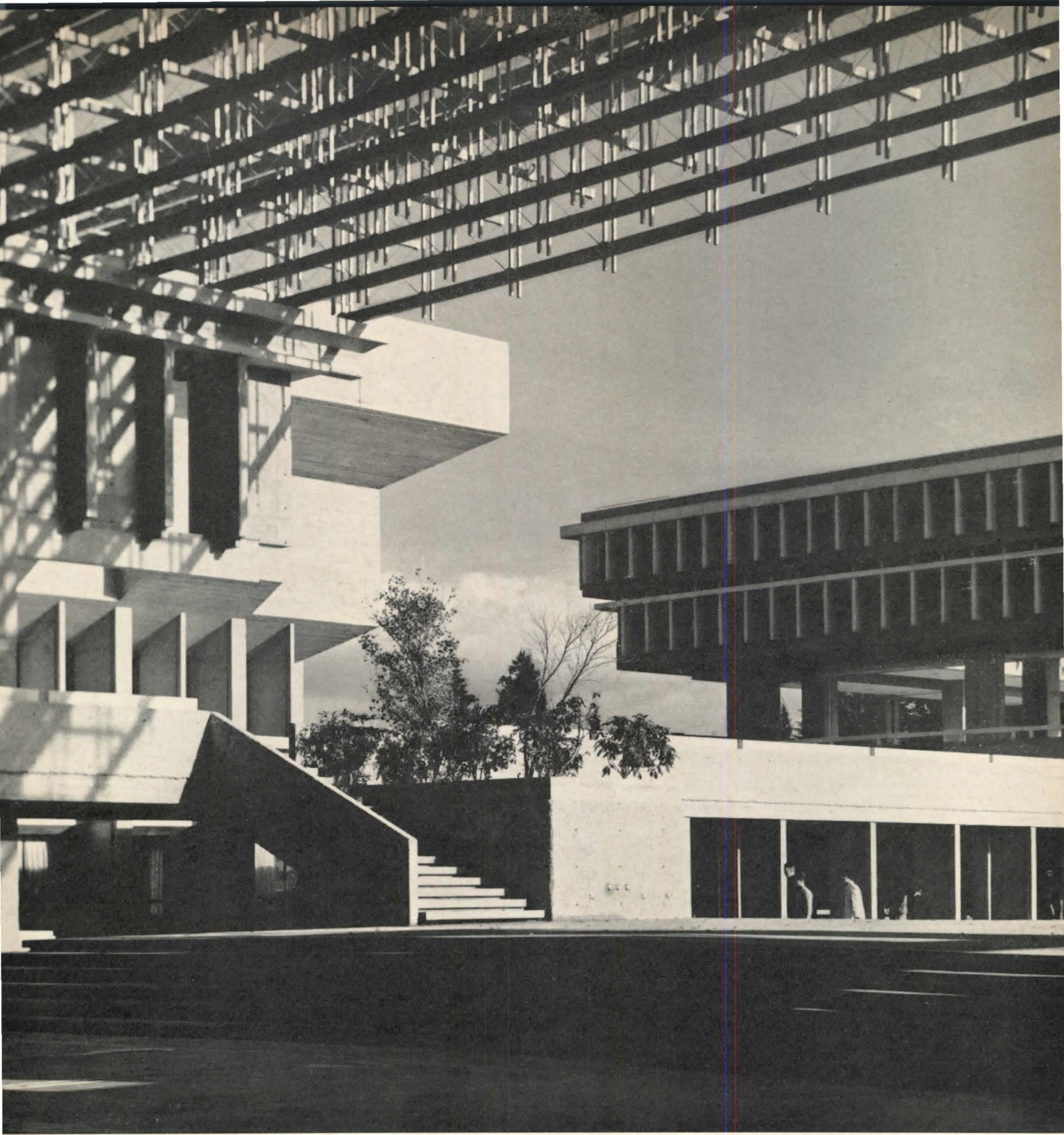
1.



2.







COVERED MALL

ACADEMIC QUADRANGLE



**At Simon Fraser, the whole is more than the sum of its parts**

The whole has received somewhat more consistent attention than the parts at Simon Fraser, a fact reflected by the matter of the precast fins (opposite). The fins occur in some form on most buildings, and contribute heavily to the quality of the place. Yet they are disappointingly mute about the process by which the individual elements were built.

Similarly, the image of the campus as a whole is overwhelmingly one of communal purpose. But there is less evidence of thorough analysis of the buildings themselves or of their relationship to one another.

The lecture rooms and laboratories, for instance, have become secondary to the point where they no longer seem to enter the image of the whole (1). Their terraced form gives little indication of their function, and their internal circulation does not effectively join the mall's.

The ratio of drop to building bulk, moreover, is too slight to convey the visual sense of graceful descent suggested by the notion of terracing. The formal problems posed by the slope are evidenced by the side elevation of the theater (2), where stairs dash downward at slightly more than human speed (3) while the main mass is substantially unaffected. Evident, too, in this view is the difficulty of connecting a fairly orthodox building to the mall's structured public spaces.

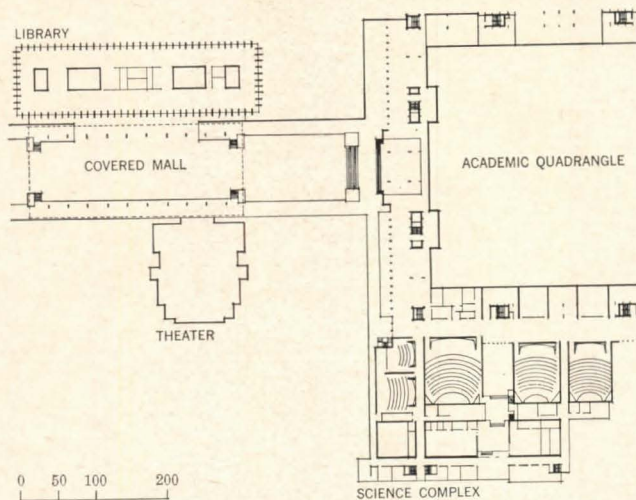
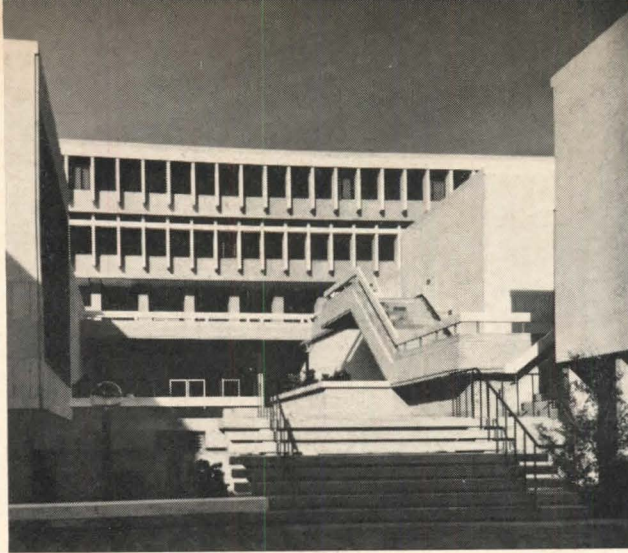
If the graded distinction from public to private is not perfectly resolved, it has been thoughtfully considered. Simon Fraser is a campus where the public has form, and the whole demonstrates clearly its base in ideas about an institution and a place.

**FACTS AND FIGURES**

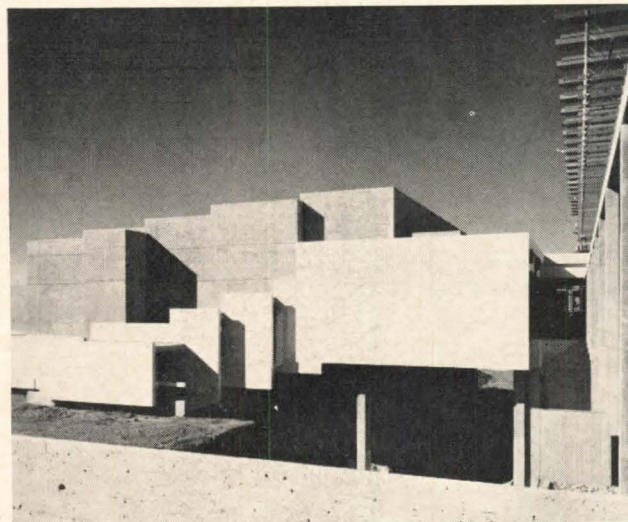
Simon Fraser University, Burnaby, British Columbia, Canada. Planning, preliminary design, and design of all buildings, site development and landscaping: Erickson/Massey Architects. Facts and Figures for individual buildings are on page 72.

PHOTOGRAPHS: Herbert L. McDonald, except aerials by George Allen; page 13 and photo number 2, this page, by John Fulkner.

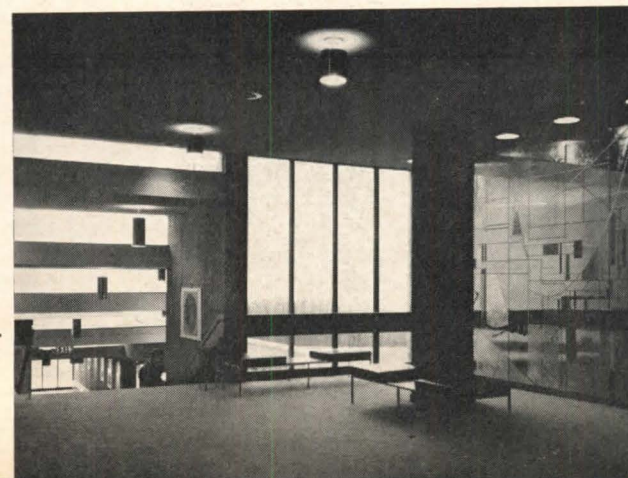
1.



2.



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# THE CASE HISTORY OF A FAILURE

Ten years ago, this St. Louis project was expected to set a new standard of housing design. Now \$7 million will be spent in an attempt to save it.

In its April, 1951 issue the *FORUM* featured a St. Louis public housing project which, it claimed, had "already begun to change the public housing pattern in other cities." Called Pruitt-Igoe, its 33 11-story buildings designed by Hellmuth, Yamasaki & Leinweber would "save not only people, but money," the *FORUM* predicted. Two months ago, only ten years after Pruitt-Igoe's completion, the Public Housing Administration announced that it will spend

an unprecedented \$7 million in an attempt to save it.

What impressed the *FORUM* were the project's efficient slab buildings incorporating skip-stop elevators opening only on every third floor, which permitted generous galleries, 11 ft. deep by 85 ft. long, at each of the stop floors. Also singled out were the "refreshing" site plan and landscaping design, which called for a minimum of 200 ft. between buildings and a "river" of open space winding among them.

The galleries, the feature which most impressed the *FORUM*, were conceived by the architects to be "vertical neighborhoods" serving a variety of uses:

- ▶ "As a close, safe playground for small children while mothers are doing housework or laundry.
- ▶ "As an open air hallway.
- ▶ "As a porch in spring, autumn and summer.
- ▶ "As a laundry.
- ▶ "As storage for such items as bicycles, washing machines, and tools."

Despite its "creative economies," Pruitt-Igoe proved too costly for PHA, which ordered several cutbacks before construction began. The landscaping was reduced to virtually nothing, and such "luxuries" as paint on the concrete block walls of the galleries and stairwells, insulation on exposed steam pipes, screening over the gallery windows, and public toilets on the ground floors, were eliminated. But the basic scheme was built essentially

as designed by the architects.

Today, ten years after its completion, Pruitt-Igoe bears little resemblance to the architects' early sketches (see page 24). In a city that suffers from a shortage of low-income housing, it is nearly a third vacant—PHA's major reason for putting up the \$7 million. Its buildings loom formidably over broad expanses of scrubby grass, broken glass and litter, and they contain hundreds of shattered windows.

The undersized elevators are brutally battered, and they reek of urine from children who misjudge the time it takes to reach their apartments. By stopping only on every third floor, the elevators offer convenient settings for crime. Every so often assailants will jam the elevators while they rob, mug or rape victims, then stop at one of the floors and send the elevators on with the victims inside.

The stairwells, the only means of access to almost all





the apartments, are scrawled with obscenities; their meager lighting fixtures and fire hoses are ripped out; and they too provide handy sites for predators. The breezeways at the entrances are hangouts for teenagers who often taunt the women and children and disturb those in close-by apartments with their noise.

The galleries are anything but cheerful social enclaves. The tenants call them "gauntlets" through which they must pass to reach their doors. Children play there, but they are unsupervised and their games are rough and noisy outdoor pastimes transferred inside. Heavy metal grilles now shield the windows, but they were installed too late to prevent three children from falling out. The steam pipes remain exposed, both in the galleries and the apartments, frequently inflicting severe burns.

The adjoining laundry rooms are unsafe and little used. They

never served enough tenants to keep them continuously bustling with activity, and thus invited molesters. Now their doors are kept locked, and keys are distributed to the few tenants who use them. The storage rooms also are locked—and empty. They have been robbed of their contents so often that tenants refuse to use them.

#### Simply too big

The St. Louis Housing Authority operates seven other public housing developments, and it claims that none of them comes close to Pruitt-Igoe in the proportion of crimes and acts of vandalism committed. Why? Charles L. Farris, the Authority's executive director, says Pruitt-Igoe is simply too big. With nearly 2,800 units and almost 11,000 inhabitants (12,000 if it were full), it is four times the size of the second largest project. Its sheer size and scale,

Farris says, thwart all attempts at effective management.

Architect Minoru Yamasaki, who designed Pruitt-Igoe, agrees that its size is objectionable. His original design called for a combination of garden apartments and high-rise buildings accommodating a density of 30 per acre. "PHA forced us to almost double the density [to 55]," Yamasaki said. "The best we could do then was to eliminate the low-rise and add more slabs."

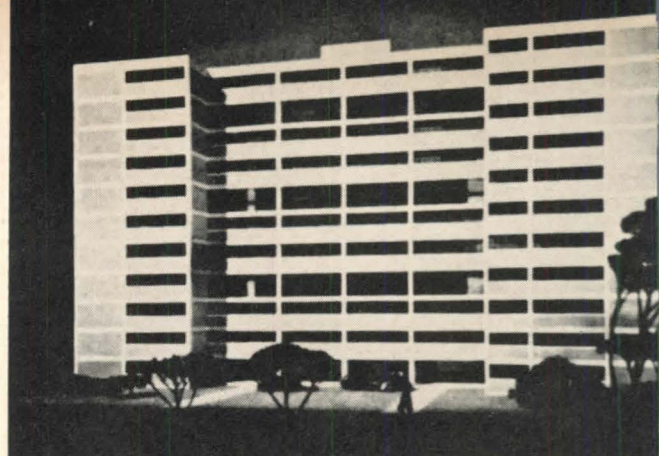
As for the misuse of Pruitt-Igoe's communal spaces, Yamasaki said, "I never thought people were that destructive. As an architect, I doubt if I would think about it now. I suppose we should have quit the job. It's a job I wish I hadn't done."

Architect Gyo Obata, who joined the firm while Pruitt-Igoe was in design, recalled that Yamasaki "tried and fought at every turn" with PHA to get more amenities. "Now," he said, "PHA has gone clear around.

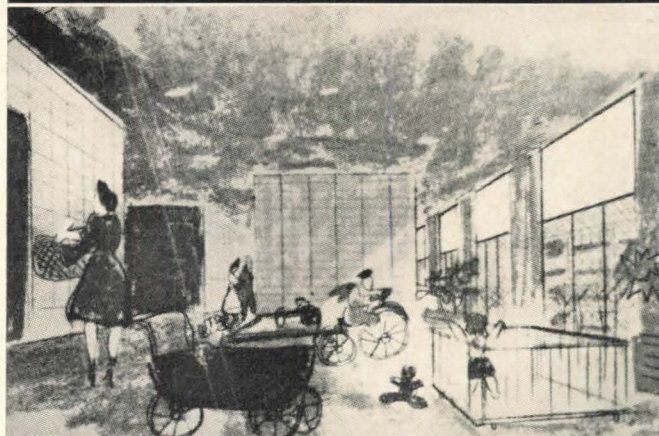
They are rehabilitating Pruitt-Igoe because they realize that the human values we fought for are important."

The Rev. John A. Shocklee, pastor of St. Bridget's Catholic Church adjacent to Pruitt-Igoe, criticized the project's lack of public and commercial facilities. "To build a place and offer no services to 2,800 units is ridiculous," he said. "There are no gymnasiums, no barbecue pits, no soda fountains, no decent places for people to gather. The kids have nothing to do; they might as well pull pipes out of the walls and break windows." A community center, built on the site about five years ago, has not worked well because the Housing Authority places too many restrictions on its use, Father Shocklee contended. Also, the community center is the place where tenants pay their rent—a function which underscores their suspicion that it belongs to the Authority, not to them.





The principal design departure in Pruitt-Igoe was the skip-stop elevator system, with galleries across one face of the stop floors (model photo above). The architects' rendering (below) depicted a mother entering one of the common laundry rooms while her children played safely in the sunshine. The bleak reality is shown at right, with the laundry room padlocked against vandals. The galleries and the stairwells between stop floors (left) are places of fear and violence.



Dr. Lee Rainwater, professor of sociology and anthropology at Washington University in St. Louis, is heading an exhaustive five-year social study of Pruitt-Igoe through a grant from the National Institute of Mental Health. Though he is reluctant to publicly discuss the study until it is completed, a paper that he delivered to an American Psychological Association conference last fall, based partly on his research at Pruitt-Igoe, reveals some of his conclusions about what he calls "the non-human threats" posed by the physical design of public housing.

These threats, he said, "can be pretty well done away with where the resources are available to design decent housing for lower class people." For example, "In buildings where there are half a dozen or more families whose doors open onto a common hallway, there is a greater sense of the availability of help should trouble come than there is in

buildings where only two or three apartments open onto a small hallway in a stairwell."

But, Dr. Rainwater observed, "it would be asking too much to insist that design *per se* can solve or even seriously mitigate" the human problems of the occupants. At Pruitt-Igoe, these problems are overwhelming.

#### Absentee fathers

The median annual income of the project's 2,100 families is only \$2,300, and more than half are receiving welfare payments. Of the 10,736 individuals living there, 98 per cent of whom are Negro, there are only 990 adult males. Missouri law prohibits mothers from receiving public assistance for their children if the father lives at home, and since the aid check is often a family's only stable source of income, many fathers live elsewhere. Father Shocklee considers the absence of so many male heads

of households at Pruitt-Igoe a major cause of its disciplinary and crime problems: "This is the natural result when you drive out all of the strong men. When you remove so much strength from a community, it takes more than the police department to restore the basic structure."

Pruitt-Igoe also is a state of mind. Its notoriety, even among those who live there, has long since outstripped the facts. Its crime rate, though high, is well below that of the surrounding slum neighborhood—and declining. Yet, until recently, the *St. Louis Globe Democrat* referred to every offense committed anywhere in the general neighborhood as a "Pruitt-Igoe" crime—its way of saying "Negro."

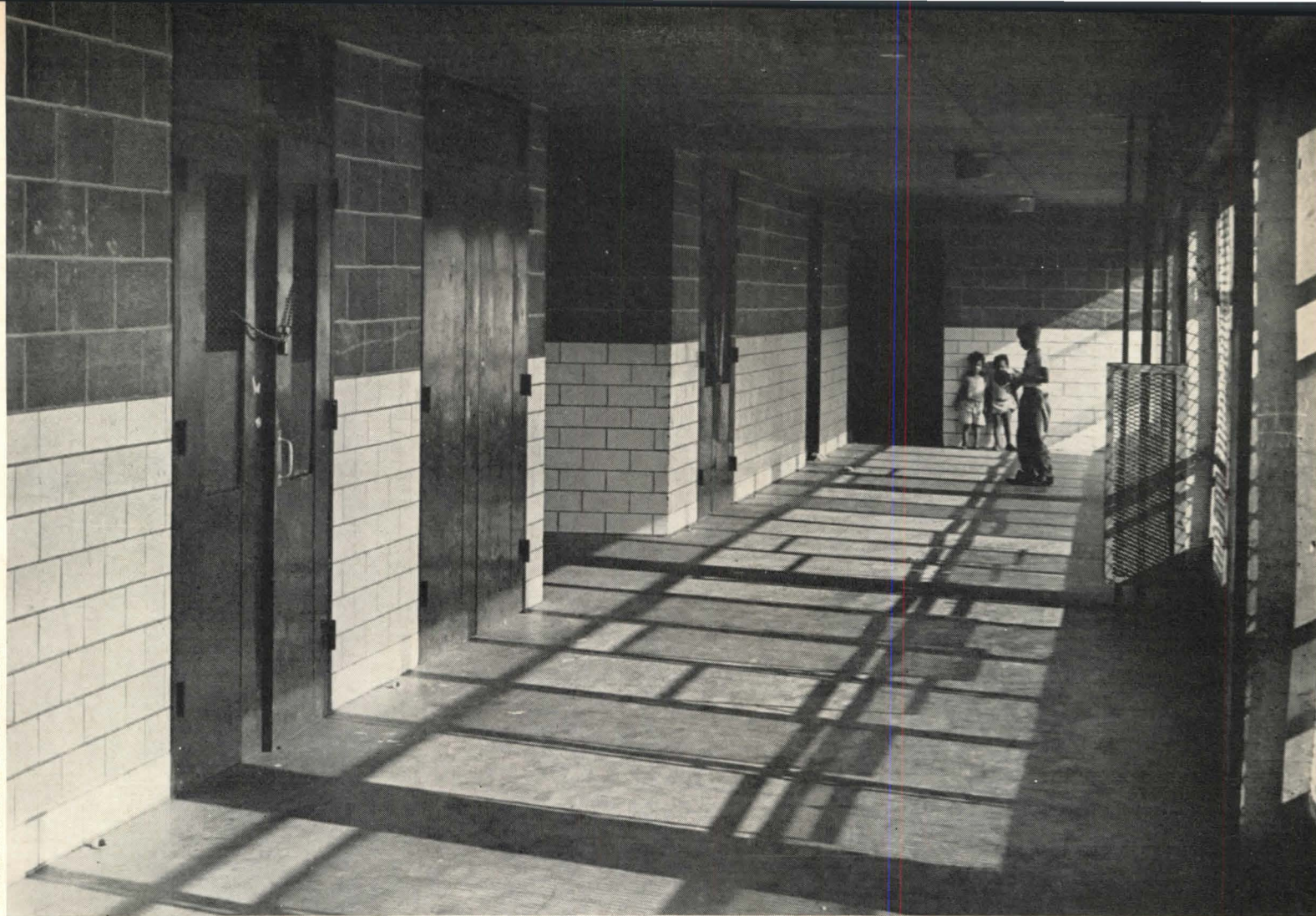
Planner-Architect Albert Mayer, who is advising the Housing Authority and Hellmuth, Obata & Kassabaum in planning the renovation, calls Pruitt-Igoe "a product of the atmosphere of the time. Housing was consid-

ered mainly as shelter. Agencies were opposed to anything fancy or enlivening, any commercial facilities. There was the crass hostility of real estate interests and the puritanical belief that all people could, if they wanted to, earn their own way."

"The success or failure of any housing project," Mayer said, depends on a combination of design, social help and alert, understanding management." Pruitt-Igoe, he feels, was deficient to some degree in all three. "Its great size and density," he said, "are accentuated by its relentless overscale. It doesn't stop and it doesn't start. It is a question of endlessness versus definition. Design can provide the definition. But much of this could have been alleviated had the management approached it administratively and socially as a group of smaller entities."

Pruitt-Igoe also is an example of the "not altogether rational craze for open space," Mayer said. "The important thing with





open space is what you do with it. At Pruitt-Igoe its relationship to the surrounding slum areas was not sufficiently considered. The adjoining strip of park, bleak and treeless, rather than acting as a link between the project and its neighborhood, serves as a barrier. The open spaces among the buildings are, *per se*, neutral. They provide too many uncontrolled situations which invite trouble."

The \$7 million renovation can do nothing about the building masses, but Mayer has proposed a number of changes designed to relieve the project's sterility and correct its almost total lack of social and recreational facilities. They include many small playgrounds of differing character and designed for different age groups, sitting places, barbecue pits, and wooded picnic areas. New lighting will be installed, not only for security but, in Mayer's words, "to highlight the arteries of this 'small town's' anatomy."

Circulation will be made to converge on a new central pedestrian "main street," and entrances to the project will be designed to give it greater self-identity. Two cul-de-sac streets will be joined to form a continuous loop. A small private shopping center will be built on a portion of the site to be sold as surplus property. Small buildings of special character which Mayer calls "Everybody's Clubs" will provide informal drop-in and gathering places for all age groups, manned and supervised by tenants.

Within the buildings, the galleries will be narrowed and additional apartment units placed where the laundry and storage rooms are. Laundry facilities will be moved to the ground floor. One of the two breezeways in each building will be partially enclosed for a sheltered play area. Exposed pipes will be covered, raw cement blocks painted, and elevators reconditioned. Public toilets will be installed in the

ground floors, and each building group will have a first-floor sub-community center. The skip-stop system, too expensive to correct, will remain in all but two buildings to be converted for the exclusive use of the elderly. All elevators will be reconditioned.

#### Tenant participation

The Housing Authority, aware that physical rehabilitation may only provide "something else to break," has a series of programs underway to involve the tenants in the process, invite their suggestions, and give them a voice—and hope—in the future. The Authority has also begun a program to coordinate the activities of the scores of Federal, state and local welfare and social agencies, private charitable organizations and sympathetic individuals who are stumbling over each other, and the tenants, in efforts to do something about the human problems of Pruitt-Igoe.

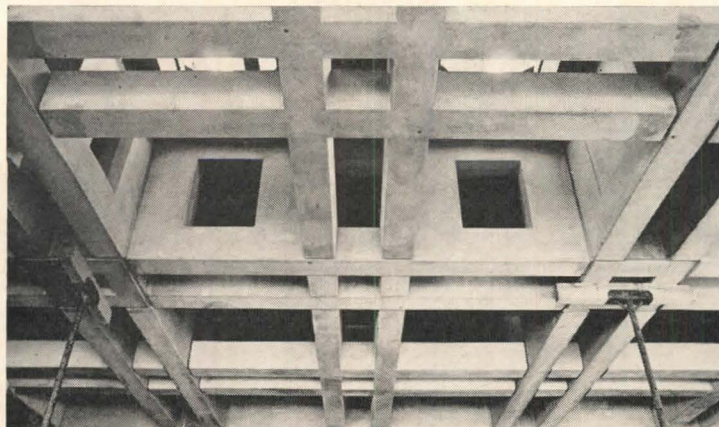
Three years ago, Pruitt-Igoe

was selected by the Department of Health, Education and Welfare for its first "concerted services" project, an intense program of health, education, vocational rehabilitation and welfare services. In a report issued last year, HEW admitted that the results have been disappointing, though the same method is working well other places. "Because of the complexity of the problems," said the report, "one can only hope for slow but steady progress in the future."

The same philosophy is being applied to the physical rehabilitation. It will proceed cautiously in four stages over the next five years. After each stage is completed, it will receive a six-month scrutiny so that mistakes can be avoided and new solutions tried in succeeding stages. This time there are no glowing predictions—just hope, and a determination to alter the grim realities of Pruitt-Igoe's first ten years.

—JAMES BAILEY

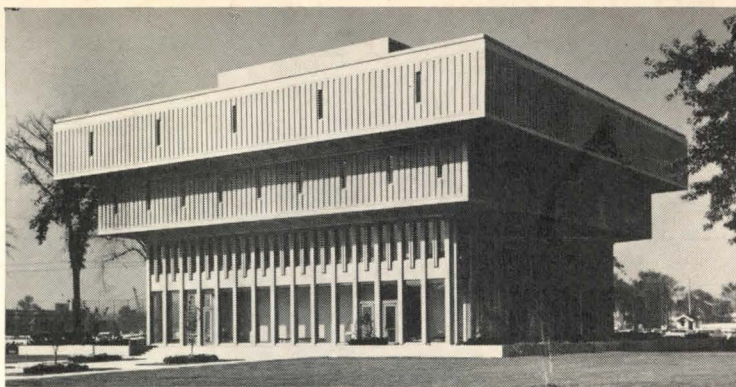




## PIECE BY PIECE IN BOSTON

One 14-foot precast truss at a time, the Vierendeel puzzle of the new Boston City Hall is being fitted together, under the placid gaze of TAC's Federal Building (background above). The competition-winning city hall scheme by Kallmann, McKinnell and Knowles promises to have the greatest ratio of solid to void since Karnak. Visible in a portion of the ceiling already erected (left) are the paired concrete trusses with smaller concrete beams between them to hold up ducts and lighting.

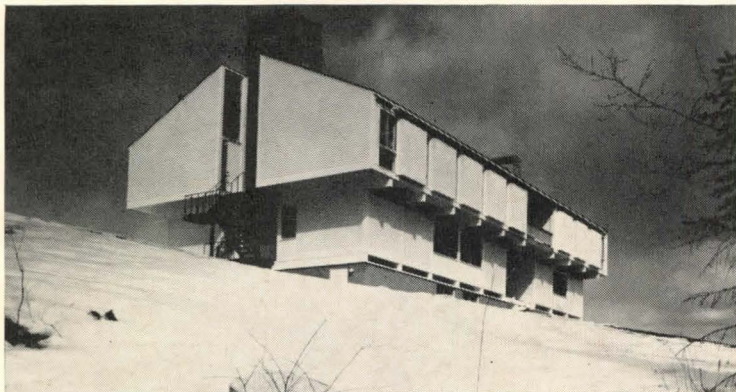




#### YIN MEETS YANG IN DETROIT

The rugged, glowering form of the Shapero Hall of Pharmacy by Paulsen, Gardner & Associates widens as it rises between two fragile Yamasaki buildings at Wayne State University, giving the top floors of the Education Building (the one to its right)

something to retreat from. The way Paulsen, Gardner turned things upside down at Wayne pleased the 1965 Honor Awards jury of the Detroit Chapter, AIA, which gave the building equal recognition with three others—not without criticizing the entries. The jury met in New York.



#### BARN FOR BOOKS IN VERMONT

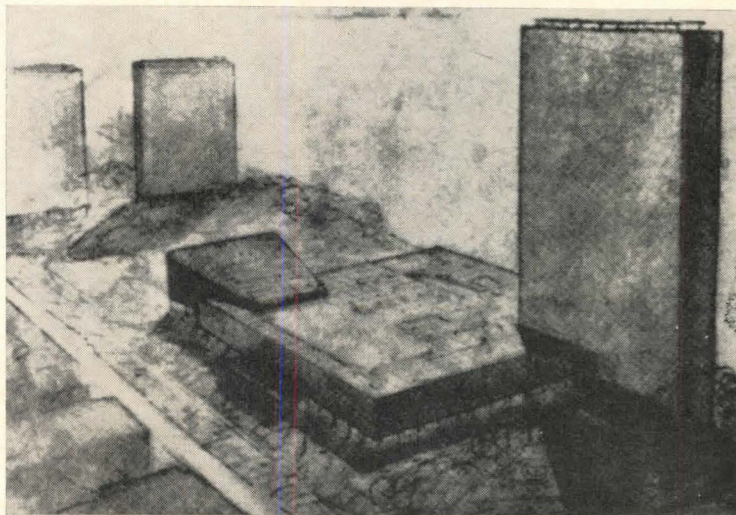
Crisp and uncontrived as the snow around it is Ashley, Myer & Associates' new library for tiny but sophisticated Marlboro College. Its barnlike form is at home among the converted farm buildings that form the core of the campus; inside it is designed strictly for reading (and "thinking," which Marlboro regards as the only major subject in its curriculum). Clapboard walls lined with books keep out the wintry winds, and each of the two massive chimneys provides several fireplaces for students to read by.



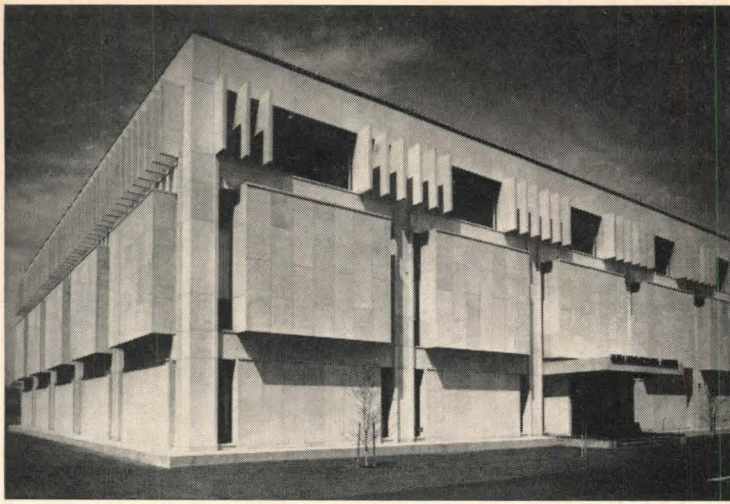
#### TWIN TOWERS AT THE U.N.

The north side of the U.N. complex in New York has been given the kind of definition envisioned by the committee that designed it. The two new slabs by Harrison & Abramovitz recently completed there bear an uncanny resemblance to two shadowy forms on the committee's sketches (below). But these new slabs belong to a strictly private under-

taking, New York's first large-scale combination office and apartment building. Its six-story office block serves as a base for 32 floors of apartments, in 36 exotic varieties. The old sketches were noncommittal about surface materials, so Harrison & Abramovitz have clad their slabs entirely in glass and bronze-colored aluminum—pleasing the sponsor, Alcoa, and complementing the U.N. group.





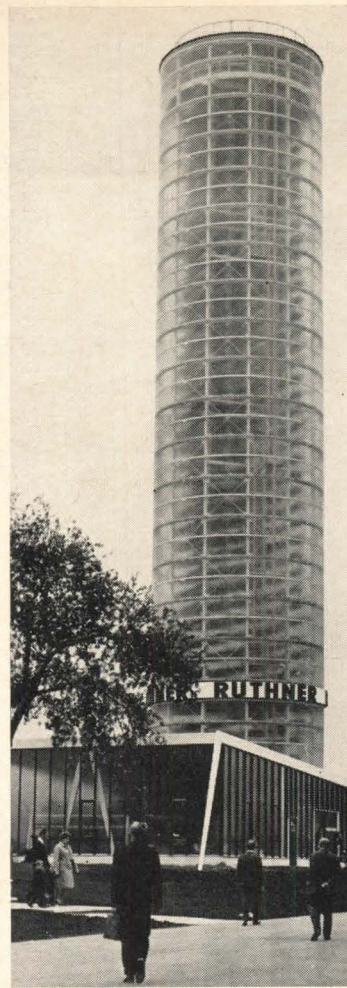


#### COMPUTER CASTLE IN BOSTON

While the Boston City Hall is barely out of the ground, its heavy-browed progeny can be found all over the Boston area. The Data Processing Center for the First National Bank of Boston, designed by Campbell & Aldrich, is one of the more successful works of this genre. Its impenetrable limestone-clad exterior helps to maintain the precise environment required for computers.

#### SALAD SILO IN VIENNA

A Viennese engineer, Othmar Ruthner, has designed a steel and plastic high-rise greenhouse in which flowers and salad greens thrive. By putting plants on vertical conveyers, Ruthner cuts out 80 per cent of conventional space requirements, makes mechanized spraying and immersion easier. Eleven towers have so far been built in Austria and Germany and others will soon go up in Canada and Scandinavia.



AAAAAAAAAAAA

With a sigh of satisfaction heard from sea to sea, the stainless keystone of Eero Saarinen's Gateway Arch in St. Louis was lowered into place shortly after 10 a.m. on October 28. The last 80-ton section was fitted in almost 18 years after the competition-winning design was made public and four years after the architect's death. His widow, Aline Saarinen, was on hand for the topping out ceremonies. After a ride to the top, she reminded the local press of the role of the Old Court House in Saarinen's design concept and of the need to preserve what is best in St. Louis. The public will not be able to ride to the top—630 feet above the Mississippi—until next year, and the 91-acre park in which it stands will be several more years in the making.



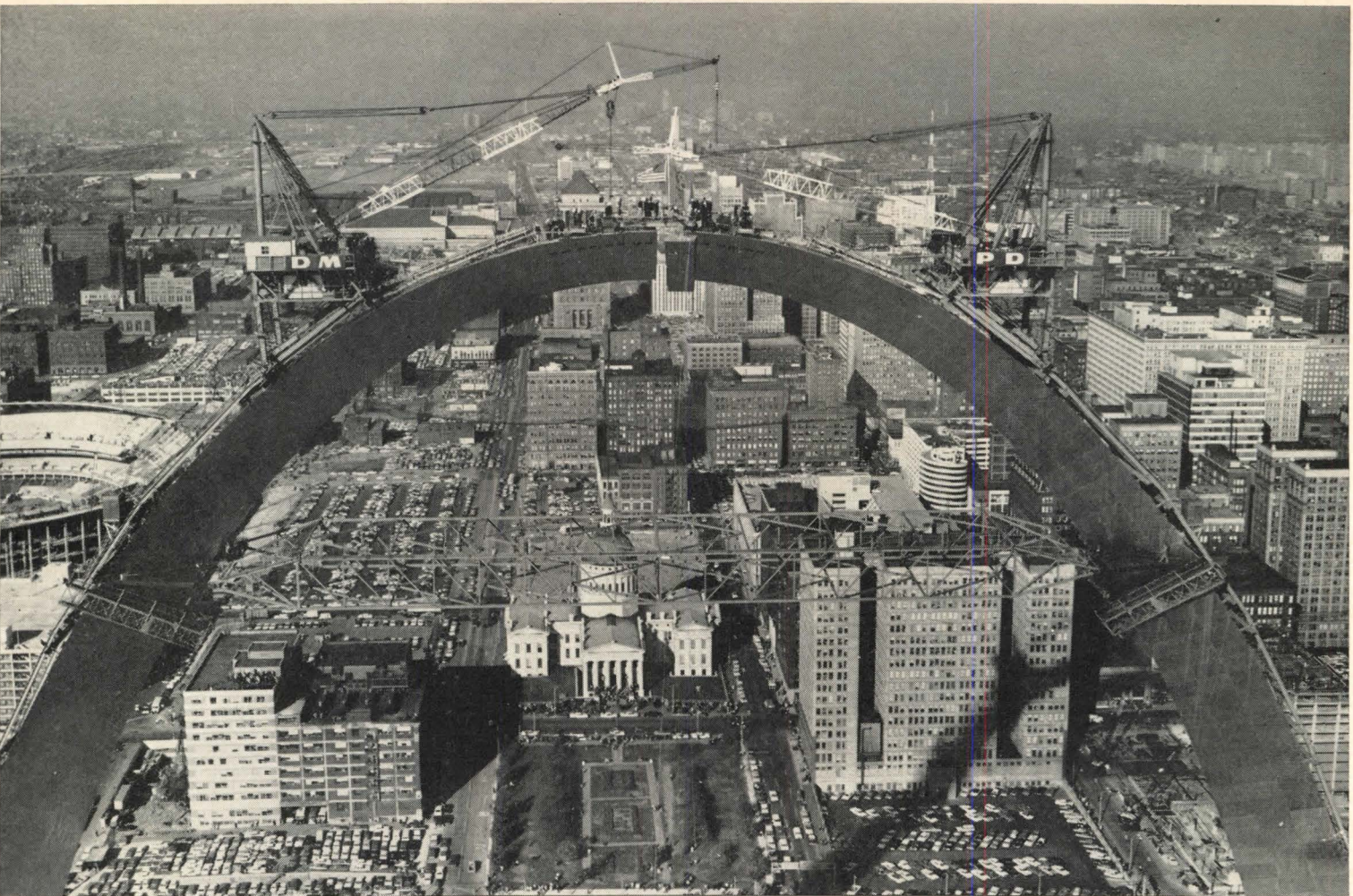
#### SAD END FOR A STATION

One of America's few great spaces has been getting less spacious as its end approaches. The once exhilarating train shed at Pennsylvania Station in New York has been truncated from the bottom

by a concrete slab, the roof of the cave that replaces it. Now massive steelwork for the new Madison Square Garden is beginning to fill what remains. The turn-of-the-century vaulting is ending its days as a humble construction shelter.

PHOTOGRAPHS: Page 26: Norman R. C. McGrath. Page 27: top left, Balthazar; lower left, Phokion Karas. Page 28: top left, Phokion Karas; lower, Norman R. C. McGrath. Page 29: St. Louis Post-Dispatch.









# The explosive forms of Piotr Kowalski





The objects on these and following pages have been stretched, sprayed, and even exploded into their unusual shapes by Piotr Kowalski of Paris, whose quest for form and method has taken him deeply into research on energy and materials. Kowalski came to MIT to study mathematics, switched to architecture, worked for Pei, Breuer, and Nervi, then turned to sculpture. He recently was interviewed by Bernard P. Spring, senior research architect at Princeton and member of the Forum's Board of Contributors. Kowalski's works are described in captions, and portions of the interview follow.

Spring: It seems to me there are two central ideas to your work which are very strongly related: One is the forming of space with a liquid medium that hardens, using an elastic membrane as a controlling force. The other is the forming of space with a crystalline medium, using explosives.

Kowalski: It is all the same thing.

S: The same in that it's energy acting on materials, in a way that reveals the trace of the action?

K: Yes. People have seen the results and said, "Oh, this is sculpture." I have replied, "No, what is left is the memory of certain things." What is interesting to me is the process, not the end product.

S: How did you become interested in elastic membranes?

K: I had been thinking about forms that would, like soap bubbles, take the minimum surface. Also, a surface that is completely elastic sets up a field in which anything you do, anywhere in this field, has repercussions on the whole. Finally, I wanted to show that you could take any complex object, put the minimum surface around it, and allow the inclusions to determine the shape.

S: That is exactly what you did in the transformer housing, isn't it?

K: Yes. I went to the people who made the equipment. Forget the building it's going in, I said, and build the most compact transformer you can. Then I made a plastic bubble big enough for it and a man.

S: If we don't think about this as sculpture, but as building technology, we have to consider the high cost of plastics.

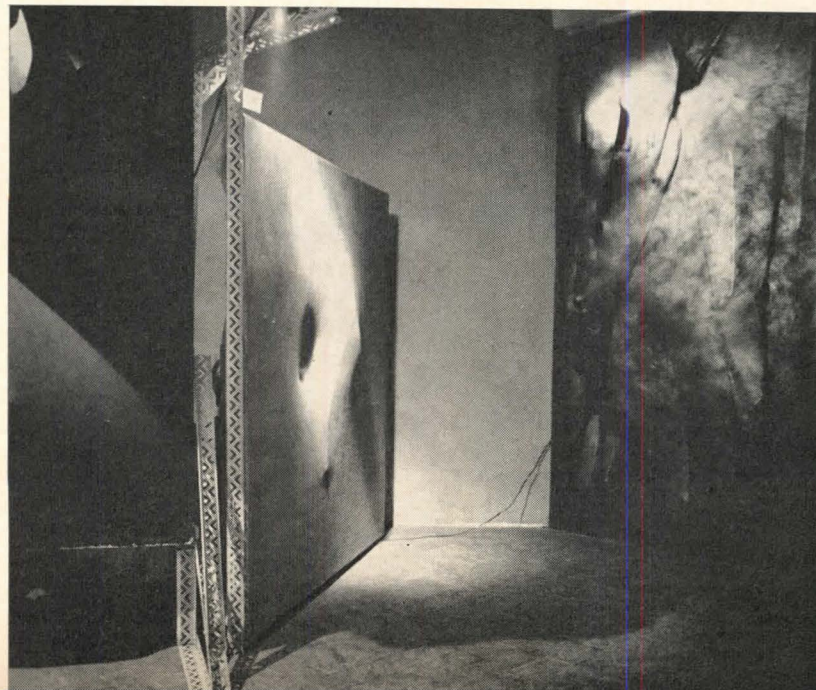
K: Plastics come from hydrocarbons, and we have lots of them. It's a question of the market. I'm always trying to think of ways of doing things in the cheapest way—getting rid of tools, getting rid of forms, doing it just by energy.



Cavernous dress shop facade (opposite) and cocoon-like transformer housing (above and right) were shop-fabricated of translucent, reinforced polyester sprayed against rubber sheets. Ribs of the transformer housing were standing seams between the rubber sheets. Kowalski shaped it by pushing and pulling on the ribs.



Kowalski "sculpture machine" consisted of a rubber sheet stretched on a frame (left in photo), backed by a motorized armature. When the armature moved, it poked at the sheet. Any time Kowalski saw it take a shape he particularly liked, he stopped the machine and cast a piece of sculpture against the sheet.







Kowalski's major work in concrete is a 120-foot wall at a housing project, built with a reusable form of rubber held in a wood frame. Here he strips the form from one panel, and the rubber snaps right back into place.



The form is then placed for another pour. It was used a total of 13 times, in whole or part.

In Kowalski's garden, a machine-made panel serves as backdrop for samples of self-shaping concrete sculpture. He made them by pouring the concrete into elastic cylinders bound with restraining wires here and there, then letting the density of the material do the rest.



The bumps on the wall's surface were made by putting pipes, lumber—anything at hand—between the rear frame of the form and the elastic. The backing was changed with each pour.

## KOWALSKI & SPRING (cont')

S: You have also experimented with elastic forming of concrete.

K: Yes. First in sculpture, letting the heavy density of the material make the shapes as it pushes against restraints [left, below]. Then in the wall of the housing project stairway.

S: Strictly speaking the wall is also sculpture, isn't it? There was a structural wall there first.

K: It was not necessary. The construction companies distrusted my mold. It could have been cast as a structural wall.

S: But every time you have a crease aren't you destroying the structural integrity of the shape? Don't the creases create

stress concentrations?

K: I imagine so, but instead of wedges behind the elastic you could use continuous surfaces, like balloons.

S: Could you do a building this

K: Yes. One could use those fram



not just flat, but in any shape. In order to build a concrete building, we have to build a wooden building first to pour the concrete on. This is absurd. I tried to develop a technique of building compound curvatures out of concrete. I would start with a cocoon, almost sprayed in air. On the cocoon I could spray polyester, which is strong enough to pour concrete on. Then I could just remove the cocoon, which is like paper, and I would have a finished surface, without a conventional mold. I have also thought of casting concrete inside a liquid of almost the same density as concrete, with only a very thin elastic divider between the two, so the hydrostatic pressure would be always equal.

S: Very good. It suggests a new way of thinking about structures.

K: It should be possible to think in terms of the upper and lower limits of densities of corrugations, not in terms of where the structural members have to be





Here is the form in place for the  
first pour, a free-standing  
entry door to a boiler room.



The finished wall stands in startling contrast to the building whose stairway  
it shields (but does not support).  
The outline of the frame's miscellaneous stuffing  
is forever traced on the wall's surface.







Kowalski has just finished a \$250,000 sculpture of quarter-inch stainless steel, formed entirely by explosives at North American Aviation Inc. Above, he and workmen polish one of the unformed sheets.



Kowalski directs attachment of the explosive charges. Held in a fishnet, their force and position were precisely calculated.



Boom! The charges are exploded under water.

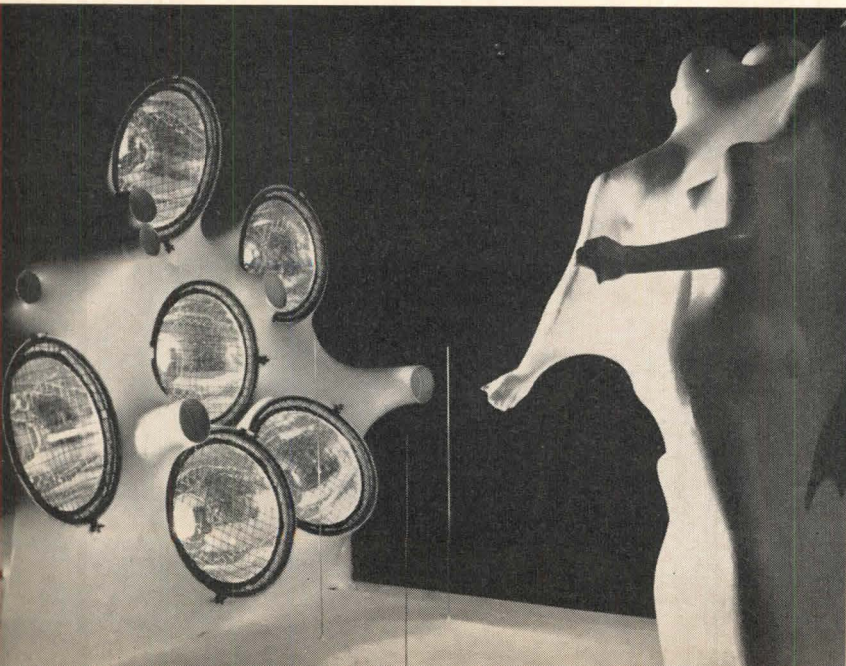


Emerging from the tank, the sheet now has exactly the intended double curvature.



Even the ridges were made by explosives, this time taped into place. Opposite, Kowalski sits in the middle of the finished sculpture.

Kowalski's latest consists of writhing (elastic-formed) plastic figures bathed in lights too bright to look at directly. The title: "It's for Today."



## KOWALSKI & SPRING (cont')

S: Your earlier ideas only worked with something that was liquid at one stage of its existence, such as plastic and concrete. The explosive forming allows you to work with metal, I suppose because for a very short instant it makes metal perform like liquid.

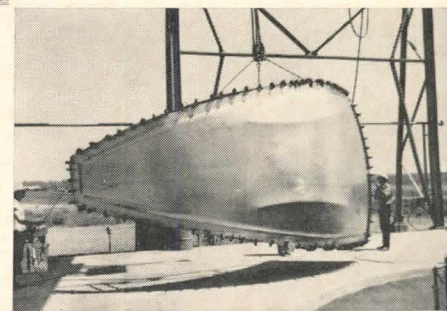
K: That's what they think, but there is no consistent theory on it. I spoke with a theoretical physicist I met by chance in Los Angeles, and he thinks that with explosives the reaction is so fast that the metal is transformed completely at the molecule level.

S: How did you wind up in California in the first place?

K: The California State College at Long Beach invited eight sculptors from all over the world. When they invited me, I asked them to put me in touch with this outfit that was doing explosive forming—I had read about it once in a magazine while waiting in a lobby for someone. When the factory [North American Aviation] saw my work and I explained what I wanted to do and why, they immediately sensed how it could be done.

S: It's easy to think of building forms which could be made this way—the steel dome, for example. How about forming an enclosed structure, rather than a sheet?

K: I did it, with pipes. One architect who saw this work was interested because his biggest problem was how to form a column how to expand it at the center. He saw how the explosive forming could make this simple.



S: What about larger scale work?

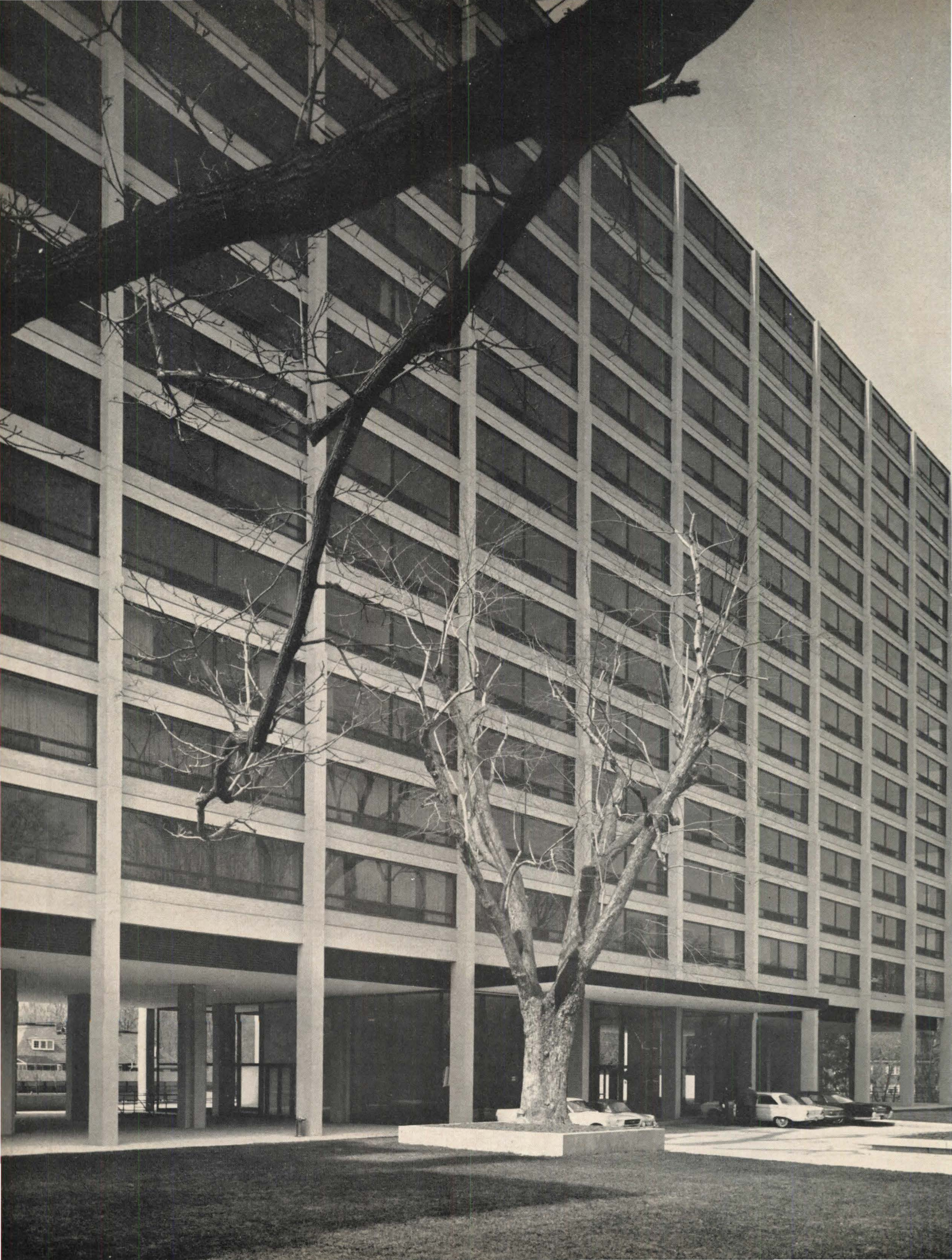
K: Theoretically, there is no limit. We made a movie at the factory, and I suggested that for the last picture they fly the biggest piece of steel they could find over the sea, and explode it there. They did it. We could do ships, or entire buildings.

Photos by Pierre Joly-Vera Cardoy, except series on concrete wall by Anker Spang-Larsen, and series on explosive forming by Globe Photos.











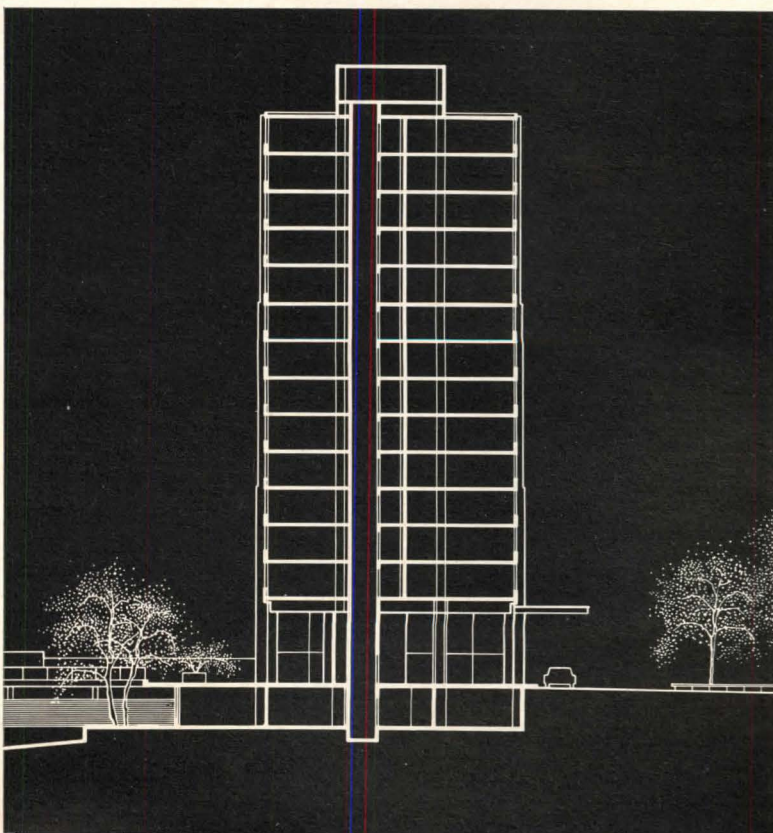
# MIES IN BALTIMORE: SLENDER FRAME OF CONCRETE

In an age when concrete is being cast, precast, scored, striated, and everywhere left exposed in a display of architectural muscularity, trust Mies van der Rohe, going his own consistent way, to show that it has other uses as well. In Highfield House, Baltimore, a broad-bayed grid of luxury apartments, Mies has used concrete in a structural frame that has all the sleekness, all the slenderness one could expect of the most finely fashioned metal.

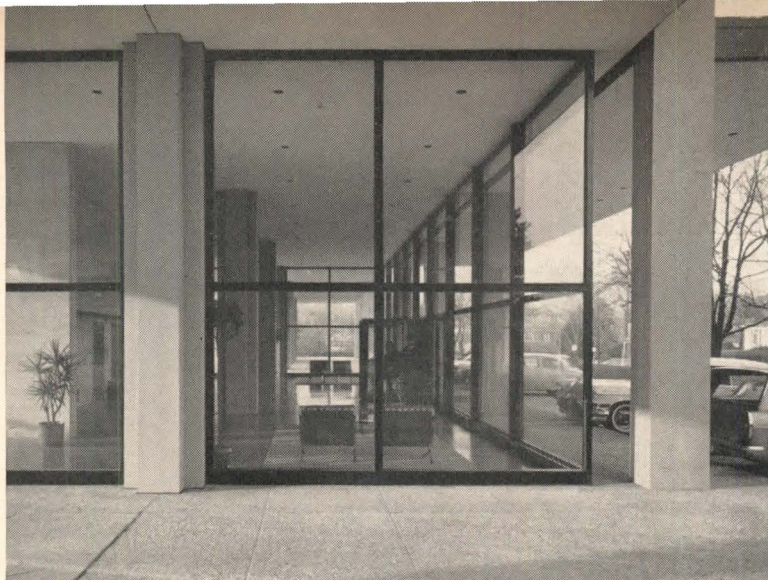
This 13-story frame, projecting beyond the gray glass, steps back twice on the way up as the column loads decrease, a device Mies brought from Chicago along with the building's great wide bays. The glass is framed in black extrusions, and the spandrels are buff face brick—a gesture, perhaps, to the fabric of building in Baltimore.

Highfield House is sited on North Charles Street, a thoroughfare leading directly to Mies's shining metal office tower in Charles Center. It is raised on a platform, 20 feet above street level, and set 100 feet back from the traffic. The glazed lobby occupies less than a third of the space beneath the mass of the slab; the rest is open, except for the evenly spaced columns and two symmetrical brick stair enclosures.

The building, containing 165 apartments renting from \$137 to \$485, is planned with the meticulousness one associates with Mies (see following page). Parking is entirely underneath, and the garage space is interrupted by a sunken pool and fountain, reached from a glass-walled recreation room below the building platform. —DONALD CANTY



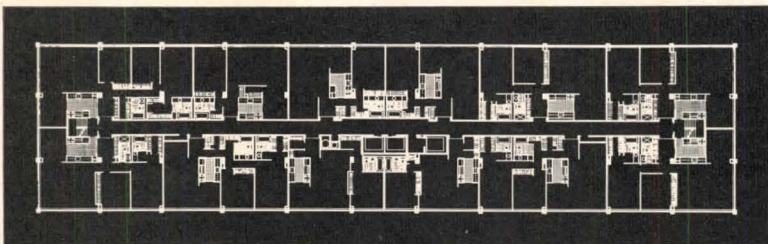




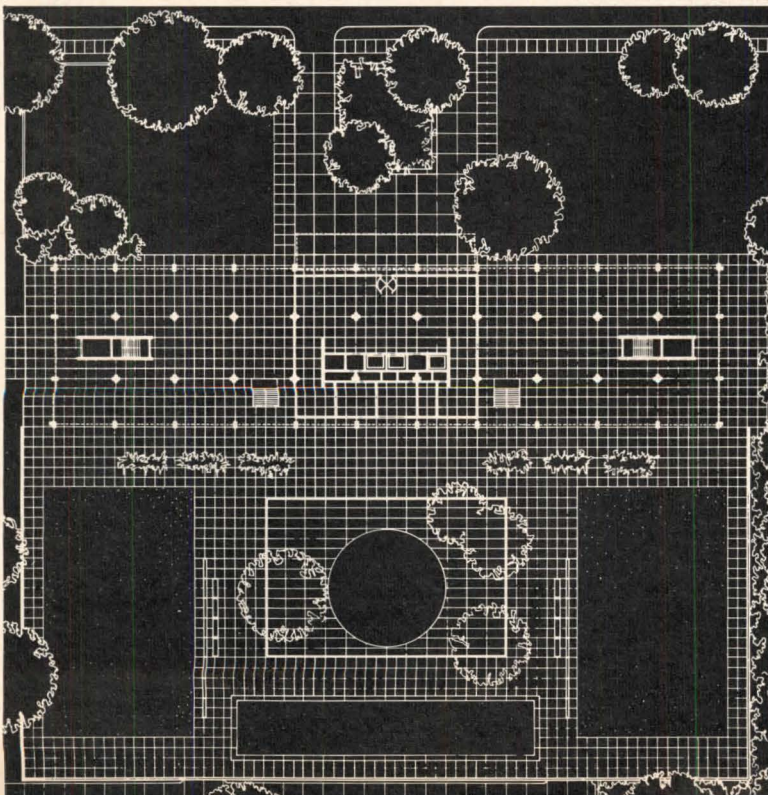
The precise grid of the rear elevation (right) looks down on a sunken court 80 by 100 feet, containing a swimming pool and fountain. At left, the glass-walled lobby.



Beneath the lobby is a recreation room (left), whose glass doors slide open to the sunken court. On the other three sides of the court, behind brick walls, is parking.



Apartments on the 13 typical floors (plan left) range from efficiencies to three-bedroom units. Ground level plan (below, left) shows continuity of paving, carried indoors and out.



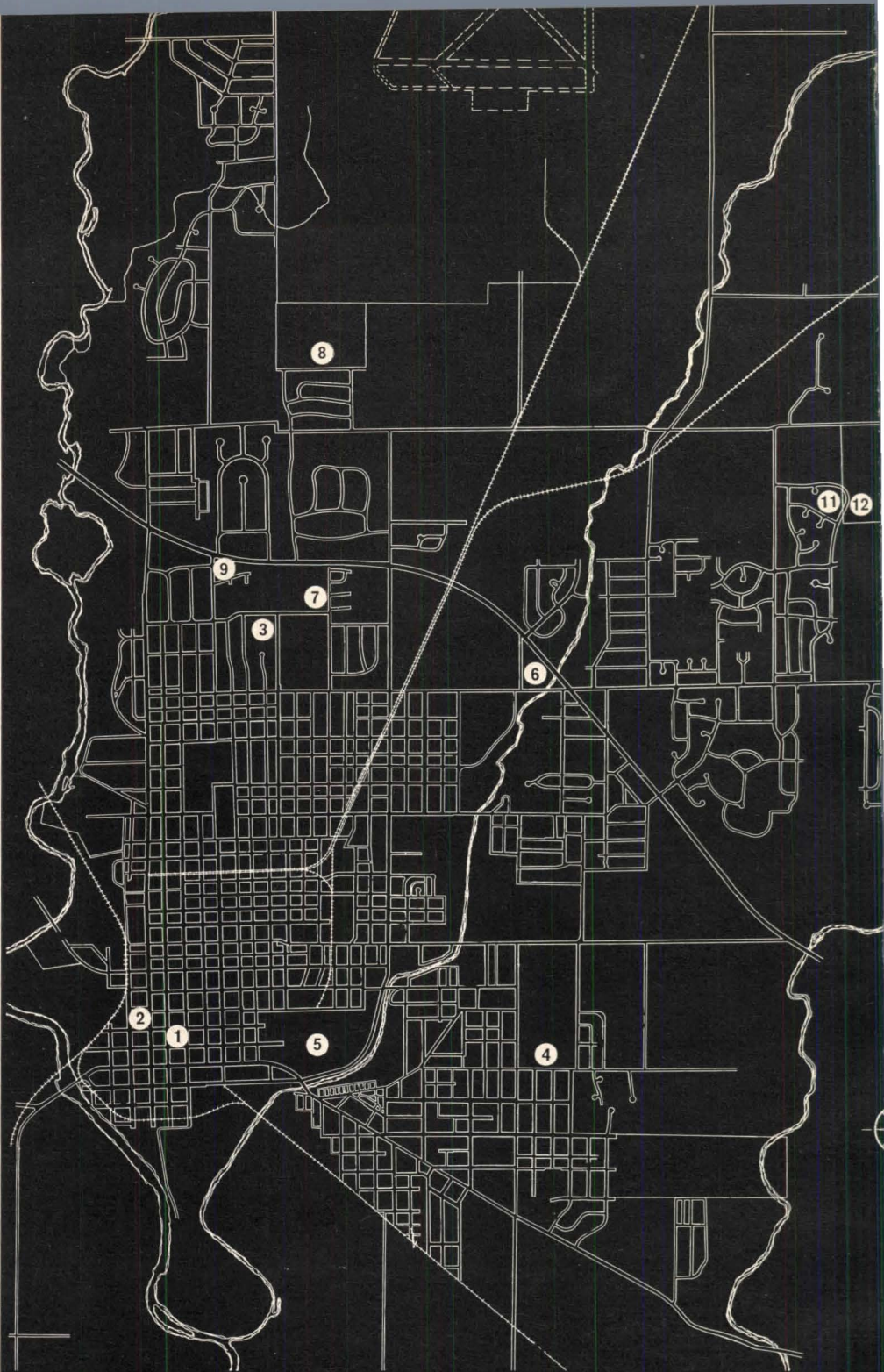
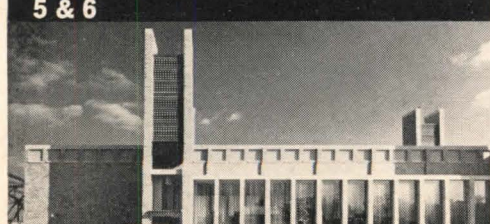
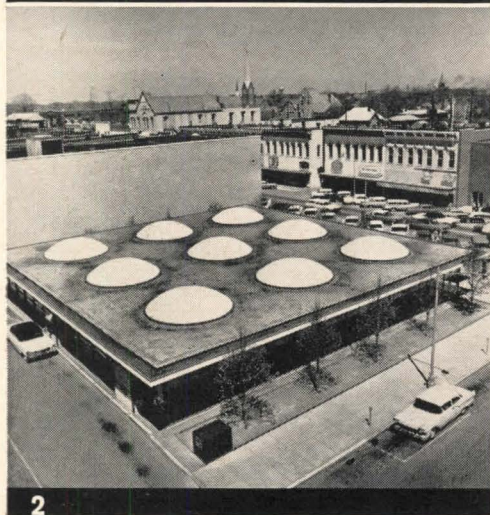
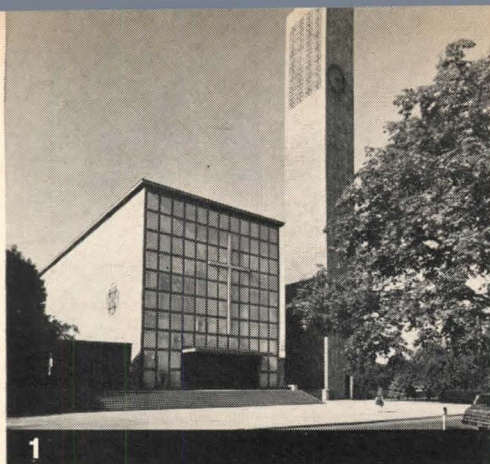
#### FACTS AND FIGURES

Highfield House, 4000 North Charles Street, Baltimore, Md. Owner: Metropolitan Structures, Inc. Architect: Mies van der Rohe. Engineers: Farkas and Barron (structural); Cosentini Associates (mechanical). General contractor: Metropolitan Builders, Inc. Rental range: from \$137 per month for efficiency to \$485 for three-bedroom unit. Building area: 265,800 sq. ft. Cost: \$4,100,000 (including fees and financing charges). PHOTOGRAPHS: Norman R.C. McGrath.







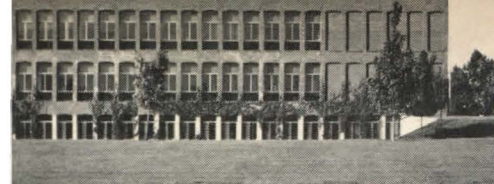


# COLUMBUS, INDIANA

*The town that architecture made famous*

- ① First Christian Church, 1941, Eliel and Eero Saarinen. ② Irwin Union Bank, 1955, Eero Saarinen & Associates. ③ Schmitt Elementary School, 1956, Harry Weese & Associates. ④ McDowell Elementary School, 1960, John Carl Warnecke & Associates. ⑤ Testing Laboratory, Cummins Engine Company, 1960, Weese. ⑥ Eastbrook Branch, Irwin Union Bank, 1961, Weese. ⑦ Northside Junior High School, 1961, Weese. ⑧ Parkside Elementary School, 1962, The Architects Collaborative. ⑨ North Christian Church, 1964, Eero Saarinen. ⑩ Community Golf Club, 1965, Weese. ⑪ First Baptist Church, 1965, Weese. ⑫ Richards Elementary School, 1965, Edward Larrabee Barnes.





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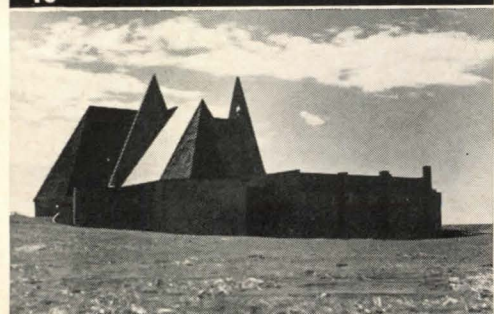
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9



10



11 & 12



**A**N architectural guide to almost any county seat in Indiana would have little to show except the county courthouse and the poor farm. But Columbus—typical of them all in many respects—has more than 20 buildings (some of them shown at left) that have attracted national attention.

Back in October, 1955, the FORUM published an eight-page review of the "forward-looking architecture" there—and that was only the beginning. In the ten years since then Columbus has averaged two landmarks per year, and has more noteworthy projects now than ever before.

Columbus owes its remarkable collection of modern architecture largely to its remarkable first family, the Irwins, who have made their fortune in banking and in the Cummins Engine Company, world's largest producer of diesels. Present head of the Irwin domains is Irwin Miller (right)—Yale man and Oxford scholar, golfer and violinist. At 55, Miller has served on the governing boards of Yale and Butler Universities, AT&T and Equitable Life, and presided over the National Council of Churches (the only layman to do so).

The side of Miller's active mind that has had the greatest impact on his home town (except perhaps for his skill at managing its biggest industry) is his interest in architecture. His first close encounter with modern architecture came in 1940, when Eliel and Eero Saarinen designed the Tabernacle Church of Christ, now First Christian Church (1), to which the Irwins contributed generously.

It was not until the 1950's that Miller commissioned a building of his own, selecting Eero Saarinen for the Irwin Union Bank (2), only a block from the famous church. About that time the town completed its new high school—by a firm best known for the quantity of schools it produced—and Miller decided that better things could be done.

To inspire better things, the Cummins Foundation made an unusual offer: it would pay the architectural fees for any subsequent school if the school board

would select an architect from a list of six or so, drawn up anew for each school by a two-man panel of nationally known architects. The architect selected was to be given control over everything from site planning to draperies—as well as future additions—and allowed 12 months for design and working drawings.

So far, the school board has never turned down the offer. Five schools (3, 4, 7, 8, and 12) have been built this way, and a sixth (by Gunnar Birkerts) will soon be started. In answer to the popular fear that exceptional schools must be expensive, school officials report that they are not only cheaper to build and maintain than schools in nearby towns, but valuable in attracting teachers and administrators.

Miller's influence is also visible elsewhere in town. Harry Weese was commissioned to design new factory buildings for Cummins (5) and branches for the Irwin Union Bank (6 and page 45). As chairman of the architectural committee of the new North Christian Church (9),



Miller helped to choose his old friend Saarinen, who made final revisions in its design only days before he died. Just this year, the Cummins Company gave the city a verandaed clubhouse by Weese (10), along with a golf course by Robert Trent Jones.

Columbus does have a few good buildings that Miller is not connected with in some way. In 1959 the Hamilton Foundation (another local philanthropy concerned about design) gave the town an ice rink with a playful clubhouse by Weese. The First Baptist Church (11), also by Weese, is the most striking evidence to date that Miller's enthusiasm is rubbing off on others.



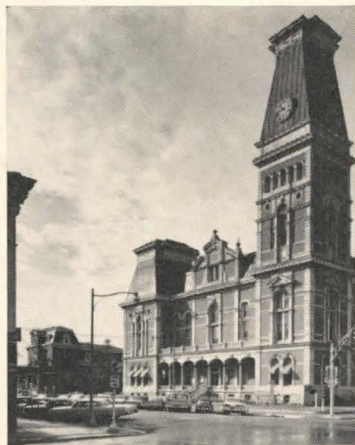




# Columbus' first modern buildings opened up public spaces in its dense downtown core

The 19th century core of Columbus was built up tightly around the courthouse, the first reason for its existence. The primary role of the courthouse (below and left in aerial) is proclaimed in its heroic scale and ornate carpentry and in its tower, visible for miles across the prairie.

The town's prosperity, however, came in with the railroad. Location at a key junction along the route from Indianapolis to Louisville (and ultimately from Chicago to the South) gave Columbus commercial dominance over several neighboring counties. It was this prosperity that lined the downtown streets with ex-



uberant Victorian commercial buildings like the original Irwin Block (right) and the first Irwin Bank (bottom right), in which Irwin Miller has his Girard-designed offices.

Only the two pivots of the town's importance were allowed to break through the tight-knit grid pattern. The freestanding form of the courthouse demanded a bit of open space, and the railroad drilled right through the core on a diagonal, scattering unusable triangles along its path. (They are still traceable on the aerial view—upper right to lower left—although the trains themselves have been banished.)

The greatest contribution of Columbus' first modern building, the First Christian Church, (foreground of aerial view) was a well-designed public open space near the center of town. Like Eliel Saarinen's masterwork at Cranbrook, this church was as much a series of well-contained gardens as a series of serene building forms. But here there



was no sweeping landscape, only 1.5 acres on which to build a large church, with school and community facilities of impressive size even by today's standards.

The Saarinens placed the church itself on the eastern edge of the block—leaving most of the site for a sunken garden, across

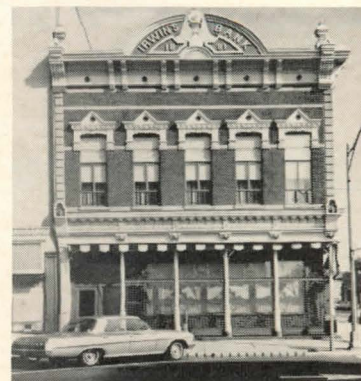


which the Sunday School wing was carried on massive Nordic pilotis. The larger portion of the garden serves as a well-contained green plaza for the dour old city hall across the street. The austere campanile indicates the location of this civic oasis (top photo) as it symbolizes the aspirations of the church.

The garden was once more of an oasis than it is now. A reflecting pool originally covered the major part of the sunken garden, adding movement and reflection to the Saarinens' gifts of horizontal and vertical space. The pool has recently been filled and seeded by a congregation

more concerned about maintenance than beauty, but even without water the spaces remain handsome.

Another downtown open space, just now reaching its final form, is contributed by the Irwin Union Bank (upper right in aerial view). For ten years this Eero Saarinen building has provided a pleasant break in the dense construction of downtown. Its transparent banking room, brick-paved and surrounded with planting, forms a sort of covered piazza. (Necessary work space is in the basement and the building next door, reached by a glazed passage). Now an old building to the west has been torn down to make way for a grove of trees between the bank and its parking lot, a formal plaza that will help to link the present center of downtown with a proposed urban renewal development to the west.









**More recent landmarks  
are focal points in the  
diffused development  
on the outskirts of town**

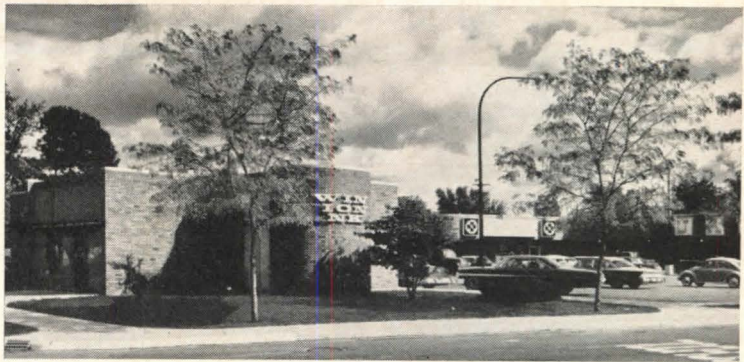
Most of Columbus' new construction since World War II has been spread across the prairies to the north and east of town (growth to the south and west being limited by flood plains). Development at these edges has followed the all-too-familiar pattern of single-family houses strung loosely along streets that depart limply from the discipline of the original grid. Columbus' expansion has been accompanied by rising levels of income, and many of the newer houses are valuable, though few are handsome.

The main street of newer Columbus is the U. S. Route 31 bypass, which makes a wide arc through the northeast quadrant of town. Swallowed up by expanding development and superseded by a superbypass (Interstate 65) to the west, the road has become a commercial strip.

The most effective focal point in all this sprawl is Eero Saarinen's North Christian Church, (left) rising alongside the road where it enters town from the north. This strategic position makes the church a visual objective from either direction along the road, and its piercing form—the same from all sides—makes the most of its position.

The church stands isolated from the fussy "ranch houses" of the neighborhood, obviously transcending their day-to-day activities. Its self-contained form is unencumbered by wings, the worldly complexity of offices and classrooms tucked away beneath the stadium seating of the church itself and sheltered by its all-encompassing roof.

The newest focal point amid the residential scatter is Weese's

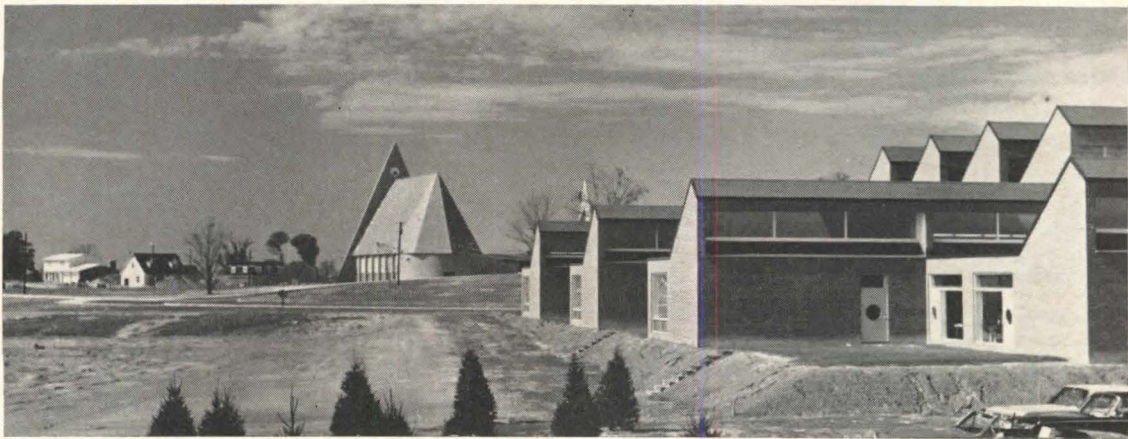


new First Baptist Church (below). His congregation wisely chose a low knoll on the northeast frontier of town, across the street from a new elementary school by Edward Larrabee Barnes. Together the two buildings, with their violently angular silhouettes, look like an expressionist miniature of a medieval village; even the pointed evergreens contribute to the effect. Although the contortions of the church and the overpowering scale of the school may be hard to accept, one must respect what they do for their otherwise dull new neighborhood.

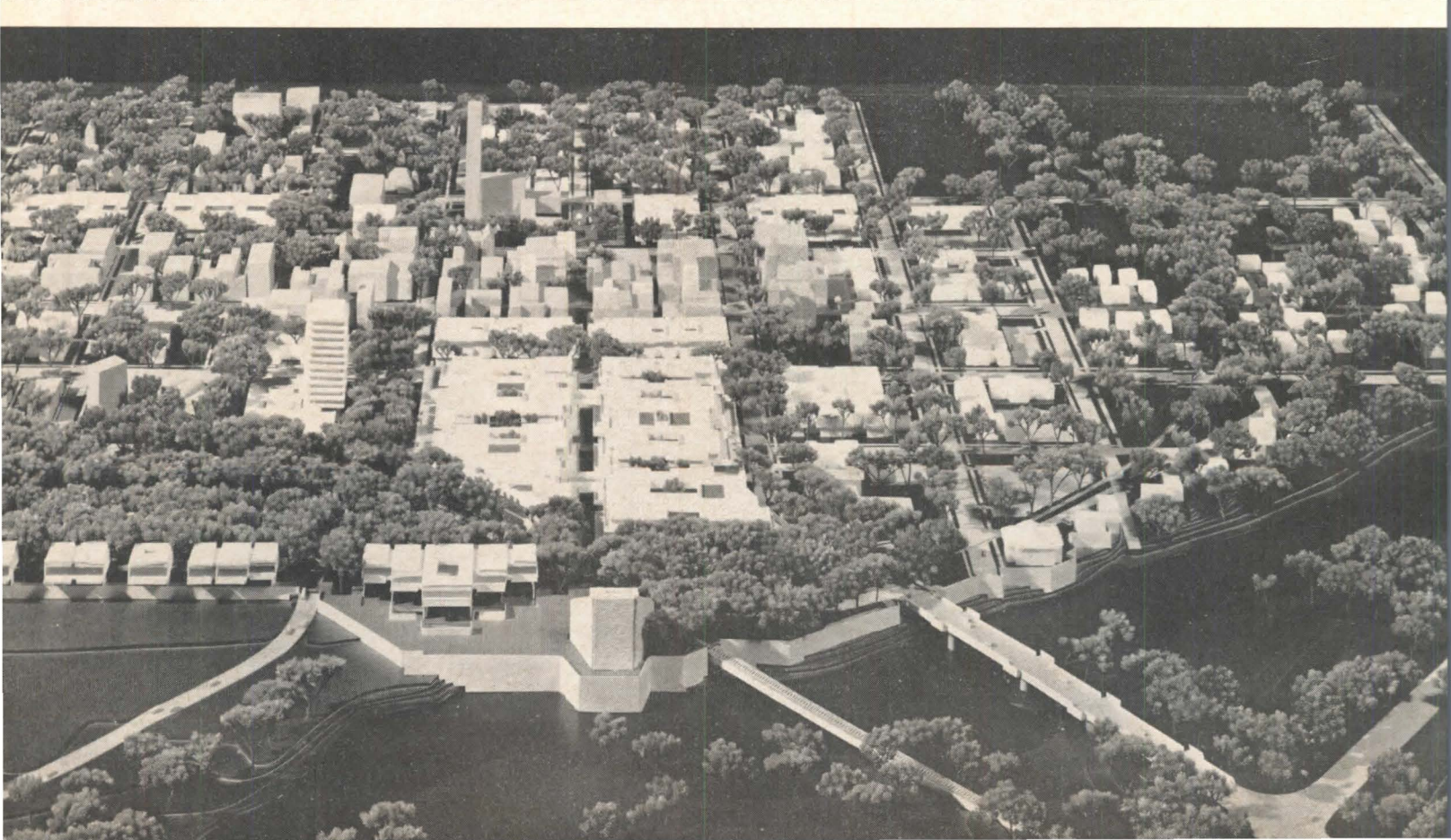
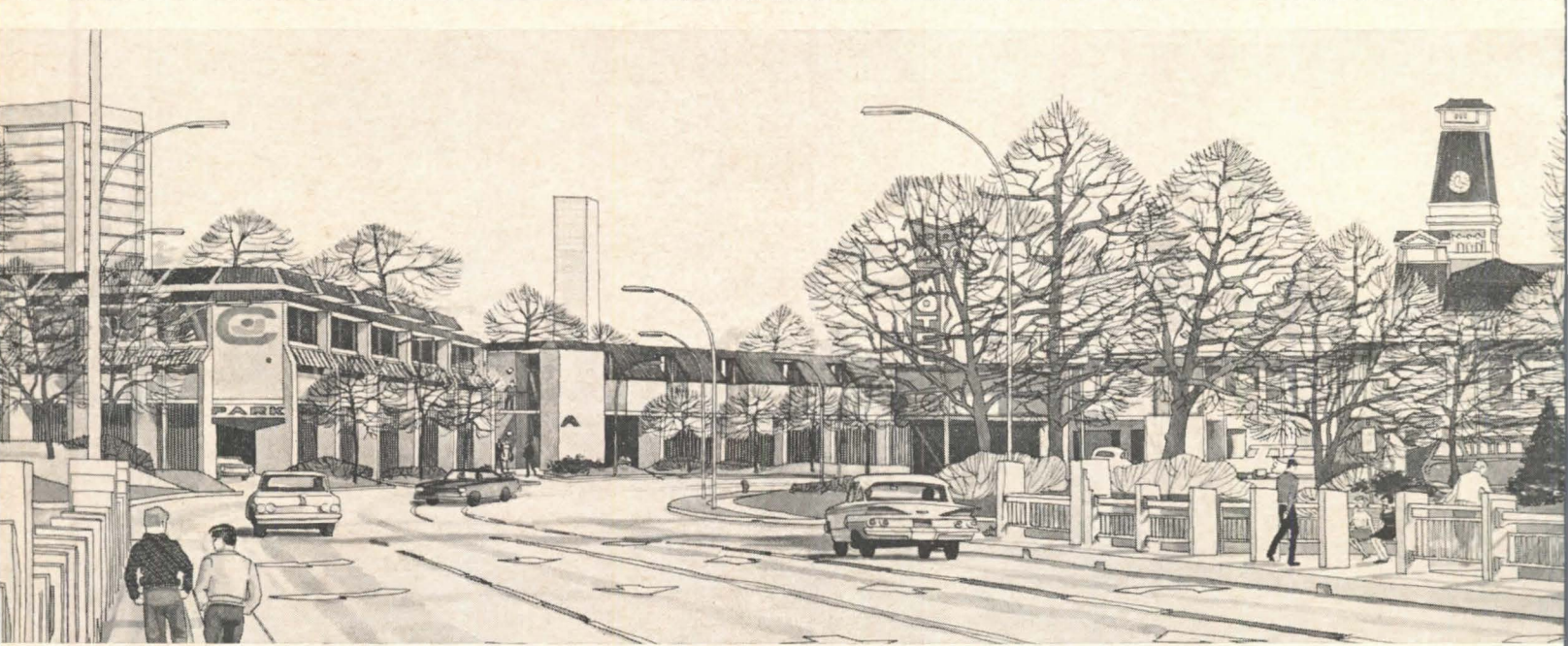
The new schools, like the one by Barnes, have often been architectural rallying points for low-density areas. All of the recent ones have been built in conjunction with public parks, under a

regular program of shared recreation facilities.

Where the new architecture had to mingle with the typical commercial buildings of the urban fringe, results were mixed. Weese's two branch banks show the effects of two such situations. In one case (top), the bank had some control over an entire shopping center—enough to set up a standard motif of curved brick walls, which enclose the bank and reappear on the shops as a sinuous, unifying parapet; even block-busting signs cannot completely destroy the ensemble. In the second case (above) Weese could do no more than try to dominate a piece of disorganized commercial development—against the crushing competition of a nearby steel-truss bridge.









**Columbus has turned its attention to plans for keeping the center of activity downtown**

Columbus may have enough fine buildings to make a visit rewarding, but it can hardly be considered a beautiful town—at least not yet. Crossing the bridge from the west, the main entrance to town from new Interstate 65 (top left), one meets a typical montage of signs and a disorganized straggle of buildings.

A study of the town's "design potentials" by graduate students at the University of Illinois indicates some things that might be done to the area at the end of this bridge, the downtown core of Columbus. It proposes creation of four superblocks (map below) by converting existing streets to malls (after a southern bypass has relieved them of through traffic). Even the spatial interest of the alleys (right) would be turned to advantage.

The western-most block—now the backyard of the main commercial district—would be completely rebuilt, with attractive apartment units over stores, and parking structures along the main access roads (sketch at left). A new resident tower (left in sketch) would join the existing courthouse and church tower in defining a triangular center of activity. A commuter college would be situated along the flood wall, sharing an auditorium with the community.

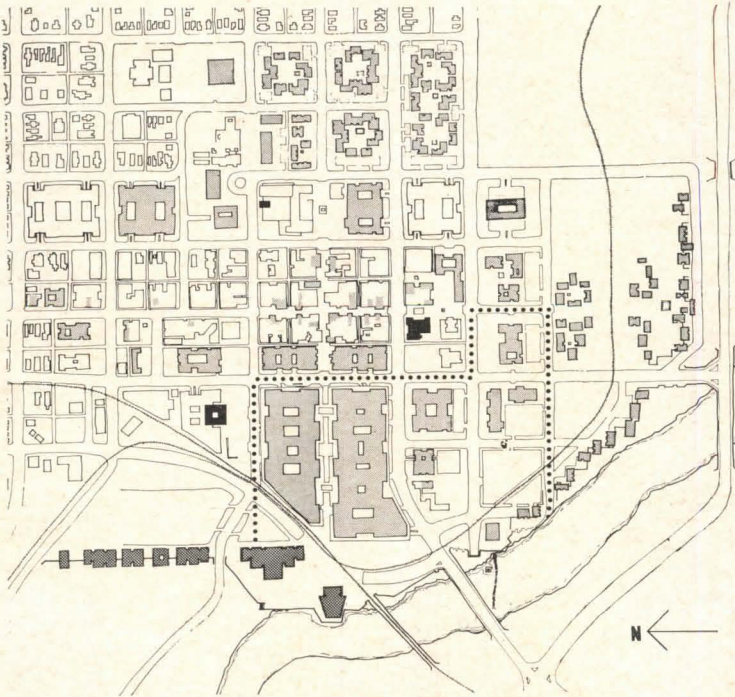
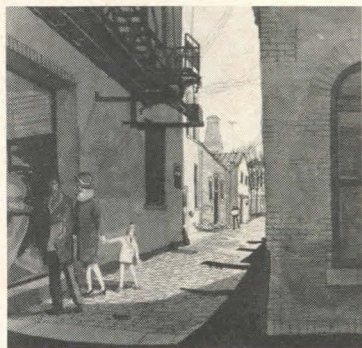
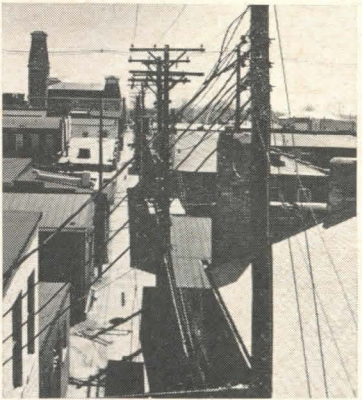
These student proposals will soon be followed by real plans



for renewal of a nine-block area between the present commercial center and the river (inside dotted line on map). The Columbus Redevelopment Board has just received approval and advance funds from Washington. While this proposal was pending, one of these blocks was chosen as the site of a new sub-regional post office by Eero Saarinen & Associates. Choice of both site and architect (whose fees will be contributed by the Cummins Foundation) were victories for the supporters of downtown renewal.

Along with the usual problems of obsolescence and competition from newer areas, downtown Columbus has the disadvantage of being off-center. Flood plains to the west and south have limited

expansion to one quadrant, leaving the old core off in a corner. Lopsided growth of the town has left the core with one great asset: a natural open space right



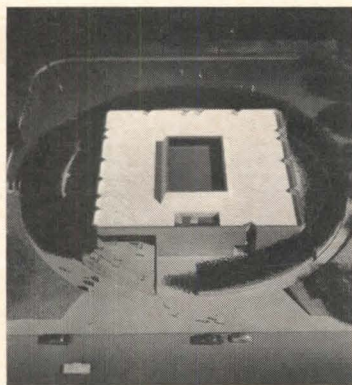
at its edge. North of the bridge, where the flood plain widens on the town side, there used to be a village of squatters shacks known as Death Valley.

A few years ago, as civic awareness increased and natural open space decreased, the shanties were bought for the city through a public subscription drive. Today Death Valley has become Mill Race Park (top of page)—still undeveloped except for a few picnic tables, but ideal just as it is for fishing and other easy-going Hoosier activities.



The transformation of downtown Columbus is not awaiting the making of large plans. A small but significant civic plaza will be created as part of the design for a new county library by I. M. Pei & Associates. Two existing streets will be closed and a turnaround laid out between the library and the First Christian Church (model photo right). On the east side of this new plaza is the old Irwin mansion (likely to be given over to public use); on the west is the contemplated site of a civic auditorium.

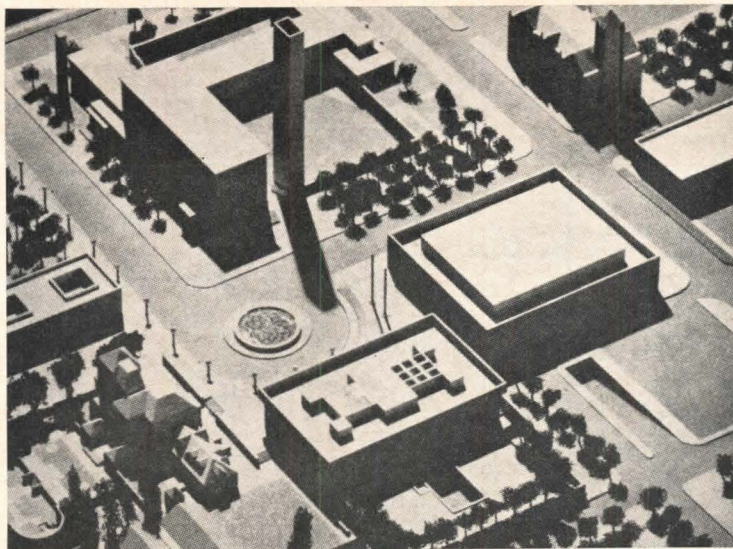
The block to the east of the mansion will be occupied by the first new downtown school in many years, an elementary school by Gunnar Birkerts (model below). His solution to the constricted site is "a school that begins at the sidewalk." An earth berm will separate active play spaces from the street; a dense ring of trees inside that will enclose space for younger children and form the visual envelope of the school; behind



the tree ring will be an almost windowless two-story building, planned for year-round day and night use by adults as well as children.

Meanwhile efforts are being made to preserve the downtown commercial core against the competition of the edge-of-town shopping centers. Cummins has helped to keep the area lively by transforming an old hotel—closed down by new highway-oriented motels—into its international corporate headquarters. With a minimum of heavy alteration, Alexander Girard has turned its drafty bedrooms into airy executive offices.

The most exciting effort to keep the main street busy is a



storefront renovation project, the effect of which is strikingly visible (right) in the first of 17 blockfronts to be completed. This face-lifting, directed by Alexander Girard (whose fee will be donated by the Irwin Union Bank) capitalizes on the one big architectural asset of downtown Columbus, its wealth of Victorian detail.

On this first block front, Girard has eliminated a jungle of competing signs and stretched a neutral canopy across all of the fronts. Each building has been given a different color treatment to emphasize the subtle differences in detail between them. Each tenant store has a new porcelain-enamel sign designed by Girard—some of them whimsical, others (like Singer's) obviously limited by the tenant's wishes. Night lighting thrown up from the top of the canopy will emphasize both the signs and the polychrome ornament.

The secondary purpose of this project is to encourage other owners of old buildings to take pride in them. Its influence can already be seen in some freshly painted buildings on nearby blocks. Their owners have avoided soft pastel colors, relying on sharp blacks and whites, grays, and vivid hues that seem more at home on an American main street.

This spontaneous action is one more sign—along with town policies on schools, parks, and redevelopment—that Miller's ten years of active support for architecture have begun to bear fruit.

"The future of Columbus," Miller acknowledges, "depends on the attitudes of its people. The impact of these buildings on them is very subtle; it may take 100 years to show." For the present, he is sure only that "there is less opposition to modern architecture than ever before."

Nearly everybody in Columbus is aware that it has a remarkable collection of modern buildings. Everybody takes his visiting friends on a Grand Tour, but this has had little effect on the way people live. Harry Weese has designed only two private houses there, of the hundreds that have been built in his years of commuting to Columbus.

School children seem more enthusiastic about modern architecture than their parents. Compositions on architecture by Northside Junior High students, assigned at the FORUM's request, can be summed up with one selection: "We should keep making architecture modern just like we make everything else modern." (But there was an outspoken, if sometimes confused minority: "The North Christian Church looks to me as if it were a restaurant, with its low sweeping roof and its high steeple.")

The most encouraging sign for the future of Columbus is the recent recognition by civic leaders that isolated masterpieces may make the town famous, but never great. There is reason to hope that visitors to Columbus in 1975 will find it a showplace of urban design as well as architecture. —JOHN MORRIS DIXON

**After 10 years, Miller's efforts are beginning to set off an environmental chain reaction**

*All photographs by Balthazar Korab except page 41 right, LIFE Magazine © Time Inc.; pages 42 and 44, Campbell's Studio; pages 46 and 47 model and drawings, Department of Architecture, University of Illinois; page 41 (top), page 43 (bottom), page 46 (top), page 47 (top), John Morris Dixon.*





INDIAN  
GAS & WATER  
COMPANY  
INC.

FRONT STORES.

ECONOMY  
FURNITURE

SINGER

GENE'S

NEAL  
& SONS

SHOES

SHOES

SHOES



**F**OURTEEN months ago, in the Time-Life building's glistening Ponti auditorium, more than 400 architects and their guests heard firsthand the facts of life in the rat-infested slums a few blocks to the north. The meeting, largest in the history of the New York chapter of AIA, was the beginning of a unique and controversial movement to involve architects in the problems of the slums more deeply and more directly than they had ever been involved before.

The movement is the Architects Renewal Committee in Harlem (ARCH), and it was formed on the premise that the poor can be helped to help themselves improve their environment. Its aim is comprehensive planning through self-help community action programs. In the words of Richard Hatch, the 31-year-old architect who first conceived ARCH and is now its executive director, it attempts to

give the poor "some initiatory power to cope with their own problems—to determine what kind of city should be built for them." Hatch believes that architects must recognize that the poor are their urban clients, and so the secondary purpose of ARCH is the reeducation of the architectural profession.

Hatch issued a call for volunteers at the AIA meeting. The response was encouraging enough for him to leave his job as designer for Abbott Merkt & Co., the New York architectural and engineering firm, and give the movement his full time. He organized the volunteers into four groups of 12 to 16 architects and planners each, and marched them on four neighborhoods in Harlem and upper Manhattan involved with urban renewal.

ARCH quickly found how difficult its self-appointed task would be. The volunteers encountered suspicion that they

were agents of paternalistic city agencies, and resentment at what was often viewed as outside interference. The kind of strong community organizations around which residents could be rallied were conspicuously lacking.

But in one of the four neighborhoods there was such an organization, set up to deal with precisely the kind of problem ARCH was designed to attack. The neighborhood was in West Harlem, and was part of the huge Morningside renewal area in the vicinity of Columbia University. It contained a dense concentration of the poor: a single block housed 3,200 families, and 40 per cent of the residents had annual incomes of less than \$3,000. The Morningside plan proposed immediate clearance of 80 per cent of the neighborhood. The West Harlem Community Organization was formed to fight the threat of demolition.

ARCH set about aiding, abet-

## HARLEM'S STREETCORNER ARCHITECTS

Led by Richard Hatch, the intense figure at right, they are dedicated to a more direct role for their profession in the problems of the nation's slums. BY ANDREA LOPEN

Miss Lopen, a former member of the Forum's editorial staff, is now engaged in free-lance writing and research in the field of urban affairs.



NORMAN R.C. MCGRATH



ting, and encouraging the Community Organization. It prepared a detailed critique of the renewal plan, proposing that at least 76 per cent of the dwellings scheduled to be torn down be rehabilitated instead, and that more low-income relocation housing be built. ARCH also opposed the widening of Eighth Avenue on grounds it would become an impenetrable barrier between the Negro ghetto on one side and the white middle class clustered around Columbia on the other. The volunteers spent months explaining their proposals to the residents, always stressing the urgency of direct citizen action.

The result was that the West Harlem residents packed the Board of Estimate hearing on the Morningside plan last March and won some encouraging, if tentative, concessions. The board recommended for the increase in low-income housing and against the Eighth Avenue widening. ARCH is now working on an alternative plan, again stressing rehabilitation, which it hopes to present to the city before the city applies for Federal funds.

#### Long, active summer

ARCH, meanwhile, had acquired foundation support. Hatch hired a full-time staff of three, moved into a third floor walk-up office (with drafting room) in the center of Harlem, and launched an ambitious summer program. Its keystone was a workshop for 20 architectural students, drawn from such schools as Columbia, New York University, Pratt Institute, Yale and Harvard. Hatch had spoken at the Harvard Urban Design Conference in the spring, urging that fledgling architects be required to do "clinical work" in the neighborhoods of the poor. The summer workshop was intended to be just such a clinic.

The students were assigned to work with residents of the urban renewal areas in which ARCH was active. Their task was to develop plans, reports, and documents which would reflect the real need and demands of the ghetto poor—a basic reference arsenal for the subsequent use of

community organizations and ARCH volunteers.

Some of the documents were intended to serve as a firm factual base for planning and design: a "diagnostic history" of Harlem; a handbook of neighborhood-by-neighborhood statistics covering the economic and social characteristics of the population and the nature of the housing supply; a report of the housing needs of single individuals, based on a survey of 100 tenants and 27 rooming houses threatened by renewal, and another on the needs of the elderly. Some were for the residents themselves, including a "tenants' handbook" containing information on landlord and tenant responsibilities, public agencies, rent control, housing clinics, and tenants councils.

The students undertook a depth study of the economics of rehabilitation in four tenement blocks in the Millbank area, one of Harlem's worst slums. They investigated the costs of maintaining the tenements, the costs of rehabilitation at various building life expectancies, and the effect of devices such as tax abatement and FHA mortgage insurance on rental levels. Their sole effort at design involved the Pierhead area along the Hudson River above 125th Street, which ARCH had recommended as a relocation housing site; the students collected program data, and took their proposals from land use plans to a three-dimensional model.

Some of the leg work for these studies was done by teenagers from Haryou-Act Inc., the principal action group in Harlem financed by federal anti-poverty funds. Next spring, ARCH is planning a technical training school for Negro high school graduates in cooperation with Haryou. Administered by Cooper Union, the school will train draftsmen, surveyors, and estimators for architectural and engineering offices. ARCH also has developed a syllabus for a demonstration course in urban planning which will be tried on a seventh grade civics class in Harlem this winter. The hope is that the course eventually will be-

come a permanent part of the curriculum in the New York public school system.

ARCH has attracted its share of criticism in its first year of operation both from inside and out. One volunteer, a Negro architect in charge of ARCH's activities in the neighborhood where he was reared, feels that too few of the volunteers have or seek direct knowledge of the ghetto community. Too much time is spent on fact-finding reports, he says, and too little getting acquainted with community leaders and organizations. Some of the summer clinic students complain that Hatch misled them into believing they would be designing for the poor, not researching about them.

Hatch regards this last complaint as evidence that the students have been miseducated. "They can't comprehend why it's necessary to talk to people to learn their needs," he says. "They only want to design, to make a building look good. They don't understand that esthetic usage should reflect social principle."

#### Edwardian reformer

Part of the controversy surrounding ARCH can be traced directly to Richard Hatch, who is credited by those who have worked with him for brains, zeal, promotional genius—and also for opportunism, brashness, and far-out ideas. With his Edwardian cut of clothing, scraggly hair, and air of hauteur, he seems an unlikely candidate to lead a campaign against social injustice.

Hatch, however, has been involved in such campaigns since his high school days in Great Neck, Long Island. In 1948, he and some school friends undertook a door-to-door survey of slum housing in Great Neck, taking pictures as they went. The resulting exposé in the *Suffolk County News* helped bring about replacement of the hovels with public housing. Later Hatch was American Labor Party representative in Great Neck. Today his politics are a bit tamer; when questioned about them, he describes himself as a "latter-day Syndicalist," but admits to a

greater regard for social structure and strategy than that shown by the radical New Left of the Berkeley variety.

Hatch acquired a B.A. at Harvard and an architectural degree from the University of Pennsylvania, then spent four years in Italy. He went to work for Abbott, Merkt on his return to the U.S. in 1963, and pursued his involvement with social action as a volunteer worker for the Student Non-Violent Coordinating Committee. It was the SNCC connection which first brought him into contact with the Harlem community groups, whom he advised on renewal problems. This led directly to the AIA meeting last fall, and thus to ARCH.

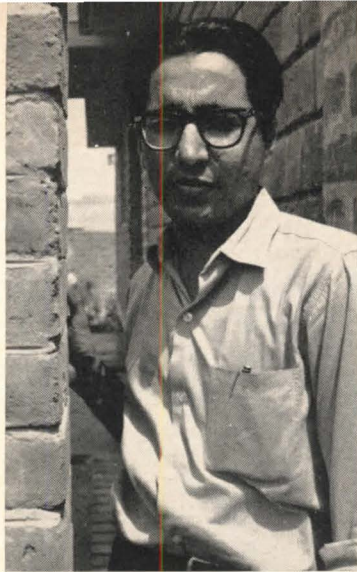
#### No simple solutions

It is a little too early to tell where ARCH will lead. The first year has been one of trial, error, organization—and some accomplishment. The accomplishment is all the more impressive when one considers the size of ARCH's staff and resources. (Hatch, as executive director, is primarily a thinker and promoter. He leaves the running of the store to Jack Bailey, an able but obviously overworked young architect formerly on the staff of the Boston Renewal Authority.)

ARCH's impact on its own volunteers has been considerable. "Working for ARCH is more real to me, more human, than creating isolated individual buildings," one said recently. He and several others who work for large New York architectural firms said they would give up their positions without hesitation if ARCH offered paid, full-time jobs. Architects in Boston and San Francisco have been sufficiently impressed with ARCH's beginnings to express interest in launching similar movements in their own cities' slums.

Architects, Hatch pronounced recently, need to realize that "there are no simple solutions" to problems in environmental design. At the very least, ARCH has demonstrated the truth of that statement on the streetcorners of the Harlem slums.





# DOSHI

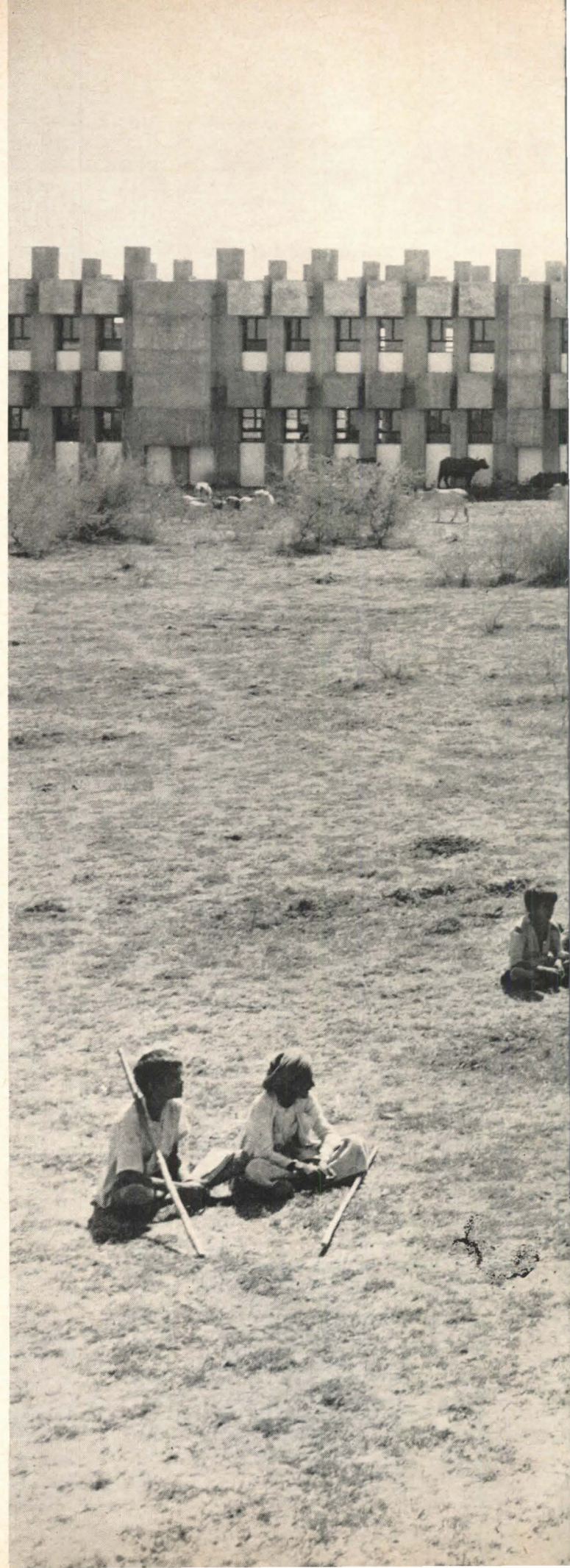
## Architecture for a time of change

The young man leaning against the gate to the house (above) which he designed for himself and his family in Ahmedabad, 450 miles southwest of New Delhi, in 1960, is one of the most talented members of a new generation of Indian architects.

His name is Balkrishna Vithaldas Doshi; he was born 38 years ago in Poona, India. He received much of his training in the studio of Le Corbusier (and helped design and supervise several of Le Corbusier's structures that have since been built in Chandigarh to the north and in Ahmedabad). When Doshi is not lecturing at U.S. universities or participating in design conferences around the globe, he serves as the honorary director of the School of Architecture at Ahmedabad (located at present in the museum built there by Le Corbusier a dozen years ago); but most of his time is spent in his own architectural practice in that city on projects intended to help solve the seemingly insoluble problems of his vast and desperately impoverished nation.

What makes Doshi much more than a "mere" Corbu-disciple is

Laboratories and Workshop for Gujarat University, Ahmedabad (1962-64); see page 58. Photo by Christian Staub.









his determination to continue one aspect of Le Corbusier's work that the latter was able only to touch upon in sketches and unbuilt projects done in the 1920's and 1930's. What Doshi is determined to do is to develop new "systems" of architecture and urban design that will make what we build today totally in harmony with the fantastic and accelerating rate of change that differentiates our century from all earlier ages of mankind.

That difference has been most dramatically illustrated recently by Dr. Philip Hauser, the population expert, when he pointed out that the increase in the inhabitants of the earth, from the Paleolithic era to the very recent past, proceeded at the leisurely rate of 2 per cent per millennium; but that today the average increase in the world's population is a staggering 2 per cent per year!

Nowhere on earth is this terrifying statistic more clearly in evidence than in Doshi's India. Since the country achieved its independence in 1947, 18 years ago, the population of India alone (without Pakistan) has grown from 300 million to about 480 million today.

"Except for the perception of contained light," Doshi says, "there is nothing the architecture of the present day has in common with that of the historical past. . . . The village of yesterday is the single building of today. The city of today will be the single building of tomorrow. . . . Form and space need to become ever-changing, ever-evolving, allowing themselves to accept internal and external additions, subtractions, multiplications. . . ."

#### A new dimension

Before Doshi came to this fundamental realization, about four years ago, his work was similar to that of any perceptive, sensitive, and talented disciple of Le Corbusier: He built isolated structures or small groups of houses that employed Le Corbusier's flawless sense of detail, of materials, of color, and of form. Because these early build-

ings by Doshi are not well known in the U.S., we show some of them at right, with the architect's own descriptive comments.

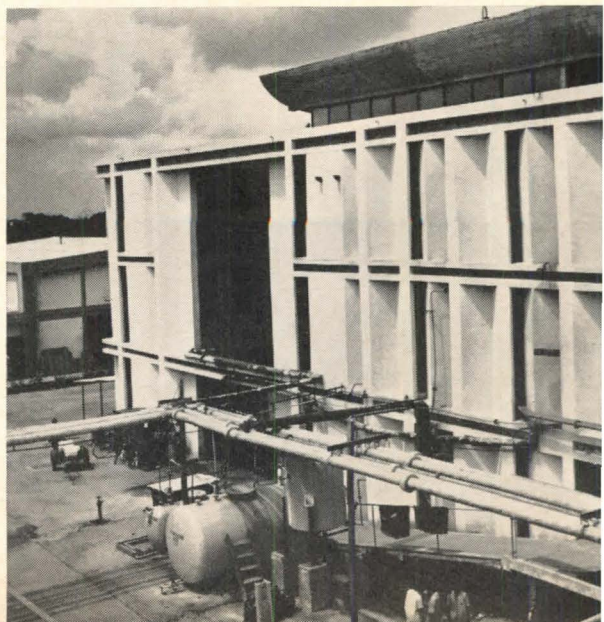
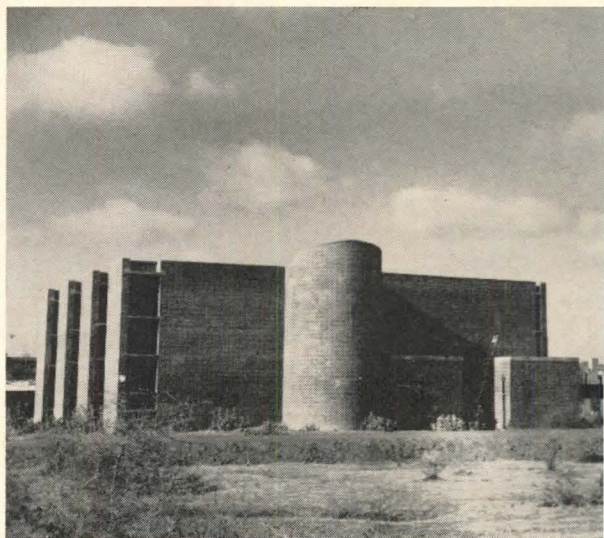
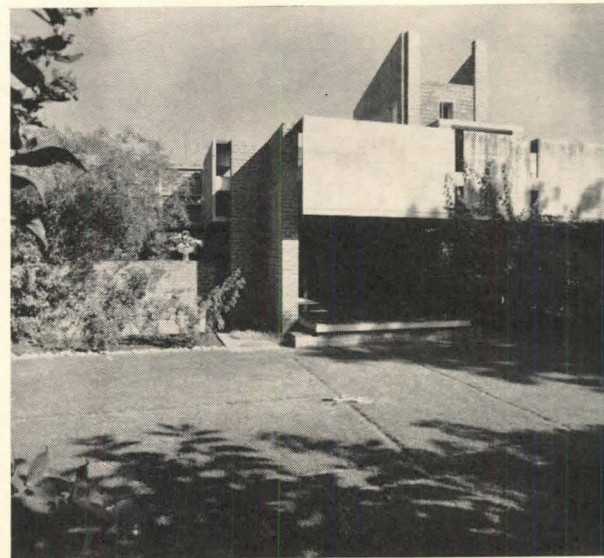
But ever since 1961 or thereabouts, Doshi's work has begun to take on a new dimension: time. His buildings, or complexes of buildings, are no longer designed to be finite, complete in themselves on opening day. They are designed to be little more than the first steps in a predictable (or possibly *unpredictable*) succession of changes and additions—predictable in the sense that Doshi knows such changes and additions are inevitable, given the facts of life of the 20th and 21st centuries; *unpredictable* in the sense that no one can tell, for sure, *what* forms these changes and additions will take.

#### Seeds of growth

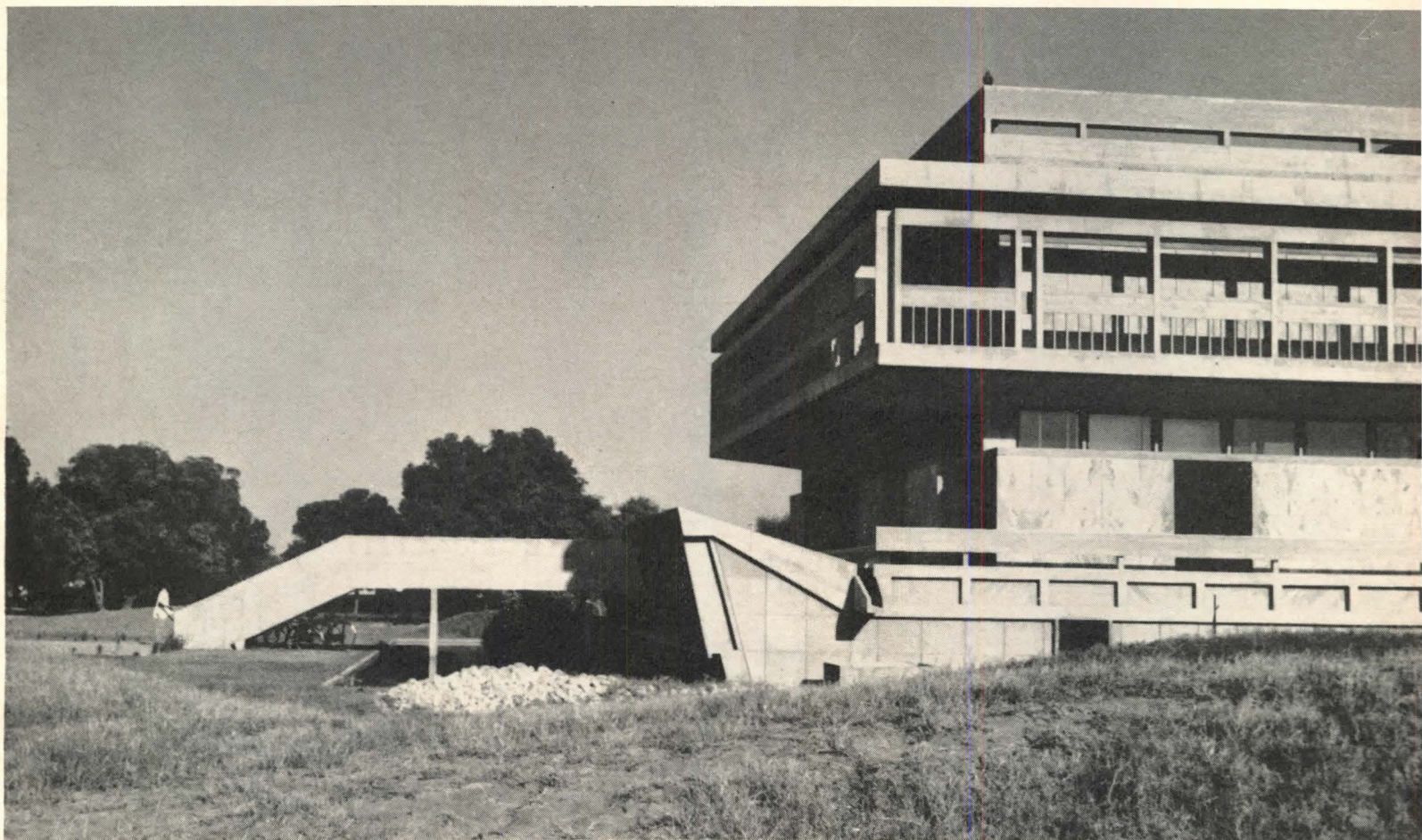
Yet Doshi, in creating his architectural "systems" for a time of constant change, is not abdicating from his form-giving responsibilities as an architect. The projects and structures shown on the remaining four pages are merely points of departure; but by various subtle means—some structural, others spatial, still others urbanistic—Doshi has tried to plant in his "systems" the seeds of their future growth; to help direct future changes as well as invite them; to offer implied suggestions to future generations that will be called upon to make those changes; to facilitate change and growth for the better, and to impede, if possible, change for the worse.

Doshi's objectives—to create an architecture that is the very antithesis of the formal, finite, static compositions of the past—are frighteningly ambitious, and he may fail. But even if he should fail, he will have been one of a small handful of young architects, anywhere in the world today, who have shown us that the old values developed in static societies have become obsolete, and that a time of change demands solutions of a kind never before envisaged. —PETER BLAKE

Doshi's earliest, independent buildings stretched the limits of India's technology far beyond the accepted conventions







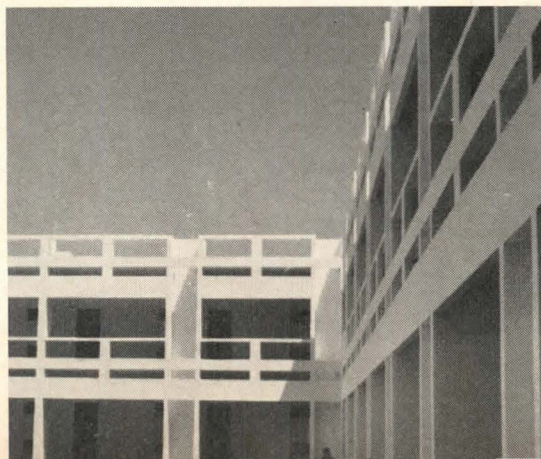
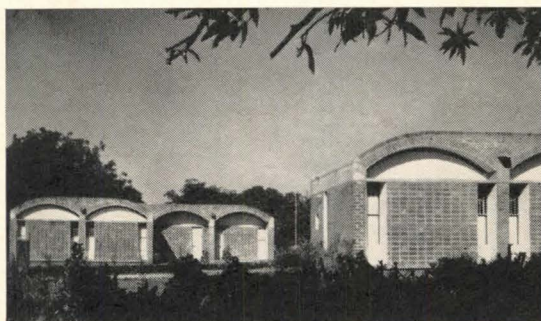
Left (top to bottom): Doshi's own house, Ahmedabad (1960-62). It was designed as a middle-income demonstration unit, contains no glass walls. Photo: Christian Staub.

Gujarat University Workshop, Ahmedabad (1963-64). Interior is roofed by hyperbolic paraboloid umbrellas, and the exterior is brick. Associate Architect: A.D. Raje. Engineer: D.R. Vakil. "Vitamin C" Building, Sarabhai Merck, Ltd., Baroda. Exterior wall is folded to admit light only indirectly. Photo: Clemens Kalischer.

Above: Rare Manuscripts Library, Institute of Indology, Ahmedabad (1960-63). Building is surrounded by water to help reflect light into the interior, and cool working spaces below grade. Associate Architect: Upendra Desai. Photo: Christian Staub.

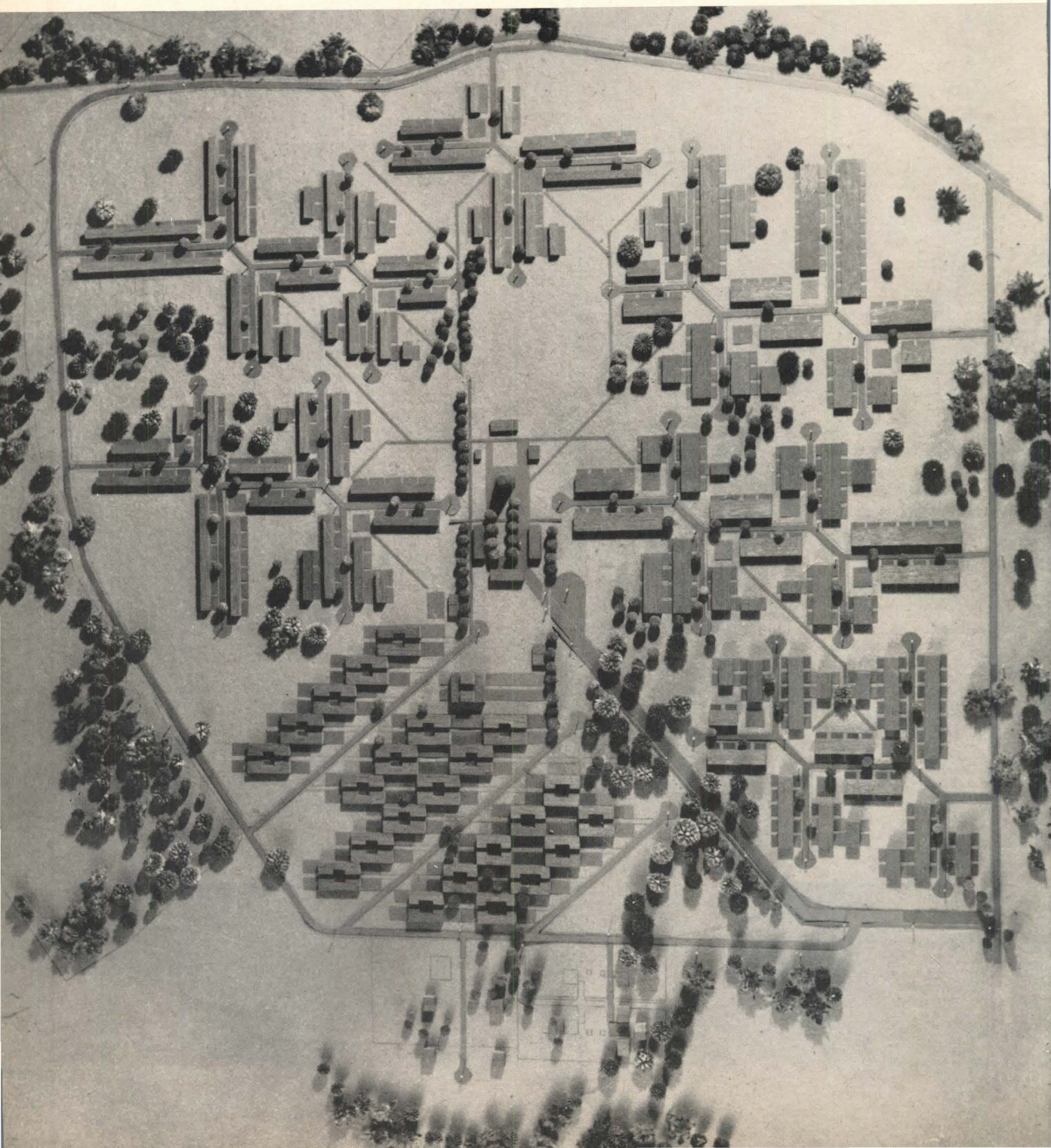
Near right: Housing for Textile Industries, Ahmedabad (1957-64). Brick vaults on brick bearing walls. Associate Architect: A.D. Raje. Hostels at Gujarat University, Ahmedabad (1962). Concrete structures that utilize the facade for sun-control.

Far right: Library and Gymnasium, Shreyas Foundation Trust, Ahmedabad (1957). Photos: Clemens Kalischer.





Knowing that inevitable change was the chief determinant of today's architecture, Doshi began to develop projects that recognized no limits in space or time.





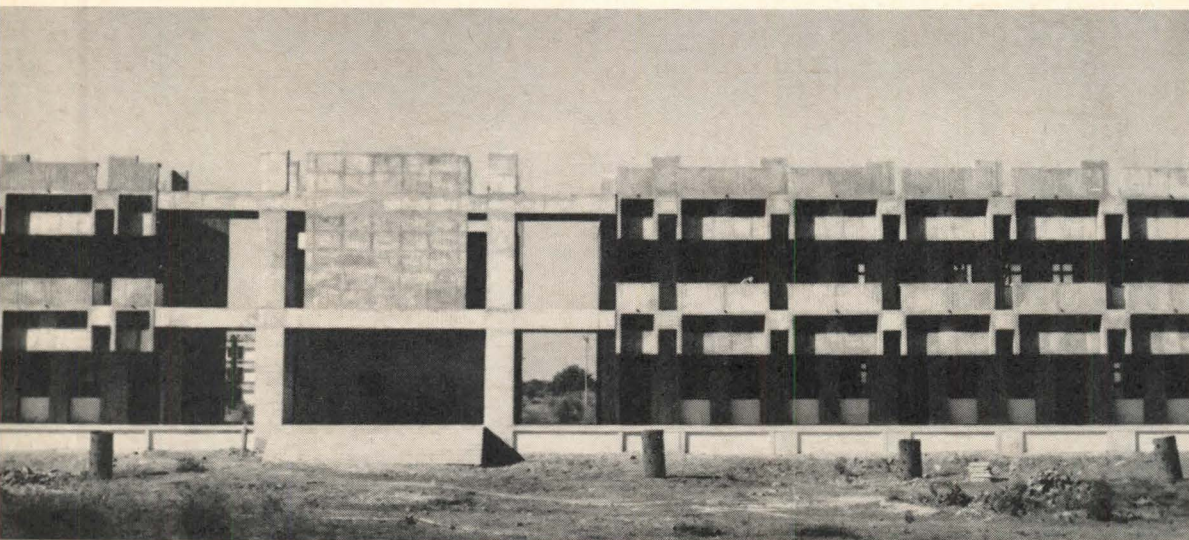
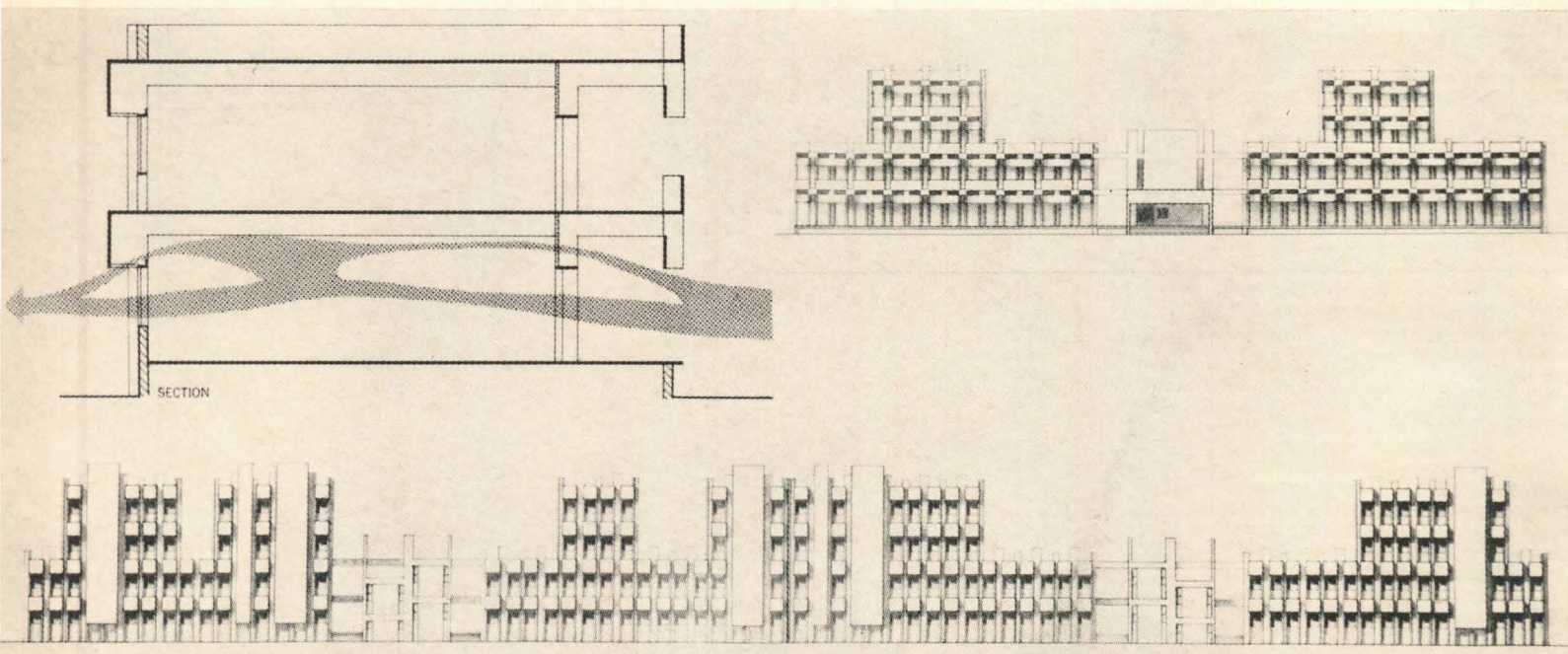
Left: G.S.F.L. Housing Project, Bajwa, near Baroda (1964-65). A three-phase plan (800 families in the first stage, 1,200 in the second, another 1,200 in the third). Vehicular roads surround and occasionally penetrate the community. Because the latter, in its first stages, consists of areas segregated according to income (and Indian custom), a system of diagonal paths was developed to encourage closer integration of these segregated areas, and to encourage future growth (vertically, as well as horizontally) that will tend to obliterate economic and social boundaries. Associate Architects & Engineers: Vastu Shilp Team, Mahendra Raj.

Right: Detail of Laboratories and Workshop of Gujarat University, Ahmedabad. Projecting hoods are "rain-protected 'nostrils'" and "fume cupboards" that exhaust gases to the outside (see section, following page). Associate Architects: A.D. Raje & M.C. Gajjar. Engineers: Raj & Vakil, Bombay. Contractors: Shah & Patwa. Photo: Christian Staub.

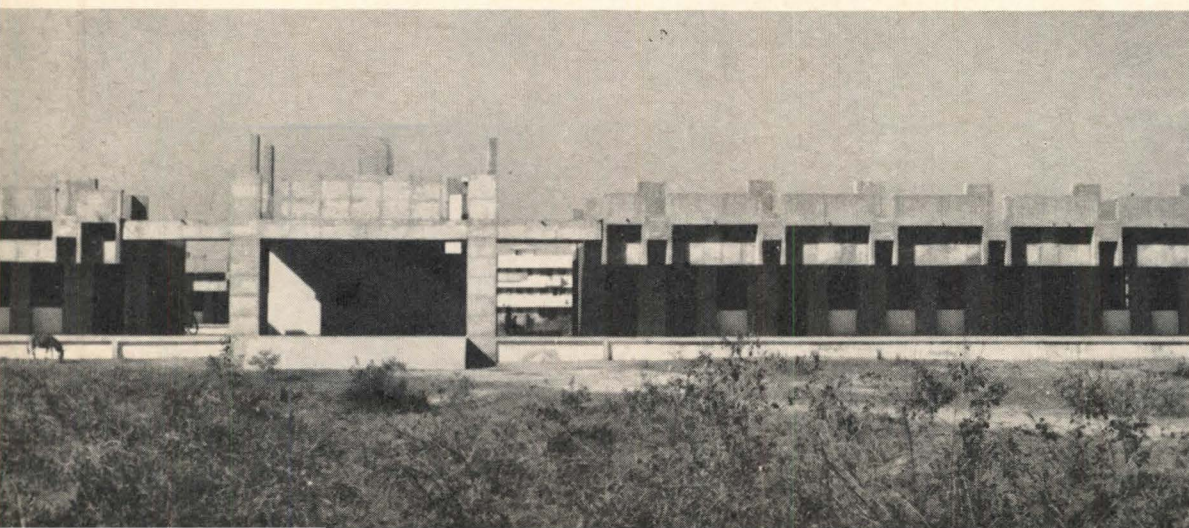




Possible vertical and horizontal expansion  
are guided by an expressed system of structure  
and of vital services



Above (left and right): Drawings and photographs explaining the stage-by-stage growth of the laboratory complex at Gujarat University, Ahmedabad (1962-64). The elevation drawings, above, show the general manner in which the complex is expected to grow. The photograph at right is especially revealing, since it shows how Doshi built the basic structural framework required by future upper stories, and thus attempted to direct the future growth of the building to assure it of a final (or intermediate) form that would satisfy his architectural intentions.

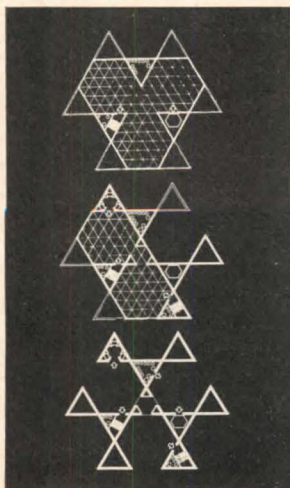
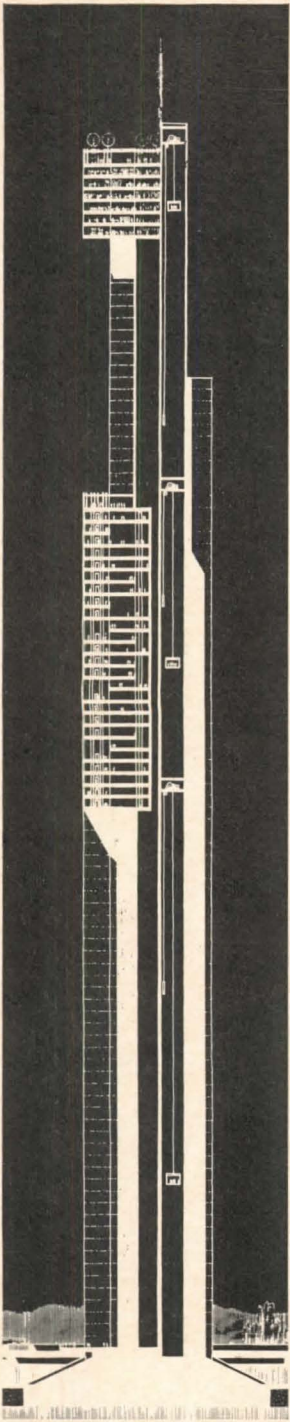


At left, head-on photos of the labs at two stages of development. The wing below is at the one-story level, but ready to receive a second; the wing above has reached two-story height. Doshi, while accepting the inevitability of future change and growth, is clearly attempting to extend his influence, as a form-giver, beyond the present. Photo at right: Clemens Kalischer.

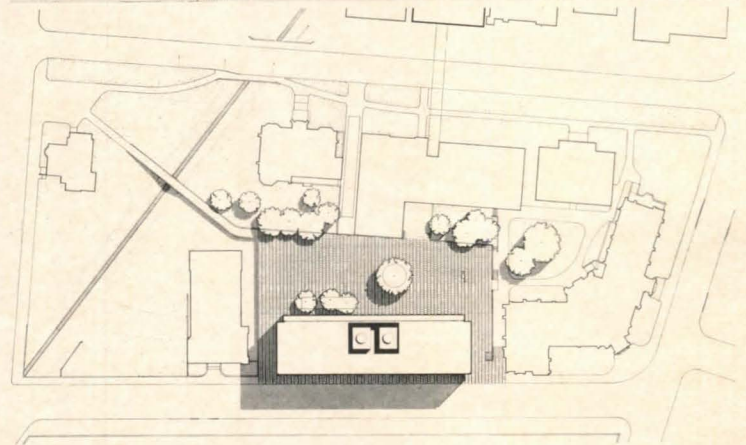
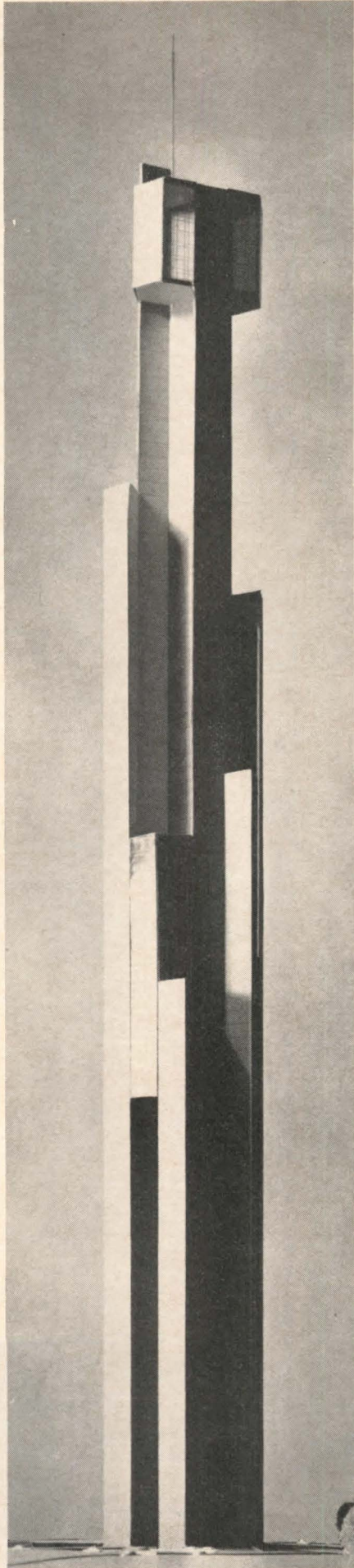




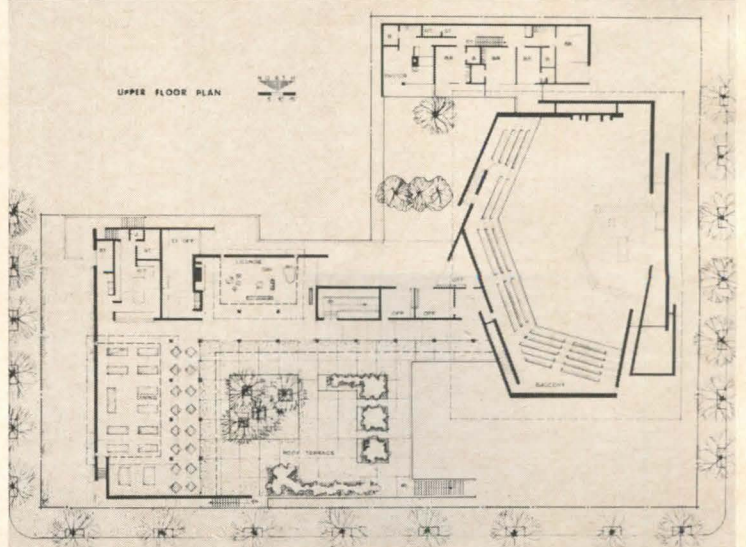
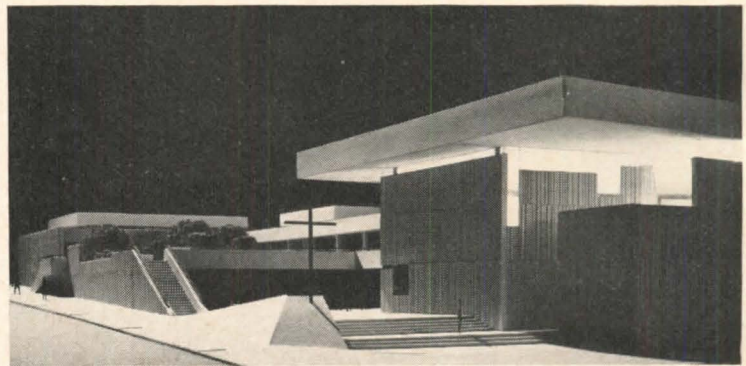




1



2



3



# FORUM CONT'D

NAHRO's next two years gave only a single non-committal paragraph to rent supplements.

It was left to Pennsylvania's Sen. Joseph S. Clark to open the closet door. Clark ringingly praised the rent supplement concept as "the most significant and imaginative proposal in the Housing Act of 1965" and castigated his fellow legislators for withholding its appropriation.

Clark also took direct note of NAHRO's internal division, addressing himself to the public housing officials in the audience. "I urge you to rise above a spirit of parochialism and give this new venture your wholehearted support," he said. "I hope you will view the rent supplement program, not in a spirit of rivalry, but rather in a spirit of partnership, sharing as you do with it a common goal—of decent, safe, and sanitary housing for the poor."

## BENIGN BUILDERS

The National Association of Home Builders last month held its second Interdisciplinary Conference on Environmental Design. The discussion was general, and the participants polite enough not to mention what NAHB members were building in places like Staten Island (page 62). Sample contributions:

► Planner Harold F. Wise proposed that builders be required to submit "sociological feasibility" studies with their development plans. Wise described a development near Washington which he said was physically "beautiful," but had become a "ghetto" because of a dearth of social amenities and programs.

► Dean Martin Meyerson of University of California's College of Environmental Design suggested that American youth be consulted in any attempt to define or achieve a "better environment." Youth, said Meyerson, is "generating a force that is going to run immensely counter to today's market preferences. We will see greater emphasis on non-material aspects of life."

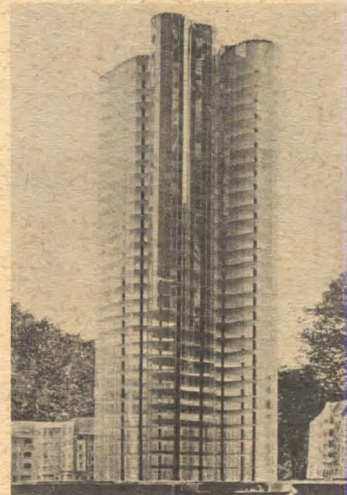
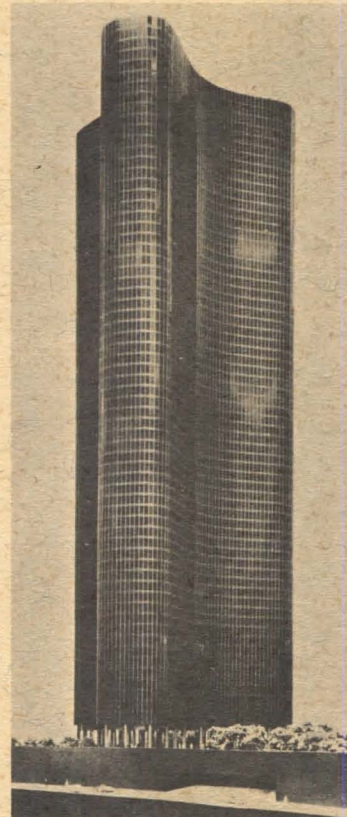
► Dr. Raymond F. Dasmann, ecologist and zoologist, said that a better environment requires that diversity be encouraged rather than conformity. "Diversity is the most valuable thing in nature," he said. "Let's declare a consensus against consensus."

► NAHB Vice President Leon Weiner of Wilmington, Del., read a message from Mrs. Lyndon B. Johnson urging the conference to "pinpoint specific factors that detract from the beauty of our nation." Later Weiner did just that. "We can build to high standards of quality and taste, but if people don't buy there's no point," he said. "I have to have a market for my product."

# GENEOLOGY

## MIES CONCEPTION

The hand of Mies is once again being felt, if indirectly, on Chicago's Lake Shore Drive. Architects George D. Shipporeit and



John C. Heinrich, both former associates of Mies, have designed a cloverleaf shaped, 70-story apartment (left, below) which they readily concede was inspired, if that's the word, by Mies's unbuilt Glass Skyscraper of 1920 (left, bottom).

Now under construction opposite the Navy Pier, the \$15 million, 900-unit tower will be the tallest reinforced concrete structure in the world. It will rise above a stone-clad base, 31 ft. high, covering the entire block. The base will contain a 700-car garage, restaurants and a health club, and will be topped by a two-acre landscaped park for exclusive use of the tenants.

A triangular concrete core will house elevators, stairs and mechanical services. The building will be sheathed in a continuous curtain wall of aluminum and bronze-tinted solar glass. Associate architects are Graham, Anderson, Probst & White; developers are Hartnett-Shaw Associates, Inc., and Fluor Properties, Inc.

# OUTCRIES

## CRISIS OF GROWTH

In a New York University lecture last month, Harvard's John Kenneth Galbraith made an articulate pitch for greater interest in the urban environment on the part of economists and public officials. That environment, Galbraith said in preface, is "scabrous to the extreme."

"As in the 1930's the world faced an economic crisis, so now it faces a crisis of urban growth," he said. "Those who once worried about jobs and incomes now worry about their environment—its effect on their children, on their education, on their own safety, on their ability to survive in dignity and happiness."

But economists and politicians "still measure accomplishment by indices relevant to the popular concerns of 30 years ago," Galbraith said. "If the Gross National Product grows adequately and unemployment declines this, *pro tanto*, means success. If our cities at the same time become unlivable, in part as a product of this growth and smoke, sewage, trash and traffic that it spawns, that is unfortunate but not highly relevant...."

"That this growth gives the revenues to the Federal government and the problems—from the traffic jams to air pollution, to

# PREVIEW

## 1. AERIE FROM ITALY

Alberto Rosselli, a member of the Studio Ponti-Fornaroli-Rosselli in Milan, has envisioned a concrete tower 400 meters (1312 ft.) high, primarily for technical equipment but capable of accepting plug-in enclosures for anything from research labs to supper clubs. The structural frame at the base is composed of six triangular piers, 33 ft. on a side, linked together to form a hexagon 164 ft. across. As the structure rises, the walls of the triangles get thinner (without changing their external dimensions), then one by one they are cut off until one lonely pier ends in the clouds. As new functional spaces are hung on this concrete tree, additional mechanical lines and elevators could be threaded up through the hollow triangles. Engineers Piero Locatelli and Mario De Bernardinis vouch for the soundness of the design.

## 2. NEW TRACERY FOR YALE

Marcel Breuer's first building at Yale, a \$9 million engineering laboratory, will blend some hallmarks of his work with certain characteristics of the Yale campus. In it his typical polygonal piers line up to form a Tudor arcade and his precast window frames are divided to suggest bold tracery. Only the uncompromising rectangularity of the overall building form defies its picturesque neighbors. Typical floors of the building will have faculty offices on the street side of an off-center corridor (behind the lancet windows). The rear side will house the laboratories, enclosed with windowless hollow walls for mechanical lines. (The appearance of this blank wall has not yet been revealed.) A granite-paved podium extending to the rear of the building will conceal receiving, storage, and lecture rooms.

## 3. SANCTUARY FOR BERKELEY

Mario Ciampi's Newman Center for the University of California at Berkeley has to be both a symbol and a refuge. On a site besieged by busy streets and high-rise neighbors he plans to raise massive fragments of concrete wall to enclose polygonal spaces, with broad steel-framed roof planes floating above them. A chapel seating 800 will anchor the downhill corner of the complex. Its crescent layout follows the reformed Roman Catholic mandate for a closer relation between congregation and celebrants, without resorting to religion in the round. Lower wings housing student activities and a rectory will twist as they climb the slope, curling around secluded terraces to be designed by Lawrence Halprin.



provision of room—to localities is also a detail.”

Like the balanced budget in an earlier time, said Galbraith, growth “is the proof of performance. The world is again out of step with economic authority, and authority is again insisting that the world conform.”

#### GOHEEN'S DILEMMA

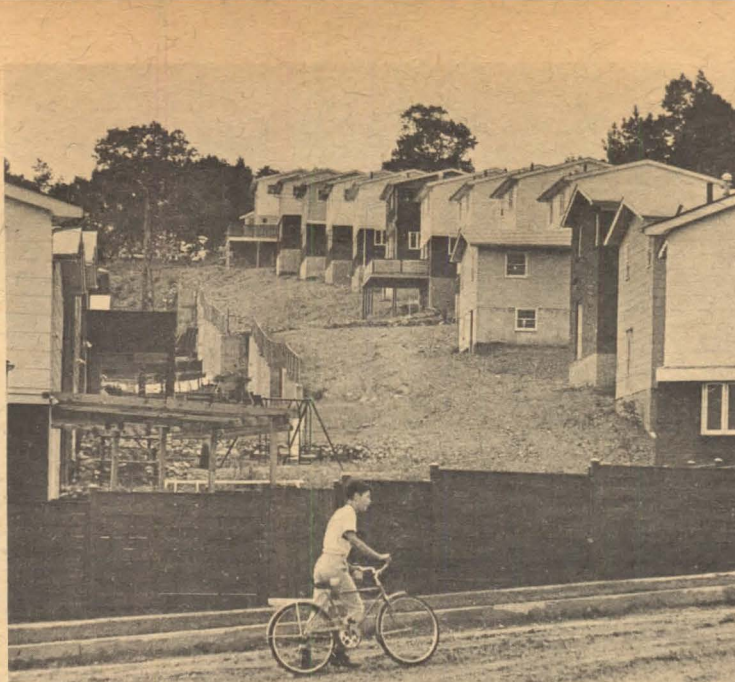
Princeton's President Robert F. Goheen quietly announced in September, 1964, that some of the university's future buildings would have to be “taller than most structures on campus.” Last month, when students and Princeton residents found out that he wasn't kidding, they rose up in alarm.

Cause of the outrage was publication of the model for a proposed science complex (below) which includes a 13-story mathematics building designed by Warner, Burns, Toan & Lunde. The student newspaper, the *Daily Princetonian*, devoted several pages to the project, dubbing it “Princeton's potential Empire State Building.” Later, a proposal was put to the Township Committee which would limit university buildings to 100 feet and to 50 per cent of their lots. The question is to be voted on this month.

Princeton's dilemma is a familiar one: What does a university do when it has to expand but has little space to do it in? Harvard, MIT and several others have reached the same conclusion as Princeton: go up.

#### EXPLOITED ISLAND

The city of New York has been asked to cease abetting the despoliation of Staten Island that has followed completion of the Verrazano-Narrows Bridge. A new group of 14 powerful civic organizations has urged a moratorium on sale of city-owned land to the



rampaging developers who are stripping the island's wooded hill-sides to build barren rows of “distinctively styled split levels and hi-ranches” (sample above).

The organizations, ranging from the New York Chapter of the AIA to the Women's Club of New York, also asked the city to enforce strict criteria for residential and industrial development, study possible uses of open lands and measures to clean polluted waters, review transportation planning to coordinate rail and highway facilities, act to preserve the island's landmarks, and give the City Planning Commission responsibility for formulating and carrying out a comprehensive plan for the development of the entire island.

To the allied organizations, Staten Island, which contains one-half of the city's open land, represents the city's last chance to “create a quality environment.” Instead, the city, which at one time owned about one-third of the island, has been selling off its

holdings as fast as they can be mapped. The newly formed organization seeks to halt the resulting “haphazard development which proceeds in total disregard of overall community, city and regional needs and makes no sense in either economic or human terms.”

## REFORM

#### LINDSAY'S NEW YORK

Last July John Lindsay came back down to earth after a helicopter survey of New York and observed that his “enthusiasm for the city's potential far outstripped his depression over smog, decay, absence of greenery and missed opportunities.” He spoke earnestly and often about urban problems before he was elected mayor on November 2, and he posed a wide range of solutions.

Ideally, Lindsay would like to remove the amateur from control of city planning. He wants architectural competitions for major projects, and a true master plan for New York. He says it is possible to build 160,000 low- and middle-income apartments and houses in the next four years with \$2 billion from actual or proposed state and Federal appropriations.

Lindsay opposes an elevated Lower Manhattan Expressway (June issue), a problem which Mayor Wagner is only too glad to leave to his successor. Wagner ordered a go-ahead on construction of the elevated expressway early this year, but by last month the cries of protest had grown so loud that he relented, announcing he would seek Federal funds to put the expressway underground.

Lindsay also favors a moratorium on all construction at the Civic Center (November issue) “until a thorough study and master plan is made for the future needs of the entire area.”

Wary politicians estimate that the full range of Lindsay proposals would cost \$1.5 billion a year, with few sure sources of such revenue. Lindsay last month offered to personally pay for one small urban renewal project—the painting of Gracie Mansion, the mayor's residence—because of what he terms the city's “very critical financial situation.”

New Yorkers, meanwhile, are waiting with a mixture of cynicism and hope to see to what extent he can keep his campaign promises to “transform the bare necessities of existence and commerce into institutions that inspire and enrich the quality of life”.

## PEOPLE

#### SIX YEARS OF LOVING BARBS

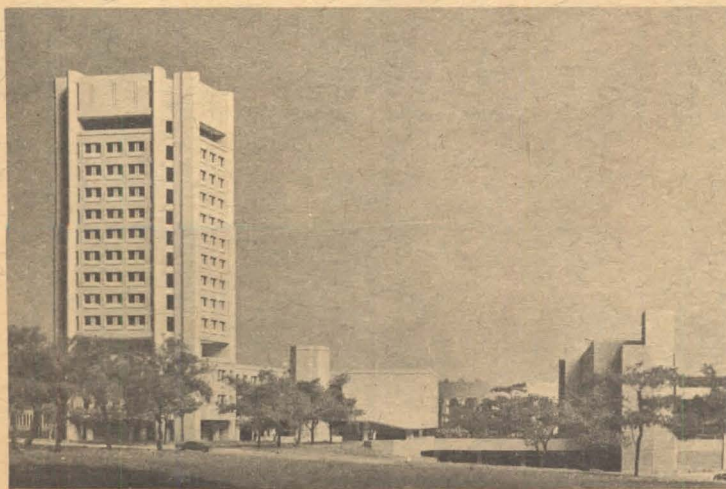
For the past six years, the *Bulletin* of the Southern California Chapter, AIA, has easily been the liveliest and wittiest of local AIA publications. The wit, usually barbed, has been employed to make serious points about architecture and architects.

The quarterly's guiding force during these six years was Architect Allen G. Siple, whose retirement was announced in the *Bulletin's* latest issue. The issue also contained a statement from “Your Fellow Architects,” who have been the objects of Siple's satire. “As a student of mankind, Allen,” said the statement, “you have penetrated our disguises. You know us for what we really are and still find it in your heart to love us”.

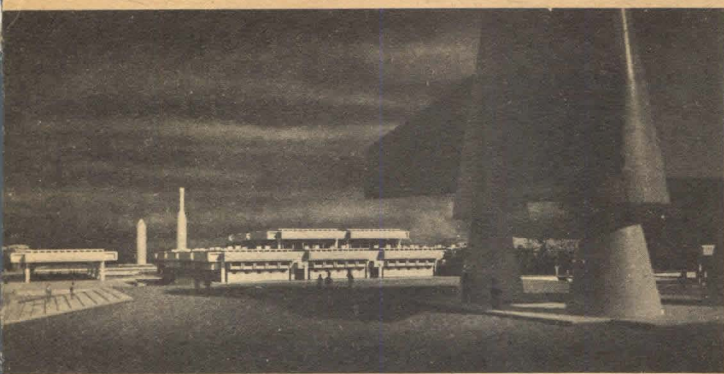
#### OUT OF ORBIT

During most of the cross-country tour last month, Lord Snowdon circled in close orbit to the main attraction, Princess Margaret. But occasionally he broke loose, and twice it was to indulge one of his favorite interests, architecture.

In Washington, he inspected the new bird house at the National Zoo, comparing it no doubt with the Flight Cage at the London Zoo (September issue) which he helped design. Accompanied by Richard E. Dimon, architect of the Washington bird house, and a few dozen others, Lord Snowdon strolled among the birds, fed a







uejay, and asked about the cage's double doors. They were to prevent people from letting the birds fly out, it was explained. "Lunatics," said Lord Snowdon.

While in New York, Lord Snowdon had lunch at Philip Johnson's house in New Canaan. When he and Johnson inspected the grounds and water folly. The princess was supposed to go along, but she said she felt tired. Maybe she doesn't like shoptalk.

#### LET LOCAL BOYS MAKE GOOD

"At last Washington is to have a building designed by one of the great architects of our country," the *Washington Post* editorialized last September after it was announced that Ludwig Mies van der Rohe had been commissioned to design the District's new downtown Central Library. "The appointment," said the Post, "will delight all those who love Washington."

Not so. Architect Louis Justement, former president of the local AIA chapter and self-confessed Washington lover, called the appointment a "slight to our local profession." Since the library will be built with District taxes, Justement reasoned, "it should be designed by a local architect."

"Many of us are disappointed," said Justement, suggesting that other local architects share this view. If so, they at least are keeping it to themselves.

## COMPETITIONS

#### CAPE KENNEDY WINNER

A five-firm competition for the design of a Visitor Information Center at Cape Kennedy has been won by Welton Becket & Associates with a scheme calling for a modular structure atop a podium in a reflecting pool (above). The other competitors were The Architects Collaborative, Norman M. Miller & Associates, Herbert H. Johnson Associates, and Charles Luckman Associates.

The winning design is of rein-

forced concrete with textured columns and beams and an exposed waffle slab ceiling, all organized in a 48-ft. by 48-ft. module. "The off-white, completely modular, strong-yet-inviting concrete structure will contrast with the warm, solar bronze glass to present a crisp, clean profile against the Florida sky," Welton Becket stated. We can't improve on that.

#### FOUR FOR ST. LOUIS

Four architectural teams have reached the finals in a national competition to design a \$3.5 million law and social science complex at Washington University: Kenneth E. Wischmeyer & Partners of St. Louis; Hanford Yang of New York City, with associates Secundino Fernandez and Alexander A. Gartner; Harry W. Saunders of Los Angeles, with associate Tom Dolle; and George Anselevicius, Roger Montgomery and Dolf Schnebli of St. Louis.

## LANDMARKS

#### THE OTHER 7,500

Of 10,000 U.S. buildings deemed landmarks in a government survey made in the 1930's, only 7,500 remain, and sporadic attempts of private philanthropy or individual acts of Congress cannot hope to save the many survivors which are now in jeopardy.

To alleviate the situation, coordinated local, state and Federal preservation programs may be forthcoming thanks to a \$130,750 Ford Foundation grant to the U.S. Conference of Mayors. With a committee of Federal officials, the Conference of Mayors will conduct a study to provide a factual basis for preservation programs which President Johnson and Secretary of Interior Udall plan to propose in the next Congress.

As a part of the fact-gathering process, funds donated by the joint Council on Housing and Urban Development have made it pos-

sible for the committee, headed by former Representative Albert Rains, to take a four-week tour of European countries where preservation programs are far ahead of those in the U.S.

The results of the study, to be published in a 240-page book in January, will develop general criteria for landmarks, examine existing preservation programs within the U.S. and abroad, evaluate preservation techniques, and weigh the desirability of the museum approach versus continued use.

## PLANNING

#### UPSMANSHIP

The most controversial feature of the grand design for Washington's Pennsylvania Avenue, the National Square, should be re-studied, the National Capital Planning Commission said last month. NCPC instructed its staff to work with the temporary commission for the Avenue "to see whether an alternative to the square is preferable."

Later Nathaniel Owings, chairman of the temporary commission, let it be known that a new design for the square was already in the works and, furthermore, that "the largest and best hotel chain in America" had offered to build a 600-room hotel on the square's east side, defining its boundary.

The commission, Owings said, expects to ask Congress for money soon to get the program going. Included are \$9.2 million to acquire land for Market Square; \$5 million to acquire setback rights along the Avenue's north side; and \$7 million for brick paving and landscaping on two four-block stretches of the Avenue.

#### BACK TO CROESUS

City planning was a highly sophisticated profession even 2,600 years ago, say two archaeologists who are digging up ancient Sardis in Turkey. Prof. George M. A. Hanfmann of Harvard, director of the Sardis expedition, and Prof. A. Henry Detweiler of Cornell, his associate, claim Sardis was planned as early as the mid-seventh century before Christ, making it "a discovery of importance for the history of city planning."

The diggers have uncovered the remains of what could be the world's first area zoned exclusively commercial and light industrial. It is a half acre of shops and industries enclosed by a six-foot high monumental wall of rough-hewn



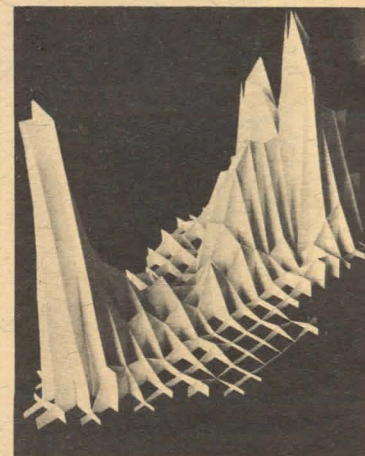
stone (above)—forerunner of the great oriental bazaars.

The discoveries also have architectural significance. In another area, zoned residential, near the source of King Croesus' gold supply, "Lydian houses with many rooms, receding and projecting fronts, and split-level arrangements" have been found. Sounds just like Reston.

#### CHARTS CAN BE BEAUTIFUL

The delicate figure in the photo below is not an artist's interpretation of a mountain range but a planner's three-dimensional representation of job densities in Manhattan's Central Business District. The paper construction, executed in origami-style by Ernst Hacker, principal planner for the City Planning Commission, shows the familiar Wall Street and midtown employment (and physical) peaks separated by the "industrial valley."

Purposes of the model are to demonstrate the relationship between density and congestion and to serve as an analytical device to study transportation and related planning needs. It's a beautiful way to express nasty problems.





Walter McQuade

## MARK JAROSZEWICZ SAYS SOMETHING

It was May 22, 1964 that the tall, untaciturn Texan, President Lyndon B. Johnson, made that memorable address at Ann Arbor, Michigan, pleading history with the American people, telling us we could achieve the Great Society



only if we took on the task of working for it in all disciplines, including architecture and urban design. In the same town, Ann Arbor, some months earlier, architect Mark Jaroszewicz, a partner in Tarapata-McMahon of Bloomfield Hills, Michigan, delivered an equally telling lecture in a sharper tone. Included in it was an indication of what we had better accomplish in the way of social self-analysis before getting down to the drafting board. What he said still applies:

"Let us take a long, critical look at the paradoxical ledger of our own collective personality as a nation. Americans are undoubtedly fiercely freedom-loving and courageous; yet we are also incredibly conformist—one look at the sameness of our coast-to-coast suburbs and our automobiles should suffice to prove the point. We are fearless

in exploring new horizons of thought and science, yet usually curiously insecure in our dealings with others, as in international politics. We are firm, bold and efficient in making world-ranging decisions, yet weakly vacillating in our whimpering desire to be liked. We are stoutly and proudly individualistic, yet kill ourselves to keep up with the Joneses.

"We cherish our independence of thought, and yet forever fall for innumerable passing fads of dress, speech and action. We take swift and positive action in our business dealings, yet so often procrastinate endlessly in accepting the inevitable. We are generous and compassionate to a fault, and yet know how to be cold-bloodedly ruthless in many of our business and personal actions. We are unhesitatingly progressive in equipping our houses, cars, stores and factories with the most up-to-date products and machines, yet accept change and progress in music, art, architecture, even social patterns and structure, only with the greatest reluctance. We hone the specialized skills of our professionals with incredible precision, yet we suffer our lower education to leave gaping voids in the most elementary foundations of knowledge, with the mastery of our own rich language leading the long list.

"The credit side of our national ledger has propelled this country in an incredibly short period of time to the pinnacle of not only wealth and well-being, but also worldwide power and influence. Conversely on the debit side lie the roots of the multitudinous ills and shortcomings which, our prosperity notwithstanding, are still besetting our society.

"Unless we learn to check our egos, to subordinate some of our cherished individual privileges to the common weal, to temper our desire for self-expression with concern and consideration for the community as a whole; unless we modify and change through conscious effort those of our character traits which lead to the endless sea of ugliness inflicted with such thoughtless abandon on the incredible beauty of our nature—when the bell will toll, it will toll for those hearts, brains and nerve centers of our civilization and culture, our cities.

"In the past, the client was usually a temporal or religious potentate—prince or duke, king or dictator, pope or bishop. Taxes or tithes furnished the wherewithal, as they do today; few



ventured questioning his judgment in employing the services of the most outstanding talent available, nor his authority to force-feed the artist's beautiful creation into life. In saying the above, I am not proposing to substitute an authoritarian system for our free-enterprising democracy. I am merely stating that, in addition to creative talent, a conscious desire and political power to will beauty into being is an indispensable prerequisite of achievement. This desire may either be confined to a single, powerful individual, it may move a group—the larger the better—or may even inspire an entire society, but has to be present in a developed, aware, vocal and demanding form before any hope for results can be seen."

\* \* \*

This, again, was delivered before the term Great Society came off that Ann Arbor rostrum, adding an official new interest to the liberal lineage of latter day government. The interesting thing to me in rereading the Jaroszewicz speech was the way that the public personality of Lyndon Johnson himself fills so nearly completely both the virtuous and vicious parts of the rough description of all of us as a nation. The LBJ visage also fits the vaguer outline of the kind of client who might get something done: "developed, aware, vocal and demanding."

And elbow-pinching too. Johnson is as practical a politician as we have seen, but so different from the stubborn, amusing old county-courthouse toughness of Harry the haberdasher. Certainly he lacks General Eisenhower's beatific—if still somewhat baffling—quality. He is not a leading man in the sense that Kennedy was. Perhaps the definition of our President is that he wants to be all the others—and FDR too. That was what made him stand up behind that rostrum and speak.

PHOTOGRAPHS: Page 10: UPI, Abbe Rowe—National Park Service. Page 11: J. Alex Langley. Page 12: Marko at Marko. Page 62: The New York Times. Page 63: Louis Checkman, Stan Shulman. Page 64: UPI, Bill Williams.



# Our file cabinet has a nice clean face.

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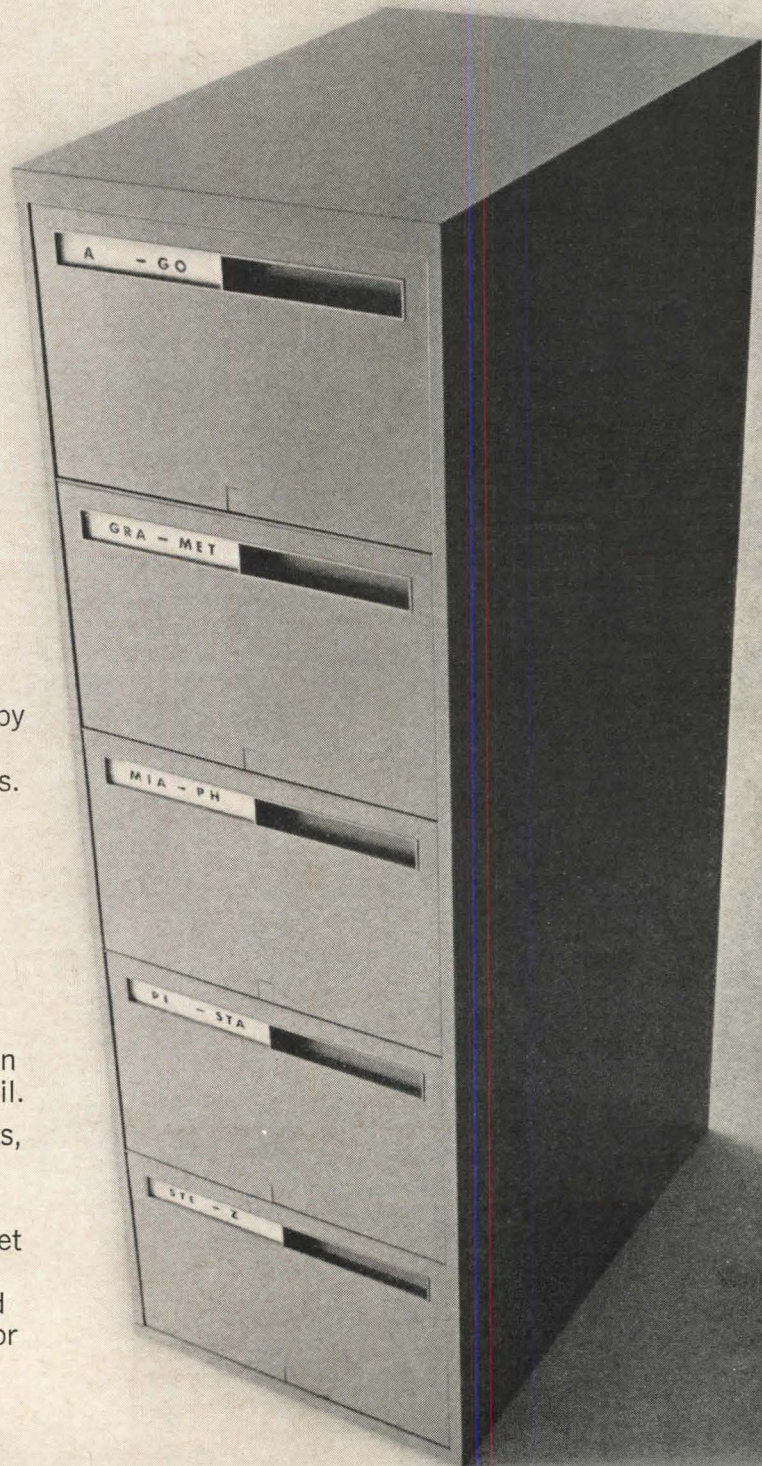
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# LETTERS

## LE CORBUSIER

Forum: Your issue on Le Corbusier is a moving document in which the feeling for the departed—friend and master, a stumbling stone to some and a light of hope to many—veils the expert presentation, the deep understanding of his voice as it sounds through the quotes, the lyricism in the choice of the photographs down to the use of color on the cover: the blue of the Mediterranean so dear to him and the yellow, an adopted color, which grew during the thirty some years of friendship with Fernand Léger.

In this hour of the market place one cannot but be surprised by this manifestation of feeling which must stem from a moral posture. Le Corbusier was one of the first to be concerned with what Valéry had called a union of "une esthétique et une éthique" necessary for the development of any significant work; your issue is a tangible expression of this.

STAMO PAPADAKI  
Designer

Washington, Conn.

Forum: I wish to congratulate you on the October issue covering some aspects of the work of Le Corbusier.

The photograph on page 51 of the interior of the Parliament Building in Chandigarh, is a particularly brilliant representation of the ideas behind the late Corbu work. It is obvious that he achieves a denseness in architecture which is entirely unique. Yet the clarity of the schemes is overwhelming.

I hope the Forum continues to make such astute coverage.

JOHN HEJDUK  
Head, Department of Architecture  
Cooper Union

New York City

Forum: Many congratulations on your Le Corbusier Memorial issue. It is magnificent; dignified and sensitive. I was enormously impressed.

JAMES STEWART POLSHEK  
Architect

New York City

Forum: Your Corbu memorial issue was as magnificent as Forum fans would expect it to be.

However, I am also a Grant's fan and my letter is prompted by Walter McQuade's comments on the "as long as you're up" Grant's scotch campaign. I wonder if he knows that the Grant's man pictured in the "old British Officers Campaign chair" was, for a short

time, the business manager of Architectural Forum a little over ten years ago. If he doesn't, it probably only goes to prove that Forum editors don't know what their business manager looks like—a very commendable journalistic policy.

JOHN R. WHEELER

New York City

*We seem to remember Mr. Wheeler as the former Forum production director. Now if we could just place the face . . .*—ED.

## HORIZONTAL WASHINGTON

Forum: The new Forum is a delight. I particularly liked Charles Moore's eloquent essay on San Francisco [Nov. '65]. The light touch makes it palatable to many persuasions and leaves a lot between the lines where it properly belongs, a relief from the polemic (including my own).

On another score, I cannot get the drift of Donald Canty's animus against horizontal Washington. If I read it closely, it seems to equate higher density with better living for the masses, high-rise with The Great Society. The debate in Chicago on high-rise public housing presents a very different picture.

If Forum has views on why the height limit in Washington should be broken and for what reasons of public interest, and can explain how the unearned increment of the inflated land value will be shared with the underprivileged of the District, I would like to know about it.

All the best for your continued success, and I hope the magazine doesn't wax too fat too soon.

HARRY WEESE  
Architect

Chicago

Forum: There are built-in dangers in capsulated criticism of any single addition to the official planning literature emerging out of a large American city. There are compound dangers when that city is Washington, D.C., when the item in question is only a "proposal", and when it is explicitly directed toward "physical development" rather than to the planning totality.

Mr. Canty's quick estimate of NCPC's "Proposed Physical Development Policies for Washington, D.C. 1965/1985" makes melodramatic reading. There is some truth in it, of course. I am not convinced that it is as a whole accurate.

If he correctly notices the very real problem of planning in a

(continued on page 72)

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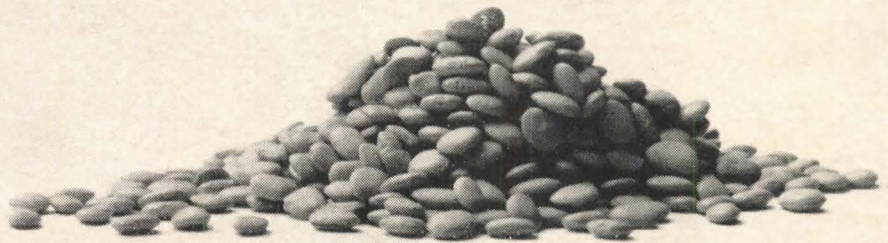
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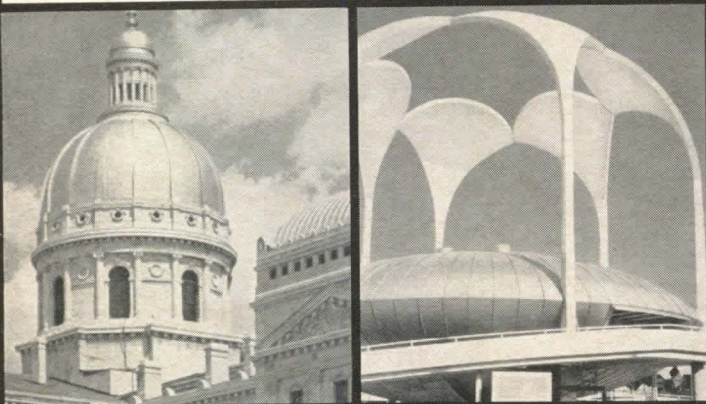


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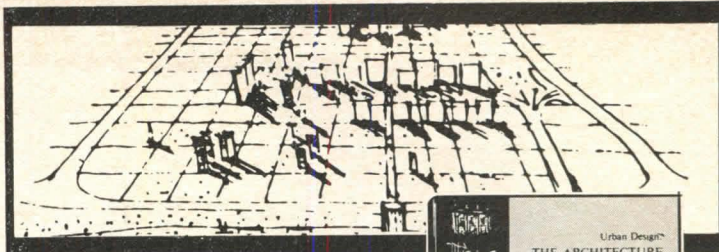


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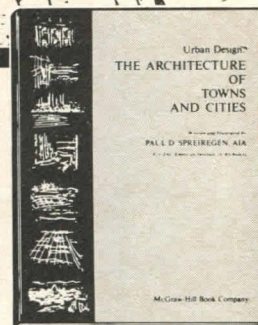
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# URBAN DESIGN

THE ARCHITECTURE OF  
TOWNS AND CITIES



Written and Illustrated for the American Institute of Architects by  
**Paul D. Spreiregen, AIA**

Amid the welter of words, emotions, and cross-purposes now being devoted to urban development and redevelopment, here is a welcome, thoroughly professional discussion of the actual design of cities, towns, and populous regions.

Seasoned in the realities by his own experience in this area, the author takes a forward-looking view which is, on the whole, optimistic and practical. He shows what can be done, how it can be done, and why the immediate future is one of exciting, thoroughly realizable opportunities for great American urban design. He calls on the designer to bring to these opportunities his own skills in the use of today's fast-expanding urban technology, creative talent rooted in understanding of the rich history of the design of cities, and a deep appreciation of the value of nature in and around the city.

Mr. Spreiregen bases his writing on considerable actual experience in urban design projects in the U.S. and abroad. He is a graduate of the M.I.T. School of Architecture, was a Fulbright scholar in Italy, and was a member of the Federal Commission for The Reconstruction and Redevelopment of Alaska. He is now Director of Urban Programs for the AIA, in which capacity he wrote this book. He has also lectured on urban design throughout the United States.

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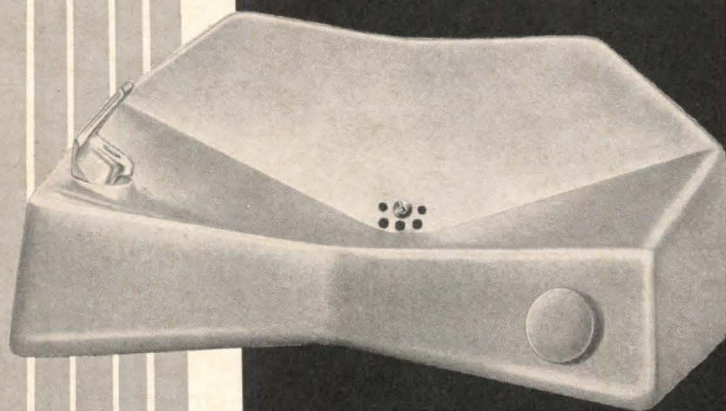


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## LETTERS

(continued from page 66)

vertically and horizontally diverse administration, and correctly spotlights the very real difficulty of striking in any official literature a perfect balance as between the "physical" and the "social" components. Mr. Canty overlooks some very pertinent matter. These initial proposals, for instance, project three roles for Washington, not just one. "First [as] Capital City . . . second, to serve as the home for more than eight hundred thousand people . . . third [as] the central city of a great metropolitan region." Nor do they stand alone. NCPC carefully notes "a closely related activity", preparation of a Community Renewal Program which will be based on a "detailed citywide analysis of housing and environmental conditions [which] will provide an understanding of the magnitude of the problem of bringing all parts of the city up to minimum living standards."

It is helpful of course for planners to hear voices of honest and responsible criticism. It is not helpful when professionals underwrite all-out attacks on something which is clearly meant to be only a part of the mix from which a final General Plan for the District must emerge, as if that part were in itself final, much less all-embracing.

Certainly, the matter is dangerously oversimplified when it is presented as "monuments" against "people." The problem is, of course and inevitably, rather one of "people" and "monuments."

REV. ROBERT C. HOWES  
Chairman, City and Regional Planning  
The Catholic University of America  
Washington, D.C.

### RENAISSANCE ELEPHANTS

Forum: Just when one thinks that the dragon of the Renaissance has finally been slain, and all its heads cut off, a new head appears representing the old idea of architecture as sculpture and painting. This is an idea which was basic to the classical architectures of Greece and Rome, and was perpetuated by the Renaissance.

In this century architecture became liberated from the imposed dead classic forms, and the idea of architecture as an enclosure of free spaces was established. The 1930's seemingly marked the end of the Renaissance, but now it has reappeared in the sculptural architec-

ture from France to the United States via Harvard and Yale. It has become universal, being most recently used in England for the Elephant House of the London Zoological Gardens. We should not be misled by these startling forms into believing they represent a "new" architecture; they too are dead forms, except possibly for elephants.

JOHN H. HOWE  
San Francisco Architect

### SIMON FRASER UNIVERSITY

#### Additional Facts and Figures

(continued from page 20):

Planning, preliminary design and design of all buildings, site development and landscaping: Erickson/Massey Architects; Landscape Consultant: John Lantzius & Associates; Site Engineering Consultant: Swan Wooster Engineering Co. Ltd.; Electrical Engineering Consultant: A.E. Simpson; D.W. Thompson & Co. Ltd.

#### Central Mall and Transportation

Center: Architect: Erickson/Massey; Structural Engineer: Otto Safir; Heating & Ventilating: D.W. Thomson & Co. Ltd.; Plumbing & Drainage: Swan Wooster; Electrical Engineer: A.E. Simpson; Special Consultant for Central Mall Roof: Jeffrey Lindsay & Associates, Space Frames, John Kariotis, Structural Engineer; General Contractor: John Laing & Son (Canada) Ltd. Cost: \$2,649,987. Building Area: 234,117 sq. ft.

#### Academic Quadrangle: Architect:

Zoltan S. Kiss; Structural Engineer: Otto Safir; Mechanical Engineer: J.D. Kern; Electrical Engineer: A.E. Simpson; General Contractor: Ptarmigan Constructors. Cost: \$3,568,522. Building Area: 182,692 sq. ft.

#### Science Complex: Architect: Rhone

& Iredale; Structural Engineer: Bogue Babicki; Mechanical Engineer: Thomson & Co.; Electrical Engineer: A.E. Simpson; General Contractor: Burns & Dutton Construction (1962) Ltd. Cost: \$1,985,500. Building Area: 49,252 sq. ft.

#### Library: Architect: Robert F. Harrison;

Structural Engineer: Choukalos, Woodburn & McKenzie Ltd.; Mechanical Engineer: Thomson & Co.; Electrical Engineer: Rich Webster; General Contractor: Ptarmigan Constructors. Cost: \$2,799,016. Building Area: 185,835 sq. ft.

#### Theater: Architect: Duncan McNab,

David Logan, Harry Lee; Structural Engineer: Read, Jones, Christoffersen Ltd.; Mechanical Engineer: D.M. Drake; Electrical Engineer: Roy Campbell Ltd.; General Contractors: Burns & Dutton Construction (1962) Ltd. Cost: \$666,000. Building Area: 24,623 sq. ft.

#### Gymnasium: Architect: Duncan Mc-

Nab, David Logan, Harry Lee; Structural Engineer: Thorsen & Thorsen; Mechanical Engineer: D.M. Drake; Electrical Engineer: Roy Campbell Ltd.; General Contractors: Grimwood Construction Co. Ltd. Cost: \$1,261,735. Building Area: 65,132 sq. ft.

#### Women's Residence: Architect:

Erickson/Massey; Structural, Mechanical and Electrical Engineering: Swan Wooster; General Contractor: John Laing & Co. (Canada) Ltd. Cost: \$384,587. Building Area: 18,625 sq. ft.





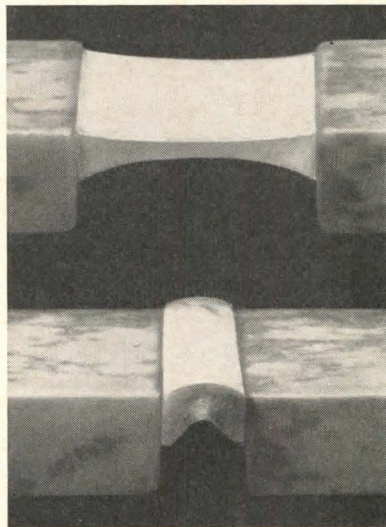
Alcoa Plaza Associates, Owner; Harrison & Abramovitz, Architects; Turner Construction Co. & HRH Construction Corp., General Contractors; General Bronze Corp., Curtain Wall Fabricator; Abbott Glass Company, Glazing Contractor.

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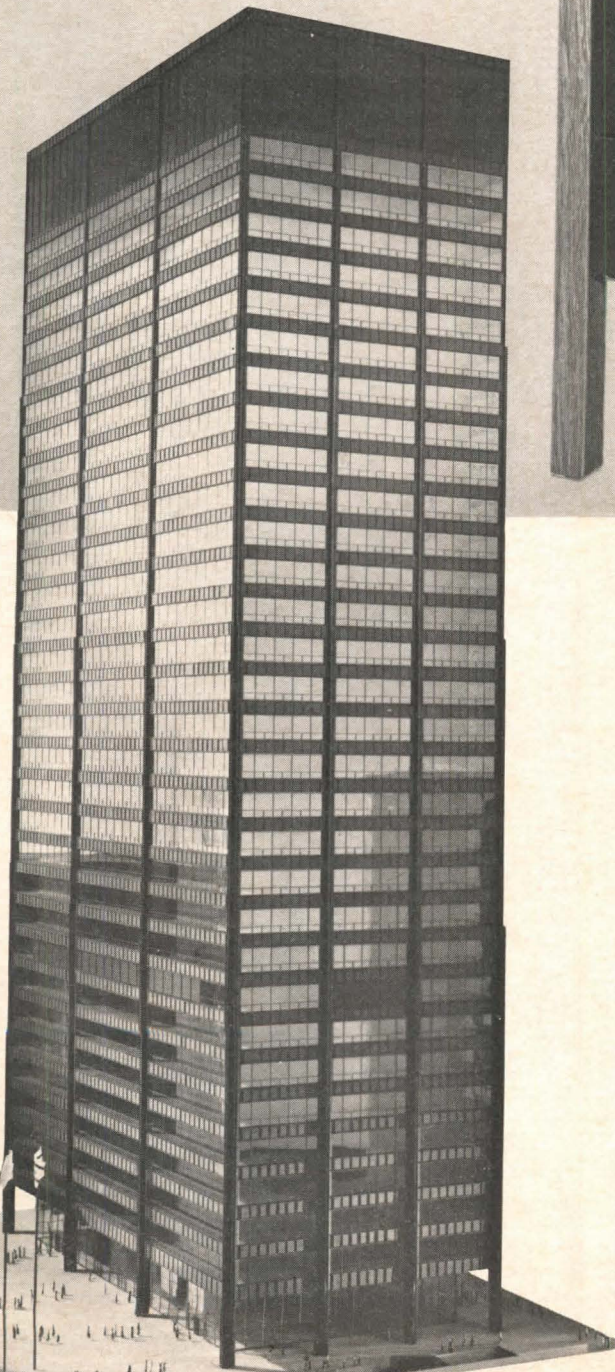
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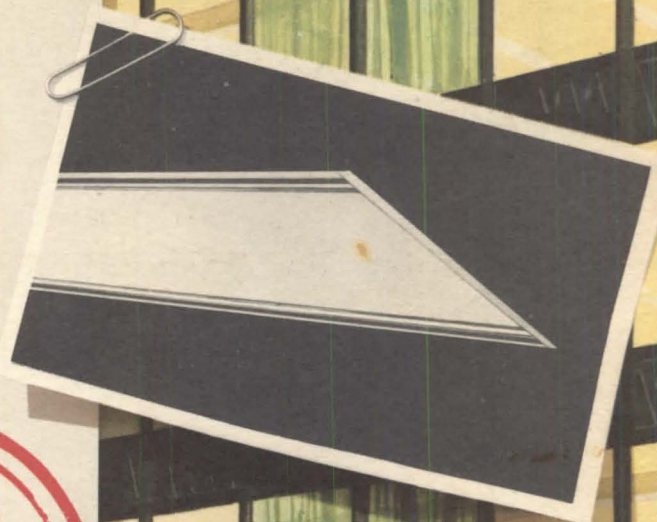
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