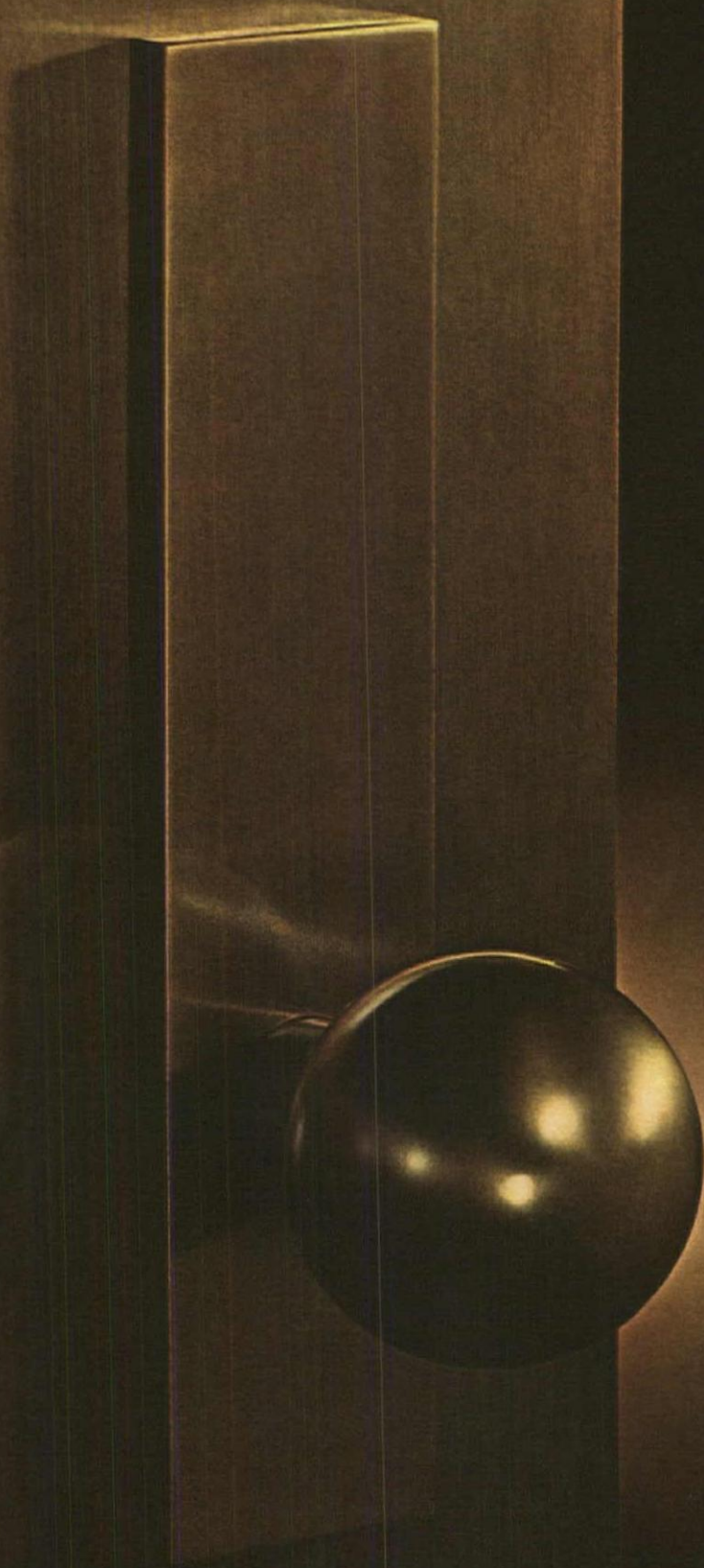




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FORUM—JULY/AUGUST—1969

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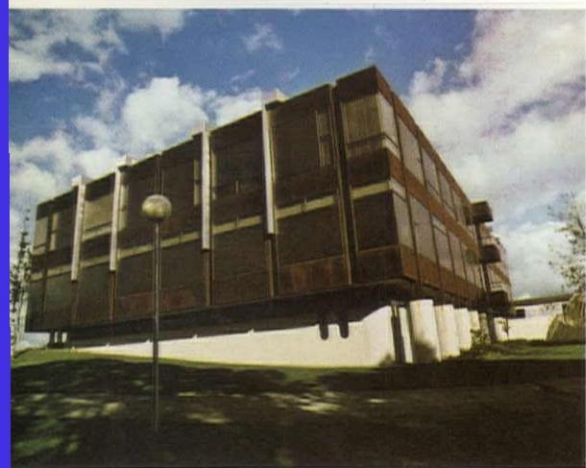
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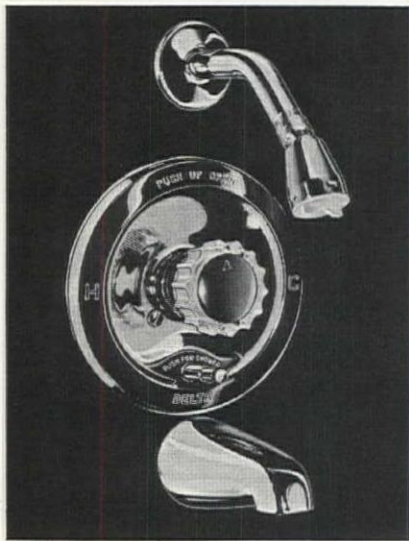
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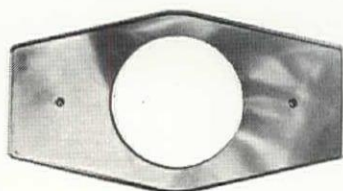
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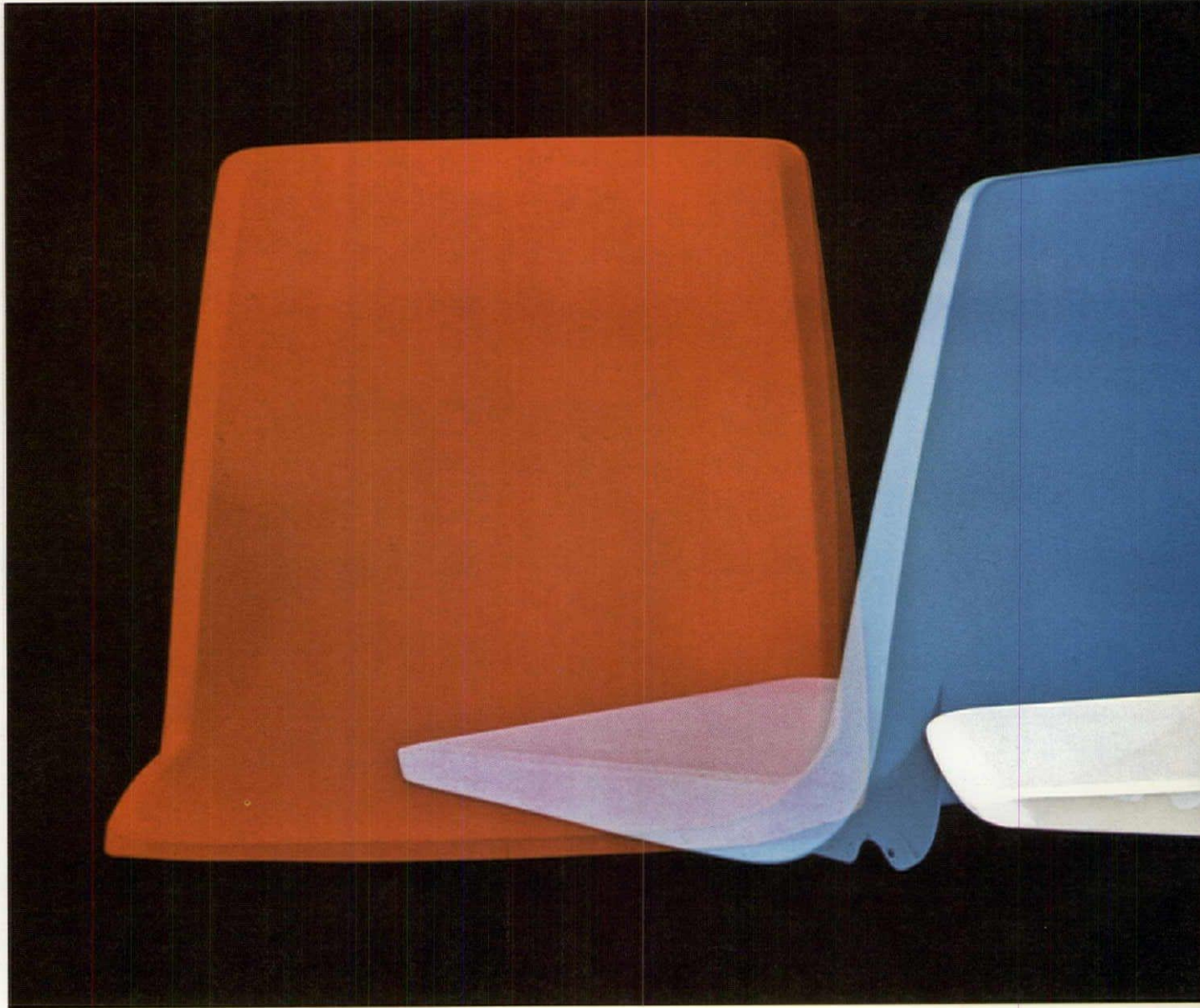
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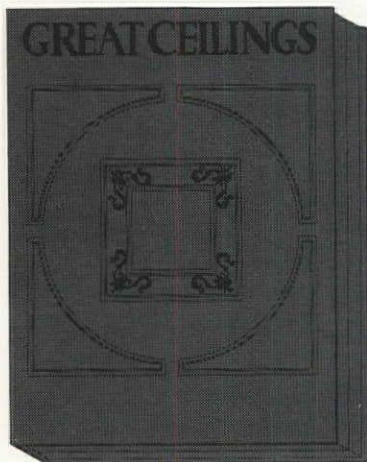
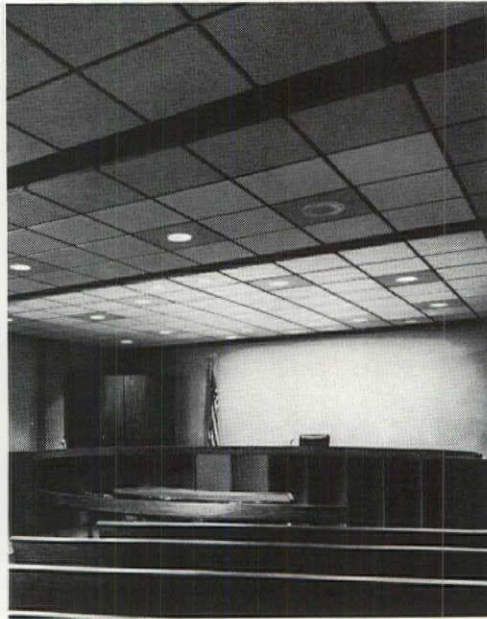
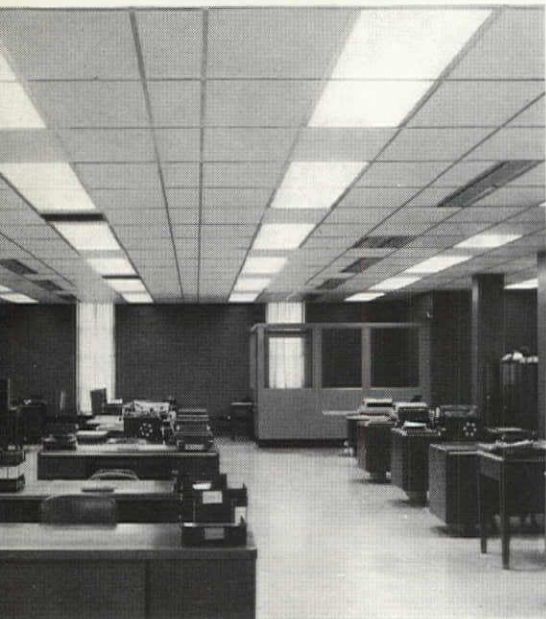
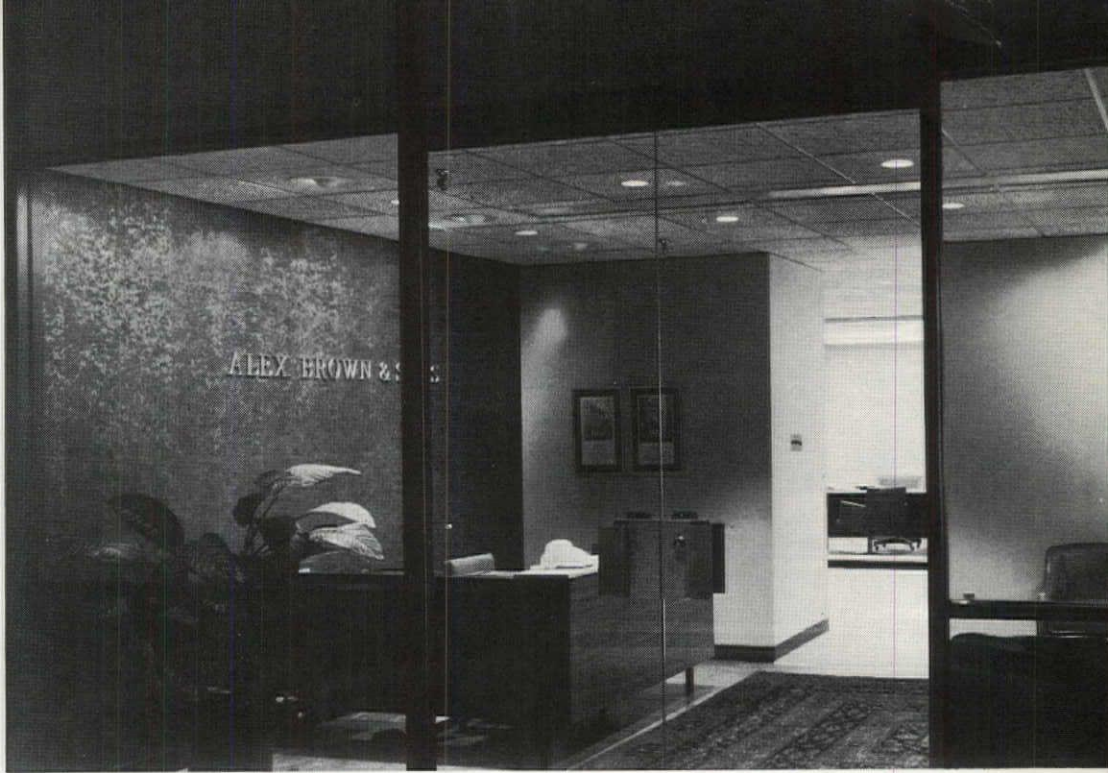
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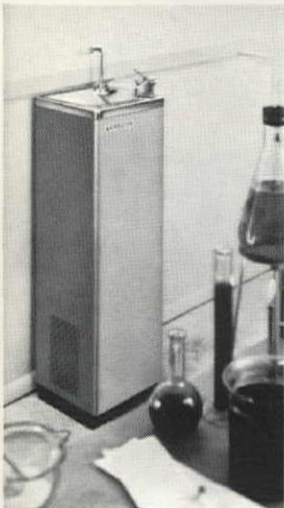
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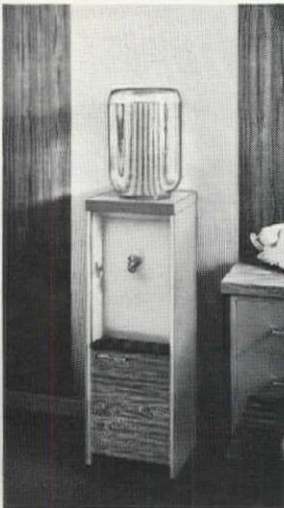
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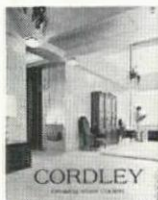
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## LETTERS

### CHARLES CENTER

Forum: We in Baltimore were most grateful for your fine story on Charles Center. The Architectural Forum has been increasingly alert to the very subtle but important points of urban development.

Mayor D'Alesandro joins me in thanking your fine staff for covering our key downtown project.

DAVID W. BARTON JR.  
Chairman, Planning Commission

Baltimore

Forum: You are certainly to be complimented on your fine analysis of Charles Center [May issue]. Those of us who have worked on the project since the beginning have been more than pleased with the center's development and gratified by the interest the citizenry has taken in the project.

We also recognize the fact that there would be no Charles Center today if it were not for the hard work and strong backing of the mayors who were involved during planning and development phases. J. Jefferson Miller pointed this out recently during a luncheon honoring him on his tenth anniversary as manager of Charles Center.

Thomas J. D'Alesandro Jr., father of the present mayor, was responsible for having downtown declared an urban renewal area. It was he who established the urban renewal agency and who insisted that the various city department heads work closely and cooperatively with the Charles Center planners. Mayor Theodore R. McKeldin was responsible for successfully launching the Inner Harbor project and getting the all-important urban renewal bond issue passed that would make this waterside companion to Charles Center possible. It is our present mayor, Thomas J. D'Alesandro III, who was the key figure in pushing forward planning for phase two of the Inner Harbor project and is the guiding force behind the city's improvement program.

But, it is the people of Baltimore who have made Charles Center more than an architectural monument or a commercial center. They have made it the new hub of the city: the place to meet at lunchtime; the place to shake hands with a politician at election time; the place to hold events.

One of the more interesting new events is well on its way to becoming a Baltimore tradition. This is the Greater Baltimore Arts Festival which has now taken place in Hopkins Plaza for the second year in a row. The four-day festival this year attracted 100,000 visitors to see and hear symphony concerts, jazz combos, ballet, folk dancing and choral recitals; to watch pottery-making, weaving and wood carving demonstrations; and to see exhibits of painting and sculpture by local artists.

This is the kind of activity that planners hope for when they first put pencil to paper, but it takes the people who live and work in the city to make it happen.

GEORGE E. KOSTRITSKY

Baltimore

Architect

Forum: Please accept my sincere congratulations for, and appreciation of, the article on Baltimore's Charles Center. It is, in general, factual and therefore interesting to those of us who have had something to do with its development.

I wish to point out, however, that on page 50, the Federal Building is said to have been designed by "Fisher, Nes & Campbell." Actually, the correct name of our firm is Fisher, Nes, Campbell & Partners, and instead of our being solely responsible for this building, it was a joint venture of three Baltimore architectural firms. The Office of James R. Edmunds Jr., and Fenton & Lichtig, in addition to our own firm.

JAMES I. CAMPBELL

Baltimore

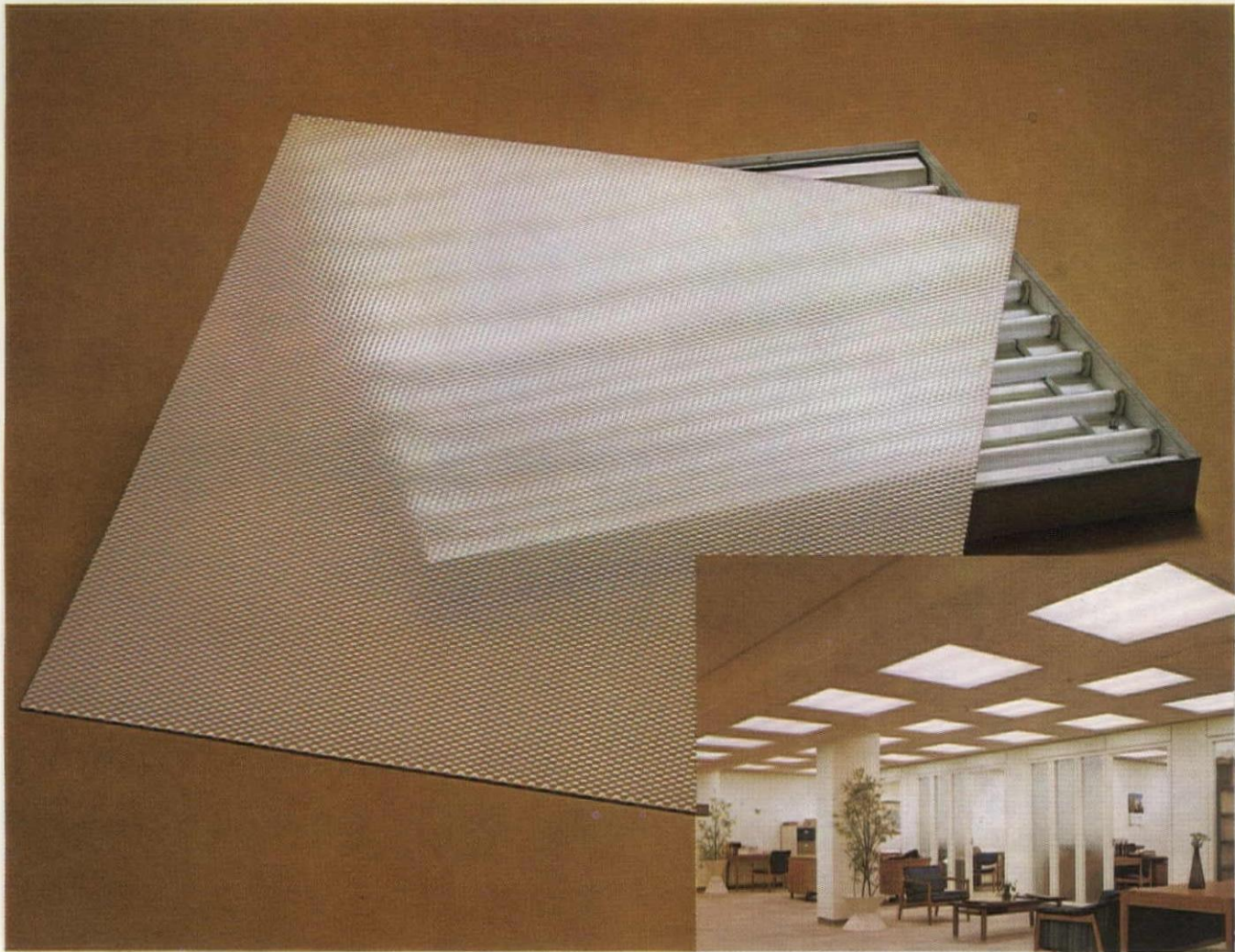
Architect

### HASKELL ON GRAND CENTRAL

Forum: That letter from the gifted pen of Douglas Haskell ("Grand Central Controversy," May issue) is nothing less than superb. Such logical planning for the city's transportation future comes at a time, now, when

(continued on page 16)

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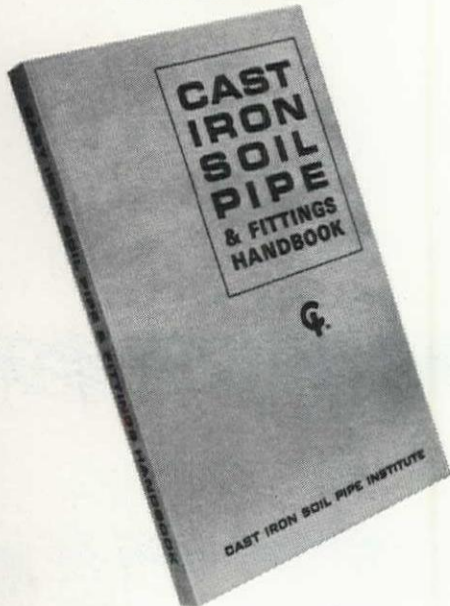
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## LETTERS

(continued from page 12)

it is every bit as critical as in 1902, "when the original terminal planning knit together all transportation media in the city with phenomenal success."

Doug's thinking is sound and lucidly expressed. May his voice lead the way, is my most sincere hope.

ROBERT FRANTZ  
Saginaw, Mich. Architect

### THE NEIGHBORHOOD'S ROLE

Forum: I have just had an opportunity to read your recent article on SAND ("Urban Renewal Need Not Be a Dirty Word," April issue). Congratulations on a job well done.

I was particularly impressed with your emphasis on the contribution being made by the neighborhood residents themselves. The ultimate success of this project relies not only on the professional assistance, but most importantly on the role which the neighborhood is performing. This, in our opinion is the critical factor and your article did well to highlight this point.

RICHARD W. MAINE  
Mortgage Analyst  
Connecticut General  
Life Insurance Co.  
Hartford, Conn.

### BICENTENNIAL HOOKUP

Forum: On page 95 of your May issue, under the title "Happy Birthday U.S.A.," you discussed the competition between Boston and Philadelphia for selection as the site of the "American Revolution Bicentennial."

What has happened to the proposal, put forward by a number of different architects and planners, that the federal government complete the very high-speed rail system between Boston and Washington by 1976, so that the American Revolution Bicentennial could be celebrated simultaneously in (at least) Boston, New York, Philadelphia and Washington?

It would not seem unreasonable to commemorate the Amer-

ican Revolution by practical methods to assure (among other things) "A more perfect union" among the states along our eastern seaboard.

JOSEPH R. PASSONNEAU  
Chicago Architect

One high-speed train now links Washington and Philadelphia with New York, and another links Boston with New York. But, according to the Department of Transportation, there are no plans for joining the two systems to provide high-speed service from Boston to Washington. So much for "a more perfect union."—ED.

### DELAYED REACTION

Forum: I have, regrettable, only just now read the article "What's Wrong with Architectural Education?" in the July/Aug. '68 issue. But even now I feel compelled to write and offer three cheers for Sibyl Moholy-Nagy, whose comments as usual were right on target, true, and level. If we could have more straight talkers like Moholy-Nagy and less mumbo-jumbo we might clear the air and get back to work.

SAM CARSON  
Los Angeles Architect

### I VOTE YES

Forum: Walter McQuade's article entitled "I Vote Yes" [May] was a classic. With guys like him pushing for sensible zoning regulations, there is no question that our country can be a better place to live in. I thought the last statement, "this opportunity to clear my throat and my mind, and give my regards to Broadway", was excellent.

PHILIP J. MEATHE  
Detroit Architect

### SPREADING THE WORD

Forum: The Citizens Metropolitan Planning Council Inc., of which I am secretary, was most interested in your article by James Marston Fitch, "A Bank With a Past in Its Future" [May]. We are planning to bring this article to the attention of individuals in the banks in Louisville. It is an excellent article, describing the choices facing the bank and the solution followed through thoughtfully and beautifully, and one which we wish to make available to men facing similar decisions in this city.

MRS. BARRY BINGHAM JR.  
Louisville, Ky. Secretary

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# LETTERS

(continued from page 12)

ican Revolution by practical methods to assure (among other things) "A more perfect union" among the states along our eastern seaboard.

JOSEPH R. PASSONNEAU  
Chicago Architect

One high-speed train now links Washington and Philadelphia with New York, and another links Boston with New York. But, according to the Department of Transportation, there are no plans for joining the two systems to provide high-speed service from Boston to Washington. So much for "a more perfect union."—ED.

### DELAYED REACTION

Forum: I have, regrettable, only just now read the article "What's Wrong with Architectural Education?" in the July/Aug. '68 issue. But even now I feel compelled to write and offer three cheers for Sibyl Moholy-Nagy, whose comments as usual were right on target, true, and level. If we could have more straight talkers like Moholy-Nagy and less mumbo-jumbo we might clear the air and get back to work.

SAM GARSON  
Los Angeles Architect

### I VOTE YES

Forum: Walter McQuade's article entitled "I Vote Yes" [May] was a classic. With guys like him pushing for sensible zoning regulations, there is no question that our country can be a better place to live in. I thought the last statement, "this opportunity to clear my throat and my mind, and give my regards to Broadway", was excellent.

PHILIP J. MEATHE  
Detroit Architect

### SPREADING THE WORD

Forum: The Citizens Metropolitan Planning Council Inc., of which I am secretary, was most interested in your article by James Marston Fitch, "A Bank With a Past in Its Future" [May]. We are planning to bring this article to the attention of individuals in the banks in Louisville. It is an excellent article, describing the choices facing the bank and the solution followed through thoughtfully and beautifully, and one which we wish to make available to men facing similar decisions in this city.

MRS. BARRY BINGHAM JR.  
Louisville, Ky. Secretary

### THE NEIGHBORHOOD'S ROLE

Forum: I have just had an opportunity to read your recent article on SAND ("Urban Renewal Need Not Be a Dirty Word," April issue). Congratulations on a job well done.

ROBERT FRANTZ  
Saginaw, Mich. Architect

I was particularly impressed with your emphasis on the contribution being made by the neighborhood residents themselves. The ultimate success of this project relies not only on the professional assistance, but most importantly on the role which the neighborhood is performing. This, in our opinion is the critical factor and your article did well to highlight this point.

RICHARD W. MAINE  
Mortgage Analyst  
Connecticut General Life Insurance Co.  
Hartford, Conn.

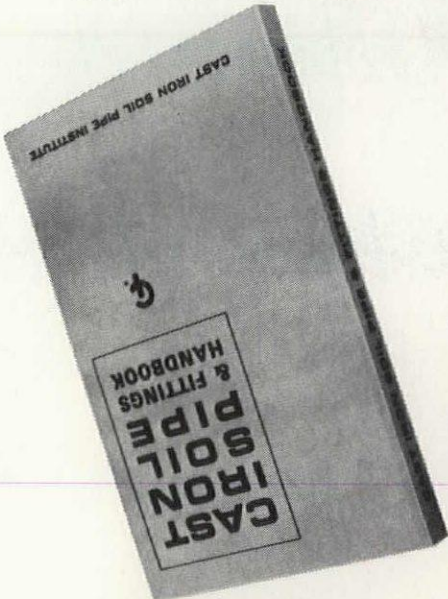
### BICENTENNIAL HOOKUP

Forum: On page 95 of your May Birthday U.S.A., you discussed the competition between Boston and Philadelphia for selection as the site of the "American Revolution Bicentennial."

What has happened to the proposal, put forward by a number of different architects and planners, that the federal government complete the very high-speed rail system between Boston and Washington by 1976, so that the American Revolution Bicentennial could be celebrated simultaneously in (at least) Boston, New York, Philadelphia and Washington?

It would not seem unreasonable to commemorate the American Revolution?

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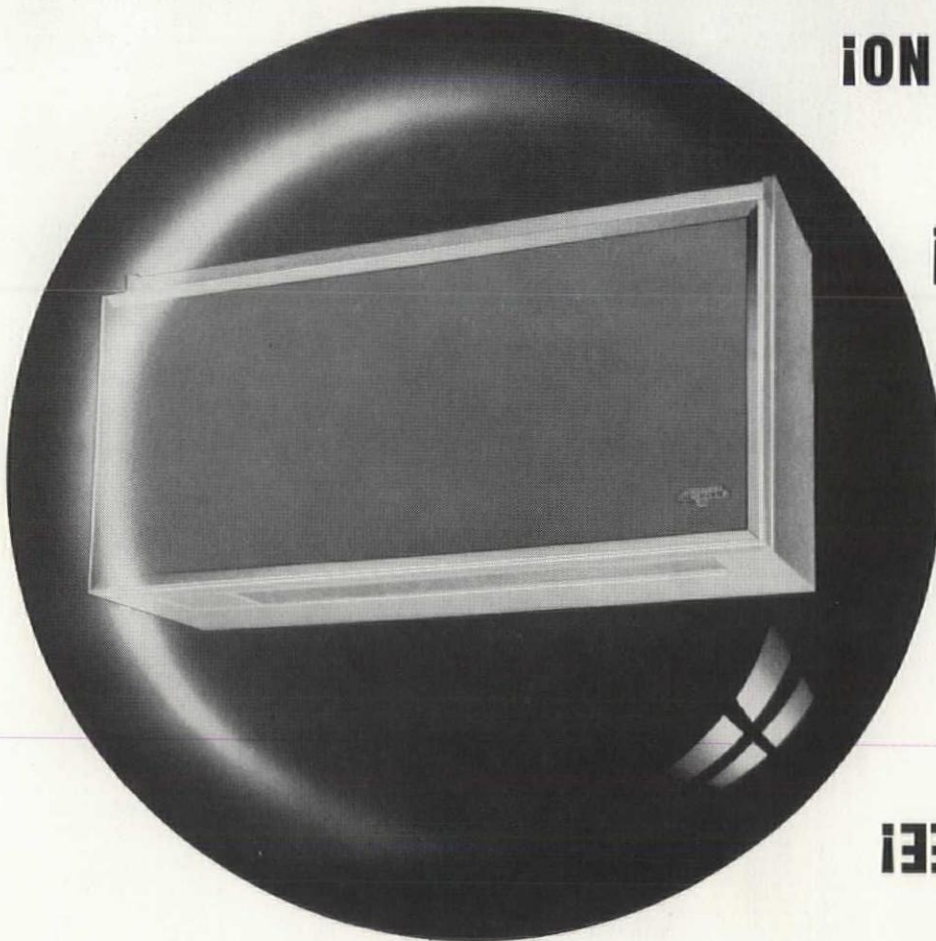
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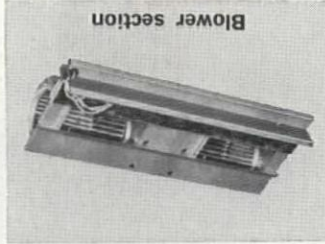
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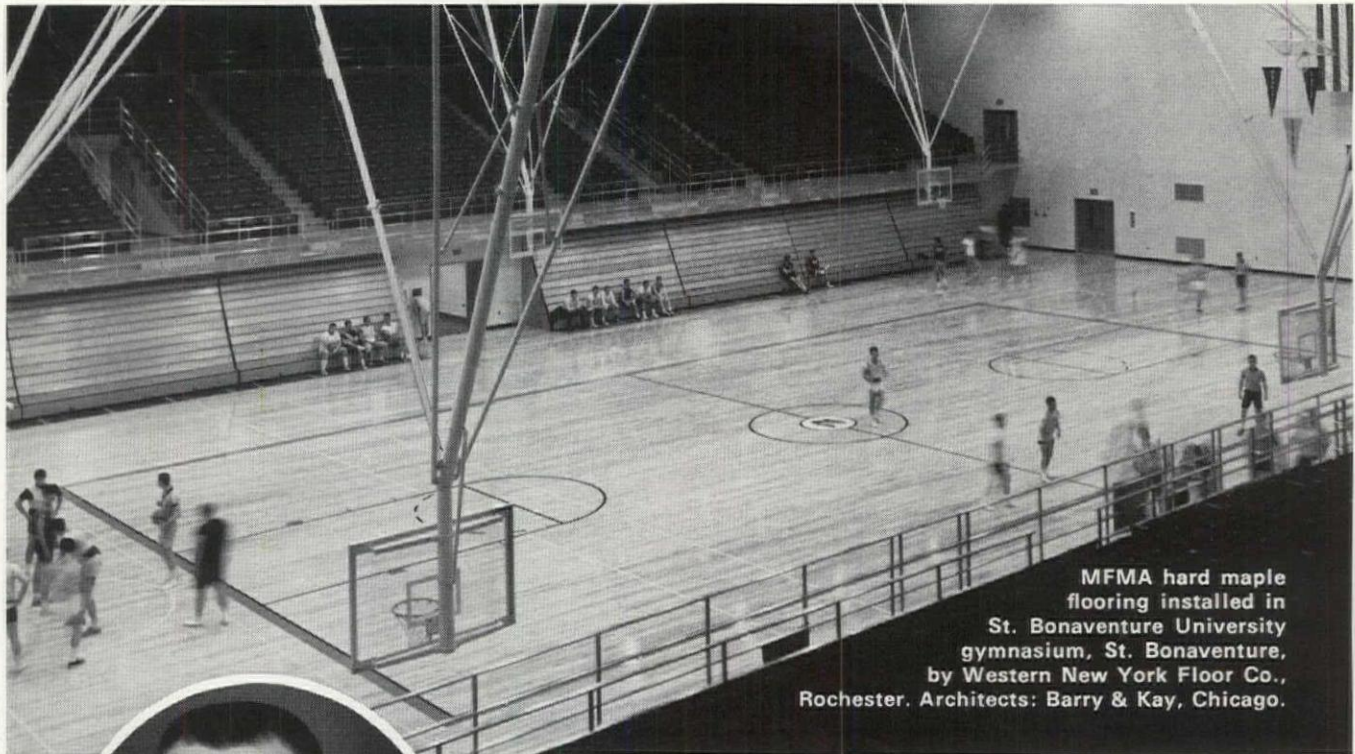


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kitchen

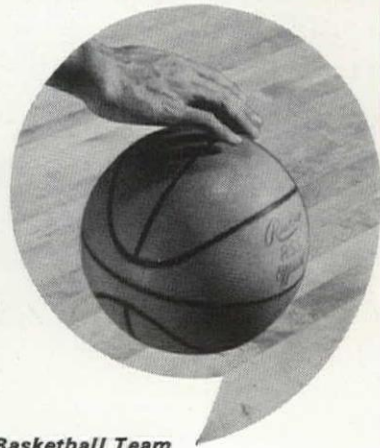




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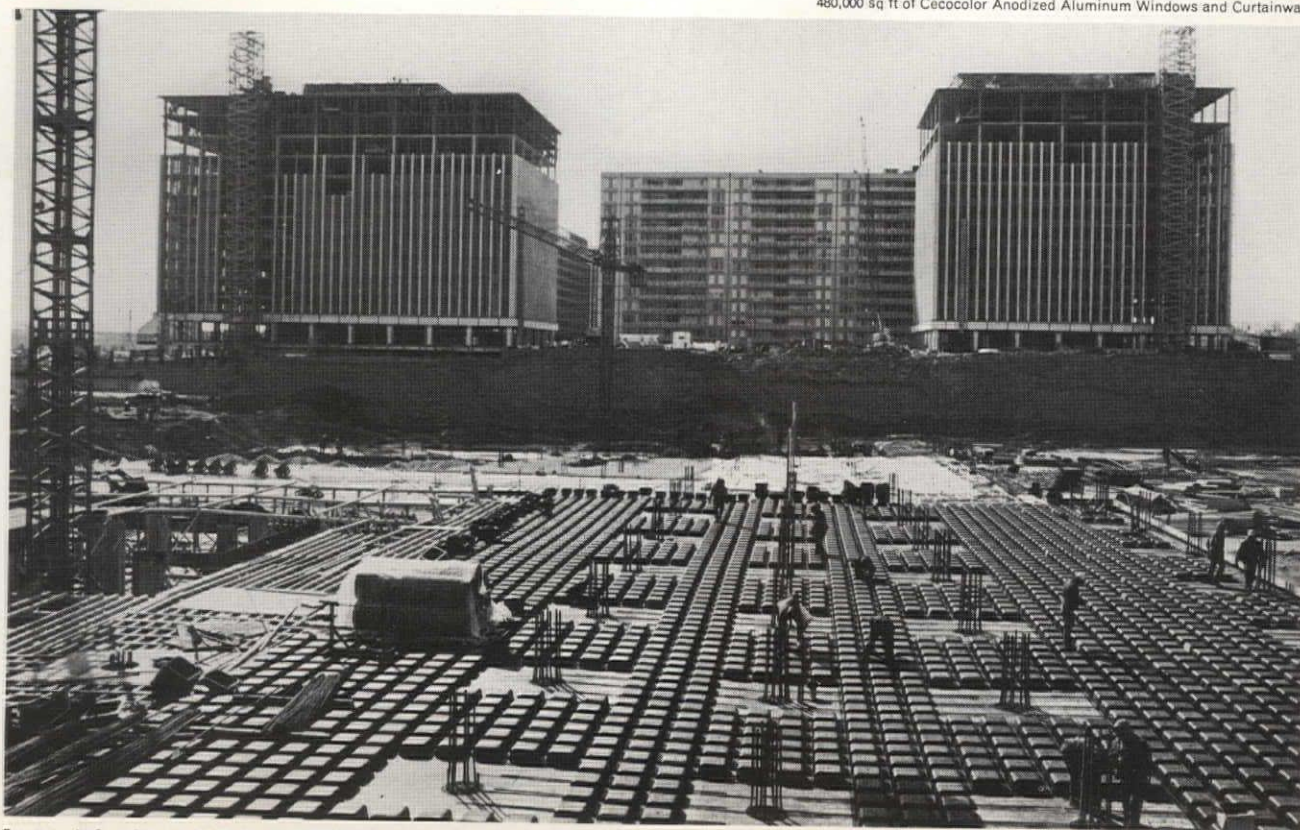
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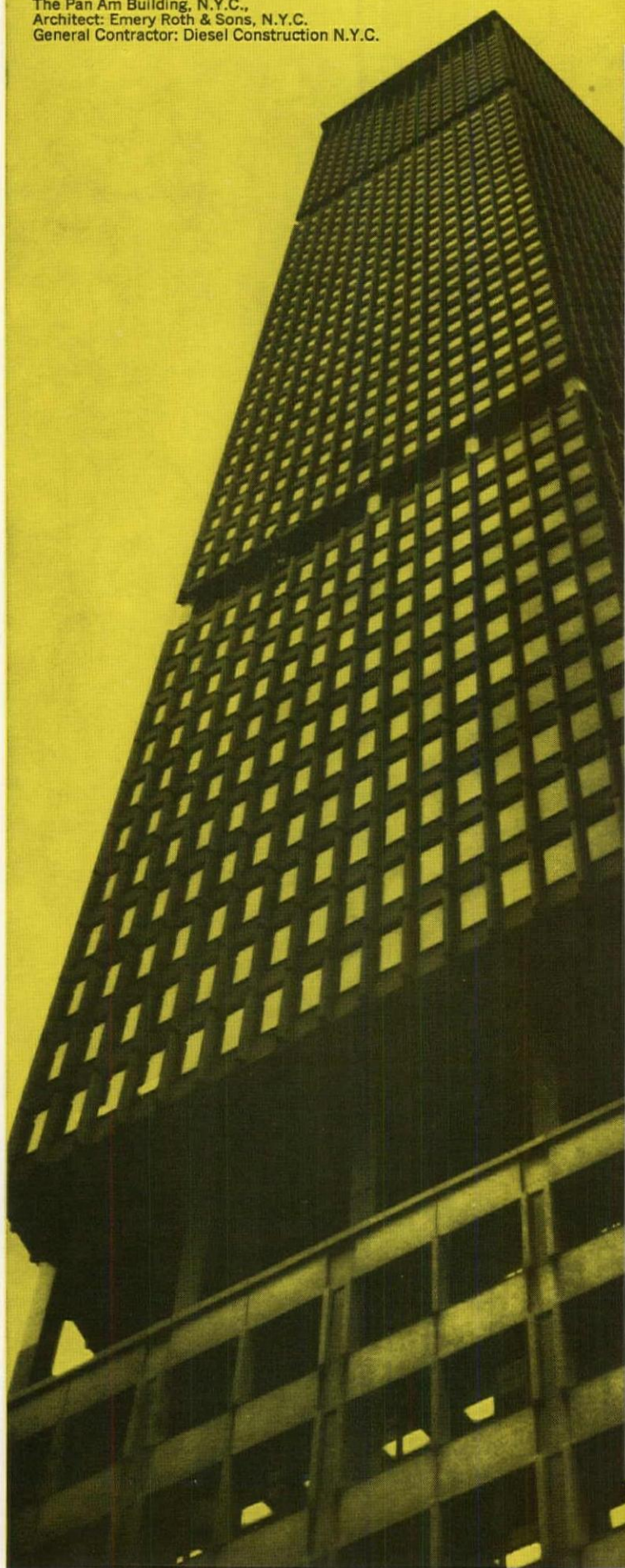


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# FORUM

At 3:58, Saturday morning, June 14, an explosion followed by a series of others, ripped through Yale University's world-renowned Arts & Architecture building by Paul Rudolph in New Haven, Conn., creating a blast furnace of the architecture and city planning floors (below).

These fourth and fifth levels in the complex vertical organization of spaces (Feb. '64 issue) are open to one another in the center, and had become honeycombed over the years with the students' makeshift partitions of plywood, curtain, and tackboard (July/Aug. '67).

Floors four and five were completely gutted; six was heavily damaged, apparently from flames reaching through blasted-out windows by way of the exterior walls. The seventh and top floor, untouched except for some plastic lighting fixtures which were melted by the heat, was rendered unuseable because of the damage below. Some steel beams were noticeably warped from the extreme temperature.

To complete their investigation, fire officials sealed off the building for all but essential administrative services. Students were allowed into the lower levels only, to remove their belongings, and only when accompanied by a security escort.

Fire Marshall Thomas Lyden remained silent, except to re-



affirm the wisdom of New Haven's fire codes. These had prevented Architect Paul Rudolph from proceeding with his original scheme to leave the central portion of the building open throughout. The addition of full floors at the fourth and sixth levels, said Lyden, had greatly reduced the damage.

The marshall's codes had also forced the glazing of the upper part of one portion of the ground-floor library, which connects with the second and third floors. Even so, this glass was broken, causing some water damage in the library.

### ... THE HANDBILL ...

Unlike Marshall Lyden, Fire Chief Francis Sweeney did have an immediate opinion about the A&A fire: "I will consider it to be of suspicious origin until we prove differently."

Arson speculation grew, occa-



sioned as much by the explosions and the hour as by Chief Sweeney's precipitate remark, and fed by controversies that had arisen in the school.

Suddenly remembered was a handbill passed out to alumni and guests at graduation ceremonies. It read: WHY HAS YALE NOT GONE UP IN SMOKE? Yale . . . Don't kill the arts! The recent destruction of the city planning department by the Yale Administration shows that Yale intends to continue serving the rich. This action should be immediately reversed. During your stay at Yale SEE THE A&A BUILDING, SEE EVERY BUILDING, SEE THEM SOON." The once innocuous, now strangely inflammatory wording originated, according to one report, not from the city planners but from five medical students.

#### ... THE FRAUDULENT LETTERS

On May 24, and the three days following, Yale's President Kingman Brewster had, it seemed to many, virtually dissolved the city planning department following 12 unauthorized admissions. The 12 were sent "fraudulent" letters of acceptance, said the administration, by a student-faculty forum, without the approval of Dean Howard Weaver (seen below, inspecting the fire damage). The letters were signed by Associate Professor Harry Wexler, Professor Herman ("Pat") Goeters, and six students in the department.

Brewster relieved tenured Professor Christopher Tunnard of the chairmanship of the department (he continues as senior professor); dismissed Louis DeLuca from his administrative duties as assistant dean; said he could not approve renewal of Wexler's contract; wrote a letter of censure to the six student signatories, threatening loss of degrees—a move he has, apparently, recanted; and advised eight students, previously admit-



ted, not to enroll.

Seven of the 12 unauthorized students, said Weaver, have since been admitted to the school in a "special student" category.

According to an unofficial report, investigators have so far found no evidence of arson. Officially, the Arts & Architecture School, doubly shaken by events, will re-open in the fall.

## CONFABS

### RESTING IN ASPEN

Last month, as it must to all symposia, torpor came to the International Design Conference in Aspen. If the 19th meeting of IDCA in that lovely Colorado resort demonstrated anything at all, it was that most designers (or, preferably, their works) should be seen and not heard.

This year's theme was "The Rest of our Lives," which summer-upper Peter Ustinov discovered, to his chagrin, referred to the next 30 or 40 years, rather than to some euphoric snooze. In responding to the Challenges of the Future, most of the designer-speakers (who shall be left mercifully unidentified) tended to maul; whereas most of the non-designer speakers did themselves proud.

Among these latter were:

- CBS President Frank Stanton, who (predictably) analyzed the present and future communications explosion—and then, unpredictably, worried about the possibility that nobody was really listening or watching;
- Writer Dwight Macdonald who proposed ten convincingly appropriate amendments to the Constitution of the United

States, starting with one abolishing the Presidency;

- Hudson Institute prognosticator Tony Wiener, who suggested, among many other fascinating things, that all of us, around 2000 A.D., might come equipped with push-buttons which, when pressed, would produce pleasurable responses. (Wiener's informants: rats);

- the Rev. William Sloane Coffin, Jr., of Yale, who spoke rather loudly about love;

- the remarkable surgeon, Dr. Adrian Kantrowitz, who suggested that all of us would soon have something like a pulsating squirt gun to replace our hearts;
- the bacteriologist, René Dubos, who pleaded, movingly, that the intervention of individual man's genius, rather than the consequences of technological advance, would forever shape the human condition;

- Poet Robert Lowell, who shyly sang his song;
- and, finally, there was Peter Ustinov.

Mr. Ustinov, unlike some of the conferees, attended every single IDCA meeting, through thick and, mostly, thin; he closely observed every single speaker and carefully listened to his cadences; he mingled freely with the mob, and absorbed the repercussions; and he delivered, in the end, a beautifully erudite summation—funnier, of course, than any previous speeches; but also, really, a great deal more intelligent than many of them. His point: if man will only continue to act individually and creatively, he has got a future.

Outside the Aspen tent, in the vast meadow, there stood a 40-ft.-tall monument to the Ameri-

can Dream: a tower of about 30 junked automobiles (left), painted white, surrounded by miscellaneous other fallout from the Affluent Society, assembled by a group of very lively art students from the University of Northern Illinois led by Don Strel, and financed by the Graham Foundation. Mr. Ustinov, and Mr. Strel's students, stole the show.

Next year: Stew Udall, Larry Halprin, and the American environment.

### \$15 MILLION VOTE

The AIA convention in Chicago began with Mayor Daley (or rather his assistant) quoting THE ARCHITECTURAL FORUM special issue on Chicago (May, '62): "Here is where it all began."

And the convention ended, for all practical purposes, with the passage of a resolution calling for \$15 million to be disbursed by the AIA on a program of social action. The kinds of projects, not yet specified in detail, will certainly include the formation of community design centers (giving technical assistance to people who can't afford it), and will probably also include the immediate upgrading (for accreditation) of six existing black schools of architecture.

This remarkable happening—about as amazing as Mayor Daley reading THE ARCHITECTURAL FORUM—is the work primarily of Taylor Culver (below), fifth year



architecture student at Howard and straight-talking president of the 17,000-member Association of Student Chapters/American Institute of Architects. Promised a voice at the convention, the students turned it into a chorus. The proposal for a \$15-million fund was first enunciated at a small Sunday afternoon session between officers of the two

groups. It was repeated to 1,500 people at a "Student Speak-out" on Tuesday morning, with Culver explaining that the money would be used to let the community decide what it wants. "We don't challenge your ability to build," he said, "but you can't determine for another man how to live." To comments from the floor, Culver responded strongly but quietly. "If you think this is a radical move, you have been asleep for five years."

The next stage of the nonviolent confrontation came at Wednesday's workshop. One architect, opposed, thought the Institute should take a hard look at things "less glamorous than the people-to-people projects." Another said that unless the body responded to this rational and moderate proposal, he would publicly burn his membership card in the Palmer House lobby.

The final moment came on Thursday morning, when delegates were working their way numbly through no less than 21 resolutions. Many people had been up until 3 a.m., at the gala event that began with a musical program at Sullivan's spectacular Auditorium Theater, and closed with a three-ring dance at the soon-to-be-demolished Grand Central train shed. Few resolutions had excited any comment—including this one. An architect from Memphis, Tenn., spoke against it, but he was his own best adversary and no one thought it necessary to reply. The resolution passed without a single negative murmur. Taylor Culver smiled with relief and turned to receive handshakes from people standing near him.

The resolution sets up a team composed of the AIA Task Force (which was formed in response to last year's convention challenge by Whitney Young), to be supplemented by a team of students. Together, they will decide how to spend the money, delivering their recommendations to the AIA Board "for official endorsement and funding plan." The wording throughout was intentionally vague. But the AIA news office was having some difficulty writing a press release, having been instructed to imply that the Task Force and not the AIA Board would be raising the money. Clearly, the intention was for the Board to raise it, and if there is any attempt to shirk this now self-imposed assignment, the AIA will forfeit any respect

it gained from the young people who came to Chicago in a spirit of cooperation and concern. "This isn't a thing just for students," said Culver, "we're all in the same boat."

#### TAR IN CHICAGO

Students were present in another way at the convention. Although SOM braced itself for a sit-in, having been the site of a picket line over their design of a large project in South Africa (May issue, page 34), the group of students calling themselves The Architects' Resistance, or TAR, gathered in Chicago more for its own purposes than to disrupt anyone else's work or play.

For several days they met in the A & A building of the Chicago Circle campus of the Uni-



versity of Illinois (Dec. '68 issue). They came from the Independent Studio at Yale, the Pratt Center for Community Improvement, the Real Great Society, the Urban Deadline, the Mountain Institute, Environment Inc., and several other groups. These are students who are passionate and convinced. "People expect us to change in ten years, but it's architecture that has to change, become a whole new process—in fact, the whole thing is process, not product," said one girl.

Like many young architects today, these students find that architecture is only part of the problem. The Mountain Institute hopes to launch an interdisciplinary attack on problems of health, education, shelter, etc., in the "hollers" of East Kentucky, going further than the projects from Yale that drop a single building into the community and do not alter basic conditions. The University of Kentucky has provided \$10,000 for a one-year planning program, which will lead to a coordinated program for students from Yale, U. of Ky., and various local



colleges. Foundations are not interested in rural problems, MI reports, expecting people to move out to the cities as soon as they can. The "urban crisis" is not connected in most minds with a "rural crisis."

The TAR students held an open house one afternoon (left), having distributed invitations outside the AIA President's reception. In view of the fact that several resolutions issued by this convention concerned the social context of architecture—in particular, the community design center—it is too bad that only 10 or 15 older people came. But they will be hearing more of these young people.

## MEDIA

### ISLAND FOR COMMUNICATION

Motorists and pedestrians attempting to circumnavigate a small pie-shaped island in downtown Boston's Park Square recently scored a high "confusion count." It was an ideal place for the experiment in communications called "Signs/Lights/Boston," a pilot project funded by a \$360,000 grant from HUD.

The project was in two parts—redesigned road signs based on European symbols, for the motorists, and a new street environment and information center for pedestrians. Both were under the design supervision of Architects Ashley/Myer/Smith Inc. of Cambridge, with consultants from MIT and the MIT-Harvard Joint Center for Urban Studies.

The information center site was created by laying a temporary paving over a portion of street 42 by 55 ft. Painted with flowing yellow stripes, the pavement extended one sidewalk to

the island, forming a pedestrian peninsula (above). Here a number of kiosks were erected—5½ to 15 ft. high and 3 to 4 ft. in diameter. These were covered with silver mylar, imprinted with graphics to indicate their use (below), and topped with 12-ft.-wide white polyethylene balloons.

Each kiosk supplied different information by different automated means: a large map of Boston with recorded events of the day; a print-out machine that answered 120 frequently asked questions; push-button movies



clearly viewed in full sunlight; slide shows; and a teletype machine with the day's news.

Communication was not all one-way. A phone recorded visitors' comments and evaluations for play-back. These, say Ashley/Myer/Smith, were overwhelmingly favorable.

By the end of June, all had come down and the old dull confusion had returned.

### TELEPHONE'S HOT BREATH

Poet John Giorno's Dial-A-Poem, the telephonic readings initiated by the Architectural League of New York earlier this year (March issue, page 27), serviced 1,112,337 thespiphiles. Then, around the middle of

(Continued on page 109)

# HOUSING

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# THE CONTINUING CRISIS

Last year, only 1,548,000 new housing units, of all types, were built in the U. S.; yet new families, and the demolition of existing housing, had generated a need for 2,100,000 new units. Moreover, of the total units built, fewer than 50,000 were for low-income families, yet 20 million Americans are living in substandard housing.

Add to these already glum statistics the fact that fewer than a quarter of last year's new housing units were built in central cities, where the housing shortage is most acute, and you begin to realize why housing is a key factor in our urban crisis. Last year, as in past years, the central cities and the poor who inhabit them continued to take a beating at the hands of affluent, mostly white suburbia.

The reasons are well known: tight money, high real estate taxes in center cities, limited profits to be made in anything but *luxury* housing. And the impact upon the fabric of urban living is equally obvious: a growing polarization, in cities, between the very few who are rich, and the very many who are caught in slums.

In the face of all this, the search for miracles continues: some look for lower building costs—but costs continue to climb at an outrageous clip; others look for lower financing costs—but interest rates are jacked up at an increasingly rapid rate; still others look for greater subsidies to housing—but the political priorities do not seem to permit such subsidies.

The search for miracles will continue so long as political power is wielded, primarily, by those who can afford to do without such miracles. And the miracles are likely to remain just as elusive as they have been in the past.

Although this special issue will not attempt to answer the cosmic questions posed by our mounting housing crisis, some of the answers are implied in the stories that follow.

- The story on the award-winning Riverbend Houses in Harlem is proof, of sorts, that—given all the incredible onerousness of the urban situation—it is still possible, for the imaginative and idealistic designers, to come up with something much, much better;
- The story on the vast Thamesmead development to the east of London is a pretty good index to what systems building may be expected to achieve—and where its limitations lie;
- The story on systems building carries this report a bit farther;
- The story on La Luz, in Albuquerque, N. Mex., suggests that Latin concepts of urbanism can have a meaning for all of us;
- And the proposal advanced by a group of University of California researchers, that welfare funds might be invested in better housing (rather than in slum subsidies) seems about as imaginative a suggestion as has been made in our pages in some years.

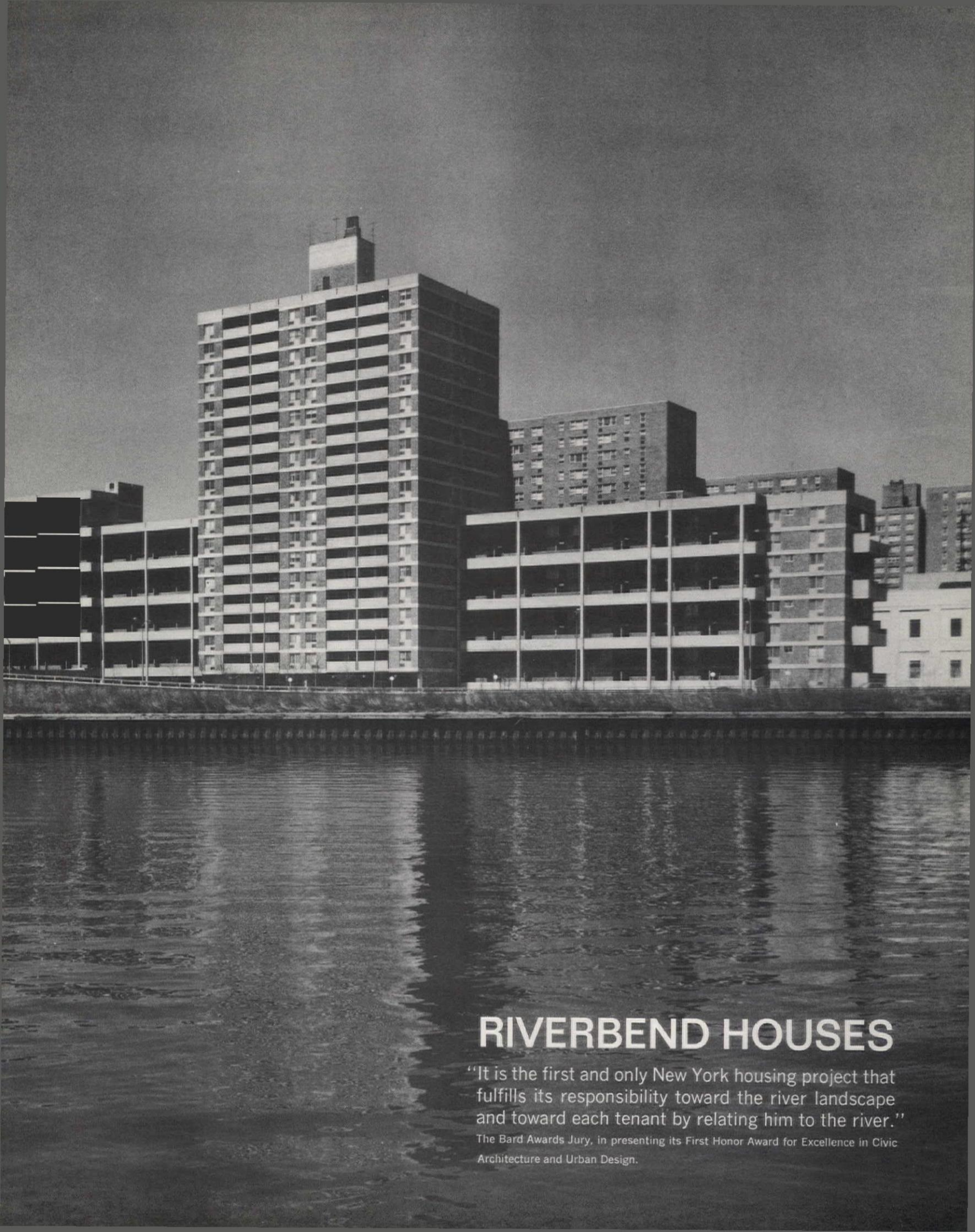
There are several additional stories dealing with various aspects of urban living, plain or fancy, and with ways of building the kind of housing that will continue to make our cities worth living in. For this, of course, is the ultimate test. We can, presumably, build adequate shelter (and we might even succeed in keeping the cost of shelter under control). But "adequate shelter" is no longer good enough. And architects and builders of urban housing are beginning to get that message.

It is encouraging to see that Riverbend Houses last month received one of the prestigious Bard Awards—not for putting a roof over somebody's head, but for "Excellence in Civic Architecture and Urban Design." When a mere middle-income housing project gets that sort of recognition things may, at last, be looking up.









## RIVERBEND HOUSES

"It is the first and only New York housing project that fulfills its responsibility toward the river landscape and toward each tenant by relating him to the river."

The Bard Awards Jury, in presenting its First Honor Award for Excellence in Civic Architecture and Urban Design.

The complex of buildings shown on the previous and following pages contains 624 apartments, 250 parking spaces, 10,000 sq. ft. of commercial space, two spacious playgrounds, two apartments for superintendents, half-a-dozen pleasantly arranged, off-sidewalk sitting areas, and a couple of minor flaws. Despite the latter, Riverbend is, quite clearly, the best housing project built in Harlem to date.

It is, also, the most unlikely project of this sort to date: it was built on an impossible site (a 3.7 acre triangle, cut up by one highway ramp, three existing streets, and a couple of city sewers); and it was also built for an impossible budget—low enough so that apartments could be bought for an average of \$414 per room, with a monthly maintenance charge, after that, of approximately \$30 per room (the exceedingly tight restrictions under New York's Mitchell-Lama Act.)

There were only two reasons why Riverbend got built at all: the first was that the architects, Davis, Brody & Associates, refused to take "no" for an answer—or to accept the easy way out, and build more of the same deadly housing units, like those visible next door in the aerial photo at right.

And the second reason why Riverbend ended up the way it did was that the developers—HRH Construction—backed their architects to the hilt.

#### An impossible site . . .

Riverbend stands on one of those pieces of land found in too many U.S. cities that are left over after our highway planners have cut up the rest of the townscape. To the east, there is a 120 ft. stretch of six-lane superhighway, that successfully cuts off the site from the banks of the Harlem River; to the west, there is the final, Harlem stretch of Fifth Avenue; and, in

between, there are little cross-streets leading to nowhere in particular—but still mapped and, hence, seemingly insurmountable. There is also one highway access ramp—and that one did, indeed, prove to be.

The easy way out, on this sort of site, would have been to accept the inevitable and plunk down two or three highrise towers on the two or three available, deformed city blocks. Instead, the architects designed a continuous ribbon of walkways and platforms on different levels, tied together by stair-and-elevator towers, and bridging the existing roads. (Only the highway ramp would not permit itself to be bridged.) Result: a connected series of apartment blocks elevated to reach for a view.

#### . . . and an impossible budget

"When you do a Mitchell-Lama job," the architects explain, "you start with the fact that monthly maintenance charges have to be \$30 per room or less—and then you work backwards." (Today, Mitchell-Lama limits have been raised to a more realistic \$50 per room; but when Riverbend was planned, the limit was still \$30.)

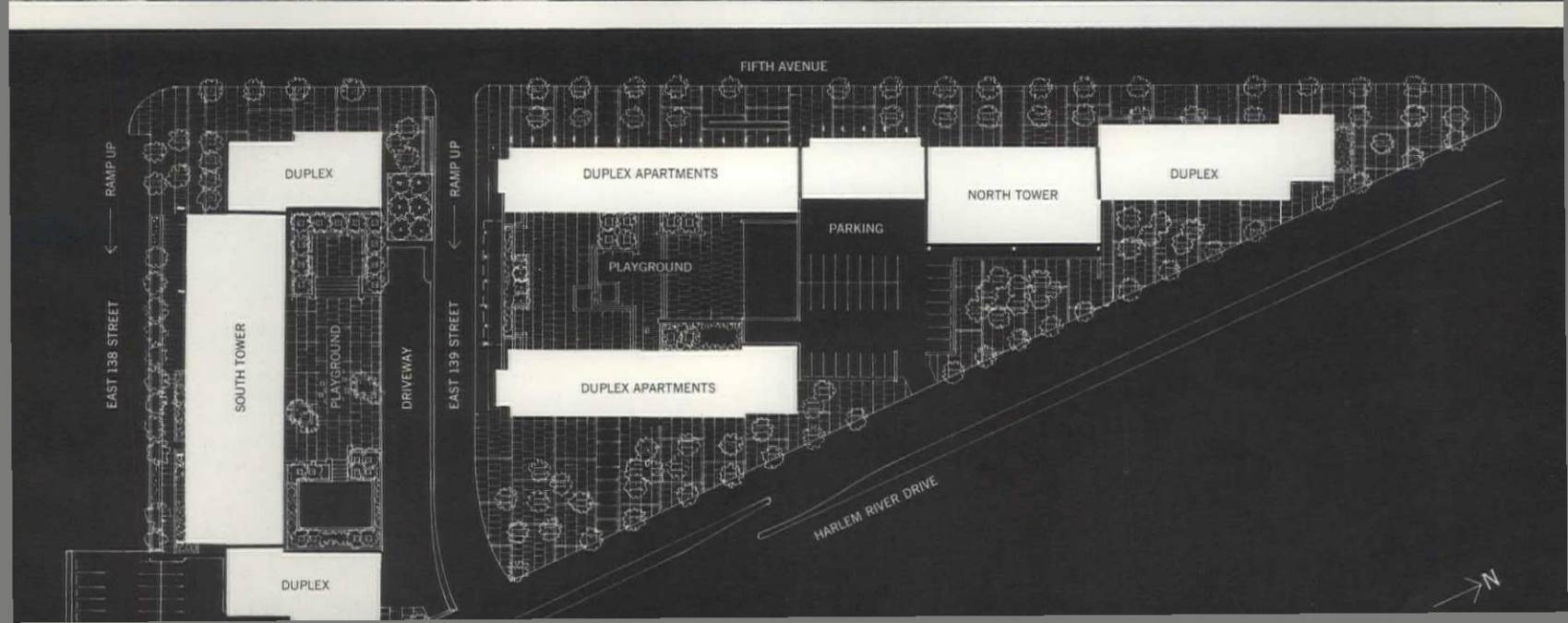
With such limitations imposed upon them by the program, the architects decided to respond creatively rather than surrender: they cut elevator costs by attaching the duplex blocks to the towers so that both would jointly use the same elevators; they cut masonry costs by designing an oversized, 5½ in. by 8 in. brick; they cut finishing costs by using patterned formwork for all exposed concrete; they provided the required "secondary means of egress" from one apartment through the one next door; and they developed details with simplicity and restraint. The only flaws at Riverbend are those caused by some of these imperfections.

## RIVERBEND HOUSES the impossible project



Aerial and eye-level views of Riverbend (above and top right) show relation of project to existing highway, access ramp, and Fifth Avenue—and to the Harlem River. These views are from the east. Housing units to the west and south of Riverbend are typical of New York City middle-income apartment building. Plan at right is of the entire triangular site. The level drawn here shows elevated playgrounds over parking garages, and sidewalks-in-the-sky leading to duplex apartments. There are two towers, 18 and 15 stories high respectively, and five duplex blocks.





## RIVERBEND HOUSES sidewalks & patios in the sky . . .

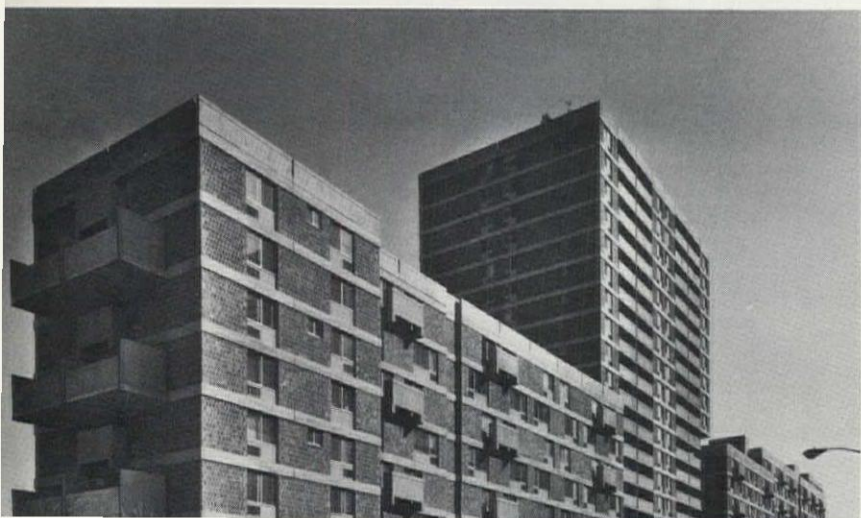
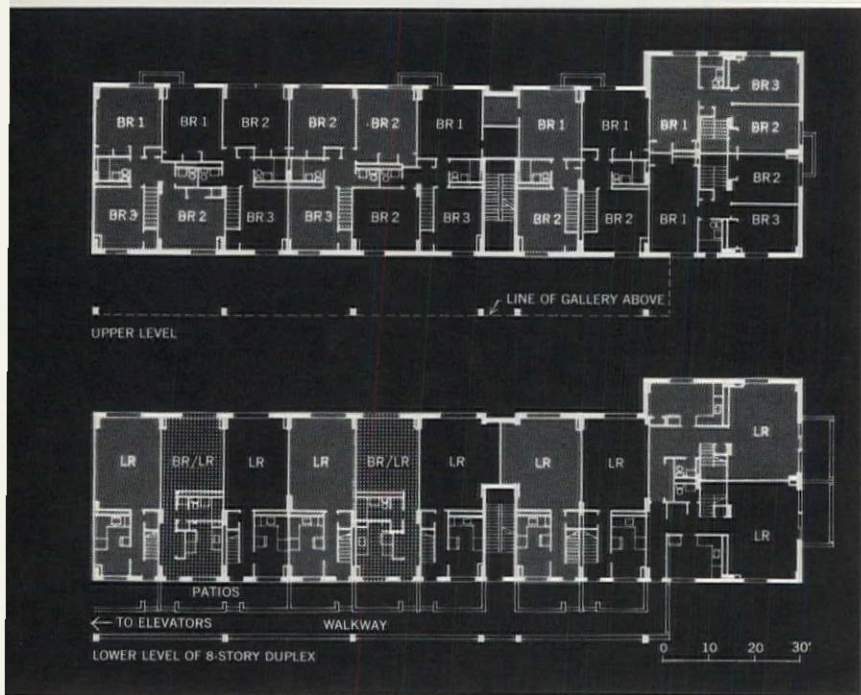
"The layout of Riverbend is based on a continuous communication pattern, from street ramp to multilevel court," the Bard Awards Jury said. It is a good description of the way the project works.

A third of the apartments at Riverbend—200 out of a total of 624—are duplex; all of those are entered from outside walkways located, in the mediumrise blocks, on alternating floors.

The walkways (shown at left) are 5 ft. wide. Off to one side of them are located walled patios measuring 13 ft. 2 in. by 6 ft. Each of these patios goes with a duplex apartment—and you enter the apartments through them.

A typical duplex along one of these elevated walkways consists of a generous living room and a kitchen downstairs, and one, two, or three bedrooms upstairs. The structural bay that forms the basic apartment is 13 ft. 10 in. wide; variations in the number of bedrooms are created by borrowing space from adjacent bays (see floor plans at left).

Tenants like the walkways and patios, even though there are occasional icing problems in winter; they like the kitchens, which are big enough for three or four people to eat in, the spacious (13 ft. 6 in. by 20 ft.) living rooms, and the sense of living in a house, rather than an apartment, conveyed by the duplex arrangement. They have improvised a few changes: wrought iron gates at each patio entrance, flower boxes on tops of patio walls, etc. They also have a few complaints: inadequate storage (but all city dwellers complain about that); some problems with acoustic privacy; and a certain crudeness in details. One interesting sidelight: the duplex apartments, with their natural cross-ventilation, don't seem to require air-conditioning units.



Views at left show two-story-high "sidewalks-in-the-sky" used to reach the duplex apartments contained in the long, mediumrise blocks. Center photo shows typical, walled patios outside duplexes. Tenants have added wrought iron gates and flower boxes to secure and enhance patios. Plans (above) show two levels of duplexes, with typical elevator-and-stair tower to the left. Far right: pedestrian ramp down to Fifth Avenue gives access to sidewalk for baby



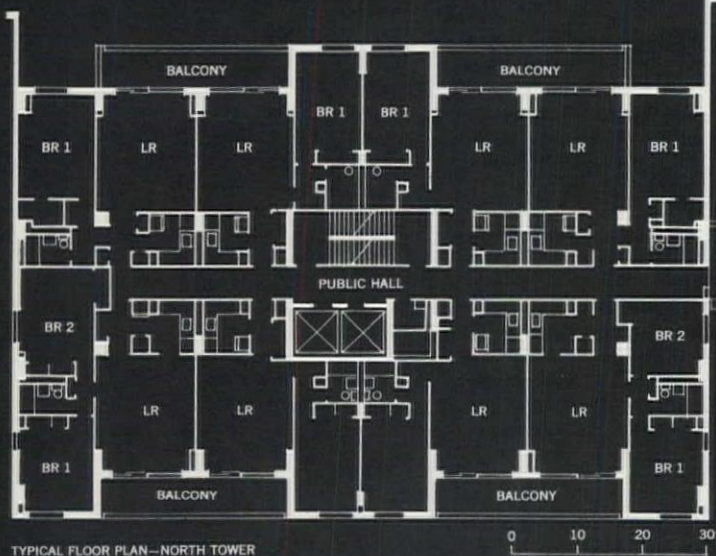
## RIVERBEND HOUSES facades in depth . . .

Even with its strung-out duplex slabs, and its two towers between, Riverbend might have been a fairly dull-looking group of buildings. What has kept it from being dull is the sort of attention to details, materials, textures, masses and voids not usually found in U.S. housing.

Throughout Riverbend, the concrete structure is boldly exposed, and brought forward beyond the surface of the brick walls. Sometimes that projection is a matter of an inch or two; at other times the structure appears several feet in front of the brick walls. In every case it is made to break up what might otherwise have been a series of pretty plain facades.

Structural concrete has been left with the markings of board forms showing. Where the concrete is used for spandrels or parapets, it has been given a special, striated pattern by making the forms out of the undersides of wood flooring. The brick, as mentioned earlier, is a special, 5½ in. by 8 in. giant size—this contrasts nicely in color and scale with the concrete structure. The windows are sliding aluminum sash, which is another unusual detail in this sort of project.

The two platforms over parking garages (right) are surfaced primarily with concrete, and this has created some hazards in children's play areas. (The surface was demanded by the maintenance people.) Apart from this, however, the finishes throughout, however rough, seem entirely appropriate.



Exteriors of Riverbend Houses (left and opposite) show great variety in patterns, textures, light and shadow—remarkable in an area of building that is moving more and more toward monotony. Differently sized windows, often a nuisance in housing design, have been grouped together within overall structural patterns. Above: typical floor in North Tower, where apartments are relatively conventional. Right: larger of two platforms used for play and conversation. (To get benches put up in the peripheral public spaces around Riverbend required a major community effort led by Teacher-Owner Mrs. Lucille Hoberman.)





Just as the facades-in-depth at Riverbend stand out effectively in sunlight (near right), so the extensive night lighting (far right) is a dramatic addition to the Manhattan skyline. Originally designed as a security measure to keep the sidewalks-in-the-sky trouble-free at night, the lighting soon became a positive architectural element, dramatizing the structure as well as clarifying the unusual circulation patterns. The Circle Line boats that take tourists around Manhattan slow down when they reach the 145th Street Bridge, especially at night: Riverbend all lit up is quite a spectacle!

Who lives in Riverbend? The answer is: middle-class families, mostly black (with a few Puerto Ricans), fairly conservative, but predominantly young. Riverbend, it was hoped, would become an integrated community, but the demand for these truly handsome apartments was so great that they were snapped up long before white families were able to summon the necessary determination to make the move. This is unfortunate, for the intellectual and cultural climate of Riverbend could have made this a highly successful prototype for integrated living.

A second failure, so far, has been in the occupancy of the 10,000 sq. ft. of commercial space provided by the developers. To date (almost a year after Riverbend was opened to tenants), although all the space has been rented, there has been virtually no financial backing available for the black store owners who would like to open there.

Meanwhile the Riverbend community seems to be settling in: there is an active tenant organization; there are handsome, abstract porcelain-enamel murals by Stefan Knapp in the lobbies, and wonderful Super-Graphics by members of the Davis, Brody staff planned for the elevator lobbies. There are spontaneous (if less professional) efforts at embellishment on many of the balconies.

The inevitable gripes are surprisingly low-keyed. Praise for the many qualities of Riverbend Houses easily drowns them out. Max Bond, the black architect (see Mar. '68 issue) lives there, and his professional criticism of the buildings—if any—is limited to what he feels are very minor details.

Perhaps the nicest compliment paid to Riverbend has come not from the Bard Awards Jury, nor from New York's Municipal Art Society which gave a plaque to Riverbend reading that it was "an exceptional concept in urban living." It came from Mr. Joey Maldonado, who is the superintendent in charge of the boilers and furnaces that serve this little town: he is so pleased with the handsome machines in his domain that he has started out on an ambitious project to paint the pipes and the furnaces in a kaleidoscope of dazzling colors. He has already painted his floor four times over, and when he is through with the hardware, his boiler room may well turn out to be a work of art to match that produced by the professionals above ground.

—PETER BLAKE

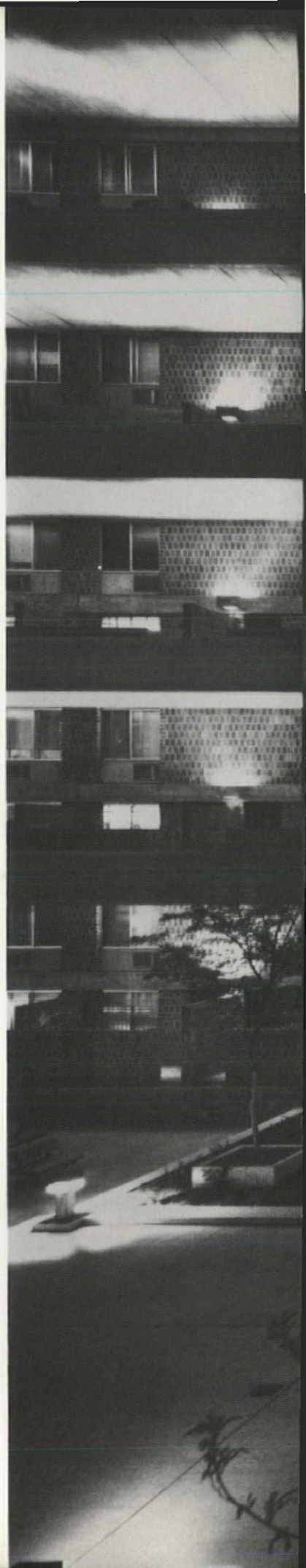
## RIVERBEND HOUSES dramatic lighting, day & night . . .

Views of double-story sidewalks-in-the-sky, by day and by night. The facades are straight "Op"—in daytime, sunlight strikes the structure, and shade makes the vermilion brick walls around patios recede. At night (opposite), the brick walls are washed in light, and the structural frame is cast in silhouette.

### FACTS AND FIGURES

Riverbend Houses, Harlem, N. Y. C. Architects: Davis, Brody & Associates (Brian Smith, senior associate in charge, Walter Beattie, project coordinator). Engineers: Wiesenfeld & Leon (structural), Wald & Zigas (mechanical and electrical). Buildersponsor: HRH Construction Corp. Site work: Coffey & Levine and M. Paul Friedberg & Associates. Graphics: George Sadek. Special lighting: David A. Mintz. Building area (excluding garage facilities and utilities): 732,000 sq. ft. Construction cost: \$11,190,000.

PHOTOGRAPHS: Norman McGrath, except aerial by Skyviews Survey Inc.





# ONE BILLION DOLLAR SUBSIDY FOR SLUMS

BY JOHN M. BAILEY JR., AND HENRY SCHUBART JR.

**One third of all welfare payments are spent on housing—most of it substandard. Here is a proposal to use these funds more constructively.**

Shocking statistics have long since become the bland C-Rations of the War on Poverty. Few moral appetites are whetted by the knowledge that over 6 million American families live in slums, or that slum housing, for all its squalor, is expensive. It may just rumble a few stomachs, though, to know that the nation's taxpayers are paying for more than 2 million of those slums.

This spring, the Community Design Center at the University of California Extension published a study of rent payments by welfare recipients in San Francisco. That study found that over \$18 million in public funds were being spent annually for some of the worst housing in the city. There are currently about 4 million families in the United States who are receiving public assistance. According to a recent (January, 1969) HEW report to the House Ways and Means Committee, these families annually spend a total of \$1.1 billion for housing. This amounts to  $\frac{1}{3}$  of total cash payments to recipients of welfare. The vast majority of these recipients, according to the same report, occupy privately owned rental housing and over 60 per cent of the units they occupy are "substandard."

Although American taxpayers have been conditioned by F-111's, oil depletion allowances and similar follies to expect little for their money, one doubts that many of them would consider slumlords deserving of public subsidy. Yet the nation's slum owners are, in fact, receiving such a subsidy—to the tune of some \$600 million per year, a sum roughly equal to President Nixon's budget request for the Model Cities program.

The way it comes about is this. The National Social Security Act prohibits vendor payments: that is, direct payments by public agencies to those who supply goods or services to welfare recipients. All payments to recipients are in cash and their total amount is supposedly calculated to cover minimum living costs in a given locality—so much for food, so much for clothing, so much for rent, etc. In fact, this practice is one of the few human characteristics of the welfare system since it gives the recipient control of his income and with it a theoretical bargaining power in the private market. Practically, however, that power is largely illusory and nowhere more so than in the private rental housing market. The HEW report acknowledges that rental allowances are "inadequate," and the CDC study found that in San Francisco the discrepancy between rent allowances and actual rents paid averaged 36 per cent.

As long as decent housing costs more than they can afford, the poor will continue to live in slums, and this fact has led reformers to seek increases in welfare allowances. Two suits challenging the adequacy of present allowances are currently before the courts in California.

Obviously, such increases are necessary and should be made. But it is equally obvious that alone they will rep-

Mr. Bailey, a 1957 graduate of the Harvard Graduate School of Design, is director of the Community Design Center at the University of California Extension in San Francisco.

Mr. Schubart, former director of the Community Design Center, is an architect practicing in Ganges, British Columbia.

resent only a temporary solution to the problems of housing citizens in the lowest income brackets. It is virtually inevitable that, given the rising costs of real estate and construction, the continuing shortage of standard housing, and the general absence of statutory rent controls, any increase in welfare allowances will be quickly absorbed by corresponding increases in private market rents. Unless some means are found to protect low cost housing against continuing inflationary pressures, the poor—and the rest of the public—will continue to pay more and more for less and less.

People who understand the housing market (and even many politicians who don't) admit that the housing needs of low income people (and, increasingly, those of middle income people) cannot be met without direct or indirect government subsidies. Yet today the funds and political support for such subsidies on a scale even approaching the need are nowhere in sight. Welfare payments, however, represent an existing, and continuing, commitment of public funds.

The tax dollars now spent by welfare recipients in the private housing market buy little for the recipient and nothing for the public. The millions which the taxpayer might reasonably expect to produce a substantial public asset only serve to guarantee a substantial portion of the slum housing market and thus to perpetuate the living conditions they are presumably intended to improve. If, instead, these monies were used to finance a publicly controlled housing development program, a new public asset could be created—and at no new expense to the taxpayer. In fact, by providing a hedge against continuing inflation of property values and housing costs, such a program could result in a long term economy of public funds. The more than \$1 billion which is spent annually on housing could support, on 221d3 terms, an investment in low cost housing on the order of \$10 billion.

Such a program might be organized in a number of ways and under the aegis either of a public agency or of a publicly controlled non-profit corporation.

For example, an appropriate public agency (either existing or *ad hoc*) could acquire and improve existing housing or construct new housing where suitably located sites are available using funds raised through the sale of state or municipal revenue bonds. These bonds would be secured and amortized by the guaranteed income from public assistance payments for housing. Since the debt service on such bonds is substantially lower than that for conventional mortgage funds (general obligations of the City of San Francisco currently earn about 4¾ per cent), the properties thus acquired could probably be operated so as to provide a sufficient return on invested capital to make funds available for improvements and regular expansion of the program while still charging lower rents than those for comparable private housing.

Alternatively, a non-profit corporation could be formed to finance acquisition and improvement of property with private mortgages secured by long term leases with the local welfare agency. Under the terms of such a lease, the agency would contract to pay an annual rental for each property sufficient to secure the mortgage. The corpora-

tion, in turn, would contract to provide units to the agency's clients on an as-needed basis but remain free to rent "surplus" units on the private market at prevailing rates. Such private market activities could provide income to finance further improvements and/or acquisitions or to lower rents.

In either case, welfare recipients would be assured a more stable supply of decent housing and both they and their fellow taxpayers would be provided a cushion against inflation in the private market. It is even possible, given the magnitude of welfare expenditures for housing, that such programs might have some generally deflationary effect upon local housing markets.

Neither of these proposals is comprehensive and both provoke questions:

- In view of the statutory prohibition of vendor payments, how can program support be assured?
- How could this program replace substandard housing with standard housing for the same money? There's not that much profit in slums.
- Wouldn't such a program tend to create welfare ghettos?

Although the most direct way to assure the channeling of welfare funds to a housing program would be to revise the law, this would not only deprive recipients of one of the few options they now have but, since the law is a Federal one, it would preclude any locally sponsored program without prior Federal action. But it is hardly likely that vendor payments would be necessary to assure support by welfare recipients of such a housing program in the market that exists in most American cities today. San Francisco currently has a waiting list of 4,940 applicants for 5,736 existing units of public housing. While the rents offered by the sort of program proposed here could not be as low as public housing rents, no program offering a stable supply of decent housing at reasonable rents is going to want for tenants for a long time to come. The poor just have nowhere else to go.

Clearly, all slum housing now occupied by welfare recipients could not be replaced with standard housing at the present level of welfare payments. Some improvements are certainly possible immediately in areas where the level of payments is relatively high. But, as welfare payments increase, which they almost certainly will, such a program will be essential both to protect the public investment and to insure that it has its intended effect.

Policies of integration seem to be more in vogue today among middle class bureaucrats than they are among the poor, who are demanding with increasing militancy to be provided with decent housing in the neighborhoods where they live instead of being shunted about in the service of some "improvement" program they've had no voice in. However, segregation is neither inherent nor intended in the proposals presented here. The funds involved could be used to acquire or construct dwellings of a variety of types in a variety of locations. In any event, the welfare recipient's choice of residence could hardly be more constrained than it is now.

The principal question to be answered is not whether welfare funds *can* be better used, but whether they *will* be.



# THAMES- MEAD

At the edge of London,  
a community for 60,000  
people is being built  
of prefabricated parts

Thamesmead is a piece of housing history under construction, under pressure. Its very site is somewhat staggering. The 1,600 acres include a former arsenal, with the sturdy name Woolwich, bombed out in two wars, girdled with marshland with the poetic name Erith. Within the second most populous city in the world, London, it includes some four miles of riverfront. Back up a rise, overlooking the site, are the ruins of a medieval abbey.

But all else within view is a townscape as tedious as tea with milk. It is, on the one hand, bluntly industrial, like the Ford Motor plant at Dagenham across the Thames, and, on the other hand, trivially conventional, with rows and rows of rowhouses stretching endlessly between here and the central city. Some is old, much is new—sometimes where the old was bombed out during World War II.

In this dull landscape, Thamesmead is an event of geographic proportions. Its highrise apartments spear up 12 stories, but that is not the real point. The towers alone might possess the tediousness familiar to governmental housing projects around the world. Instead, the powerful lift of Thamesmead results from the deliberate contrast of towers (foreground in photo, left) with acres of well-knit lowrise housing of two basic types. The first type, five stories tall, is composed of two duplex apartments stacked over a raised ground floor—as shown under construction in the background of the photograph. The other type is three-story rowhouses, not visible here, but shown under construction on page 62.

Because building regulations in this marshy locality forbid residential occupancy of the ground level, even after filling, the first stage of Thamesmead has materialized the old planners' dream of separating cars from the people by strata, leaving the bottom range for the precious metal beasts and some storage, and beginning living space one level up. Much of the pedestrian circulation has been raised as well. With its first stage almost finished, Thamesmead achieves the pleasant architectural balance of Reston, Va., but at larger scale, without the toy-like character.

When completed, Thamesmead will house some 60,000 people, about the same number

as America's single largest state-subsided project, New York City's environmentally starved Co-op City. Thamesmead is entirely government-sponsored, at present a project for subsidized tenants, but it will be broadened to include at least 20 percent of private participation. It is all being shaped by the Greater London Council's own architectural and planning staff. And finally, but not least, it is being put together by means of systems building, out of large concrete slab assemblies precast under indoor industrial conditions in a hangar-like, on-site factory owned by the governmental client. It is the largest single systems building undertaking so far in Western Europe.

## Approaching systems with care

The Greater London Council was out to prove things on various scales of values when it undertook Thamesmead. The GLC, successor government to the old London County Council, is one of the world's largest landlords, owning a total of some 260,000 dwelling units, most of them built between the two world wars. The 3,000-man architectural construction staff of the GLC is responsible also for all municipal structures in the London area: firehouses, schools, colleges, magistrates courts, sewage treatment plants—everything public. The responsibility is not only for managing and making contracts, but for designing. The organization is able to raise money by bond issue without too much difficulty and, indeed, is rather resented by the poorer county authorities throughout Britain because the GLC can build to higher standards.

It was with the higher standards that the GLC designers began; only secondary was the determination to execute the plans by means of systems building. The GLC planners and designers evidently decided to try to satisfy people living in a city, rather than a theoretical social stereotype. In the preceding several years, there had been widespread public and professional reaction against family housing solutions with total emphasis on highrise. Having laid the city out, including schools, stores, health facilities, space for industry, etc., they designed the first

*(continued on page 63)*

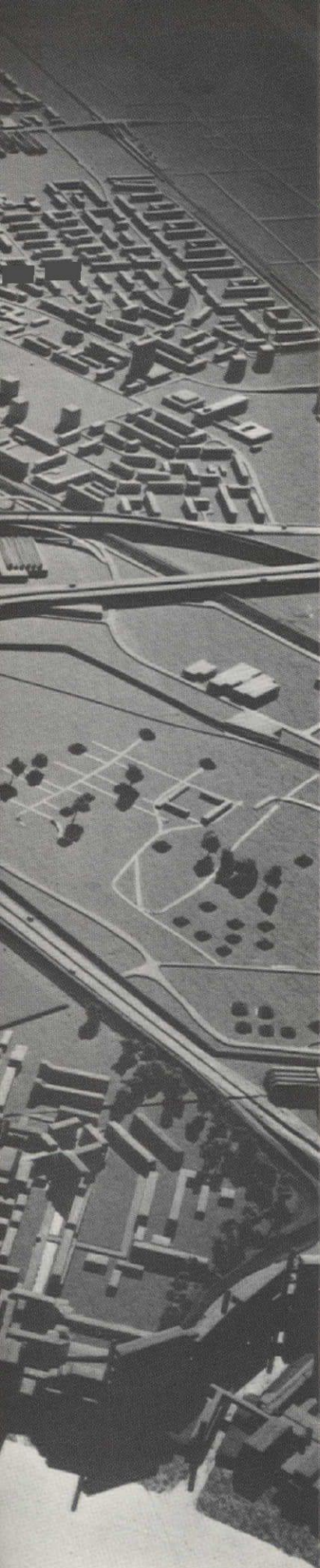


FIRST PHASE

FACTORY

TUNNEL



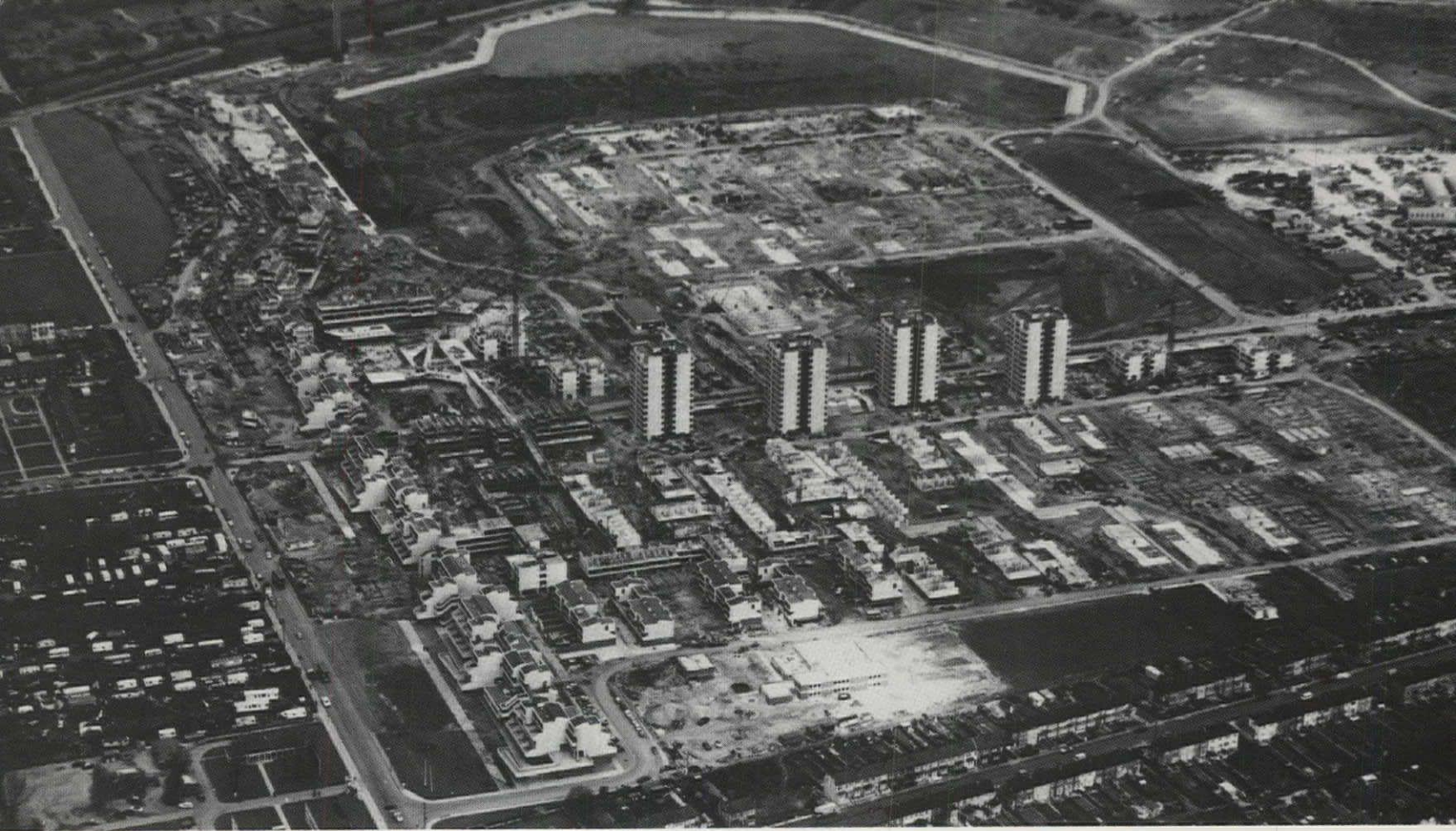


0 1/2 1 MILE

THAMESMEAD MASTER PLAN

Thamesmead was started small, if 4,000 dwelling units can be considered small. The first stage is well back from the normal path of the river, near the commuting railroad to central London. Upon completion, there will be 15,000 units, high and low, with some industrial and much recreational land and water, including a large marina. Levees will protect the land from the steep tide rise of the Thames; fill is barged in from the estuary and pumped into place hydraulically. The subsoil is soft, a deep layer of peat under the surface clay, requiring extensive piling. But the GLC designers have been able to accept this philosophically, noting that 1,600 acres of riverfront land in London might not have been available, if it had been perfect building land.

LEGEND	
ROADS	LOW DENSITY HOUSING
PEDESTRIAN ROADS	OPEN SPACE AND PLAYING FIELDS
WATERWAYS	INDUSTRY
RAILWAY	PRIMARY SCHOOL
LOCAL CENTRE	SECONDARY SCHOOL
HIGH DENSITY HOUSING	SITE BOUNDARY



4,000 housing units with diversity in mind.

The shapers were the chief architect of the GLC, Hubert Bennett, with, as principal associates, J. Whittle, J.G.H.C. Cairns, W. J. Appleton, and D. T. Groves. They next arrived at a firm sketch design for the housing, set high performance specifications for material, and had surveyors estimate costs.

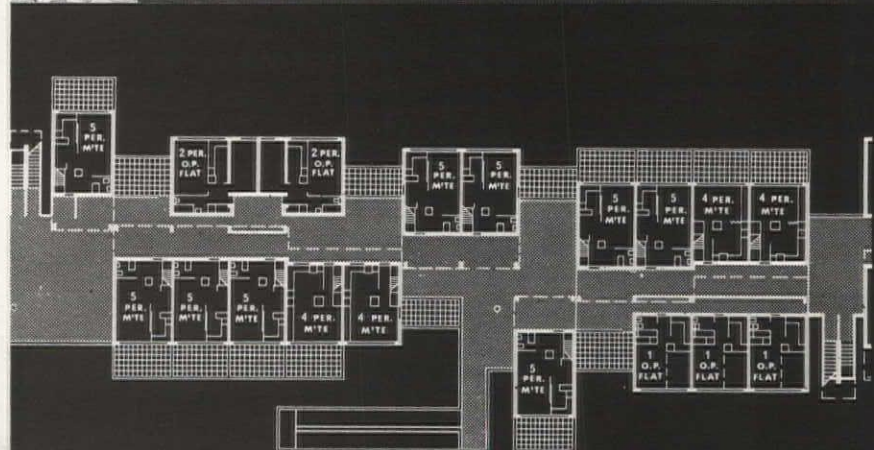
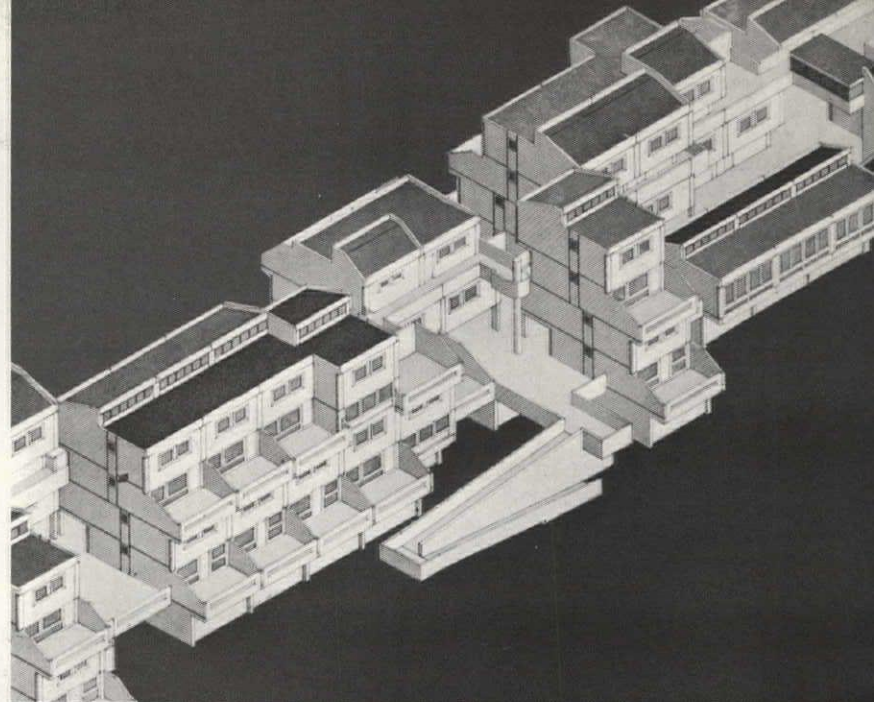
Then entered the industrial approach. In Britain, as throughout Europe—and possibly, before long, throughout the U.S. too—the main reason for the systems approach is the saving of labor. Building craftsmen are in such short supply in Britain that completing the first stage of Thamesmead might have necessitated bringing in craftsmen from all over the island if done conventionally. Cost entered too; the GLC knew that systems building should be cheaper, but not exactly by how much.

#### To share savings

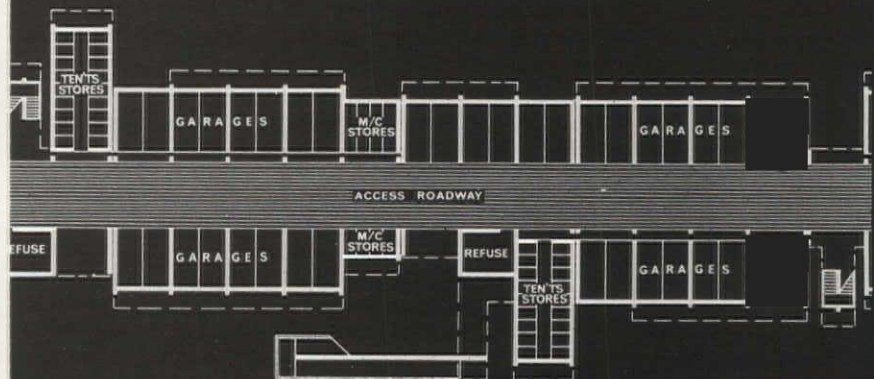
This was the method established: the GLC proposed for Thamesmead a business arrangement in which the contractor would, in effect, operate a systems setup for the GLC, with the client paying for the factory and equipment, including special cranes. If GLC's cost analysts discovered that there were substantial savings in systems building by this pattern, the contractor would share the benefit by a bonus arrangement up to 25 per cent of the savings. If systems costs ran higher than the estimated conventional costs in the "target cost-value" scheme, the contractor would have to accept a lower fee.

Lowest bidder of the three invited contractors was Holland & Hannen and Cubitts, one of the big six in Britain, who are licensees for the French system developed by Baley & Schuhl. The Baley system, like the other two widespread French systems, consists of large concrete loadbearing wall slabs, with cast-in heating, window frames, plumbing, electrical conduits, and finishes, factory-formed in heated steel molds. The GLC architectural section then collaborated with Cubitts engineers and production men and with the engineers of Baley & Schuhl, to adapt the system to the Thamesmead design.

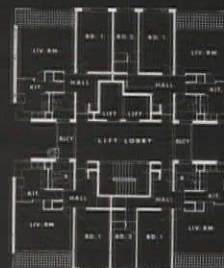
But, while these working



LINEAR HOUSING: FIRST FLOOR PLAN



LINEAR HOUSING: GROUND FLOOR PLAN



TOWER: TYPICAL PLAN

Opposite: Aerial view of Thamesmead construction, Stage I. In the center are four 13-story towers. Directly beneath them in the foreground are three-story rowhouses. Running parallel to the road at left are linear, duplex houses, some of which, finished and occupied, are shown in photo at bottom. This page: Isometric drawing and floor plans of the linear houses and, at bottom, a typical four-apartment floor plan of the towers.

drawings were being done, construction was already under way on the large factory to house the systems building process on the Thamesmead site, roads were being built for the special vans which would carry the concrete sections to the first stage, and construction had begun also on the first residential units, which were the five-story stacked duplexes. This meant that the earliest Thamesmead housing was not truly systems-built, but was what the British themselves refer to as Rat-trad, for rationalized-traditional. It was yard-cast, not made indoors, and was erected with the assistance of scaffolding.

What this early start achieved was the setting of architectural quality. It cost extra; rationalized-traditional construction saves man hours, but at nothing the rate that the fully industrialized method can, as has been shown at Thamesmead since completion of the factory. All the Thamesmead tower flats and the row-housing have been craned into place straight from the stacking yard by way of delivery vans. The first Rat-trad duplex units will not be duplicated, but have been redesigned to be completely factory fabricated, which has meant a certain amount of simplification in their panels. But the architectural point was made.

#### Criticism and rumors

There is considerable criticism of Thamesmead in professional circles in London, with objections centering on the whole idea of building such a large, even if varied, project, and on cost rumors. The GLC admits that the costs of the early units were up, but no higher than might be expected in setting up a large manufacturing process. The British national government has instituted a national yardstick for subsidized housing, and Thamesmead's costs are above it, at about 5,500 £ construction costs and 1,500 £ land costs per average unit. But those yardstick figures were set after Thamesmead had been qualified for national assistance. Now, with the factory running full blast, it is expected that unit costs will be brought down considerably, rather than rising as is more usual. For one thing, the costs of the molds will be written off after the first 4,000 units have been made, although they will still be usable for thou-

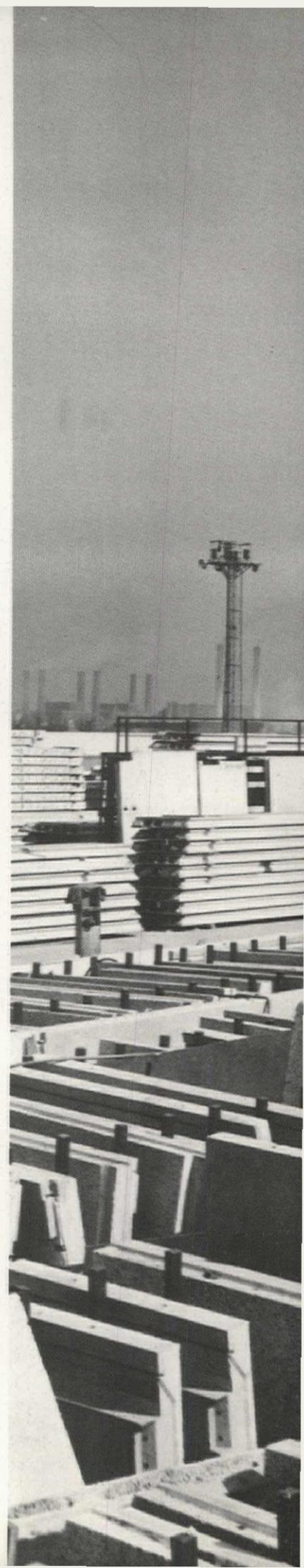
sands of more units. Another object of write-off will be the big cranes. Belt-tightening will be going on all over England, and Thamesmead will be much more capable of doing it than projects undertaken conventionally. Until the long-range economies of full production and write-off of capital investments appear, however, it may be that some of Thamesmead's notable amenities may be pinched, such as the landscaping around its lakes, the first of which has already been installed.

#### The site plan survives

A considerably greater tension about the future of Thamesmead was relieved not long ago when a governmental decision was made to dig a tunnel under the Thames near the middle of the project. This (see model photo) had been the original intent of the planners, but a suspension bridge seemed more probable for a time when it became evident that it would save millions of pounds over the tunnel. It would also have murdered Thamesmead's site plan, of course.

Another lift came not long ago when Hubert Bennett's design team was awarded the 1969 award for architecture and town planning by the *Union Internationale des Architectes* for Thamesmead. Bennett, a Yorkshireman, evinced polite pleasure, but professed no illusions that Thamesmead itself was yet won. "We have got to hang on to the conception—to the piece of sculpture—and that is going to be a problem for 15 years. We have got to ensure that over that period it will get better and better, not worse and worse." If this professional and his colleagues can keep the end product of their housing factory up to the 1968 and 1969 models, shown here stacked outside the assembly line in the storage yard, these architects and planners will be winning a good many more prizes from the world's urbanists. Thamesmead is a piece of housing history under construction, under pressure.

In the component storage yard outside the precasting plant at Thamesmead, a traveling crane transfers a selected wall panel onto a specially designed trailer truck waiting below. PHOTOGRAPHS: Stewart L. Galloway, page 58; Robin Ross, page 64.





# LA LUZ

The smallest new town to date is more impressive  
in terms of urban design than most of the big ones



Half a dozen miles to the northwest of Downtown Albuquerque, on a 500-acre tract overlooking the Rio Grande, three remarkable young men have started to build a new community that is much more truly Spanish than just about any other in New Mexico. The name of the community is La Luz; the three young men are Ray Graham III

and Didier Raven, the developers, and Antoine Predock, their architect (La Luz is his first commission). To date, they have built fewer than two dozen houses and a small recreation area; and, yet, this little cluster of true-adobe houses contains within it the germ of some important urban concepts.

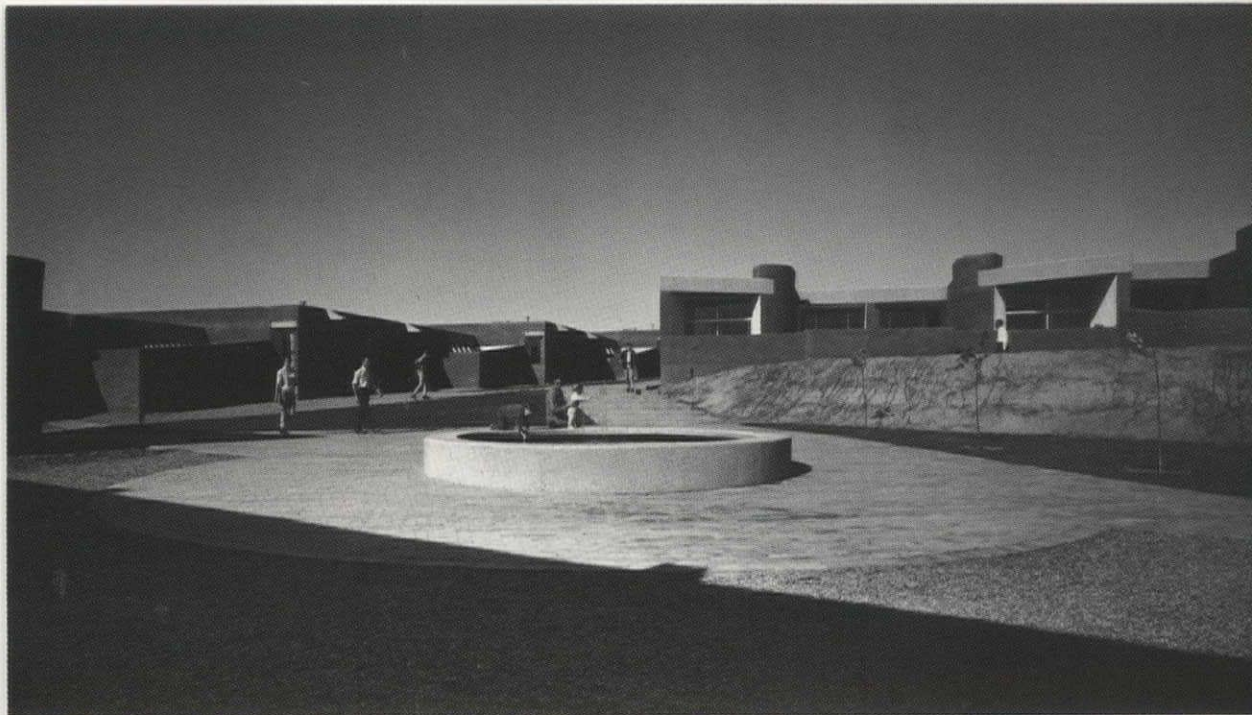
To those who know Spain,

the picture below may suggest a sort of miniature Avila. Though Predock is no historicist, he did spend nine months in Spain (under a Columbia University scholarship) and was clearly influenced by its urban forms and spaces. (Another influence: the clustering in Indian pueblos.)

Such obvious analogies, however, miss the important points

of La Luz. This little development is a very serious effort to demonstrate at least three principles applicable to urban situations, big and small, almost anywhere: First, it is an attempt to show how land can be *improved* by development, rather than *despoiled* by it; second, it is an attempt to show how housing can be clustered without ever

From across the mesa, La Luz looks like a miniature Spanish fortress-town rendered in adobe (far left). Below: interior pedestrian space with fountain and pool at the center of the first cluster of houses. Bottom: new group of houses is under construction to the south of the first cluster.



becoming cramped; and, third, it is an attempt to show how, on an almost miniscule scale, spaces between buildings can be organized so as to separate cars from pedestrians; and to show, also, how intimate private outdoor spaces can be separated from—but related to—generous public outdoor areas.

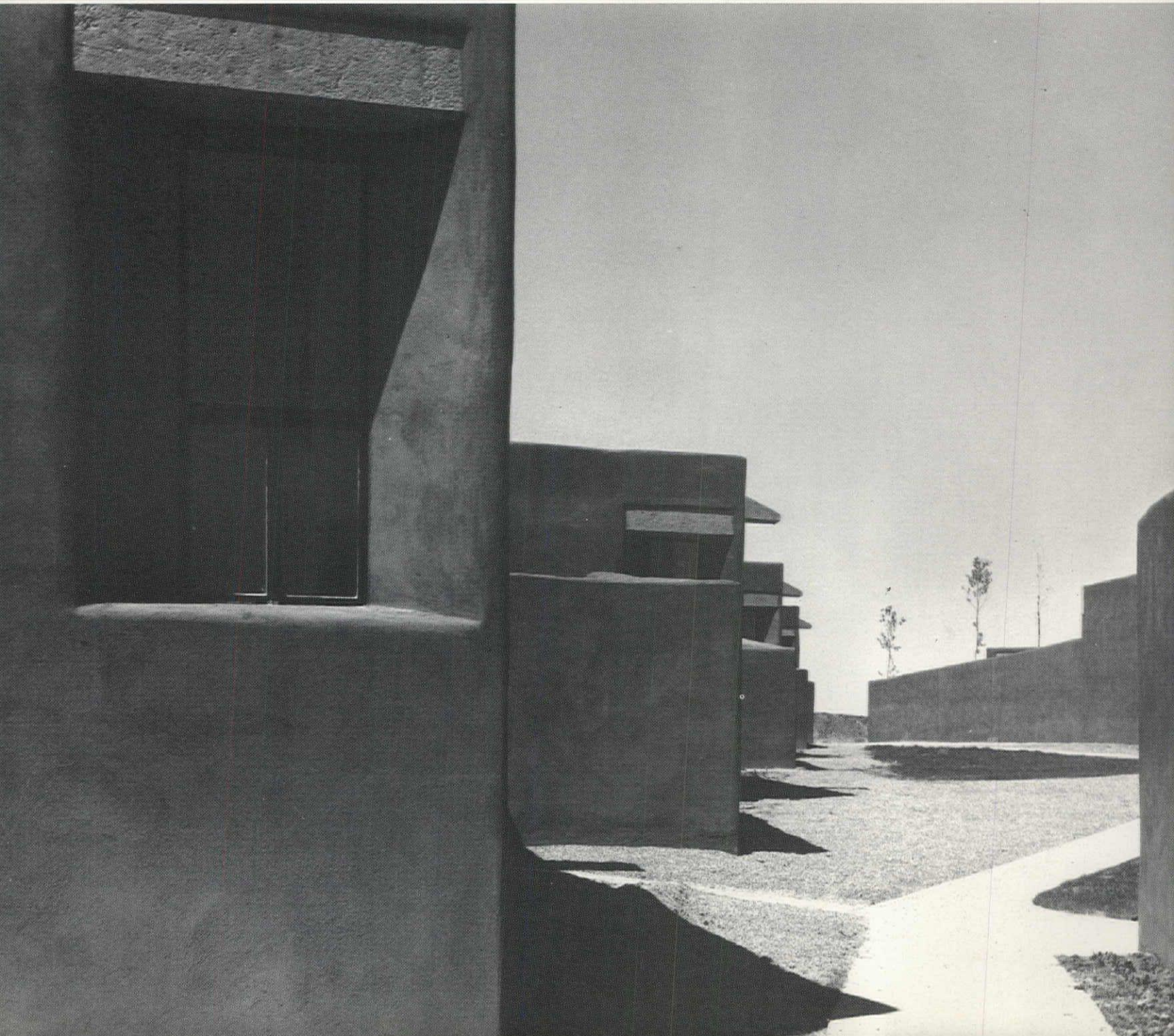
La Luz is a successful demon-

stration of a number of other concepts as well—particularly in the area of working with climate and with natural assets. But these three principles make La Luz especially intriguing:

● The 500 acres acquired by the two young developers represent a one-mile frontage on the Rio Grande. By clustering their buildings in tight, “Mediterranean” groupings the devel-

opers and their architect will be able to save nearly 200 acres from the usual sort of destructive development. Looking east from the first cluster of houses, toward Albuquerque and the mountains beyond, there is now a harsh, semi-arid mesa—and then a belt of lush, floodplain trees along the river. It is

a spectacular view—and on a recent day it changed, in a matter of minutes, from brilliant sunlight to a near-tornado panorama. Most developers would buy such a site for its spectacular assets—and then proceed to destroy the very assets that made the site worth buying. Predock and his clients, by preserving the 200 acres along the Rio





Grande, will have their cake and eat it, too.

● The clustering of the first couple of dozen houses is another demonstration of intelligent planning. It is almost impossible to find a single room in any one of these tightly knit units that has its privacy—or its views—compromised by any of the neighboring houses. The houses

step up on the mesa, each overlooking the one below; parapets on balconies screen out everything but the range of mountains to the east; and the small patios, back and front, together with the split-level interiors, convey a sense of space lacking in most suburban developments.

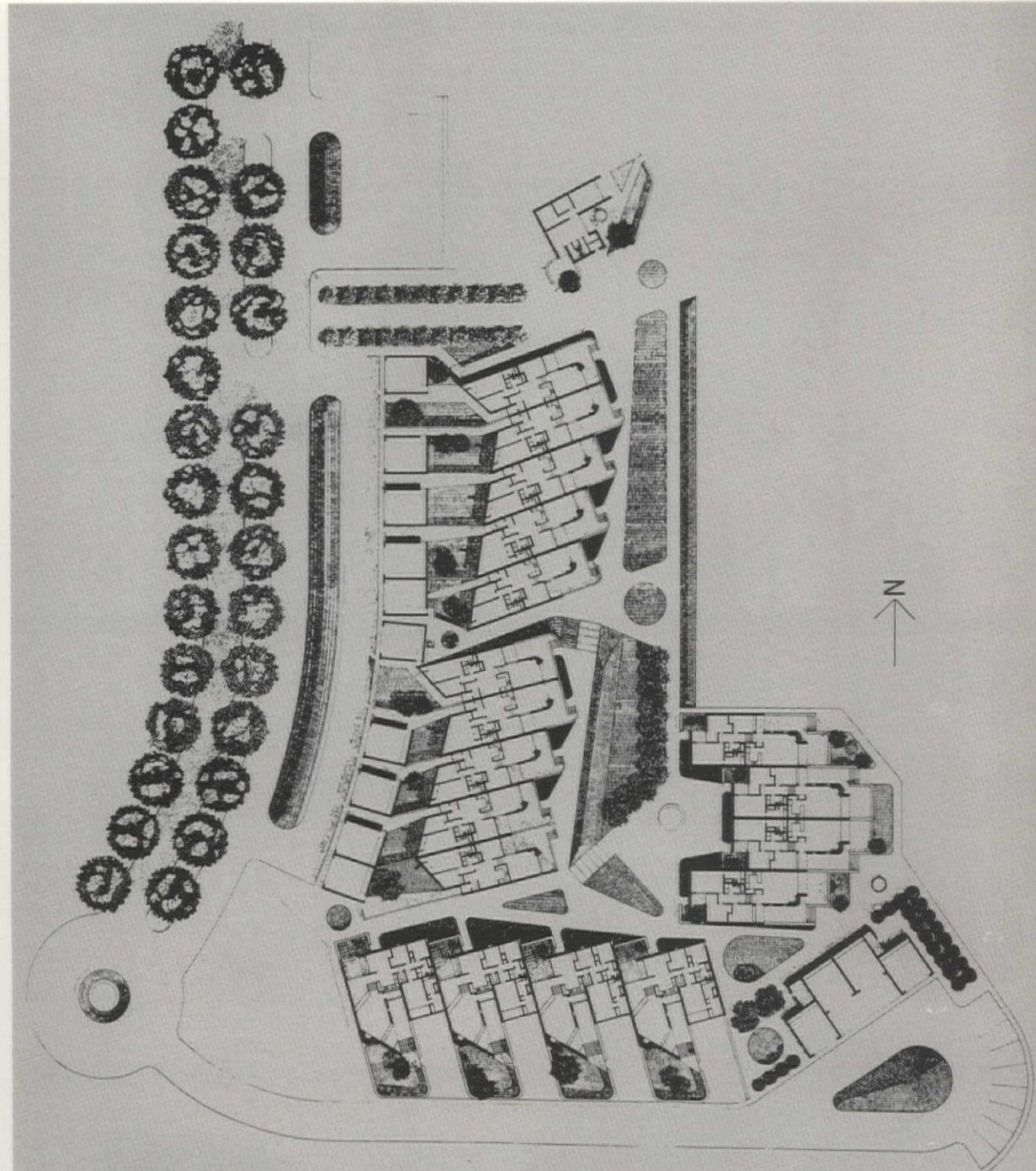
● Finally, in this first little cluster of houses at La Luz, the

cars have been successfully separated from the pedestrians. There is a small, peripheral loop-road, screened from view by bermed-up embankments, and this road leads to garages, either in back of the houses, or beneath them. And then there is an interior pedestrian space, with lawns and fountains, which, in turn, opens out toward the

200-acre public lands to the east.

All the houses turn their backs to the west, whence the harsh winds come. They open up with walls of glass toward Downtown Albuquerque and the mountains to the east. The views are spectacular, day and night. The adobe walls, with their insulating and heat-retentive qualities—together with the

Most of the rowhouses shown in the plan (below) are completed; others are under construction. There are three basic houseplans to date, with varying bedroom arrangements. Small building at north end of cluster contains administrative offices. Left: pedestrian walks criss-cross the cluster.



cross-ventilation created in each unit—make the air conditioning that has been provided almost unnecessary.

La Luz is not only a demonstration in creative conservation, architecture, and planning. It is, also, a show of courage.

Most suburban development around Albuquerque is plain awful—imitative of the worst

that has despoiled Southern California. If the first phase at La Luz turns out to be a financial success (the houses sell for \$29- \$40,000 each, which includes a share in the park along the Rio Grande), then the developers will go on in the same vein, adding shops, offices, apartments, and further community facilities. (Schools already exist nearby.)

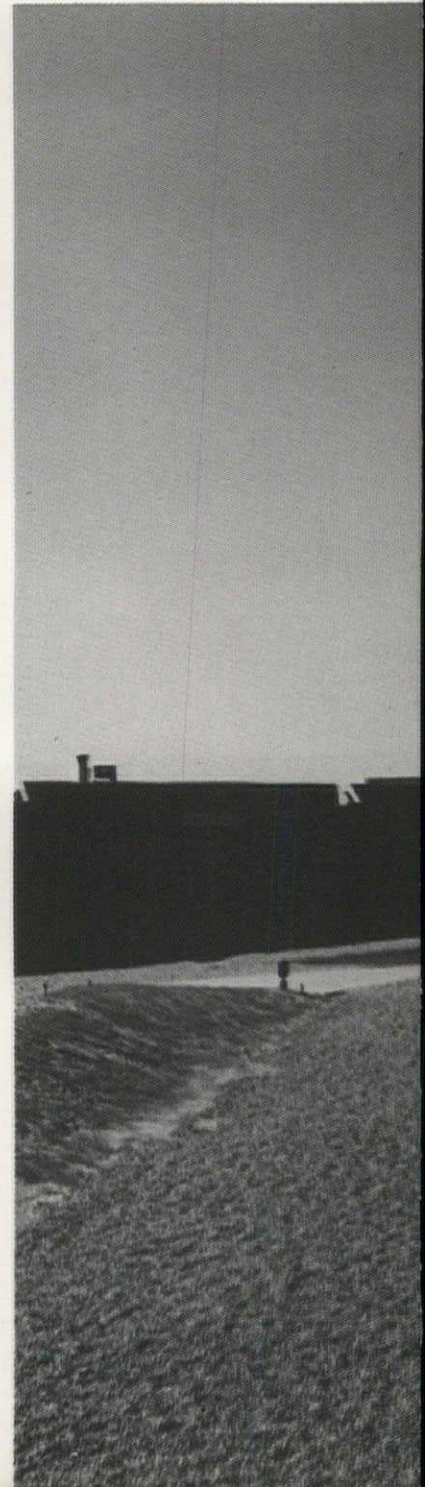
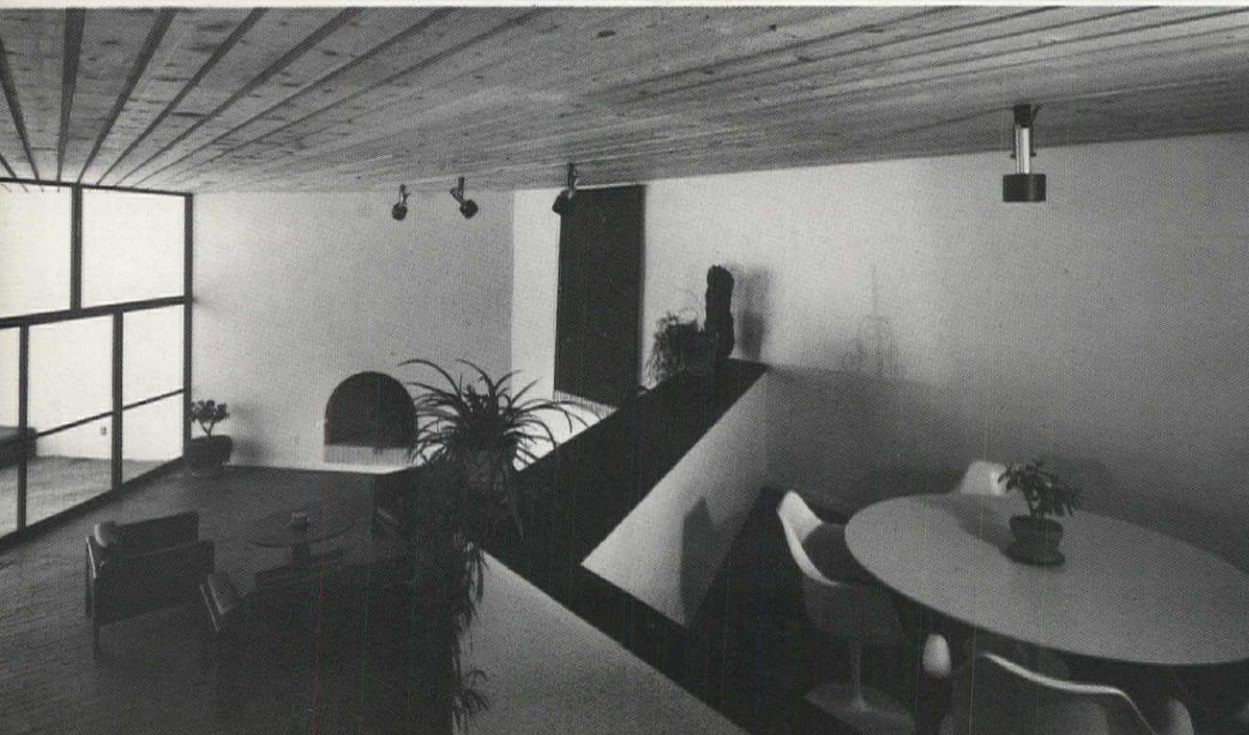
And if all this comes true, La Luz may, some day soon, become the core of a Greater Albuquerque. For the city is moving toward the west, beyond the Rio Grande to the Rio Puerco, and will soon envelop these precious 500 acres. Hopefully, then, a La Luz—conceived as an urban satellite, rather than as another piece of suburbia—will become

an example and a center in this beautiful valley.

#### FACTS AND FIGURES

La Luz Project—Phase I, Albuquerque, N. Mex. Owner: Ovenwest Corporation. Architect: Antoine Predock. Engineers: James Innes (structural); Coupland, Moran & Associates (mechanical). General contractor: Gunnar Dahlquist. Building area: 37,800 sq. ft. Cost (excluding fees and financing): \$567,000. PHOTOGRAPHS: Jerry Goffe.

Opposite page: exterior and interior of some of the two-level houses. Parapets around terraces are high enough to screen out automobile and pedestrian traffic. Below: Unlike most "adobe" construction in New Mexico, La Luz uses real adobe block made nearby. Finish is stucco.





# WOODLAWN GARDENS

**A 221d3 project in which the participants have been concerned as much with process as with product**

Eight years after its inception, the largest lowrise 221d3 project in the country is under construction in Chicago. The fact that Woodlawn Gardens is being built at all is a tribute to the tenacity of the key participants, and their determination to carve out new roles for themselves in the process.

The developer of these 504 units of housing is one of the strongest community organizations in the country, The Woodlawn Organization, or TWO. Originally aided by Saul Alinsky, TWO is an umbrella group of 115 autonomous organizations in the mid-South Side of Chicago. The struggle TWO had with the Chicago Department of Urban Renewal—for a role in planning the project and developing it (in conjunction with the Kate Maremont Foundation)—is an example of its concern with the “how” as much as the “what,” since the “how” very much affects the “what.”

Metropolitan Structures Inc. shares this concern. The developer of enterprises as large as the new town of Nun's Island near Montreal, MSI here assumed the relatively minor role of general contractor. But its contribution was the major one of bringing in an unusually high number of black subcontractors.

And, although Woodlawn Gardens was “a people's project from the very beginning,” according to Rev. Arthur Brazier, president of TWO, the project is definitely architect-designed. Stanley Tigerman, the architect of Woodlawn Gardens, is proud of designing “exactly what the people wanted.” He is also proud of having used his own expertise. He has shared, not abdicated, responsibility.

Each of the participants has gone to some lengths to make the final product “unproject-like,” yet each has been as much concerned with *process* as with *product*. The finished buildings will not show that hundreds of people had their say in the design process, or that 40 per cent of the subcontractors were black, yet these facts are as important to any measurement of progress as the new housing that is the visible result of eight years' work.

## **An agreement with the city**

In the early 1960s, the University of Chicago wanted to expand its South Campus; TWO was actively opposed. Woodlawn seemed an ideal community to move blacks out of and whites into, because of the university, but residents of Woodlawn were in no mood to go.

Woodlawn is five minutes from the lake, and 12 minutes from the Loop. It has two of the best parks in Chicago, and one of the best institutions in the entire Midwest (the Museum of Science and Industry). Because of the lake, it is ten degrees cooler, in the summer, than many other parts of Chicago. (“According to American standards,” says Brazier, “blacks aren't supposed to be that near the lake; we're supposed to be near the river.”)

Brazier explains the decision to stay and fight. “Every ethnic group wants to build up its own community; we don't want to migrate from one place to the next. Some people call it gilding the ghetto, but what's wrong with making your own community a desirable place to live?” He's opposed to anyone's being forcibly confined, though. “Everything in an area might be gold,

but you should have the opportunity to move out, into the brass community, if you want.”

Back in 1961, TWO was launched on this issue. It sat in at the Mayor's office, with up to 700 persons at a time, using techniques of protest and persuasion that were then almost unknown. In 1963, TWO withdrew its opposition to the campus expansion in exchange for the city's agreement to designate a three-block segment of Cottage Grove Avenue for urban renewal. At that time, recalls Brazier, “221d3 housing was hailed as a panacea for poor people's housing, although we have since realized it is not.” (Income limits for Woodlawn Gardens are set at \$6,400 for one person, \$10,500 for a family of six. But the Chicago Housing Authority will subsidize 50 per cent of the units; a family could pay as little as \$80 for a three-bedroom unit.)

The three-block strip on Cottage Grove, between 60th and 63rd Streets, was the only acreage that could be developed without displacing many people. It was a worn-out commercial strip, with only seven families living on it. The major occupant, a furniture store, will relocate to a new two-story building elsewhere on the site.

Brazier realized that whoever controlled the land could determine what would be built on it. Taking part in the planning, therefore, was not enough; TWO wanted to participate in the development, too. They had heard of the Kate Maremont Foundation through its rehabilitation work, and together they set up the TWO-KMF Development Association (with TWO in the majority on the board of

directors). “We had people power and they had money power,” says Brazier, “but we never considered ourselves the inferior partner—people are as important as money.”

## **A systemless system**

One of the first things that TWO spelled out for the architect was no elevators and no long corridors. (There are two elevator buildings, but only four stories high.) TWO also insisted that the project not seem like a project—no endless repetition of identical buildings.

Tigerman was asked to provide as many units (and as many with three bedrooms) as possible. The final number of 504, therefore, does not cover the 1,150 families being displaced by the campus expansion, but nobody in the community—repeat, nobody—wanted tall buildings. As it is, the density of 55 du's/acre at Woodlawn Gardens is *higher* than the public housing built in Chicago since the war (which varies from 45 to 49 du's/acre). Whatever Chicago's block after block of public housing does to its own tenants, it has made Woodlawn people, among others, adamantly opposed to high-rise buildings in any form.

Tigerman's “systemless system”—the result of 100 preliminary schemes—is a basic module of six units that is capable of combination in different ways throughout the site. This “module of six” has two apartments on the ground floor (each with three bedrooms) and four duplexes above (two with two bedrooms, two with three bedrooms). The small side of the T-shaped module can always be windowless, and the modules can be then joined to form

View into one of the segments of the three-block-long Woodlawn Gardens. The community wanted the project to be as "unprojectlike" as possible; and the architect has answered this by making units combine in various ways around their own open space. People will belong to the small community outside their own private doors rather than to the larger "project." Woodlawn Gardens is the result of eight years' effort by The Woodlawn Organization to obtain housing for people displaced by the South Campus expansion of the University of Chicago. TWO struggled with the city to keep the development free of highrise buildings.



buildings of 12, 18, and 24 units.

To avoid the institutional quality that comes from exact duplication, block after block, each segment of the project is centered on its own open space. Residents of each block will work with Tigerman after they move in, deciding what to put into their tot-lots and open space—with a total budget of \$32,000. (Thus far, the client has been represented primarily by TWO's housing and planning committees. Tigerman has met with up to 20 people at a time, making presentations to groups of more than 1,000. This next phase of citizen participation will be another new experience for renters and architect alike.)

Even though the blocks are separate, the project as a whole has a structure. On each side of the street, a secondary movement system runs the length of the project as an alternate to the sidewalk. This "movement-way" leads to different stopping places along the way, and shapes the space of each block uniquely as it connects the blocks with each other.

Because so much of the site is taken up by buildings and parking, Tigerman sought to make the parking areas seem "less parkinglike." The black-top surfacing is therefore not confined to parking areas, but reaches into the heart of the development. Here it acts as a counterpoint to the white-surfaced movementway. Some of this extra blacktop serves as play space, some keeps the walkway clear of the windows, and some surrounds the garbage areas that are indented into the ground floor of each module of six.

Considerations of safety and maintenance affected the de-

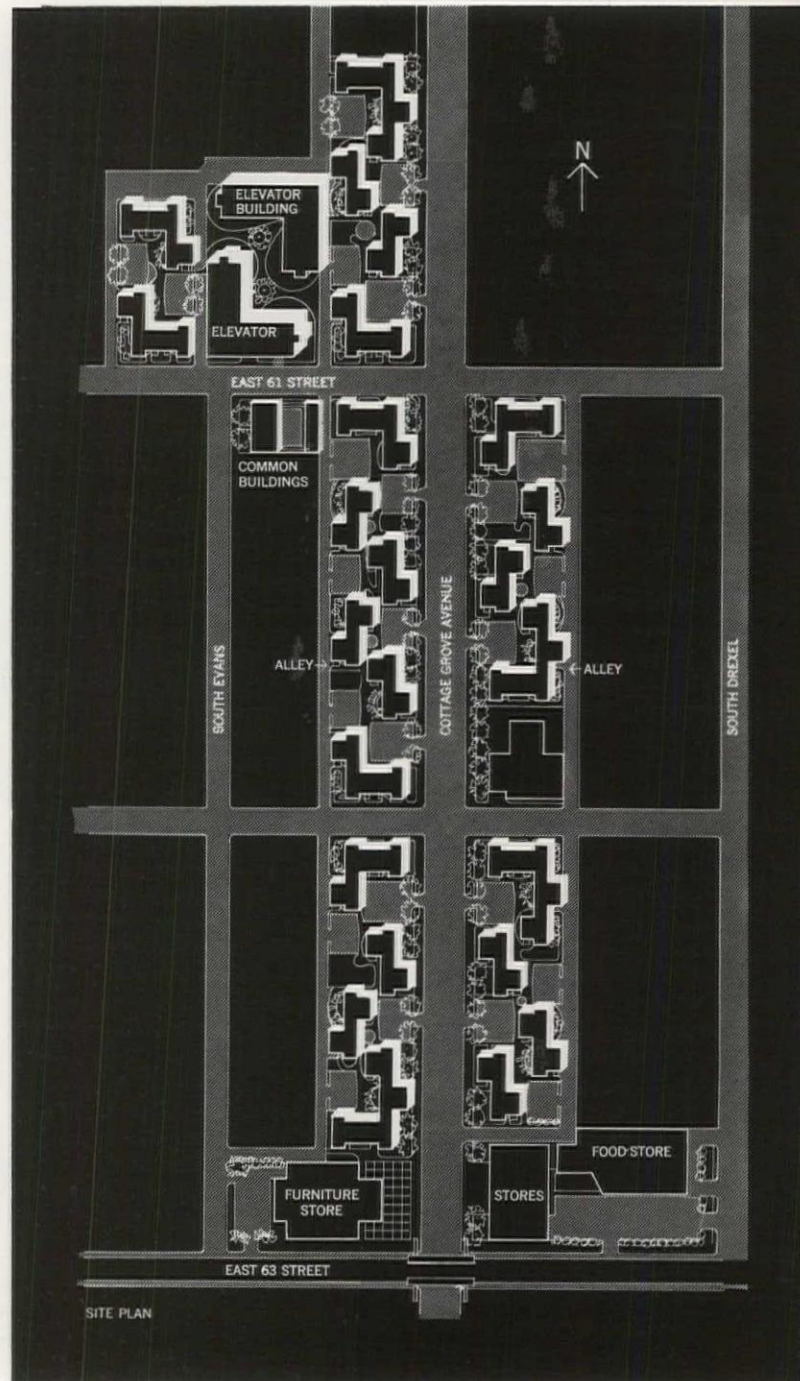
sign. It was necessary to illuminate the parking areas and walkway, but lights are so located on the ends of the buildings as to avoid shining into the apartments. Laundry machines are placed in a single location on each block, rather than in each building, to provide safety in numbers. The windowless walls facing the street and alley will be covered with ivy, to make them less inviting to spray-painted graffiti. Walks are rounded to keep people from cutting corners; and at the periphery of the project the grassy areas will also be bermed to keep pedestrians off.

#### "Don't let anyone tell you"

The apartments are minimal but not mean. As hoped, everyone in the two-bedroom and three-bedroom apartments has his own entrance directly from outdoors. (Terraces and balconies were too expensive, but there is extra space at the top of these 126 stairs for two or three persons to sit.) These apartments also have their own back door to the garbage and storage areas. Size of bedrooms, closets, etc., was fixed by FHA standards; and economy dictated such arrangements as the back-to-back plumbing.

In the duplexes, each apartment has no more than three windows per floor (another economy), but the windows are so ample and well-finished, in a bronze-color baked enamel, that they give the project one of its few touches of luxury.

Construction is conventional—wood frame, concrete block (not exposed), and brick facing—in order to keep costs low, and to enable the largest number of small (black) subcontractors to



The site extends 125 ft. into the block on one side, 120 ft. on the other—up to the alleys that run the length of these and almost all blocks in Chicago. Except for two low elevator buildings and a one-story community building, the project is made up of the typical "module of six" (below), which has six apartments on its three floors, and combines to form buildings of up to 24 apartments. Even in this narrow site, there is a tree-lined pathway system meandering through the development and linking the internal open spaces. Perpendicular parking along the alleys is legally permissible, but the city held out for the situation shown.

work on the job. But there are innovations. The flooring is of 3/4-in. plywood over the joists, covered with 1 5/8 ins. of poured concrete—for a cheaper and more fireproof job than the standard wood floor.

Large-sized bricks are used, which reduces labor costs (and also tends to reduce the scale of the entire project). The soldier course above and below the windows and at the parapet is the only embellishment in this otherwise unpretentious design.

In an architecture of solids and voids, Tigerman felt that the exterior stairs should be enclosed; an open stair would look too flimsy. The architect made many such esthetic decisions. But having accepted the basic requirements laid down to him by TWO—no highrise buildings, no inside corridors or entries, no project atmosphere—he saw a number of his design decisions go unquestioned.

It wasn't that Tigerman didn't argue about highrise. He believes that the community made a mistake not to have one or two tall buildings, but he saw no way to break through their hatred of highrise. "The model of this community now is the white middle-class lawn, and the townhouse. We did more than accommodate their ideas; we made their feelings work. As the wealthy aspire to polyhedral lightweight solutions, or as 'sidewalk-in-the-sky' schemes become better known, these may become the models for middle and lower income groups. But not now."

Tigerman admits that the whole problem might be different today; the young militants were not around then to be part of this project. But he doesn't

believe in a Black Architecture: "The aim is a decent urban environment." (The street numbers on the exterior doors will be done in black nationalist colors, though—green, red, and black—and in supergraphics.)

As Brazier sees it, "A community should decide within itself what's best for it, then stand together. Don't let anyone tell you what's best. Not Tigerman, not Mayor Daley, not anyone." The DUR had tried to force highrise on the community for several years, but TWO stood firm. "If you're going to decide wrong, then decide wrong. Maybe we made a mistake in not having highrise. But we can't say the DUR is responsible for anything we may not like here. *We* are responsible."

Brazier expects the project to have a big impact when people move in and see what they've fought for. They'll glory in it—but only for a while. "There's so much left to be done."

#### A few problems

For several years during the design stage, Metropolitan Structures lent Bennet Greenwald to the project. (His father was the late builder and entrepreneur, Herbert Greenwald, who was first to see the greatness of Mies and put it into steel and glass.)

"If TWO had only wanted to show that a black community could make its own decisions, they could have done it in one acre instead of nine, with one million dollars instead of nine. But they wanted to solve a real problem," says Greenwald.

In the process, they ran into quite a few problems. Economic for one, although the project has worked out at \$11.50 per sq. ft. for the construction.



Other problems were political. "If you don't have the goodwill of the city and the FHA, says Greenwald, "this kind of project doesn't get done. In the end we had it, but it was a struggle." Tigerman also refers to the struggle. "The DUR didn't volunteer anything. TWO had to squeeze it out of them." Tigerman cites the many delays by the city, and bemoans the fact that a project like this must take eight years. He did, however, demand and obtain the 27 building permits in one day, a feat that probably makes him a legend—or worse—in the city's eyes.

In any case, the city will probably now claim as much credit as it can for Woodlawn Gardens, although it is unlikely that many people in Woodlawn will accept that interpretation.

#### Getting black subcontractors

The biggest problem that Metropolitan Structures set itself was getting as many black subcontractors as possible. It was a major effort—getting lists of people from TWO and Operation Breadbasket, contacting them and advising on the bidding. "A low bid won't do me any good," says Mike Chuck, supervisor of construction.

MSI refused the request of a bank to be the personal guarantor on several loans to subcontractors, feeling that this would be the wrong business relationship. Greenwald talks about the problem of money: "The reason many small subcontractors stay small is that they can't find the borrowing wedge. They can't get a loan unless they're financially responsible, with a good Dun & Bradstreet rating, and they can't get that unless they've borrowed money. Loans should

be made on another basis than past financial responsibility."

One of the most creative efforts by MSI was the formation of a consortium of black electrical contractors, called ABCD, to handle a large contract that was beyond the capabilities of any single firm. A number of work areas have multiple subcontractors—two of the brick-laying subs are black, and three of the painting subs. "They tell me no one has put in as much effort as we have," says Mike Chuck. "It gives a certain sense of satisfaction; the construction business is pretty monotonous."

The firm has continually gone beyond what a general contractor might be expected to do. Bennet Greenwald is currently arguing with the city about trees. "They want to put in shallow-root trees, which will tear up the sidewalks and foundations. I want deep-root trees. This project will be around for 50 or 60 years, more like 120; I'd like to build it right." He is actually furious that one apartment will have to look out on the Nelson Brothers furniture store, inside the project area, which is being built two stories high instead of an agreed-upon single story.

But if MSI did more than what it might have done (including paying Tigerman a small retainer for several years, before the project was assured of going ahead), it also did less. Says Bernard Weisbourd, president of Metropolitan Structures, "We were not the decision-makers here; it was their thing, not ours. We only made our knowledge available."

And if the contractor went beyond his usual role, so did the architect. Tigerman and TWO

wrote the program which the DUR would ordinarily have set forth, establishing heights, densities, etc.

And Tigerman probably had an indirect effect on the selection of the TWO-KMF submission. The DUR usually made these decisions according to the highest bidder, until 1963, when Tigerman, as chairman of the AIA planning committee, urged the city to set up an architectural review board to do its judging. He also suggested the people to be appointed—Walter Netsch, Bruce Graham, Bud Goldberg, Harry Weese, Ben Weese, Ed Dart, etc. "It was a very autocratic thing to do," he says, "telling the city, 'kindly use the best people,' but they did it. And they like the arrangement. The schemes judged by this board are now becoming visible all over Chicago."

Tigerman's commitment to the project has been intense. "You can't just go in and get out. It's an ongoing thing." This attitude appears also in the design of a model apartment by Jo Ann Gray. The model will be only the product; the process will include a once-a-week session with residents, giving information on where to buy good inexpensive furniture (with comparative interest rates), and how to make some items at home.

Supervision of the project is constant. The Tigerman office has a full-time man in the storefront construction office, half a block from the site. It takes him several hours to go from one end of the project to the other, and he also handles the paper work, which amounts, on an FHA job, "to a mass about equal to the size of the buildings."

Like some of the more

thoughtful students today, Tigerman believes that the profession isn't solving the real problems, and that the architect is afraid to exercise his real power, and exerts no morality whatsoever in accepting clients. "But I don't agree with the ones who say that anything the community puts together, accidentally, will be beautiful. I prefer to work in areas where there are real problems to be solved, but this doesn't preclude an esthetic."

He doesn't believe that an architectural degree is necessary, "but you do have to know how to build." His own schooling adds up to only three years. He flunked out of MIT as a freshman, then, after eight years of day-and-night apprenticeship, and registration, he went to Yale for a B.Arch. and M.Arch., doing each in a year.

His experience at Woodlawn Gardens has been an education in itself. "Process in architecture has been implicit, kept private to the architect; while the product has been explicit—there it is. I prefer the reverse. Let the process be *explicit*—an open, honest, rigorous confrontation with the client. And let the product be *implicit*, requiring participation to complete it. It should be fulfilled by the people who inhabit it. We're through with the product as an art form, a thing in itself. People are tired of being given, shown, handed down something preconceived and already complete without them." The years spent with TWO on Woodlawn Gardens have taught Tigerman to see a difference between process and product, and, as an architect, to value them both.

—ELLEN PERRY BERKELEY

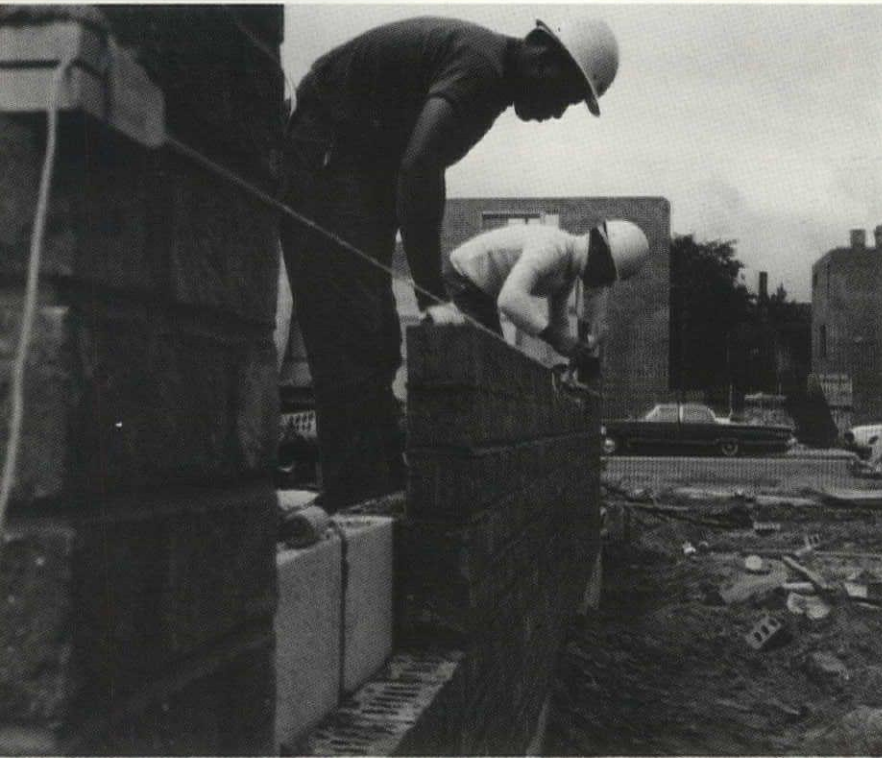


Below left: Forty per cent of the sub-contractors are black. Below right: the two elevator buildings are four stories high, with parking at ground floor. Bottom: A "residential" atmosphere, despite high density of 55 du's per acre.

#### FACTS AND FIGURES

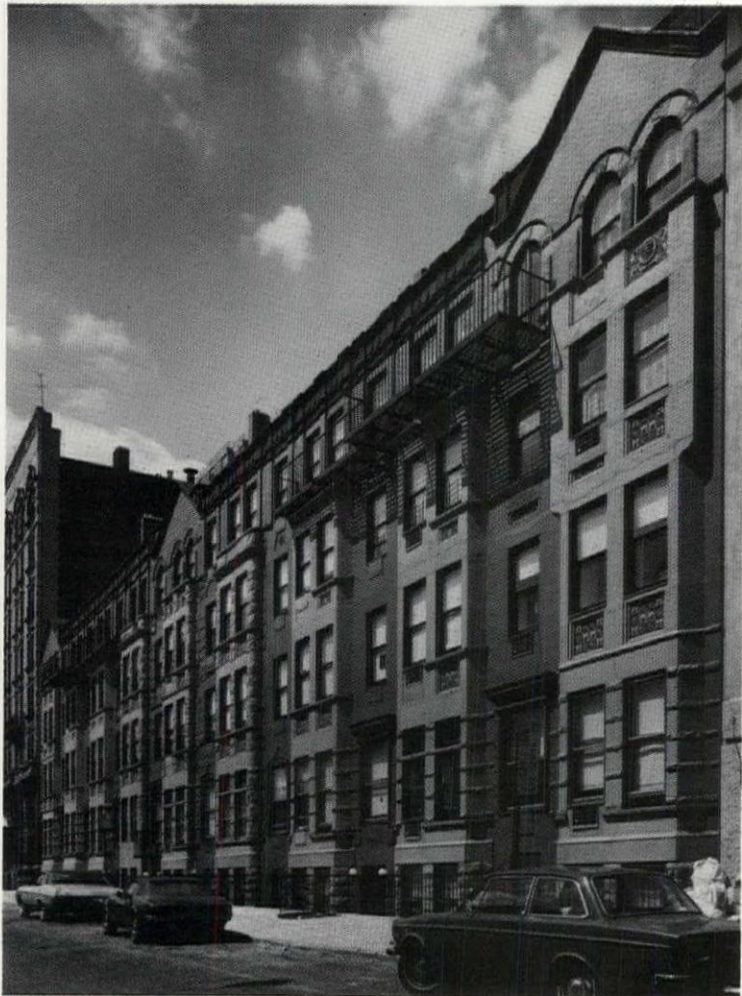
Woodlawn Gardens, Cottage Grove Ave. 60 to 63 Sts., Chicago, Ill. Owner: TWO-KMF Development Association (formed by The Woodlawn Organization and Kate Maremont Foundation). Architect: Stanley Tigerman. Engineers: The Engineers Collaborative (structural); Wallace & Migdal (mechanical). General contractor: Metropolitan Structures Inc. Building area: 475,007 sq. ft. Construction cost: \$7,502,620.

PHOTOGRAPHS: Philip A. Turner.



# NINE-G COOPERATIVE

Nine adjoining brownstones in New York City are now a single building combining the best of both townhouse and elevator building



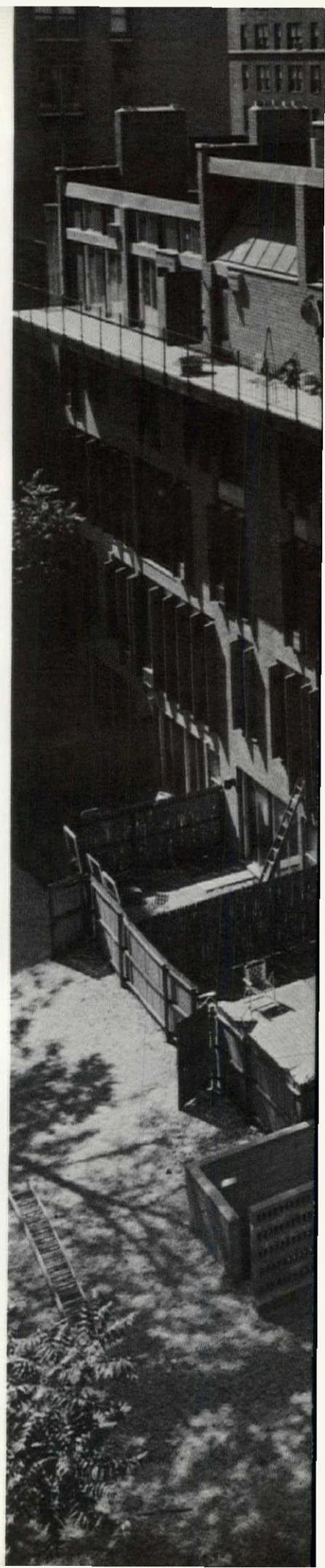
Built as a unit in the 1890s, nine brownstones on West 93rd Street, N.Y.C., have been transformed in a way that cuts across the intention of the original builder. The redesign has added a corridor connecting the nine buildings, an elevator in the center, and a new facade at the rear (right), and gives a new lease on life to a block that was about to undergo major surgery.

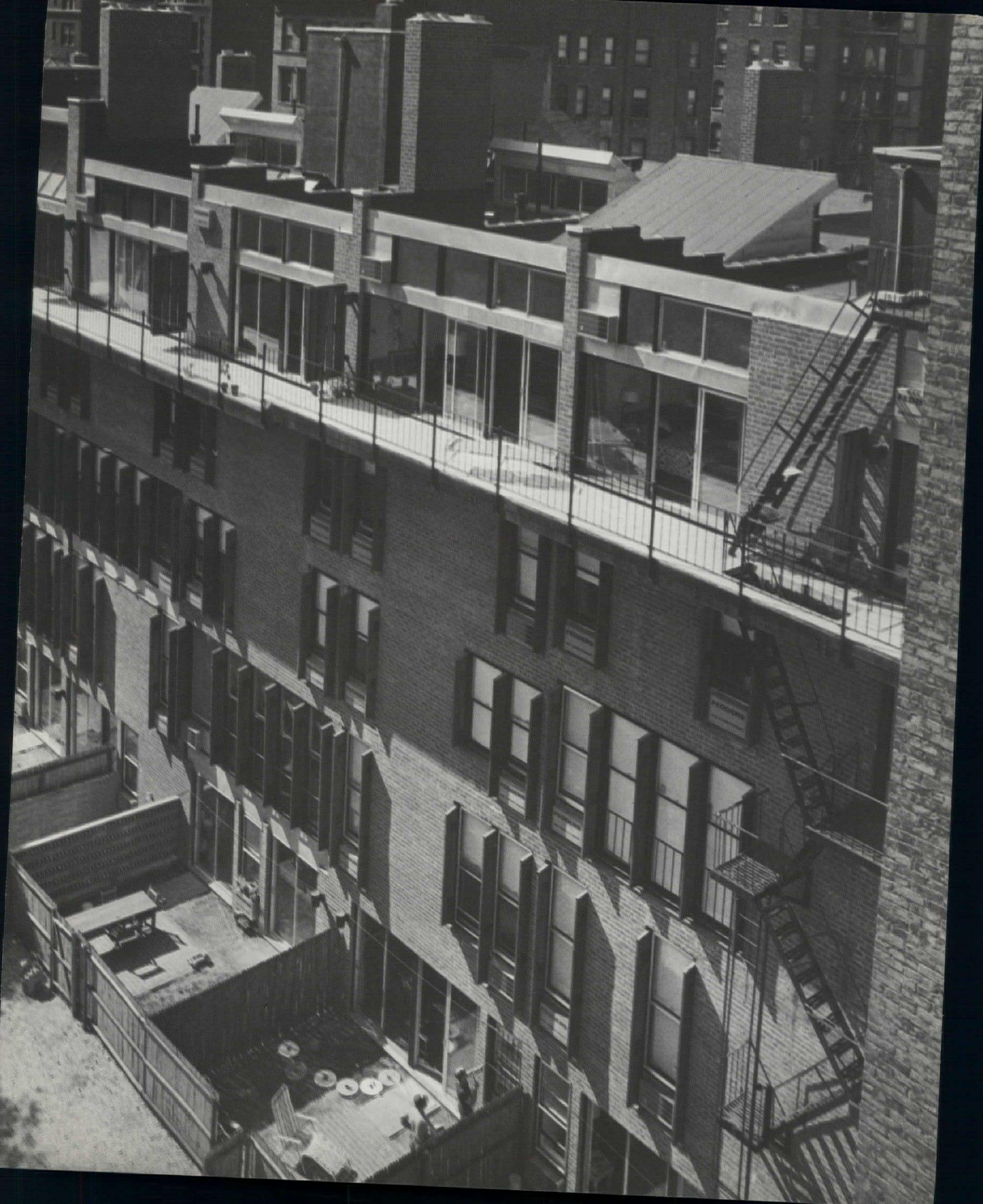
Duplexes on the two floors at bottom and top make a sandwich of the self-contained middle floor (see plans overleaf). Apartments cut through party walls and floors to solve the individual requirements of the 34 tenants. The renovation has already proven its worth to members of the new Nine-G nonprofit corporation, who have paid an average of only \$5,950 for each half-slice of brownstone (or about \$20,000 for a floor-through duplex). The Nine-G Coop has also proven a point with the architects, Edelman & Salzman—that they can work with 34 separate clients without losing their shirts or their sanity.

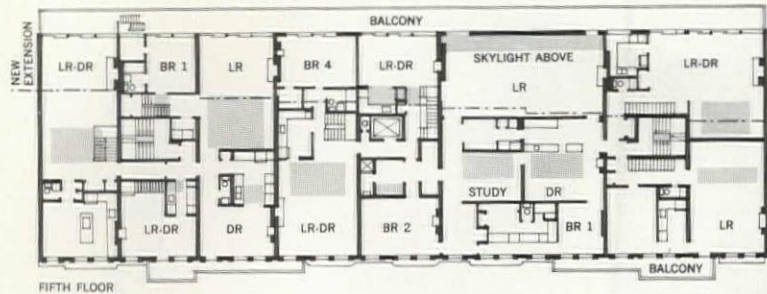
The original houses were thought too small—20 ft. wide, 30 to 40 ft. deep—to be worth saving, in the city's West Side urban renewal plan. But when a developer sought to build an even taller building than the allowed ten stories, local opposition took form. The Little Old New York Citizens Committee, formed in 1962 to help families find brownstones in the renewal area, got together enough people to save these as a group. After a financing study, the architects suggested making it a coop.

From the front, the nine appear still separate. Front stoops were removed, and three small lobbies provided. The rear facade is entirely new, though, in fenestration and location—houses had been of varied depth because of an old pathway running diagonally through the block.

The combination of elevator building and brownstone has obvious appeal, combining the convenience and safety of one with the amenities and home-like feeling of the other. The architects suggest the technique for new or existing buildings, as a way to preserve the scale of a neighborhood. They envision it as a way to keep the side streets for low buildings only; these would feed off the elevators of the highrise along the major avenues.



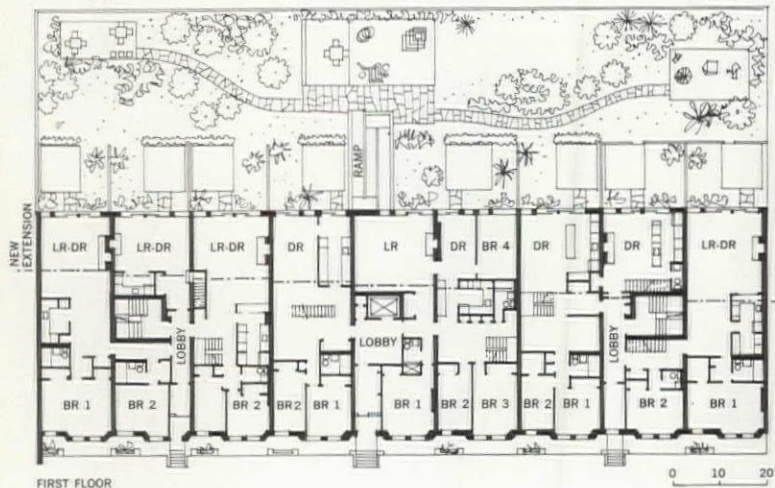




FIFTH FLOOR



SECOND FLOOR



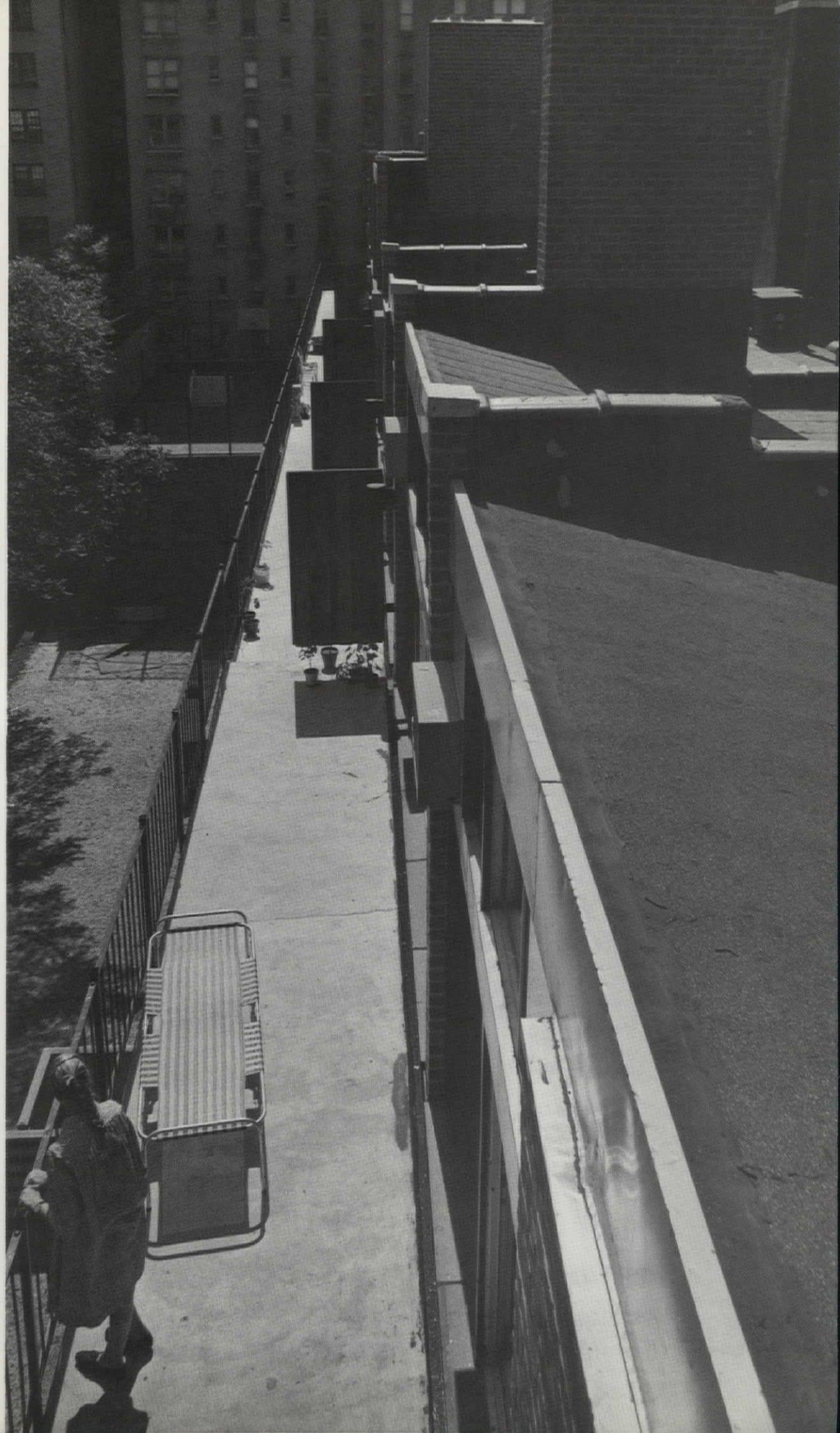
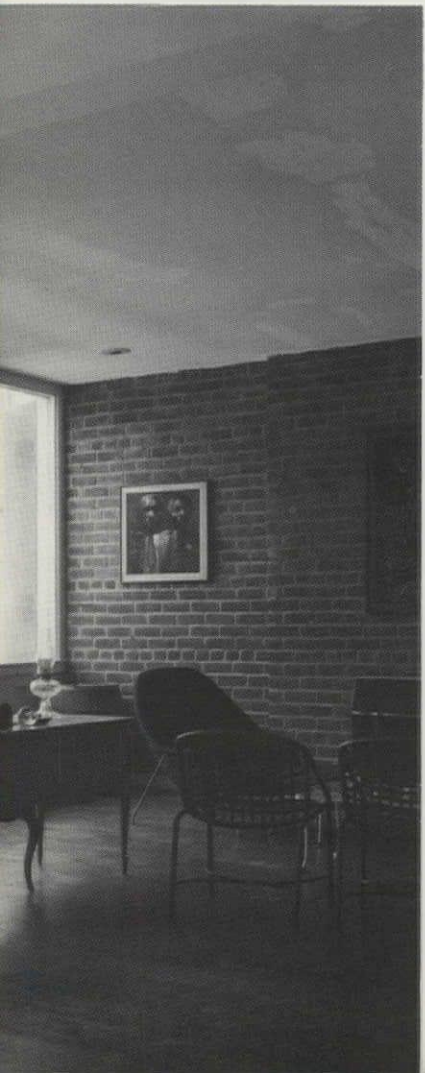
FIRST FLOOR

Corridors connect the original nine brownstones on all but top and bottom floors. The third floor (not shown) has one-story apartments sandwiched between duplexes; the fourth floor (not shown) is primarily a bedroom floor for the handsomely skylighted living-dining areas above. Major new features are the central elevator and garbage chute, fire escape and balcony along the rear, community recreation area outdoors beyond the private courtyards. Costs of about \$20 per sq. ft. compare with renovation costs on a single brownstone today, of about \$25 (the difference is partly in the economies of a larger job, partly in the lower costs, generally, when this job began).

#### FACTS AND FIGURES

Nine-G Cooperative, 19-35 W. 93 St., New York, N.Y. Architects: Edelman & Salzman. Engineers: Richard Hill (mechanical). Building area: 46,946 sq. ft., plus 9,389 in cellar. Construction cost: \$817,148. Financing: 40-year mortgage from Fanny May, insured by FHA under section 213. PHOTOGRAPHS: George Cserna, except page 80, Harold Edelman.





# SCOTLAND, MARYLAND

A new townhouse development has firmly reestablished a century-old Negro community threatened with oblivion



Out along Seven Locks Road, nestled in the green, rolling terrain of suburban Washington, D.C., is a nearly completed townhouse development that looks more or less like any other white, middle-class subdivision.

But it isn't. The townhouse project (partial view, left) is being built by and for the residents of Scotland, Md., a community of about 50 low-income Negro families who have pooled their land, their determination, and their hopes to produce the new housing. The result is something of a miracle in the low-income housing field, yet it took five long years of pushing, pulling, cajoling, manipulating—and seemingly endless waiting—to bring it off.

Scotland's prolonged, tortuous battle for decent housing and a better way of life has not been waged against the exclusionary attitudes of lily-white suburbia. On the contrary, literally dozens of Scotland's white neighbors, church groups, and civic leaders in Montgomery County have given help and encouragement to the venture. Nor has it been a struggle against the administrators of federal housing programs. They have all cooperated fully—if not always courageously. The real villains in the Scotland story are not people, but rules, regulations, and bureaucratic red tape, which almost stifled the project on several occasions.

For all that, you won't find a Scotland resident who will say it hasn't been worth the effort. The new townhouse development will not only provide the people of Scotland with their first experience of living in decent housing, it will firmly reestablish a century-old com-



munity that was threatened with extinction five years ago.

The threat came from two outside interests which converged on Scotland in 1964 (Oct. '66 issue). The Maryland-National Capital Park and Planning Commission wanted to acquire about two-thirds of the community's heavily wooded land, which Scotland's families and their ancestors had owned since Civil War days. And the remainder of the property was being coveted by real estate speculators, who were pressuring the families to sell at ridiculously low prices.

Even though the families were living in a collection of dilapidated, overcrowded shacks (see one example above), the sale of their land and houses offered an even bleaker alternative. First of all, no resident stood to gain a significant amount from the sale, since the property had been split up over the years to the point where few individuals owned as much as a quarter of an acre. (One owner's parcel amounted to 1/348th of an acre!) Secondly, there was no low-income housing in Montgomery County, and the families couldn't have afforded anything better. Their only real housing alternative was the Negro ghetto of Washington, which the fam-

ilies considered a definite step downward. "We were caught between the buzzard and the hawk," said one resident, Mrs. Geneva Mason (below).

It looked as though Scotland would quietly disappear until a seemingly unimportant event occurred just before Christmas of 1964. Onto the scene came Mrs. Joyce Siegel, a housewife from nearby Bethesda, who drove up to deliver a load of toys for Scotland's children. It was Mrs. Siegel's first look at the community, and she was horrified by what she saw and heard—so much so that she immediately set about rallying support for Scotland from the white residents of nearby communities.

Many individuals, church groups, and civic leaders pledged their help, giving Scotland its first reason to hope that the destruction of their community might not be a foregone conclusion. Together, the people of Scotland and their white neighbors formed a new organization, Save Our Scotland (SOS), to do battle against the outside threats.

The fight turned out to be



relatively easy: the park commission readily agreed to halt the expansion of its park until a community plan could be drawn up; and the Scotland residents, with their hopes renewed, simply ignored the speculators.

With the immediate threats out of the way, Scotland began working up a housing solution. The community and its neighbors formed a new, nonprofit corporation called Scotland Community Development Inc. (SCD). The corporation devised the broad outlines of a housing program under which the residents would pool their land, totaling about 50 acres, sell off all but about 12 acres to the park commission, and use the income to finance construction of a 100-unit development under the federal 221d3 program.

Then SCD applied for a demonstration planning grant from the Housing & Home Finance Agency (HUD's predecessor). In July of 1965, HHFA Administrator Robert C. Weaver, noting that the Scotland situation was typical of "numerous slum pockets in which land is owned by long-term residents who have not the means to rehabilitate housing that has become dilapidated," announced that the corporation had been granted \$78,400. "The demonstration in Scotland, within the orbit of the nation's capital," said Weaver, "will be of nationwide interest, and help show the way to a solution of similar problems elsewhere."

At that point, Scotland needed professional planning and architectural help. It came from Rurik F. Ekstrom, a young architect in nearby Potomac who had heard about the community and

volunteered his services.

It appeared as though Scotland now had everything going for it: the support of its influential white neighbors, the money and professional services needed for planning and design, and the backing of the federal government. But the residents soon discovered that support from the top of the federal housing hierarchy carried no weight in the bureaucratic labyrinth below.

"Individually, everybody couldn't have been more helpful," says Ekstrom. "It was the regulations that caused all the problems." The problems were legion, as the three examples below only begin to convey:

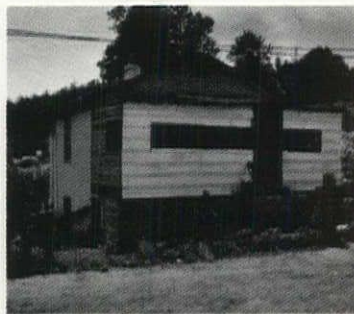
- The residents wanted their new houses to be detached, in a pattern similar to what they had been accustomed to. The regulations wouldn't allow it, on the ground that it was "economically unfeasible."

- The residents wanted a variety of unit sizes to accommodate the community's large, small, and medium-sized families. The regulations called for three-bedroom units only, because that was where the market was.

- The residents wanted to own their units, detached or not. The regulations would not permit families of such low income to buy houses.

- The SCD wanted to be the sponsor of the project. Under the regulations, SCD was not "stable" enough to qualify.

Chances are Scotland might still be attempting to unlock the intricate mysteries of federal procedure had it not, in desperation, called in David Clark, a Washington housing consultant who knew his way around both



the bureaucracy and the regulations. After months of negotiation, Clark was able to work out a housing solution which combined several federal programs in one package. It was a compromise, to be sure, but at least it accommodated the major needs of Scotland's residents, as well as the needs of about 50 other Negro families, many of whom had left Scotland in past years but wanted to return.

The package provides for 100 townhouses, of which 75 are rental units and 25 are to be purchased by Scotland residents. Technically, as far as FHA is concerned, all units are three-bedroom, but in fact the development contains a mix of two-, three-, and four-bedroom units. This was accomplished by gerrymandering the second-floor plans so that bedrooms of larger units were placed above the first floors of smaller units.

The 25 purchase units, on which construction is about to begin, will house those families who were able to qualify for homeownership at the time the project was approved. Now, under the more generous provisions of the new federal 235 program of mortgage subsidies for lower-income families, it is hoped that several rental units can be converted later to condominiums.

One of the existing houses (left), will remain and be rehabilitated for its occupants.

Thirty of the families living in the rental units will be given federal rent supplements which will bring rent payments down to 25 per cent of their incomes. And SCD is now negotiating with the Montgomery County housing authority to lease another 30 units as public housing.

Yet to be settled is the financing of a new community center contained in the Scotland plan (opposite page). SCD, which joined forces with the Washington Council of Churches to meet federal "stability" requirements as the project's sponsor, hopes the community center can be built through a neighborhood facilities grant from HUD, with Scotland putting up the site as its one-third share of the cost. Scotland's old "community center" (below), which served as its school house until the 1954 Supreme Court decision forced neighboring schools to accept its children, was demolished to make way for the new housing.

Architecturally, the townhouses are, if anything, a bit more corny than most of their kind in the suburbs. No matter: they were designed to the rather exacting specifications of the people who will live in them—



none of whom are architects. Before Ekstrom designed the development, in association with Collins & Kronstadt and Randolph Janney, he took a number of steps to familiarize Scotland's residents with some of the more far-out design possibilities open to them. Among other things, he got the deans of several architectural schools to assign the Scotland project to their students, who responded with highly imaginative, but largely irrelevant, schemes. "Most of them designed new Georgetowns," says Ekstrom. "The kind of places in which people drink martinis in the evening and sit around reading newspapers. They don't do that in Scotland."

In the end, the clients opted for the more conventional. What influenced them most was a new shopping center, featuring Mansard roofs, that was built down the road from Scotland.

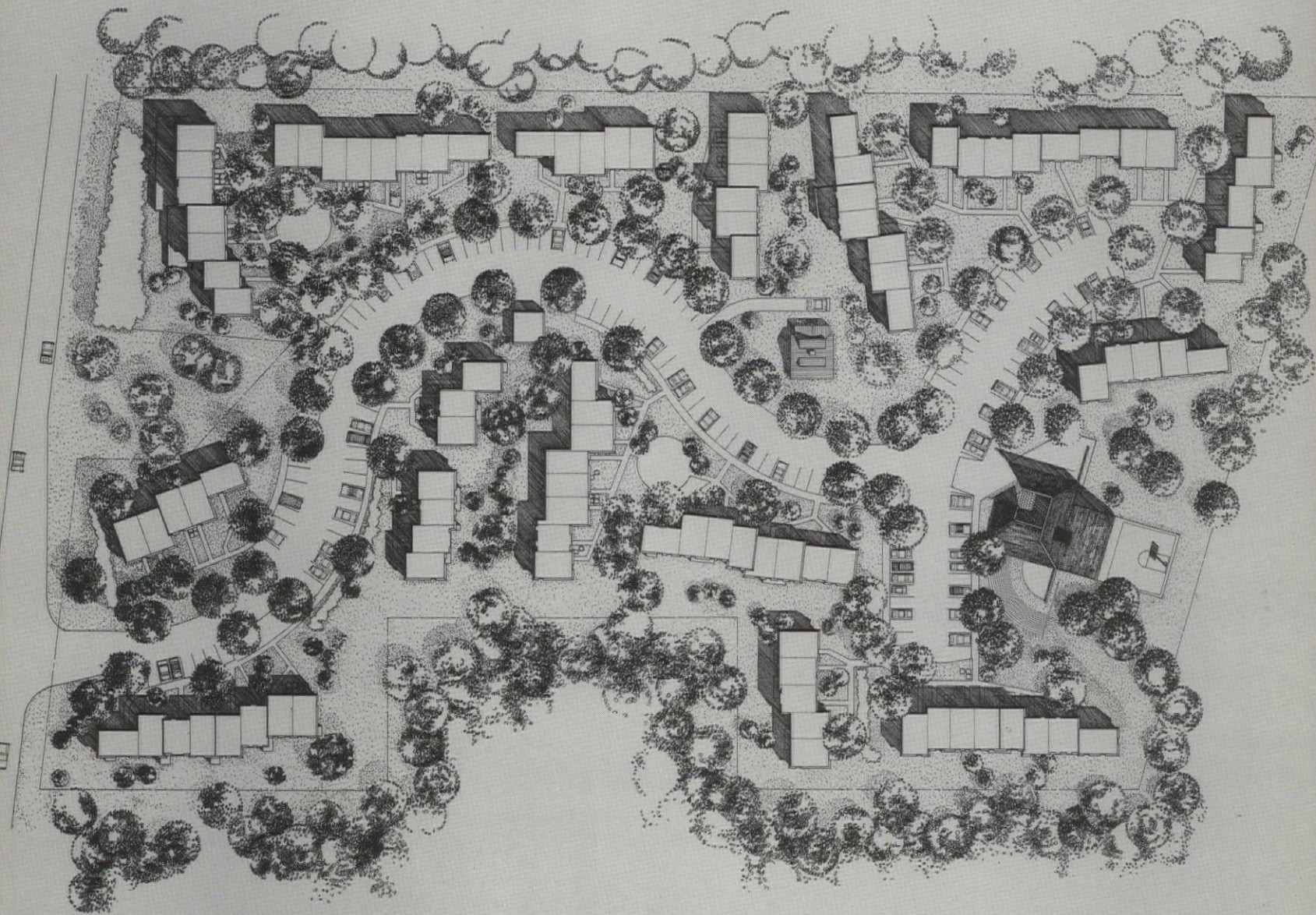
Architecturally, and in every other respect, the new Scotland belongs to its people. It was they who bore the agonies involved in bringing it to fruition. They had help, of course, and they accepted it gratefully, but they also accepted full responsibility for the decisions that had to be made. They are proud of the results, and have good reason to be.—JAMES BAILEY

#### FACTS AND FIGURES

Townhouse development, Scotland, Md. Owner-sponsor: Scotland Community Development Inc. Co-sponsor: The Council of Churches of Washington. Architects: Rurik F. Ekstrom, Collins & Kronstadt, and Randolph Janney. General contractor: Urban Systems Development Corp.

PHOTOGRAPHS: Bruce Michel, page 82, page 83 (top), and page 85 (top right); Michael Lenzi, page 85 (bottom left); Alan R. Siegel, page 83 (bottom).





# HISAKA HOUSE

**An architect's own house shows  
that urban design  
is possible on a suburban lot**

Only rarely is the design of a single-family, suburban house related to buildings beyond its own property lines, but the house that Architect Don Hisaka has just built for himself in Shaker Heights, near Cleveland, is a small-scaled example of effective urban design. It not only complies with the town's demanding zoning rules, but it

clarifies the spatial arrangement of the whole neighborhood.

Like most suburbs, Shaker Heights decrees that each homeowner dedicate a portion of his plot to unobstructed "front yard." In the case of Hisaka's V-shaped corner lot, the front yard (and similarly prescribed side yard) took up 70 per cent of the entire area.



The house that Hisaka designed for this lot not only had to stay within the small area allotted for building under the zoning ordinance, but it also had to satisfy an architectural review board that guards Shaker Heights against strident non-conformity. There was no conflict, however, since Hisaka *wanted* his house to maintain

the established setback lines and to look at home among the surrounding pseudo-Colonials.

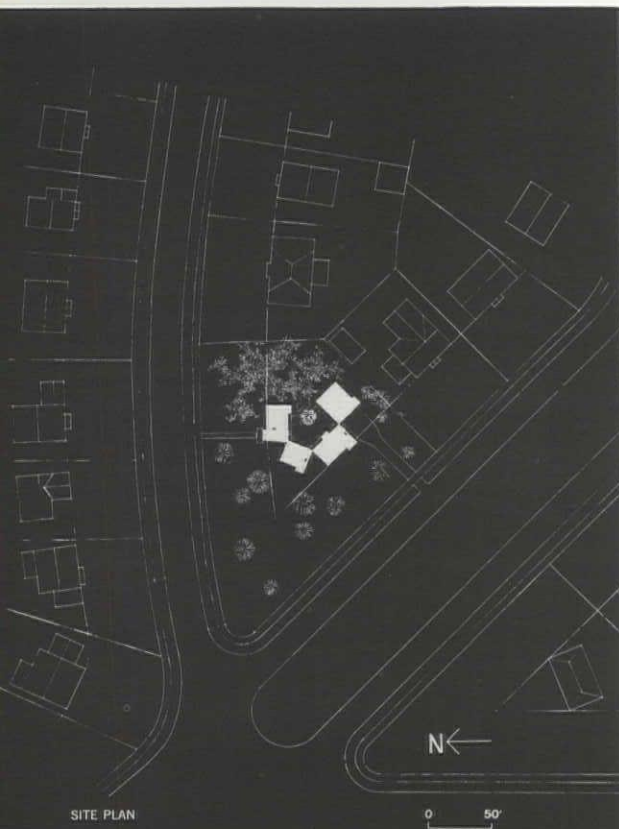
He felt that—at least in this locale—the uniform front yard and the repetition of similar roof forms established a coherent physical pattern that was worth preserving. But he was not willing to retreat into a little gabled box at one edge of the site and

peer out at the landscape through conventional windows. He wanted to reserve a part of the plot as private outdoor space, and to look out at it through large areas of glass that the neighbors could not see into.

He accomplished all of these objectives at once by designing the house in the form of three connected blocks, closed toward

the street and open toward the court between them. The two end blocks continue the lines of house fronts along the two streets, and the central block turns the corner between them, reconciling the odd angle between the two setback lines.

All three blocks have the same 16-ft. structural spans and roofs of the same pitch rising



Seen from a church tower across the street to the south, Hisaka's house (left) seems to be hiding in a grove of trees. Actually, the location at the far edge of the lot was chosen not for concealment (which vanishes in winter anyway) but because the setback requirements of the local zoning ordinance (plan above) left little choice of location. Seen from the street (right), the solid walls and sloping roofs repeat the geometry of neighboring "traditional" houses.



from a uniform eave line. On the street sides, all three have largely solid walls of vertical cedar boards. Two large openings, which keep the house from looking inhospitable, have been placed in projections with solid sides, so that passersby get only a limited view of the interior.

Geometrically and structurally, the three blocks have been kept

separated. The plainly visible triangular links that join them provide an interesting reversal of the openings-inward, walls-outward scheme of the main blocks. Each of the links offers a broad view outward toward the street, yet gives the neighbors no view at all of the interior of the house.

Inside, the three main blocks

are not as similar as they look from outside. The two-story living room (below left) occupies the whole central block, compensating in scale for the 7 ft. 1 in. ceiling heights (keyed to the size of standard doors) throughout the rest of the first floor. A balcony along one side of the living room links the parents' bedroom at one end of

the house with the daughters' rooms at the other end (all of which have ceilings that follow the slope of the roof). A ship's ladder leading up to the girls' rooms from the breakfast room gives them a quick alternative—which they always choose—to the roundabout route via the main stairs near the front door.

As the size of bedroom win-



A two-story living room (left) fills the central block of the three-part house (plans above). The large glass areas of the first floor rooms face inward toward the court (right), where they are shielded from the view of passersby, as well as from direct sun.

dows suggests, the house was designed to be air-conditioned. The entire system has been installed, except for the cooling units themselves, and the Hisakas have already decided that one summer without air conditioning will be enough. The three blocks of the house are heated by three separate furnaces (hence the numerous

chimneys). Three independent systems turned out to be less expensive than a central one because ducts could be shorter and controls could be simple.

The Hisaka house is not the first "modern" house in Shaker Heights, but it is probably the first one that the other residents have really liked. And its appeal may go deeper than the comfort-

able familiarity of its solid walls and sloping roofs. Even though the neighbors cannot look into the Hisakas' court, they can tell it is there, and perhaps they realize that the scheme of additive units around a court solves some of the basic problems of housing—either single-family or multifamily—in the suburban setting. It shows one way to en-

joy private outdoor living space and large glass areas—without living either in a goldfish bowl or behind a stockade.

#### FACTS AND FIGURES

Hisaka house, Shaker Heights, Ohio. Architect: Don M. Hisaka. Engineers: George Evans & Associates (mechanical); William B. Ferguson (electrical). Building area: 2,375 sq. ft., plus 480 sq. ft. garage.

PHOTOGRAPHS: Thom Abel.



# ACORN PROJECT

In the midst of Oakland's worst ghetto, a 221d3 development has emerged as a vital, racially mixed community

BY ROGER MONTGOMERY

Oakland's brightest new buildings of the season have emerged at last from the long dormant Acorn renewal project in a shapely 221d3 community by the young San Francisco architectural firm of Burger & Coplans. The project's designers and developers have shown, as it rarely has been shown, that bulldog tenacity and some kind of mad disregard for the account books can unsnarl the FHA's incredible red tape and make the federal below-market-interest-rate program work.

While some critics may carp at its scenographic esthetic, Acorn gives an astonishing amount of dwelling for the dollar. And it does this while maintaining an evident seriousness and love for domestic architecture. That is no mean achievement in this era of 9-per-cent construction money, enormous lumber prices, and quick in-and-out speculative development. These accomplishments overshadow what it does not do: it looks unmistakably like a housing project, a project built with the most conservative traditional technology, both doubtlessly unavoidable choices.

Before examining the architecture further, some idea of the project's background needs sketching in. Acorn lies in the bend of a freeway just outside the central business district in infamous West Oakland, the city's best-known blighted area and home of the proudest, most militant minority community in the West. Since planning on the project began almost exactly ten years ago, during the era of the unfettered federal bulldozer, Acorn suffered all the ills of old-style urban renewal. It proved characteristically easy when it came to pulling down old houses, but the city still suffers repercussions from the aggressive relocation this required. Despite some careful urban design studies done in the early '60s by George Rockrise and Lawrence Halprin, marketing and management problems caused endless delays. The land lay fallow for several years.

In late 1964, the Oakland Redevelopment Authority held a

design competition to select a redeveloper for the tract. The ground rules, as well as the price of the land, called for a high-density (by California standards) residential community served by a convenience shopping center and various neighborhood open spaces. The Burger & Coplans design won out over the others largely because the firm was able to achieve the density requirements and still have most dwellings open directly at ground level, and because the site planning showed an attractively varied, resourceful organization. Most of the submissions had resorted to standardized-looking medium highrise buildings. The built result achieved these qualities of the competition design.

## Turning the corner

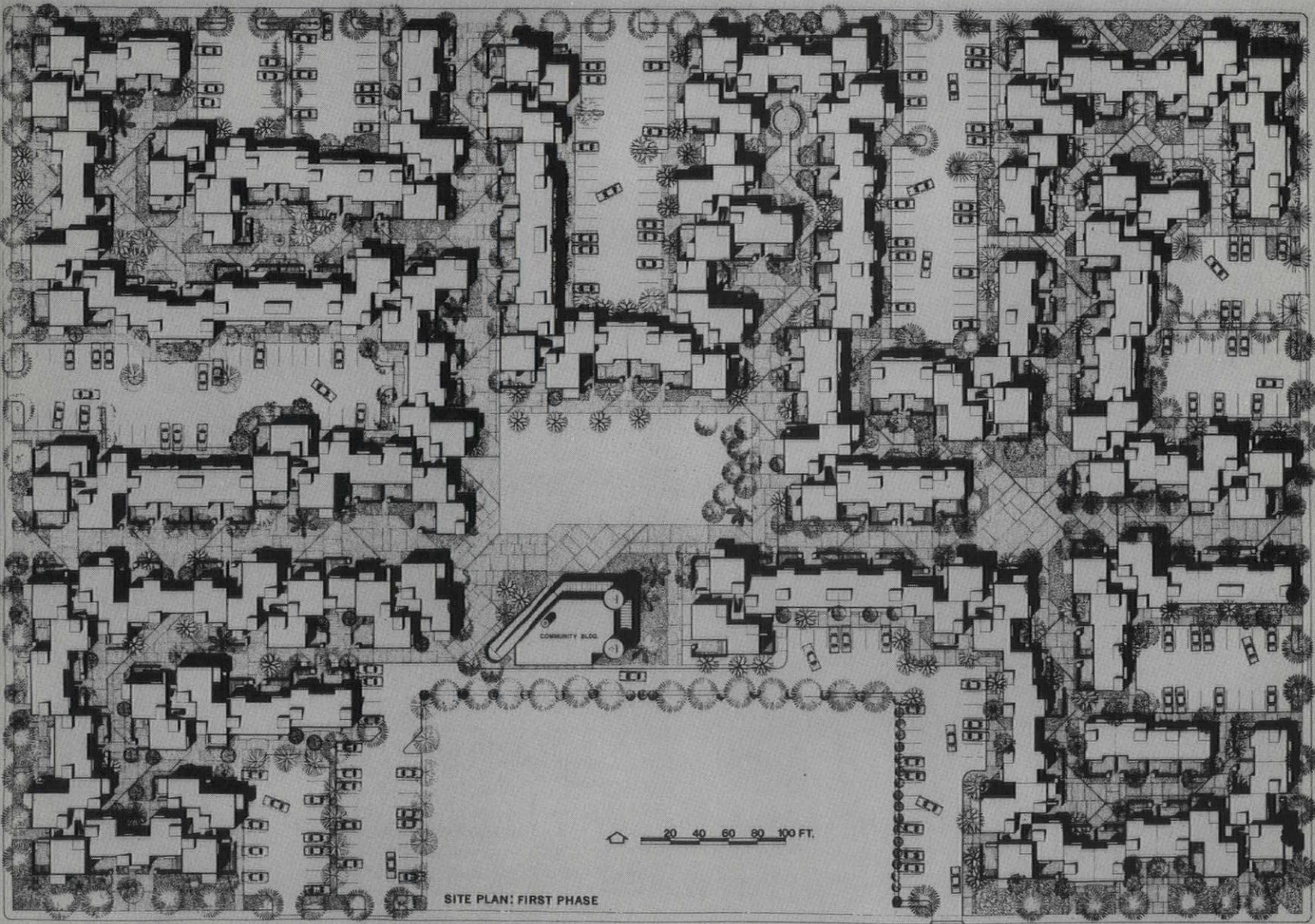
Burger & Coplans' secret for realizing both objectives of density and variety lay in marrying what they call their "corner-turning building" to relatively standard townhouse rows. This ingenious planning concept of an attached three-story walkup which packed additional units into the rows, added considerably to the spectrum of unit types and permitted snaking the rows around in a way that never seems to repeat itself. The panoramic view of the project (opposite) shows how much its appearance benefits from the articulate silhouette the corner-turning building generates. Inside the project the visual benefits are at least as great because the added height of the three-story structure comes just where it is needed to terminate the neighborhood's series of linear open spaces.

The project covers two blocks, actually small superblocks, one about twice the size of the other. It provides 479 dwellings on 17 acres for just short of 30 units to the acre. In the center of the large block the designers have located a large open play-space and a community building. A second phase, about to get under way, will put about 300 more townhouses and apartments on an adjacent block to the east. The final third phase will provide a 70,000-sq.-ft. neighborhood shopping facility.

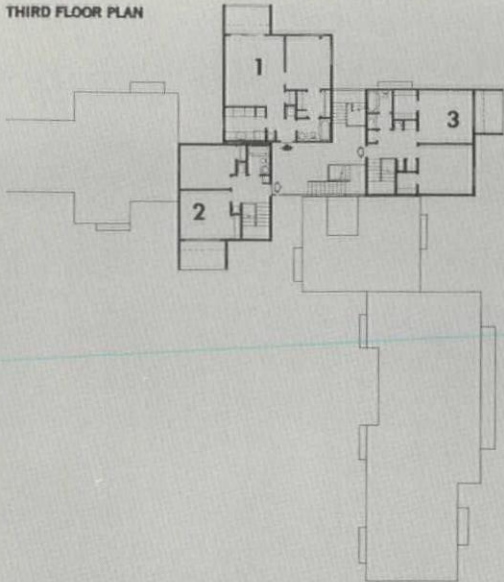
In social and housing-market terms, Acorn looks good indeed. A waiting list of people anxious to live there developed almost immediately. As in all 221d3 projects, the income spread of the tenants is narrow, but the

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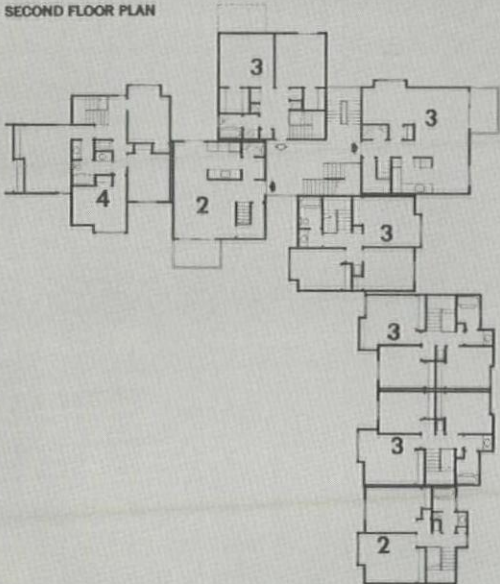
Mr Montgomery is professor of urban design in the Department of Architecture and the Department of City and Regional Planning at the University of California, Berkeley. He is the West Coast correspondent for Forum.



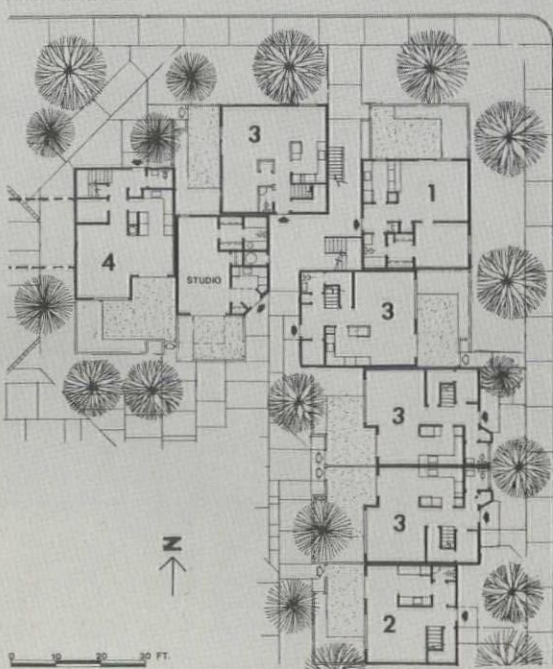
THIRD FLOOR PLAN



SECOND FLOOR PLAN



FIRST FLOOR PLAN



racial composition is exceptionally diverse—to the surprise of many who thought integration an impossible goal in West Oakland. About half the tenants are black; the others include whites, Chicanos, Indians, Orientals—the whole racial mix characteristic of the cosmopolitan San Francisco Bay region.

This social success represents a triumph of faith for the project's developers, who sweated it out for five discouraging years. Beneficial Development Group, the combine which won the original competition, is composed of a team of energetic black entrepreneurs: Milburn T. Fort, Dr. Carlton B. Goodlett, Samuel B. O'Dell, and the Honorable W. Byron Rumford. The housing portion of Acorn was turned over to the Alameda County Construction and Building Trades Council as non-profit sponsors-owners. Beneficial will construct and own the shopping center.

Turning back to architectural matters, Acorn's technological conservatism stands out sharply in the current Oakland context of considerable experimentation with industrialized building. Doubtless the choice was wise. The architects had enough to do without taking on the multiple problems of new technology. So did the sponsors and builders. Perhaps here lies an important lesson to learn from Acorn. After all, this project has produced more homes for more people in Oakland than all the experiments. Perhaps, as a matter of principle, technical experimentation should be uncoupled from attempts to provide low- and moderate-cost housing. It might result in more of both.

On a different level, another kind of serious question arises about the architecture of Acorn: 700 little houses all the same color, all the same shape, and all the same style cannot help but look like a housing project. Even in the details (the owner provided window curtains, for instance, all in the same white cloth covering hundreds and hundreds of windows, big, little, and middlesized) the architects belied their stated concern with variety. In a low-income area where people seek safe shelter before style, why such idiosyncratic forms? The architects have treated housing like sculpture, not like the old, individual shoe most of us want to live in.



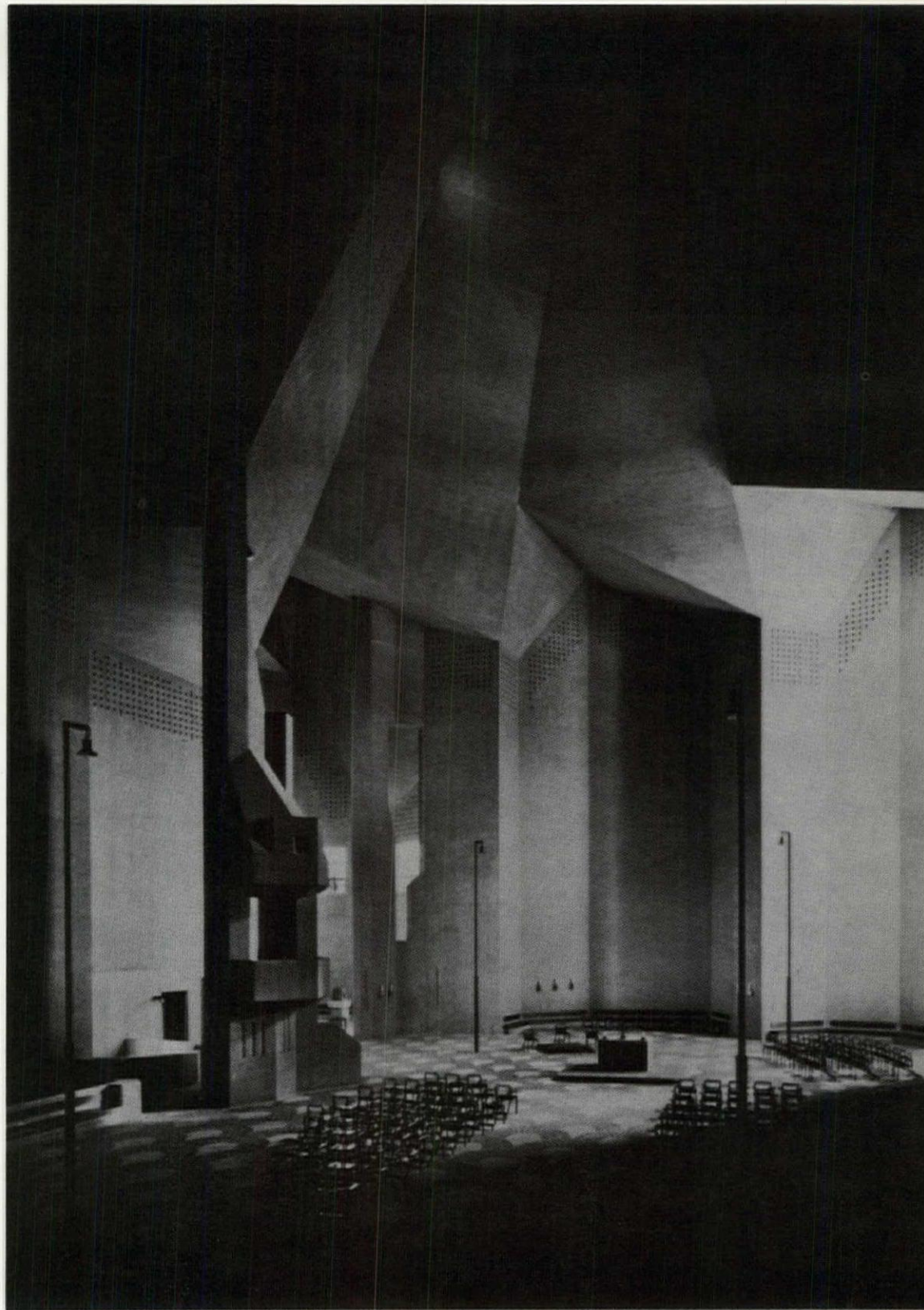
To achieve both the required density and a sense of variety, Acorn's architects attached three-story "corner-turning buildings" to the project's relatively standard townhouse rows (see plans, left). The three units serve as enclosures for the linear open spaces of the neighborhood (photos, right). Above: the community center, which provides a covered outdoor playspace beneath its overhanging upper story.

#### FACTS & FIGURES

Acorn renewal project, Oakland, Calif. Owner: Alameda County Construction and Building Trades Council. Developer: Beneficial Development Group. Architects: Burger & Coplans. Engineers: Geoffrey Barrett (structural); James Peterson (mechanical and site); Toge Hansen (electrical). Consultants: Mai Arbegast (horticultural); Geological Engineering Consultants (soil); Hal Dunleavy (financial). General contractor: Williams & Burrows. PHOTOGRAPHS: Jeremiah O. Bragstad.







## PILGRIMAGE POINT

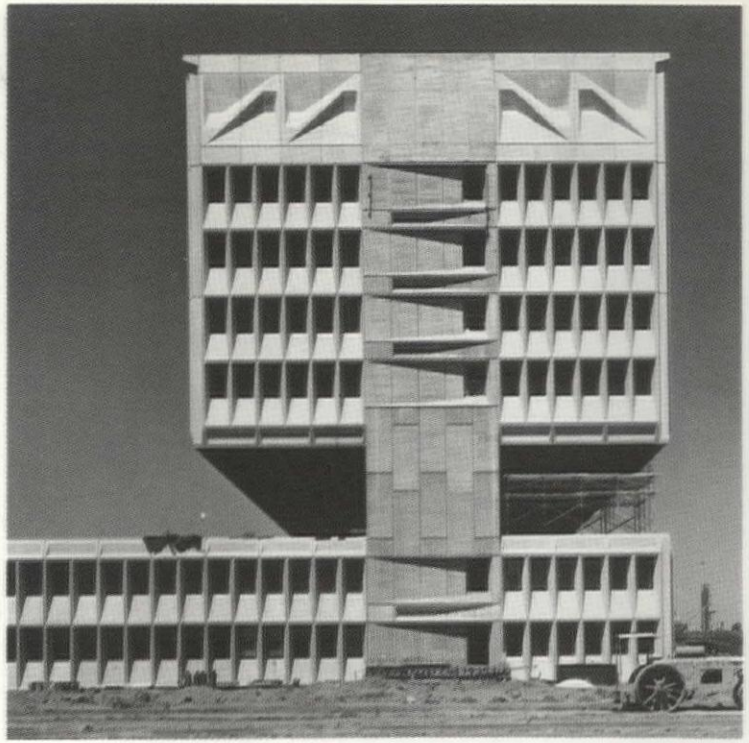
The pilgrimage town of Neuviges, Germany, consecrated in 1681 to the Virgin, attracts hundreds of the faithful every day. An existing chapel, seating 200, was inadequate, and the Franciscan Order, which owns the chapel, has planned a new pilgrimage center which will eventually accommodate over 7,000 persons.

The first building in this project, a church, seats 800 and has space for 2,200 "standees." It is a polygonal structure of sand-blasted reinforced concrete, rising to 114 ft. in a series of peaks; it is approached up four flights of steps from a broad "pilgrims' way." The interior space is divided into a principal worship

area, a chapel of grace, a sacramental chapel, and sacristies. Underneath is a crypt with a chapel, and secondary altars. The central area (above) is lit by tall streetlamp-like lights and by banks of windows. The pulpit rises like a chimney through one facet of the folded slab roof. Architect: Gottfried Böhm.

#### HEADQUARTERS FOR ARMSTRONG

The striking, angular profile at right belongs to the Armstrong Rubber Company's new corporate headquarters in New Haven, Conn. Designed by Marcel Breuer, this 183,000-sq.-ft., \$6.5-million structure is one of the first buildings in which the floor framing is suspended from overhead cantilevered trusses. Here, the seven trusses, each weighing 50 tons and each carrying hangers at both ends, support the steel-framed block below them, which contains four floors of office space. The base of the office block and the lower building, for research facilities, are separated by 17 ft. of open-air space, in which two additional floors can be sandwiched in the future.

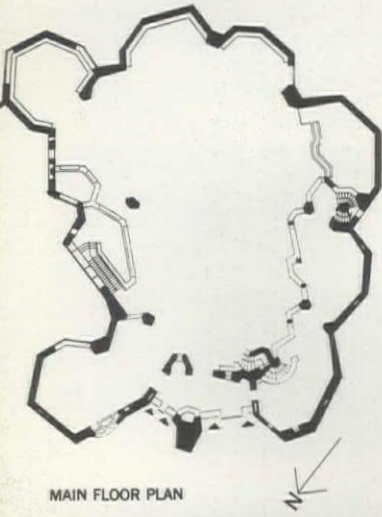


#### BICYCLE FOR THOUSANDS

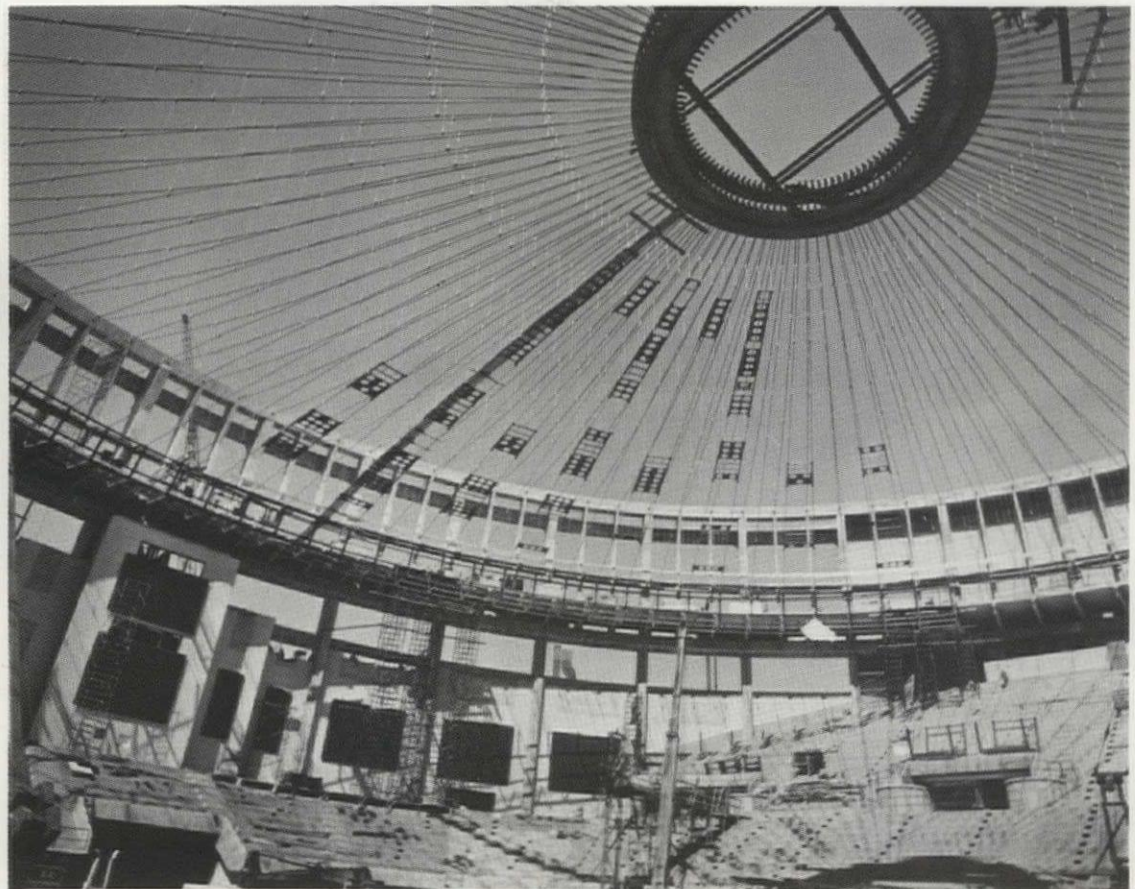
The giant concave bicycle wheel below is in reality one of the largest cable suspension roofs in the world. It was dubbed a "bicycle roof" by its creators, Consulting Engineers Zetlin, DeSimone, Chaplin and Associates of New York, who also designed

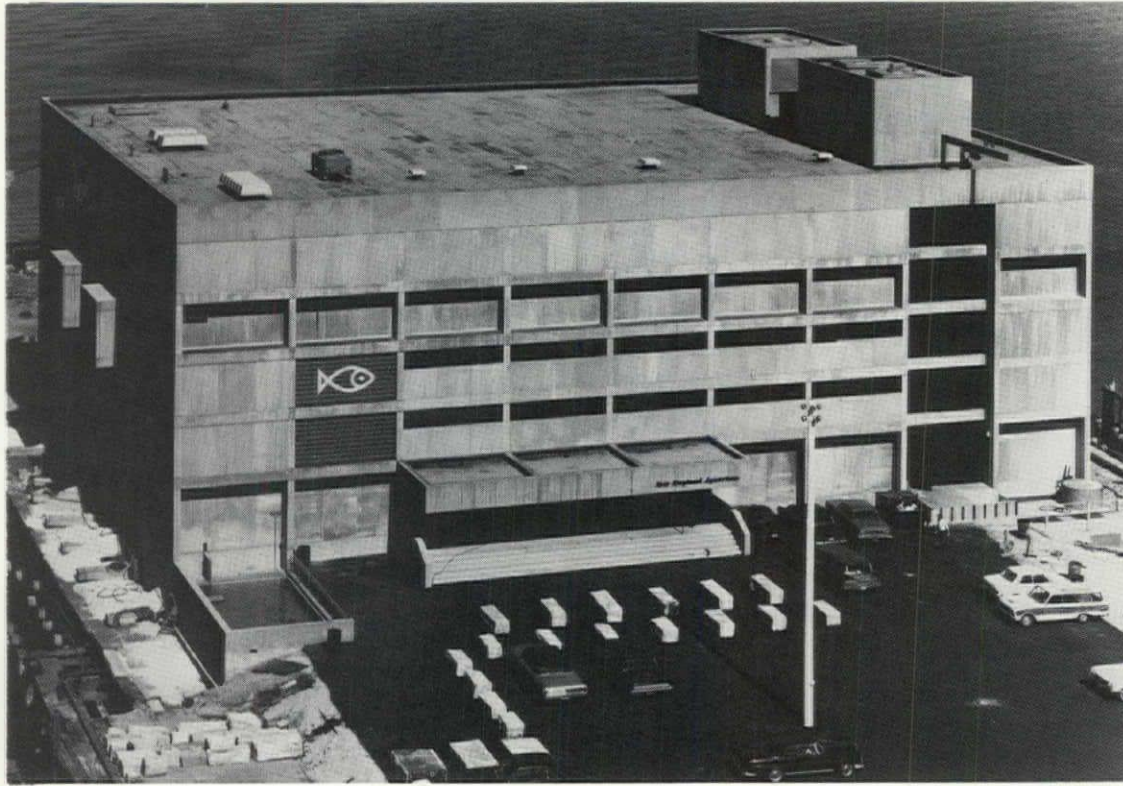
the New York State Pavilion roof for the 1964 World's Fair. It covers the new Salt Lake County Civic Auditorium in Salt Lake City, Utah. The roof is 360 ft. in diameter, and consists of a double layer of cables—180 cables per layer. The cables are an-

chored by two 40-ft.-diameter tension steel rings which also serve as support for mechanical equipment and for a suspended score-board. Thirty-six reinforced concrete columns, which form the main elements of the exterior wall, support the roof.



MAIN FLOOR PLAN





#### FISH TALE

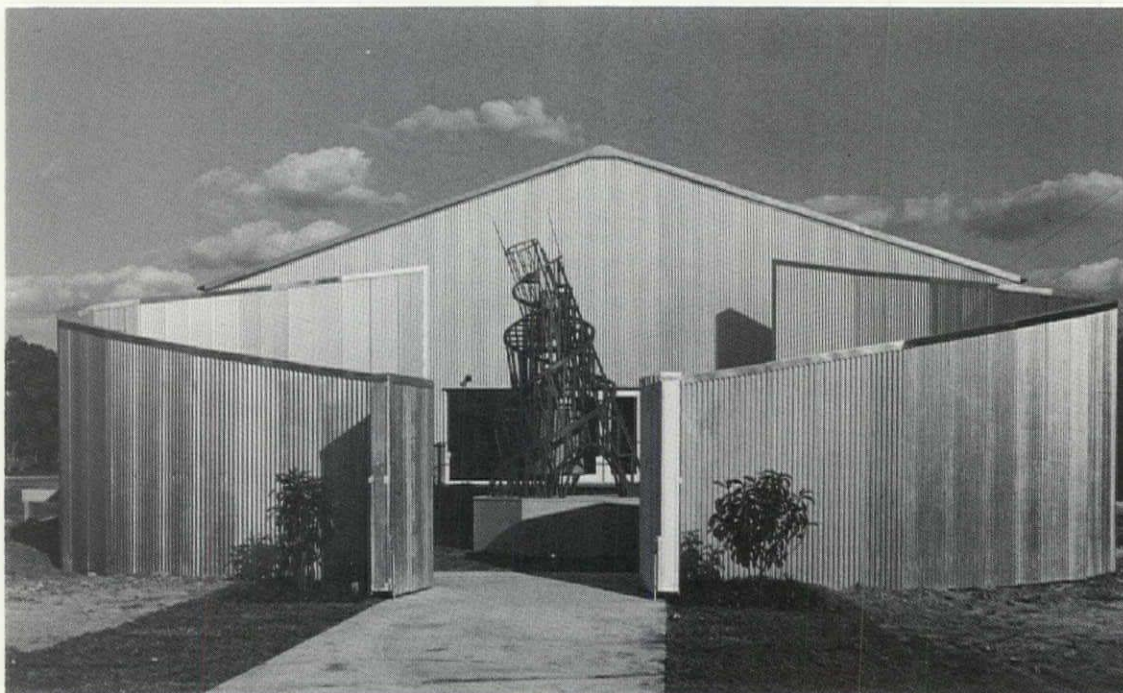
After nearly three years of construction, the New England Aquarium on Boston's Central Wharf (see Oct. '67 issue), was finally opened to the public. Designed by Cambridge Seven Associates Inc., this combination research and recreation facility houses over 2,000 varieties of aquatic creatures in 70 tanks. A giant tank, the largest in the world, is the central core and focal point. Measuring 40 ft. in diameter, this 200,000-gallon salt-water cylinder is 23 ft. deep and is enclosed by glass that is 1½ to 3¾ ins. thick. It is encircled by a spiraling staircase. Visitors, after proceeding up a series of straight ramps overlooking galleries and small tanks, may look down into the giant one, and then descend the spiral stair for a closer look at its marine inhabitants. A 150,000-gallon fresh-water pool surrounds the base of the tank, and another pool for seals is outdoors.

#### MACHINE SHOP FOR ART

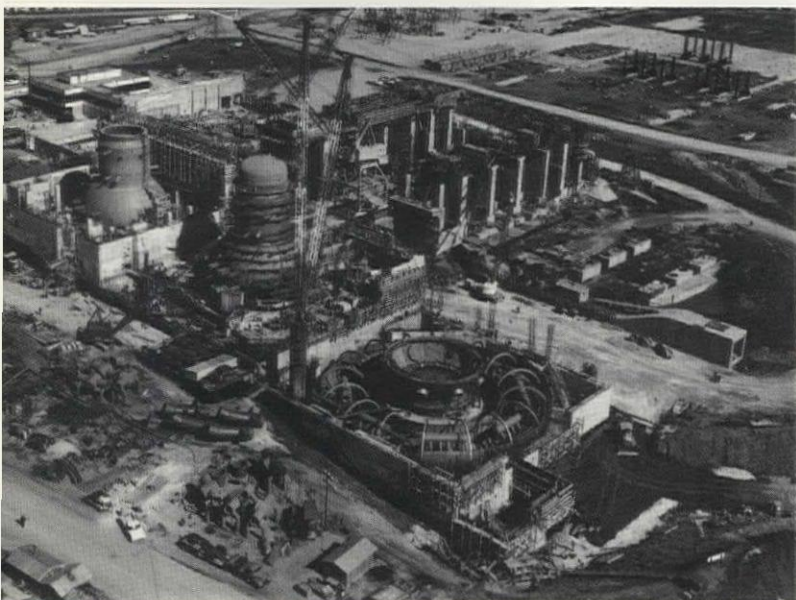
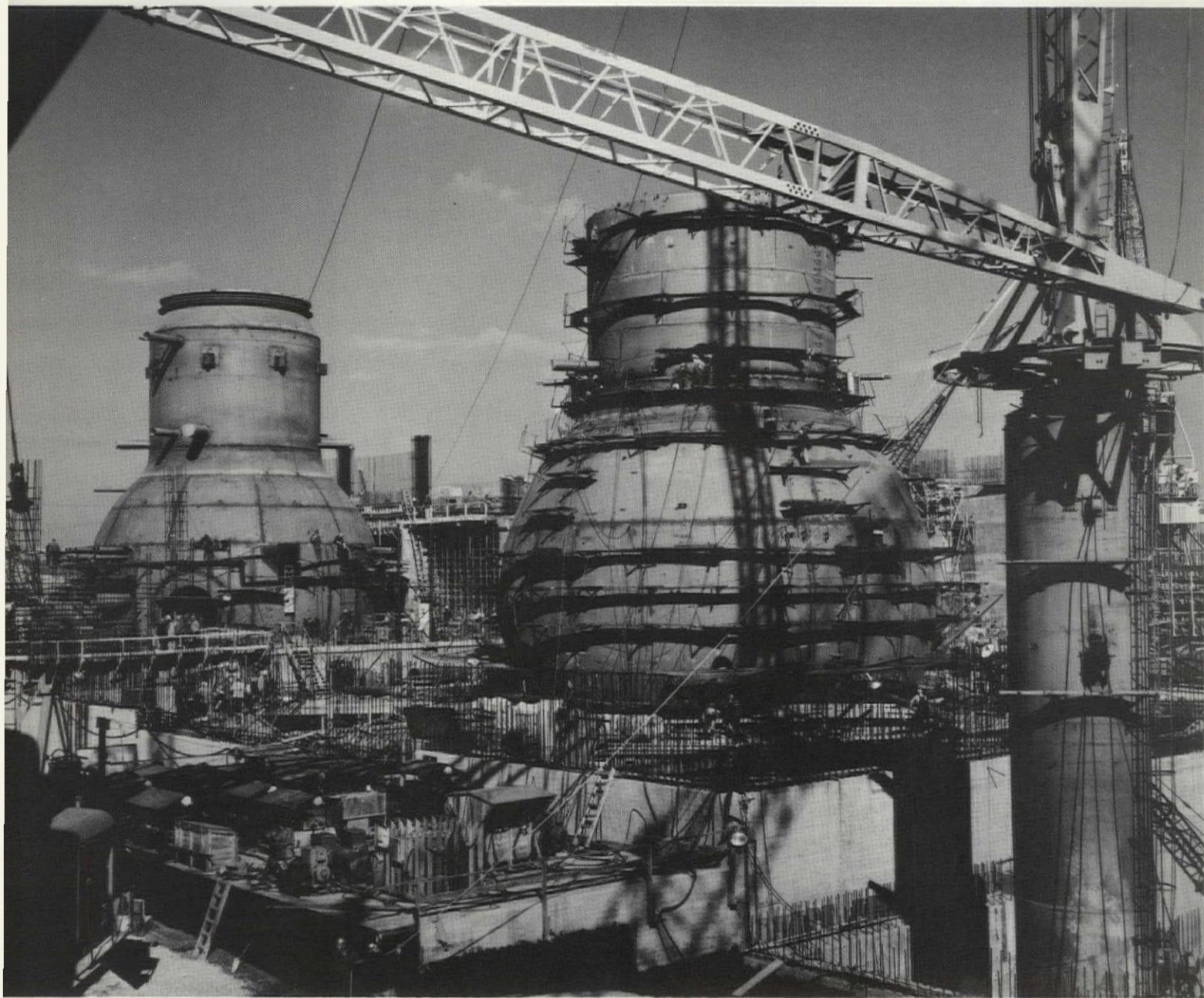
When Art Patrons John and Dominique de Menil of Houston, Tex., offered their financial support to Rice University last year, the university decided to establish an Institute for the Arts. Among other things, the institute was to be the location for the show, "The Machine at the End of the Mechanical Age," first exhibited at New York's Museum of Modern Art. Archi-

tect Eugene Aubry was given the problem to design (and get built) a space for the institute and for the machine show, in six weeks time. He decided to combine economy and design, and came up with a "machine look" for the structure. The building is composed of five segments, constructed in wood and sheathed in galvanized, corrugated sheet iron. Each of the

40-ft. by 60-ft. segments contains its own air conditioning and electrical distribution system, and can be moved about as the institute wishes—for exhibits, studios, and offices. The show itself was a great success: Dr. K. G. Pontus Hullen, mastermind of the show, said, "Here's a new concept in the presentation of art pieces: you're not in a palace, but in a workshop."



PHOTOGRAPHS: Page 94, Inge von der Ropp; page 96 (bottom), Hickey & Robertson.



**NUCLEAR VISION**

In order to meet a rapidly growing demand for additional electrical power, the Tennessee Valley Authority has begun construction of a huge nuclear power plant which will have a capacity of nearly 3½ million kilowatts, or nearly twice that of any power plant in the U.S. This plant, the Browns Ferry Nuclear Power Plant, is located about ten miles from Athens, Ala., just south of the Tennessee border. Nuclear power was originally chosen, in 1966, because it could provide power at less cost than traditional methods. The reactors at Browns Ferry use water as a means to absorb heat and produce steam. The three units (two shown in

photo above) will have multi-barrier safety containments, including drywells and suppression pools to contain any escaping steam or water. Further safety factors had been reviewed fully by the Atomic Energy Commission before the construction permit was even granted, and the Commission has overseen every step in the building process. The type of fuel chosen, and the design of the plant, make it impossible for nuclear explosion to occur. The aerial view at left shows all three units, which will be completed in 1970, '71, and '72 respectively, and office and service facilities. Turbine foundations are visible in the background of the photo above.

THE ECONOMY OF CITIES by Jane Jacobs. Random House, N.Y. 268 pp. 5½ by 8¼ in. \$5.95.

REVIEWED BY JAMES MARSTON FITCH

In her first book, *Death and Life of Great American Cities*, Jane Jacobs produced an unorthodox, oddly-structured, disputatious and—from an academic point of view—unsatisfactory critique of city-building. But exactly the same charges could have been raised against Harriet Beecher Stowe's *Uncle Tom's Cabin*; and in both cases the charges would have been largely irrelevant. For it is no exaggeration to say that, in the eight years since its publication, Mrs. Jacob's book has had much the same impact in its field as Mrs. Stowe's once had in hers. Which is to say: enormous. Theory was fundamentally altered, critical opinion deflected into new channels by the sheer presence of these two books with their new ways of looking at their respective subject matter.

Jane Jacobs new book, *The Economy of Cities*, is certain to have a comparable effect—though this time among urban economists and sociologists rather than the architects and physical planners into whose unsuspecting ranks her first bombardment fell. In purely formal terms, it is a much better book—shorter, better structured, beautifully written. Conceptually, it is stronger, too: densely reasoned, rigorous in its clarity and economy, and absolutely brilliant for the new light it casts upon familiar, worked-over materials. It is, in short, that rare thing, an authentically innovative theoretical work. Whether they like it or not, the professionals in her field of fire had better prepare for battle stations: their sinecures will never seem so safe again.

In this new book, as in her first, Mrs. Jacobs disdains the whole superficial apparatus of modern scholarship. Though every page reveals internal evidence of deep thought and immense research, she gives us no bibliography, no documentation, and a very scanty set of appendices. (Her few footnotes are purely expository; other authors are usually paraphrased, but

Mr. Fitch is a professor in the School of Architecture at Columbia University, and a frequent contributor to this magazine.

when they are directly quoted, the citation is rarely complete.) Those many academics who are certain to be outraged by some of her propositions may be tempted to think that her un-scholarly style will render her vulnerable to scholarly counter-attack. But they should not be misled by the disarming simplicity of her methods. *The Economy of Cities* is cast in the classic mold of Bishop Berkeley and Adam Smith. Her work will stand (or fall) upon the sheer, internal strength and consistency of her reasoning. Urban economic theory will henceforth be modified by this remarkable book.

In *Death and Life*, her central concern was the manifest dysfunction of most contemporary architecto-urbanistic design. This dysfunction she traced to the fundamentally formalistic posture of middle class designers, unable to intervene successfully in the experiential reality of the city because they did not understand it as a way of life. In this new book, she turns to much more fundamental questions: what is the city? how does it differ from all other forms of human settlement? how does it grow? why does it decay? As anyone familiar with her city-centered point of view is well aware, Jane Jacobs equates cities with civilization. But this new book opens with a proposition which carries her far beyond previous claims of urban primacy. Cities today are not only the point of origin of all advance, agricultural as well as industrial: she is now prepared to argue that *they always have been!* Tackling head on what she calls "the dogma of the primacy of agriculture," she challenges the generally accepted theory that cities could appear in the great riverine cultures of the Indus, Mesopotamia and the Nile only after agriculture had reached the stage of surplus production. This Jacobean heresy, so contrary to current theories held by anthropologists, archaeologists and prehistorians, is not so outlandish as it might have seemed before the recent excavations at Çatal Hüyük. This city on the Anatolian plateau of Turkey, which dates from the seventh and sixth millennia before Christ, appears to have reached the stage of a fully functioning urban center before the cultivation of crops or the domestication of animals. In

fact, as Mrs. Jacobs reconstructs this paradox, agriculture was the result of the penetration of the primeval countryside by the urbane technology of the town.

Persuasive as is her reconstruction (the townspeople apparently ate wild grains and wild animals almost exclusively), it is certain to be challenged by many specialists. Despite Catal Hüyük many scholars believe that the prehistoric peasant made, if anything, a much greater contribution to civilization than either the archaeological or the written record shows. Robert Adams, director of the Oriental Institute of the University of Chicago, has recently pointed out, for example, that archaeologists have been traditionally interested only in great urban sites and monuments. As a result, smaller sites, settlements, and fortified villages were largely neglected. Since they were by definition more fragile than urbane constructions, they vanished quickly; and since such peasant cultures were preliterate, they could leave no record in stone or clay of their accomplishments. Thus, as Adams points out, the writing of history has always been an urban monopoly: it is not surprising that it has been consistently pro-city in its biases.

But, if Jane Jacobs' theory of the absolute primacy of the city is less than impregnable for prehistory or antiquity, it is clearly valid for today's city. Agriculture, horticulture, forestry, cattle-breeding—even fishing and oyster-raising—have become preponderantly urbane technologies. Theories, techniques, and literature, as well as equipment and cultigens, are all the products of great urban institutions—universities, laboratories, factories. Even the preservation of the wilderness is an urban, not a rural, concept. Mrs. Jacobs is quite properly impatient with an urban intelligensia which—umbilically tied though it is to the city—still finds it possible to talk about the advantages of "the disappearing city." If the country is to be saved, only a regenerated city can do it.

Having established the city's primacy, Jane Jacobs then constructs a model of its economy. She sees it as a kind of reciprocating engine, absorbing imports, turning out exports, with a by-product of what she calls "new work" as the index of its health. For her, the city is not

a statistical model but a tangible organism bedded in a specific environment and always delicately balanced between growth and decay. To understand it, one must study it like a biologist who understands that, while all members of a given species display common characteristics, no two individuals are ever identical. This point of view gives her book a quality of compassion, almost of love, when she is discussing the vital processes of cities such as Tokyo or Scranton, Venice or Duluth.

And this biological point of view leads her to the heart of her argument — what she calls “the valuable inefficiencies and impracticalities of cities.” Here again, her argument is too densely reasoned to permit any easy synopsis. She begins thus:

“Cities are indeed inefficient and impractical (when) compared to towns . . . but I propose to show that these grave and real deficiencies are necessary to economic development and are thus exactly what make cities uniquely valuable to economic life. . . . By this I do not mean that cities are economically valuable in spite of their inefficiency and impracticality but rather because they are inefficient and impractical.”

In a sense, of course, her terms are sardonic, not perjorative. If one were trying to “remodel” a Bengal tiger or “redevelop” Pablo Picasso along orthodox economic lines, one would be forced to describe both animals as either inefficient or impractical or both. But her point is that cities which have been so described often turn out to be far and away the most productive. Manchester, that model of 19th-century efficiency, turned out to have far less developmental possibilities than inefficient Birmingham; and Los Angeles, so impractically located far from centers of population and raw materials, turns out to be far more viable than Detroit, ideally placed with reference to both. What determined their different destinies was their internal balance between imports and exports and —of critical importance—the inefficient and impractical development of new work. This is the “awesome force” which she is trying to isolate and define.

Moreover, when such cities are experiencing such material development, the basis is laid for cultural florescence as well. Thus,

in her native Scranton, during the period of its expansion (and of her own childhood), there were added to the city's amenities “a zoo, a museum of natural history and a central reference library . . . and a trolley car system (whose cars) were painted fuschia or sky blue or silver and had flowered seat covers.” She knows, of course, that there is no one-to-one relationship between economic development and cultural flowering:

“*Shakespeare's theater found room in a city that had grown room for it. This does not explain Shakespeare's genius, but it does explain why there was scope for that genius in the local economy of London rather than in Newcastle-upon-Tyne, or for that matter, in the local economy of Stratford-on-Avon.*”

Clinging thus as closely to reality as a squirrel to a nut, Jane Jacobs contrives to make the economic life of these cities both vivid and urgent.

Of course, her book is not flawless. It displays, to my mind, two of the same conceptual weaknesses which marked its predecessor: (1) Her brilliant diagnostic power is not matched by a comparably effective prognostic power to prescribe therapy; (2) Her “evolutionarianism,” so dynamic when used as an analytical tool for the urban past, becomes a kind of “laissez-fairism” quite inadequate for the urban future. Thus she is vague as to what policies should be followed to preserve for the city in the future its historic role; and she is vague as to what institutions or professionals should be entrusted with this task. There is, God knows, basis aplenty for her skepticism about the ability of Americans to plan anything, let alone an organism as delicate and intricate as a city. Yet the laissez-faire which she so admires in Victorian Birmingham is manifestly impossible in Nixonian Los Angeles.

The fact remains that all environmental manipulation is the consequence of deliberate human action, whether the manipulators be planners working for the Port of New York Authority or carpenters at work on a crossroads store. There will be conflicts and contradictions between these agents of change and these will have to be resolved by human agencies. With the growing complexity of urban life—a complexity which she herself advo-

cates—there cannot *not* be environmental designers, architects, landscapists, planners, urbanists, whatever one chooses to call them. Despite all our organic analogies, city builders are not working with living tissue, with its properties of genetic memory and cellular multiplication. Someone might anticipate, chart, direct this change. Thus the final question (which Mrs. Jacobs does not answer) is: who shall these new professionals be; according to what criteria shall they be trained?

But these weaknesses in her extraordinary book turn out to be, in the present context, almost endearing idiosyncrasies, the spin-off of her fundamental point of view. Her contempt for the formalism, subjectivity and irrelevancy of much contemporary design has plenty of factual basis. And, in the final analysis, it is not her task to prescribe for the design professions; it is enough that she has given them another brilliant diagnosis of what ails them.

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**PEOPLE & PLANS, Essays on Urban Problems and Solutions. By Herbert J. Gans. Published by Basic Books, New York, N.Y. 395 pp. 6 by 9½ in. \$10.00.**

**REVIEWED BY PETER MILLARD**

*People and Plans* is a book for architects, planners, developers, politicians and anyone else interested in qualifying our physical environment, even though it proposes no new definitions of architecture, demonstrates no startling spatial insights, and doesn't even mention the automobile as a design problem. It was written by Herbert J. Gans, a Professor of Sociology at Columbia, and is based on his experience in planning as well as his scholarly research. He declares in its preface that his book is “a critical examination of city planning and of the problems of the city,” and later lists the following five ideas that have concerned him in his work and writing; I believe they will interest those architects and plan-

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Mr. Millard is an Associate Professor of Architectural Design at the Yale School of Art and Architecture.

ners who are not too offended by them:

- Any program seeking to improve living conditions by architectural or planning means will achieve no significant change through manipulation of the physical environment, but must address itself to the economic, social and political causes of those conditions;

- Planning for the future must be responsible to the interests of users instead of those values cherished by designers of plans;

- Because no one has the definitive conception of life's purpose, makers of plans should be alert and responsive to that variety of goals and values to be discovered in the everyday life of different age and class groups, the members of which are entitled to live in any nondestructive way they choose;

- Because poverty is the root of our cities' problems (as well as of our society's segregationist nature), the good life we seek cannot be achieved until the problem of poverty is solved;

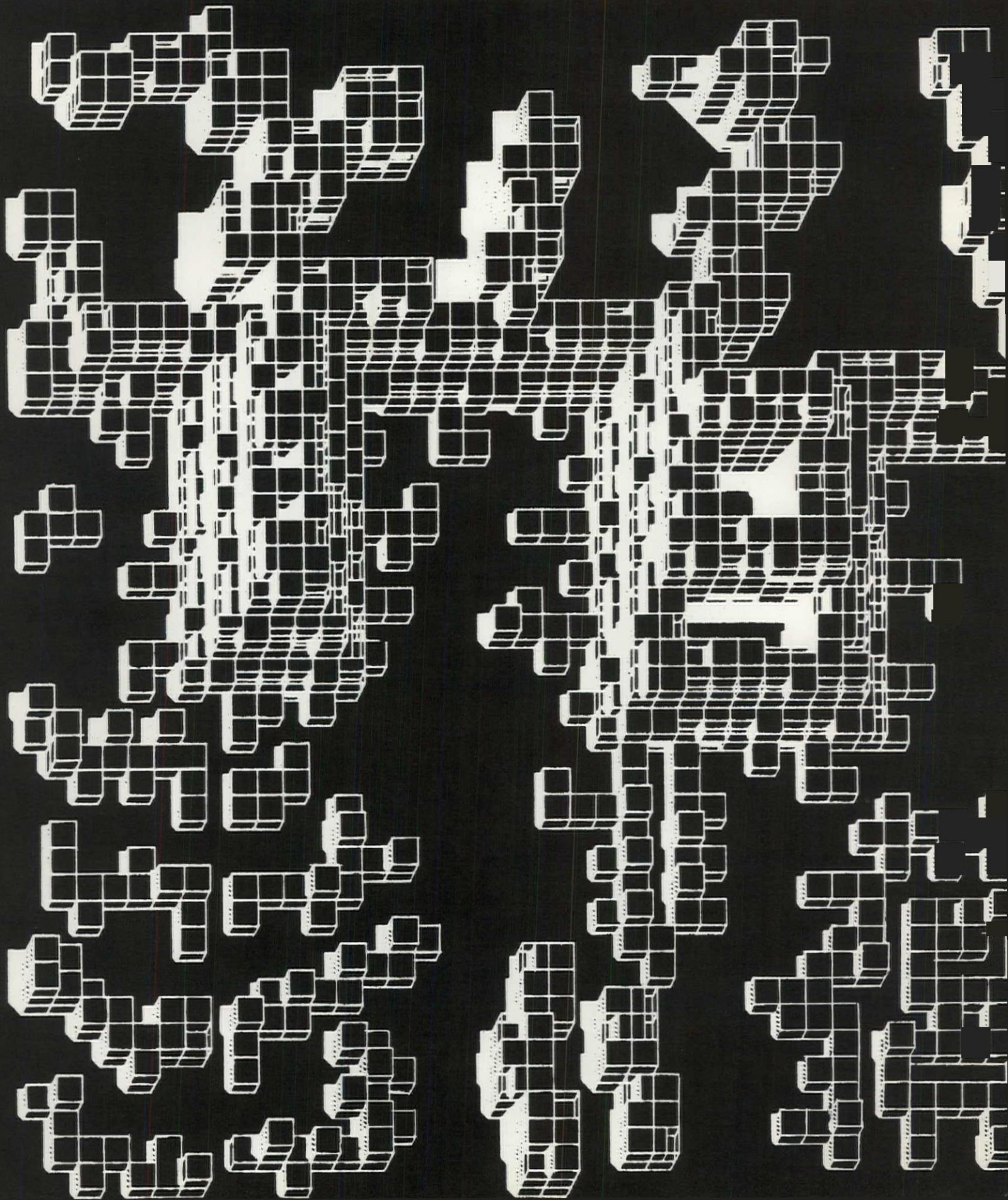
- Planning can and must be a rational and visible process which tests plans and programs against desired goals.

The body of the book is a collection of papers he has written during the past ten or twelve years for different purposes, some previously unpublished, but all reviewed, edited and arranged in order to form a coherent whole that documents, expounds and appeals for those five ideas. It covers 393 pages, is indexed (with apparent relevance and thoroughness), footnoted (conveniently, at the end of each chapter with amplifying comments and a strongly sociological bibliography), and annotated with introductions to each of the six major parts. There are 29 papers with a note on each explaining its origin and subsequent modifications. The result is a book from which I have drawn some strong impressions about the man who wrote it, about its content and about some of its implications.

Via recording and radio, the musical poetry of Bob Dylan has reminded us that “the times they are a-changing,” and it seems to me that in the troubles that go with the changes we would do well to consider our choices of ideal and action. After reading *People and Plans* I had the impression that Pro-

(continued on page 142)

# INDUSTRIALIZED HOUSING





## can it happen here?

The Housing and Urban Development Act of 1968 established a national goal of 26 million new housing units by 1978—that is, an average output of 2.6 million units per year. But in 1969, we are still building at the rate of 1.5 million per year—even fewer than we were building back in 1950. Unless there is a dramatic change, the chance that every American will be adequately housed by 1978 is nil.

The critical shelter shortage is felt at all income levels. The rocketing rise in the cost of new housing (now going up more than twice as fast as the overall cost of living) could not occur if there were not a yawning gap between our total demand and our capacity for production. The importance of shortage as a factor behind rising building costs is confirmed by the rapid rise in prices and rents for all kinds of housing—new and old, lavish and shabby.

The indispensable prerequisite for greater housing production, of course, is *money*. Right now, money for construction is very hard to get—either for financing of private projects or for federal support of subsidized housing. But even if substantially more money were poured into a construction establishment which is incapable of rapid growth, much of it would end up in higher profits and wages; the effect on output would be disappointing.

There is mounting pressure to deal with our housing needs by adding a whole new production capacity to our present inadequate mechanism—a capacity for large-scale, industrial production of housing.

### What's in a system?

Countless building systems have already been proposed. But so far only a handful of Americans are living in housing that was produced by really industrialized methods.

Thousands of "mobile homes" come off factory assembly lines annually, but most are produced by traditional carpenters' techniques (using glue and staples instead of nails); in general, they are not durable enough to offer long-range economies. The use of more permanent units of the same wood-framed type in low-rise housing has passed beyond the demonstration phase; over 1,000 units of this type are now occupied and the rate of production is rising sharply. But so

far none of the proposals for stacking fireproof "mobile home" units in highrise structures has reached even the demonstration stage.

So far, only one American system involving factory produced components for fireproof, urban housing has been applied beyond the scale of a demonstration project. The Techcrete system (page 105) devised by Architect Carl Koch and Engineer Sepp Firnkas, has now been used in about 600 low- and middle-income units.

A workable building system must be more than a kit of parts that can be assembled—somehow—to form a structure. To have any significant impact on the cost or output of housing, the system must not only represent a major part of the total building cost, but it must account for the whole *process* of building: capitalization of plant and equipment, financing of construction, and management of production—both in the plant and at the site. It must also be geared to available labor supplies, work rules, lending policies, building codes—all of the factors that will affect the actual application of the system.

If the system is to have any future, there must be a definite strategy for its introduction. It must either fit into the present relationship of contractors, fabricators, and building trades unions or it must leap-frog over the whole existing establishment—capitalizing new kinds of production organizations and changing traditional labor practices.

Structurally, most proposed systems fall into three broad categories: the frame type, into which wall and floor panels are inserted; the bearing wall and slab type; and the major module, or "box" type. One convincing proposal has been made by Craig Hodgetts (page 107) for a hybrid system, in which box-like mechanical cores would play a structural role in a system that includes slabs and columns.

The advocates of various systems are intensely competitive. Each talks as if only his system solves all problems effectively. The producer of one component system may call another one unrealistic because building trades unions will oppose it; the promoter of the second system may claim, on the other hand, that the first one cannot make any economic breakthroughs if it re-

mains tied to existing labor practices. The proponents of a box system may claim that their system is truly economical because everything—down to the carpet—can be installed in the factory; the component producers, however, will argue that the box-maker is paying dearly to ship volumes of air.

Whatever the type of system, the selling point to government and investors is invariably the *reduced cost* that the system is supposed to offer. And there are potential savings: in labor costs, of course; in construction time saved; in the predictability of building cost; perhaps even in transportation cost—compared with the aggregate costs of shipping and on-site materials handling in the usual process.

What is not stressed enough, however, is that *immediate* savings will be modest compared with *eventual* ones. The major economies of mass production are realized only after the initial investment has been amortized, when volume of output is high enough for truly efficient production and management.

### Who will put up the money?

It will take some outlay of capital to put any industrialized building process into use. Generally speaking, the greater the system's potential for reducing cost or increasing output, the higher the required investment in plant and equipment. There will also be significant but elusive transition costs—for retraining labor (and management) and for ironing out bugs in the process (even after bugs in the *product* have been revealed in costly prototype structures).

For a highly industrialized system, such as the Balency system (page 104), the initial capital required is estimated at \$2 million. A minimum guaranteed market of 2,000 units would be needed to justify setting up one Balency plant in this country.

Even systems designed to be produced by established fabricators (usually precast concrete producers) could not be introduced without some capital outlay. The Componoform system (page 103), for instance, could be turned out by any precaster licensed by the corporation, but his initial outlay for expansion and special molds would be about \$500,000.

One reason capital for introducing building systems is so

Opposite, a sketch by German architect Rudolf Doernach for an urban system with three-dimensional growth capacity, made up of "regenerable cellular units" analogous to human body cells.

hard to obtain is that no real "building industry"—in the sense of a highly organized, heavily capitalized production system—even exists in this country. Building production is now in the hands of innumerable firms operating with an absolute minimum of capital. As one promoter of a highly industrialized system puts it, "The typical contractor operates as a broker," buying and coordinating the services of subcontractors. Expensive pieces of equipment, such as cranes, are almost invariably rented.

New kinds of organizations will be required to raise the capital to introduce highly industrialized systems. And the capital will not be forthcoming unless there is assurance of a large, stable market—most likely guaranteed by government action.

#### Who will do the work?

Besides the problem of securing capital, the main obstacle to industrialized housing is the reluctance of labor to revise its rules. No significant change in cost or production capacity is made unless traditional divisions between trades can be broken down, and workers can be assigned any role in the process that efficient operation demands.

Only a few years ago, it looked as if all of organized labor would stand behind the traditional trade jurisdictions. But recently trade unions have shown a willingness to negotiate. In some cases joint work forces have been formed to assemble factory-produced units at the site. Just this June, the huge United Brotherhood of Carpenters and Joiners signed an agreement with a corporation which plans to produce thousands of prefabricated wood box-type units complete with wiring and plumbing. A precedent-setting aspect of the agreement was an arrangement between the union, the corporation, and the National Urban League to set up training centers for unskilled and unemployed residents in cities where the units will be manufactured.

At least a few union leaders now seem to realize that industrialization can open up a large, stable market for union labor, *in addition to* conventional building activity. Industrialization could offer the building trades an opportunity to expand with security, and to admit significant numbers of urban mi-

nority groups to membership as they expand. If, instead, the unions fall back to their old position of limiting membership (a position borne of a traditionally unstable construction labor market) competing unions are likely to grow up in the field of industrialized building.

#### What happened in Europe?

Industrialized housing already accounts for a major part of the market in several European countries—France, Great Britain, the Scandinavian countries, West Germany, and, of course, the Soviet Union. Industrialization has advanced faster in Europe not because the Europeans thought of it first, or showed more ingenuity in designing systems. Industrialization took place there first because a critical need for housing, coupled with a shortage of skilled construction labor, occurred there first.

Of course, there are important differences between our situation now and the situation in Europe in the early 1950s, when industrialization began there in earnest. For one thing, "conventional" construction is much more efficiently organized here today than it was then in Europe. For another, our shortage of skilled construction labor is balanced by a surplus of unskilled labor; we must be sure that introducing industrialization does not reduce the *total* demand for construction labor, even temporarily.

It took large-scale government commitment to get European building systems through the initial period of capitalization and transitional costs, and almost all of the producers still rely on government subsidized housing for their market. It should be possible, however, for an established producer in a free market to outgrow its dependence on government. One producer which seems to have jumped that hurdle is the MBM Corporation of Milan, licensee of the Balency system (page 104), which is now selling about 50 per cent of its production in the privately-financed housing market.

#### What can government do?

Government intervention will be absolutely essential for the establishment of industrialized housing here, just as it was in Europe. One step the Federal government has taken so far is to provide special financing for

experimental projects. Unfortunately HUD, which is perennially short of funds, has tended to support only schemes that involve a minimum of capitalization. "If you go to HUD with a scheme that calls for an investment of \$500," says Guy Rothenstein, vice president of Balency's U. S. marketing organization, "you are likely to get the money." But schemes that can be initiated with little investment can generally do little to shift the proportions of labor vs. equipment in housing production, and so can have little long-range economic effect. Up to now, HUD has offered hardly any help for technologically advanced systems which require large investments.

HUD's recently announced "Operation Breakthrough" (page 110) seems to be its strongest effort yet to test industrialized building at a reasonably large scale. The program's main objective is to encourage state and local governments to organize aggregate markets for housing systems and to find ways to revise obstructive and inconsistent building codes. The limited funds the program will probably have to operate with raise some doubts about its producing any real breakthroughs—at least in the type of systems that require high capital input.

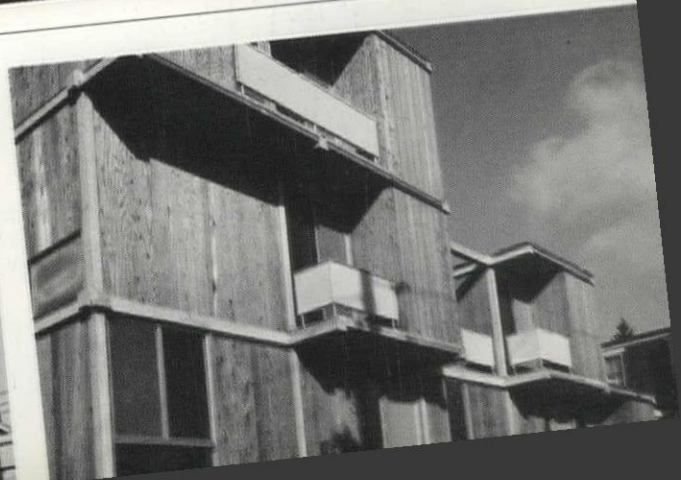
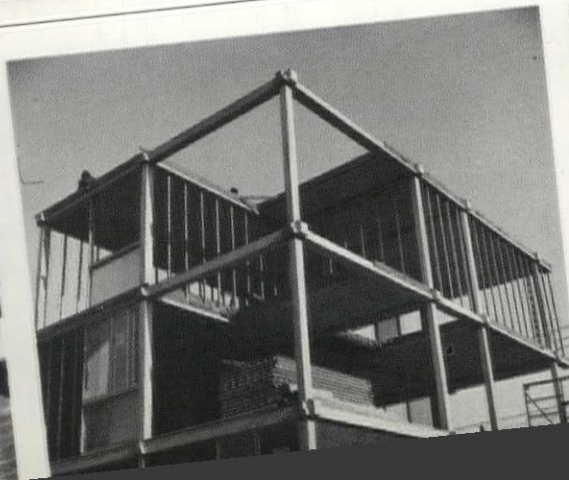
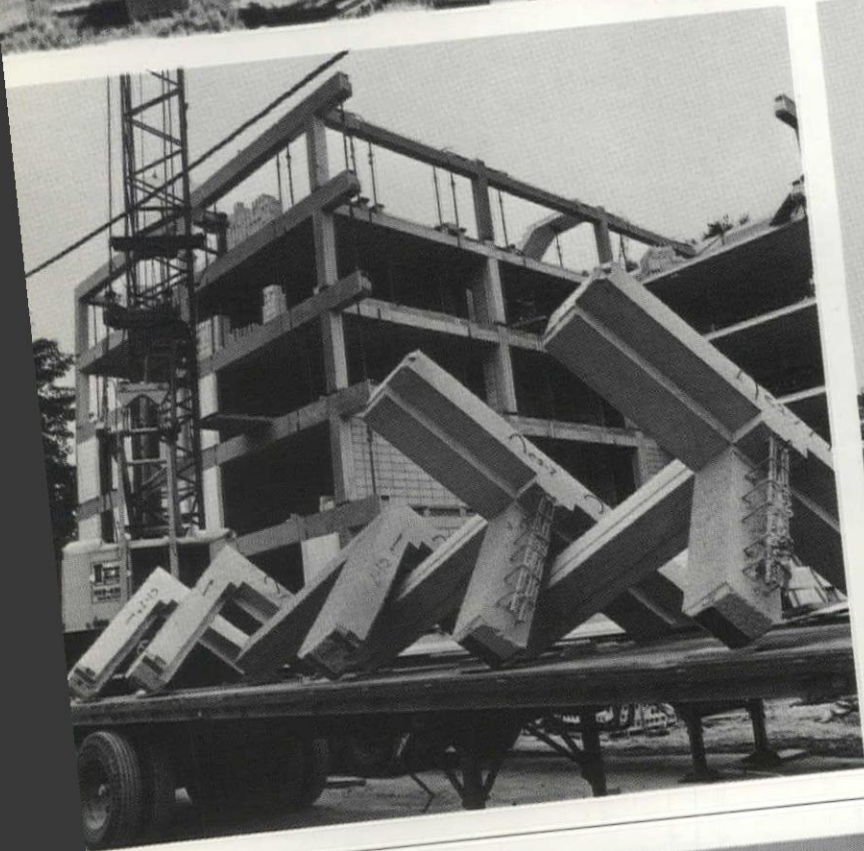
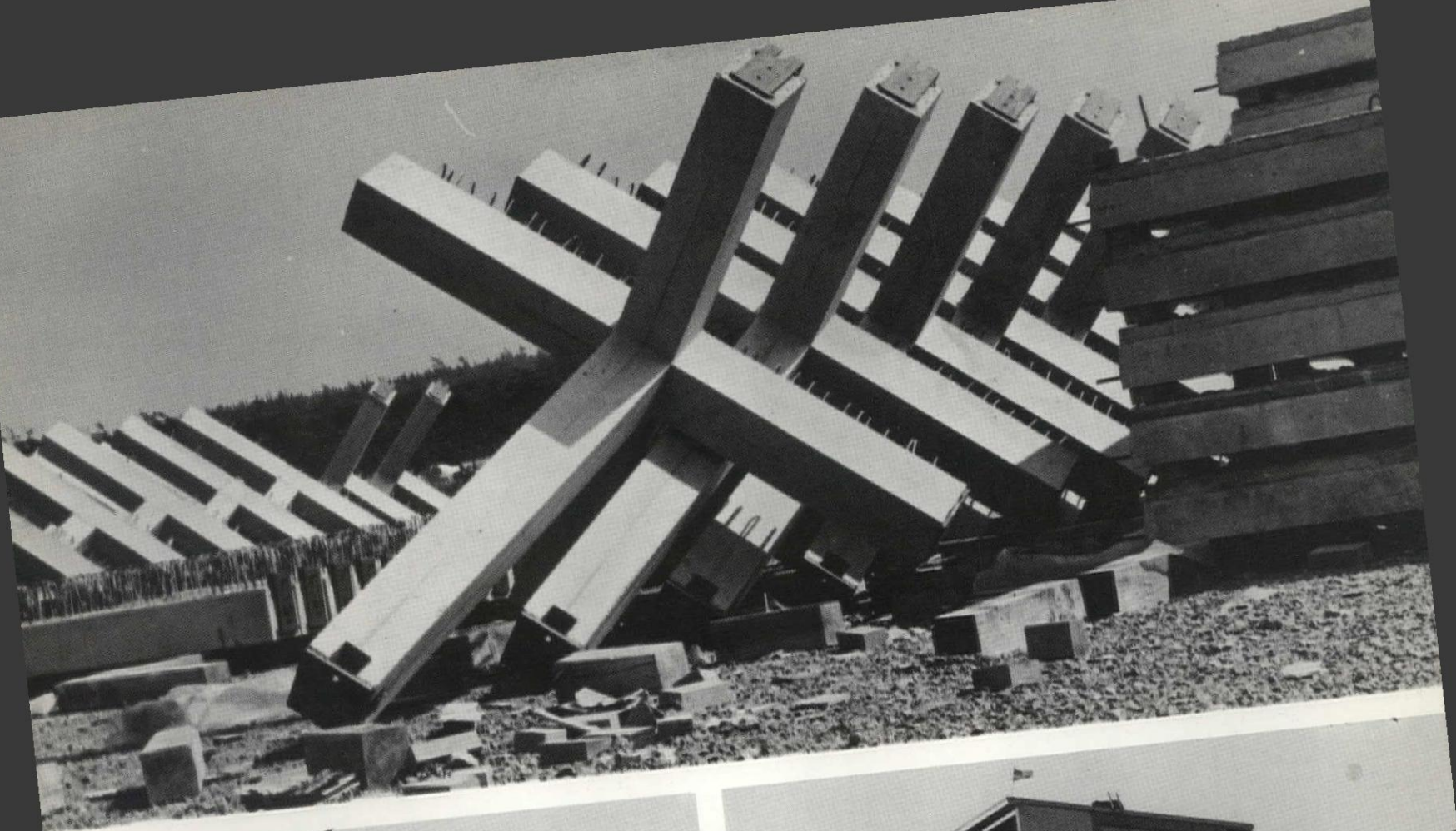
Even if Operation Breakthrough does not succeed in establishing any sophisticated systems on an economically sound basis, it will at least stimulate a round of intensive research and evaluation of the many systems currently waiting on the drafting boards.

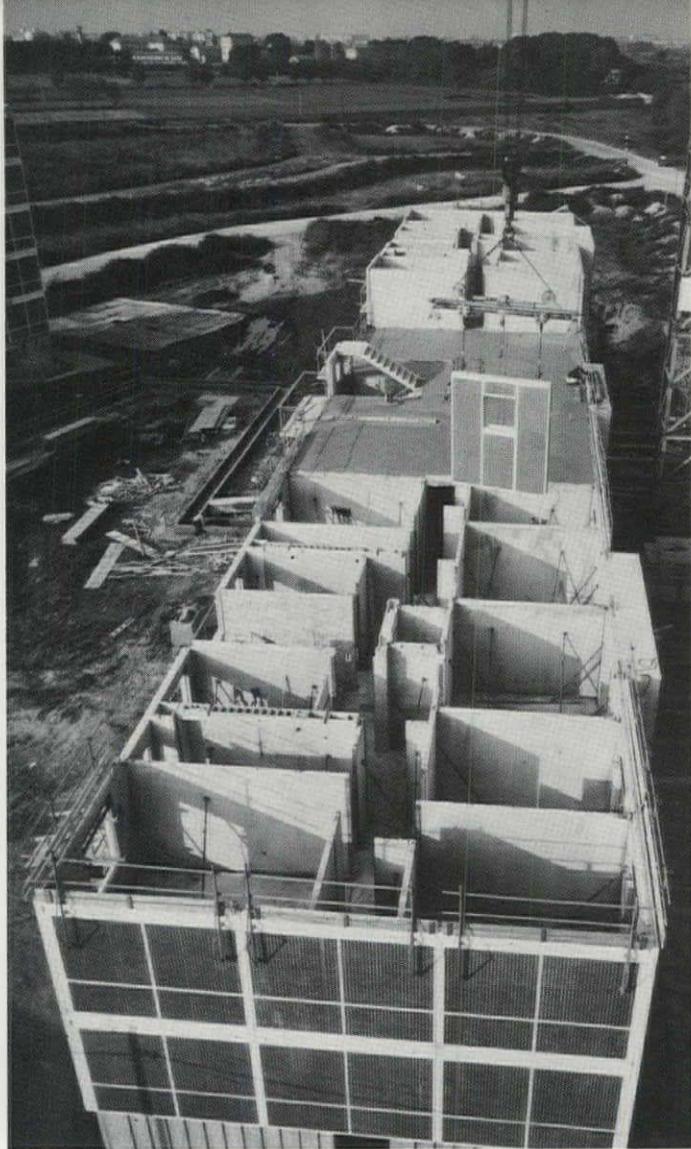
And HUD's enthusiasm is being echoed at lower levels, at the level of city housing and development authorities; promoters of housing systems who have found them hard to reach until recently are now being *invited* to present their systems. Of course the chance of having even a bit of HUD's limited demonstration housing built in their cities can be a lure to local authorities facing a desperate housing crisis.

The housing shortage may have to go even farther beyond our ability to produce—to the point where the secure middle class is seriously affected—before government at all levels will put real commitment and real money behind industrialized housing systems. —JOHN MORRIS DIXON

The concrete frame of the Componoform building system is based on an unusual "cross beam" column (top photo) which can support structural bays as large as 34 ft. square. Architect Egon Ali-Oglu, who developed the system, is convinced that a frame system, with a set of compatible slabs, wall panels, etc., has the greatest potential for mass-production savings, since it can be used for a wide variety of building types. Componoform's structural components have already been applied in the Trowbridge Apartments in Cambridge, Mass. (construction sequence, right), as well as in a dormitory and a nursery school. FHA has approved the system, and so far building codes and labor unions have raised no obstacles, mainly because the system allows for on-site installation of electrical and mechanical equipment. With an initial investment of about \$500,000 for equipment, a licensed precast concrete fabricator can set up a plant to produce Componoform parts for 1-1.25 million sq. ft. of construction per year.

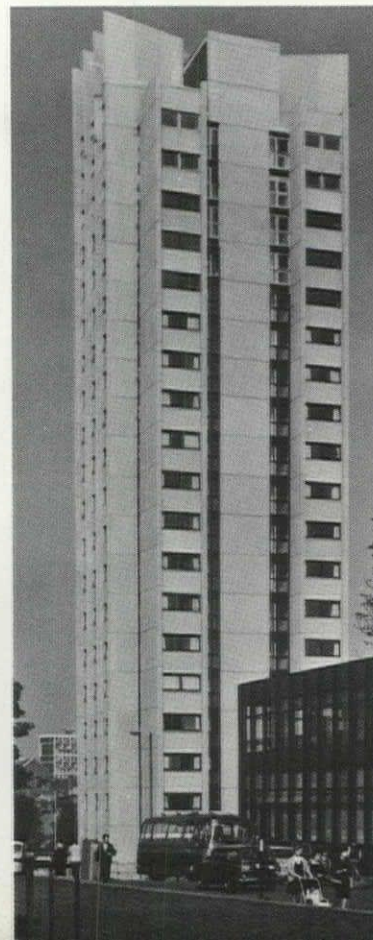
The Mitchell Framing System, developed by Engineers Neal Mitchell & Associates, is based on a skeleton of small-scaled concrete columns and beams. The frame and lightweight infill components can be fabricated with simple forms and erected with light cranes. The test group of row houses shown here was erected by the city of Lancaster, Pa. (Jan./Feb. issue) without Federal aid. A private developer is about to put up 165 more units in Lancaster.





The Balency system originated in France in 1948 as a result of a government-sponsored competition. Its precast bearing walls, partitions, stairs, etc., are all designed to be joined together at the site by pouring concrete into channels between parts. (In many cases, the entire floor slab is poured on-site, instead.) Thousands of units have been built all across Europe—from Dublin (far left) and Thamesmead, near London (page 58), to Milan (near left). Unified control of fabrication and erection has led to great refinement in the process and equipment (heated forms, conveyors, etc.). It would cost \$2 million to equip a Balency producer here, and a minimum initial order of 2,000 housing units would be required.

Techcrete, developed by Architects Carl Koch & Associates and Engineer Sepp Firnkas, is the first U.S.-designed system to become competitive with conventional construction. So far, 588 housing units have been built using the system and over 600 more are scheduled for construction soon. Structurally, Techcrete consists of precast bearing walls—post-tensioned as they are erected—and precast, prestressed concrete slabs. A whole set of related non-structural components has been designed (with the help of a Department of Defense contract), but projects completed to date have conventional partitions and exterior walls, constructed on site (as at Academy Homes in Boston, far right). Photograph, far right: Phokion Karas.



The Bison System, developed in Great Britain, is approaching the U.S. market by licensing precast concrete manufacturers to produce components for the totally prefabricated system, which would then be erected by general contractors. Although no unconventional equipment is required, a large assured market would be needed to justify the fabricators' investment in additional plant. To satisfy the British public, Bison has concentrated on a variety of possible building types and concrete surface effects, illustrated here in low-income housing at Hyson Green, Nottingham (far left) and a college residence hall at Coventry (near left).

"Infill" housing designed by Architects Stull Associates (prototype building, right) will soon go up on 200 vacant lots selected by the Boston Redevelopment Authority. The buildings will contain apartments designed especially for large, low-income families. The building system includes components similar to those of Techcrete, but makes more intensive use of precast wall panels (both interior and exterior) mainly so that work on the isolated sites can be completed quickly. The builder expects each building to be erected in two days by five men.

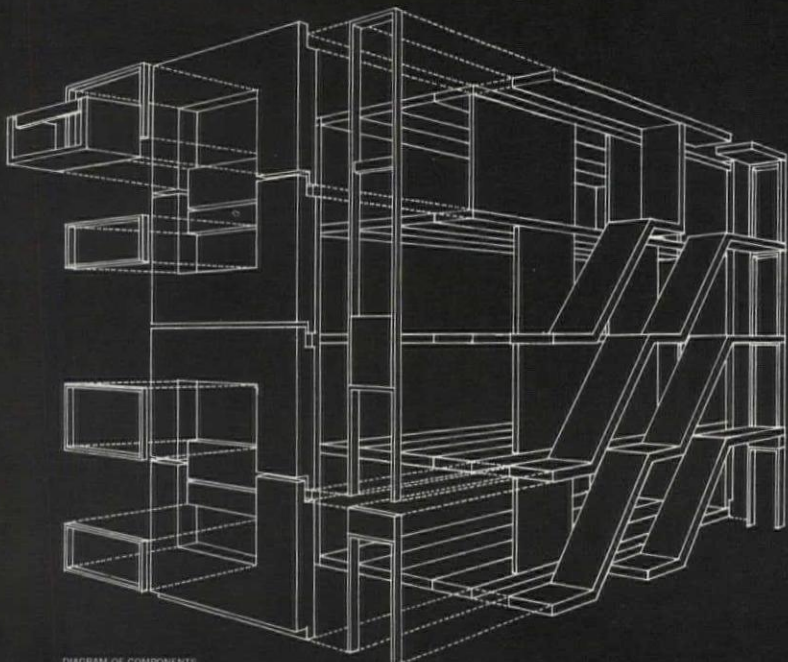
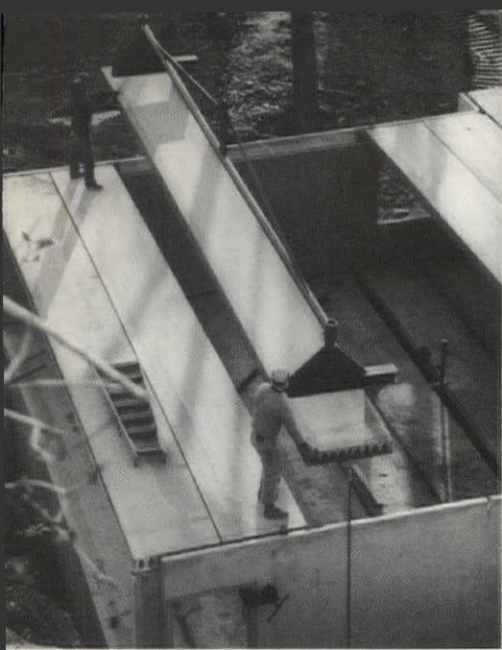
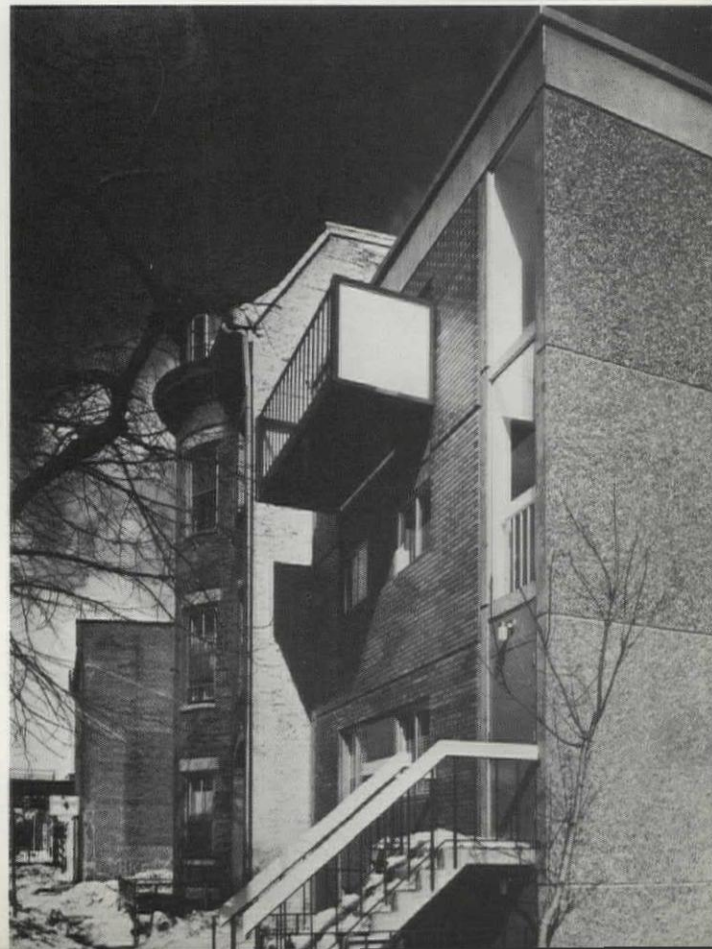


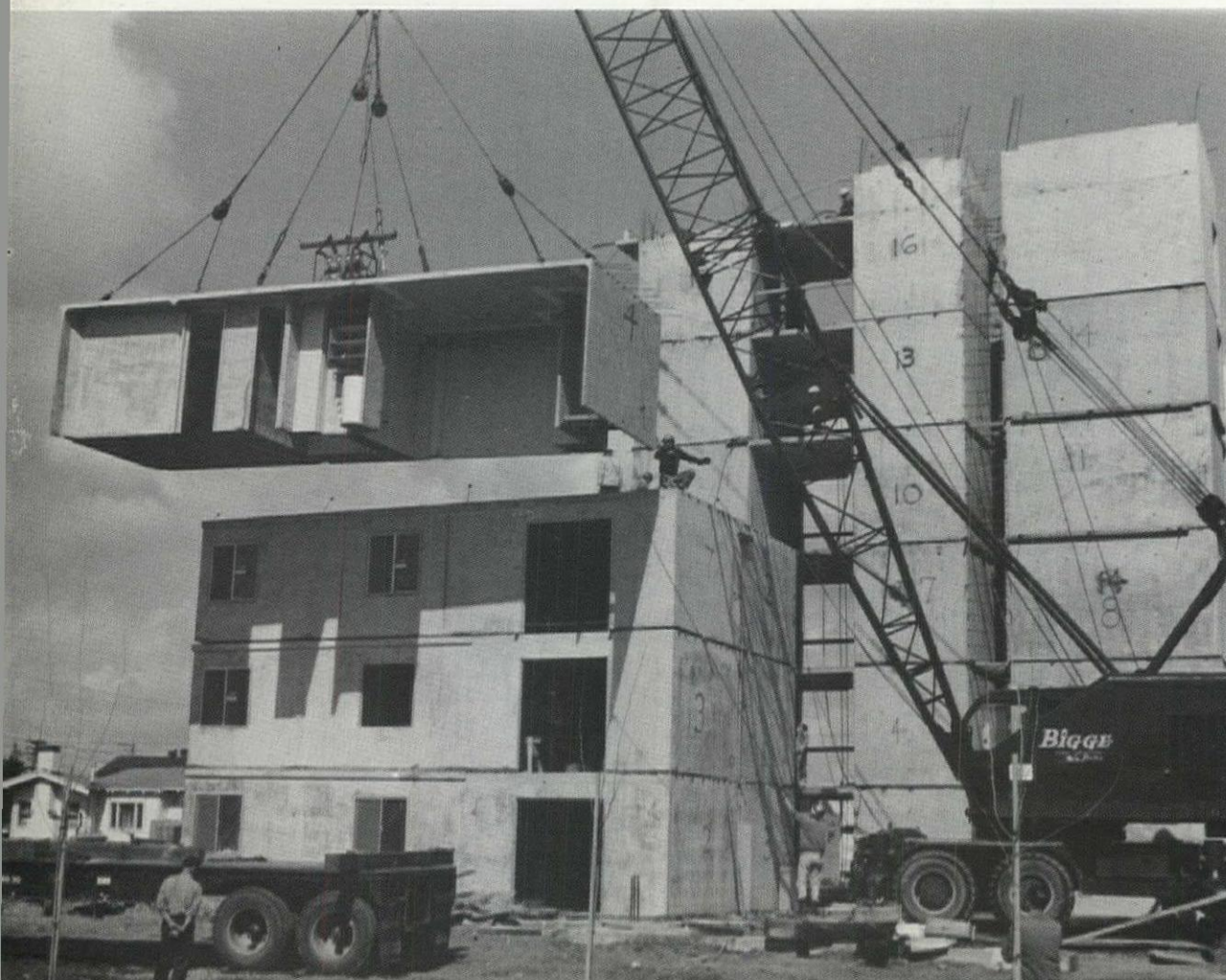
DIAGRAM OF COMPONENTS



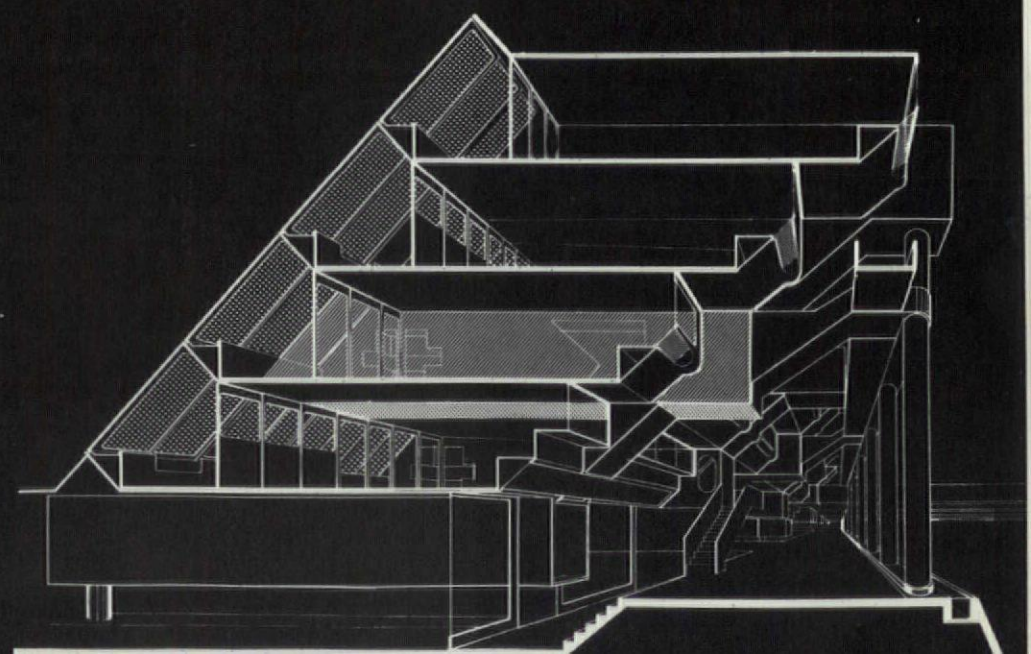
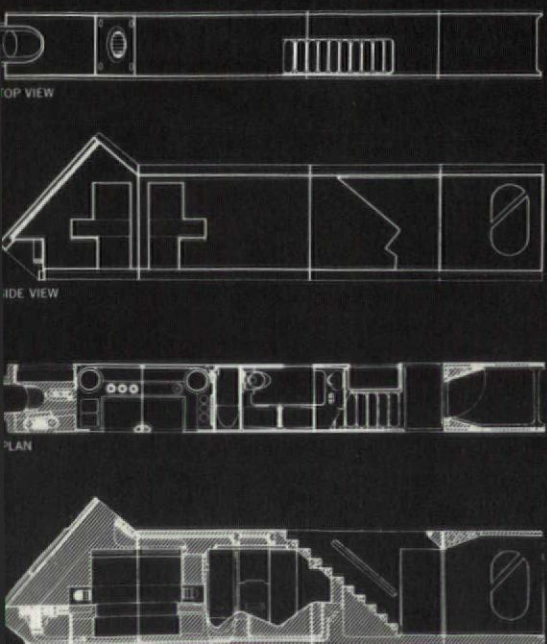
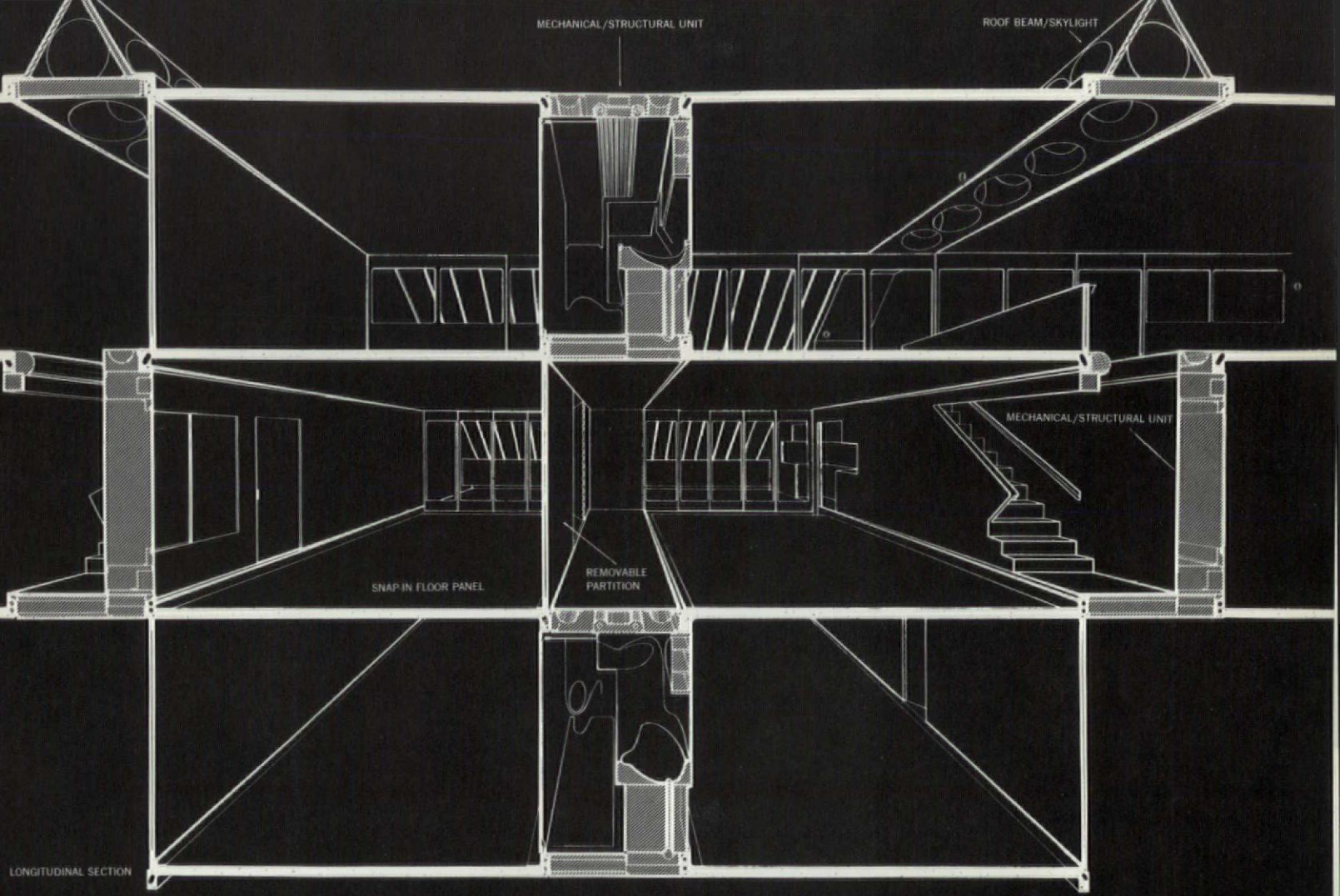


The Building Block Modules system for stacking precast concrete "box" units has been tested in a prototype apartment group in Oakland, Calif. (left), designed by Architects Fisher-Jackson & Associates. The open-ended precast boxes are stacked in a vertical checkerboard pattern that yields usable "bonus" spaces between the actual boxes (April '68 issue, page 85). At least in this prototype structure, the major part of the building cost is in the conventional, on-site construction required to turn the boxes into living units.

The Links system (right), a proposal by Architectural Designer Craig Hodgetts, demonstrates (at least on paper) the possibility of a hybrid building system, combining the advantages of box systems and other component systems. Three-dimensional box-type elements containing the mechanically complex parts of the individual apartments (gray tone on section at top) would also serve as the main horizontal structural members (section below right). These fireproofed steel structural-mechanical units (drawings, near right) would be placed within the overall structure in a checkerboard pattern (top section), so that the clear spaces between them would be more than twice as wide as the span of the floor panels.



The Uniment system is based on a technically ingenious prefabricated concrete box (shown being lifted into place, left) developed by Conrad Engineers (April '68 issue, page 86). A special concrete—also developed by Conrad—makes possible "chemical prestressing" of complex three-dimensional forms—in this case all the walls and partitions of an 11 ft. by 36 ft. box with the floor slab at the top of it. The investment in intricate molds, which must allow for every detail of the finished apartments, makes it uneconomical to introduce variety of unit layout unless a huge market is generated.







May, the New York Telephone Co. cut off the ten programs recorded by the poets. Reason: too much taped obscenity.

The Telephone Co. was willing to turn the poets on again if *Giorno* would promise to *bleep out* what he found offensive in the works of Allen Ginsberg, William Burroughs, and John Giorno.

*Giorno*, of course, was offended only by the Telephone Co. As it happened, there was not enough money left to pay the phone bill for another month anyway, so *Giorno* bleeped out the entire project rather than allow the phone company to bleep in their own sense of morality, which would certainly have -----d up the meter.

Since the Telephone Co. operates under a monopoly granted by the public, what constitutes telephoned obscenity should, perhaps, be left to the courts. Meanwhile, the Public Service Commission might look into the "morality" involved in the actions of a corporation that calmly collects—at 10¢ a call—over \$100,000 from the works of young poets, while the poets get not a cent. In fact, when the New York State Council on the Arts stepped in on *Giorno's* behalf, they discovered that while Dial-A-Poem was paying \$25 per line per month for the service, Dial-A-Prayer was paying only \$4.75.

If the Council on the Arts can recover the overcharges and can interest some private contributors in subsidizing a revival, Dial-A-Poem may return in the fall. St. Mark's Church has donated a room for that purpose. Perhaps somebody up there—and we don't mean at Dial-A-Prayer—protects poets after all.

## UPS & DOWNS

### FAREWELL, BUT NOT GOODBYE

"A kind of member of the family to us," moaned Composer Benjamin Britten on June 8. He was referring to the Maltings at Snape, in Suffolk, England, which had been destroyed by fire a few hours earlier.

The acoustically superb structure, which Arup Associates had created from the shell of a cen-



tury-old malt barn (above and Nov. '67 issue), was about to begin its third season as the Aldeburgh Music Festival's main concert hall when the fire struck. But the charred remains had hardly cooled when Britten and his fellow festival directors announced that (1) the festival would still be held, in nearby Blythburgh Church, despite the loss of sets and costumes; and (2) a fund-raising campaign would begin immediately to rebuild the Maltings exactly as before.

One of the festival's scheduled events had to be canceled, however. It was the premier performance of "The Building of the House," an overture for the Maltings composed by Britten. Hopefully, it will be performed next year in the rebuilt hall.

### PAID IN FULL

The Arizona Court of Appeals, in a recent landmark decision, has ruled that the city of Phoenix must pay the architects it contracted for the design—subsequently abandoned—of a municipal baseball stadium. After having given Architects Guirey, Srnka & Arnold no fixed budget to work with, the city reneged when construction bids exceeded available funds.

The stadium, as it was eventually built (below), was completely redesigned by the same



architects, this time on a verbal contract with the city. The suit brought by GS&A was for recovery of compensation for the abandoned scheme.

In reversing the decision of a lower court, the Court of Appeals commented—in sometimes tortured syntax:

"If a satisfactory proposal is not received the architect shall revise or redraft as necessary to obtain a satisfactory proposal. These architects continued with redrafts and revisions until it was obvious that the project was abandoned.

"If we were to affirm the lower court, we would be saying in effect that all a city has to do to avoid compensating an architect is to find that the proposal is unsatisfactory. Such a ruling would allow cities to hire architects at will to design any number of speculative buildings but avoid compensating the architect when the city determines there is not enough funds to pay for the construction even though they were aware, as herein, that the estimated cost was above the funds available.

"While we fully realize that a city should not be required to compensate an architect who fails to provide a satisfactory proposal, we do not believe the legislature intended that this power should be exercised in such fashion as here."

## HOUSING

### WHERE THE ACTION IS NOT

In late June, after six months of what had been described as a "flurry of inaction," the Nixon Administration's first Congress gave, at least, a first indication of where its heart was *not*. It was not in the ghettos, nor, for that matter, even in the cities.

The House Appropriations committee, blaming the "inflationary spiral," slashed nearly \$500 million from the Nixon Administration's budget requests—certainly not "inflated" to begin with—for low-income housing and Model Cities.

Of the \$14.9 billion package reported out of the committee, the ax fell hardest on HUD. The committee chopped off \$384.3 million, leaving only \$1.6 billion in HUD's bag. (Meanwhile, on the Senate floor, a total of \$4.4 billion in *supplementary* funds for the fiscal year ending June 30 was approved, \$1.3 billion of

## FOOTNOTE

In God we trust—This 200-ft.-long, 60-ft.-wide, and 30-ft.-high inflatable vinyl bubble is, according to its maker, the first "Air Cathedral" ever, anywhere. (It happens to be located in San Jose, Costa Rica, but it was fabricated in L.A.) It will seat up to 3,500 persons, and it currently serves the Assemblies of God Foreign Missions Board. Even if the doors were to be left open, or if an infidel were to slash the nylon-reinforced walls, it would take 30 minutes for the bubble to deflate. The "stained glass windows," are, in fact, plastic panels rendered in white and gold, and they contribute to the atmosphere. Photos: Firestone Tire & Rubber Co.

which was for the Vietnam war.)

The House Committee cut by more than half—to \$100 million—the request for urban renewal programs, and slashed \$150 million off the \$650 million sought for Model Cities. Conceding the full \$23 million request for the rent-supplements program, it then sliced in half—to \$50 million—the sum requested to subsidize private builders who construct low-income housing.

The biggest cut of all, from \$10.5 to \$3 million, was, strangely enough, for law enforcement. The law to be so pitifully enforced: open housing.

Another housing move, not apt to raise cries from anyone, was the committee's denial of an Administration request for \$150,000 to be used for planning and design of a new residence for the Vice President.

In the Senate, \$10 million was given to the Neighborhood Youth Corps, a compromise of sorts between the Senate Appropriations Committee, who had recommended \$7.5 million, and New York's Senator Jacob K. Javits, who was seeking \$55 million in what he termed a "modest test of national priorities."

#### LABOR BREAKS RANKS . . .

The traditional solid front of organized labor against any modification of archaic building methods is beginning to crumble.

● At the end of May, the nation's two largest unions, the United Automobile Workers and the International Brotherhood of Teamsters Union—both now separated from the once monolithic AFL-CIO—announced the formation of a new Alliance for Labor Action. With 10 million fewer members than AFL-CIO, the alliance has dared to challenge Big Labor by calling for reform of old work rules to permit housing production using advanced technology—some of which the alliance itself plans to sponsor.

Walter Reuther, the perennial crusading leader of the auto workers (and a member of president Johnson's Committee on Urban Housing) predicted that if archaic rules are suspended "the building tradesmen will get twice as much work out of rebuilding the cities."

● A few days later, the Detroit Building Trades Council, which includes AFL-CIO construction trades unions as well as teamster locals, announced that it would negotiate industry-wide contracts

for the production of factory-built housing.

● In mid-June, the 900,000-member United Brotherhood of Carpenters and Joiners signed a precedent-setting contract with the Stirling Homex Corporation of Avon, N.Y., which manufactures wood-framed "Instant Housing" units. The carpenters and joiners will carry out all operations in the factories (including those traditionally reserved for members of other unions) and all on-site carpentry work.

Of course the AFL-CIO might not take it all sitting down. President George Meany, himself a former plumber, recently protested that "you can't build houses like automobiles. Too many things go into them."

#### . . . HUD BREAKS THROUGH

George Meany's remark (see above) was directed at HUD Secretary George Romney, who once ran an automobile company and is a firm believer in mass-production as a way out of our present housing crisis. This spring he has been busily laying the groundwork for a new HUD program called—optimistically—Operation Breakthrough.

The objective of Romney's breakthrough is to push the concept of industrialized housing production past the mini-demonstration phase and establish several systems on an economically sound basis. Romney has revealed the program in stages over a period of months, conferring with labor and industry leaders along the way, apparently so that their reactions could be fed back into planning for the program.

The strategy of Operation Breakthrough is to induce industry to invest in development and testing of promising building systems by offering the possibility of a large market as a lure. While the designers and corporations are readying submissions for HUD to consider for the program, state and local governments—at HUD's urging—will be

cooperating on the "aggregation" of housing demand into volumes large enough to justify investment in production equipment for systems.

The systems that HUD selects for the program will then be built in prototype form on several geographically scattered sites. (Each of the 12 to 20 chosen systems will be built on several sites, if that is feasible.) Representatives of the local aggregate markets will then be invited to inspect all of the chosen systems and award contracts to those that best meet their needs. Thus, no individual systems producer will be certain of a mass market, but he will be given a chance to compete for part of a guaranteed aggregate market.

Romney has put forth this program as one way to avoid "a deficit of 11 million homes by 1978," but he warns that his program will not erase the housing shortage overnight. In fact, if all goes well, it will take two or three years before Operation Breakthrough has any major impact on housing production.

#### ROWHOUSE RETHINK

The Armstrong Cork Co., after two experimental programs in rowhouse rehabilitation, has concluded "that under most circumstances mass-scale rehabilitation of badly deteriorated small dwelling units [by private means] cannot be done on an economic basis at this time."

The second of their experiments—in Lancaster, Pa.—involved the complete renovation of nine rowhouses within their existing shells.

New floors, walls, and ceilings were installed as well as plumbing and electrical systems, lighting fixtures, and kitchen ranges and cabinets. On the exteriors, a minimum of alterations were made by Architects Haak and Kaufman—porches redesigned, bay windows eliminated (below).

Armstrong estimated that it had invested an average of \$5,000

per house more than it will recover from sale of the house under the provisions of the FHA 221(h) program for low- and middle-income families. Rehabilitation work alone cost more than \$15 per sq. ft.

In announcing that the company would, in the future, concentrate on the development of new products and building methods, Max Banzhaf, vice-president and treasurer, listed some of the now-familiar obstructions to success in the moderate-income housing market: overly complex requirements of government programs, restrictive local building codes, and labor unions unresponsive to on- and off-site construction innovations.

#### TIMBER!

In mid-June, it was reported that lumber and plywood prices, which had been rising alarmingly in recent months (June issue, page 25), had taken a sudden dive to the lowest levels in five years. All things being equal, the price drop (from \$144 to \$62 per 1,000 sq. ft. of quarter-inch sanded plywood, for example) should have given housing production a critically needed shot in the arm. Unfortunately, all things are not equal in today's housing market.

As it turns out, lumber prices have dropped dramatically because an even greater deterrent to the production of homes—tight money—is becoming increasingly more critical. As C. C. Crow, publisher of various lumber and plywood journals, explains it: "Mortgage money just isn't available and the market for single-family homes has evaporated."

## YOUTH

#### YOU NEEDS HELP

In late May, Warren V. Gilmore, a former Chicago street gang member, and Lelan F. Sillin Jr., vice-president of Urban America Inc., held a joint news conference at the Sheraton-Boston hotel. Urban America was holding its annual meeting there and Sillin and Gilmore, president of Youth Organizations United, made a plea to business, government, and the foundations for \$750,000 seed money to "get YOU moving."

YOU was organized a year ago when 50 youth groups, some of



which were street gangs, consolidated their efforts toward community service and ghetto entrepreneurship. Today, YOU is comprised of 350 "gangs" with some 350,000 young blacks, Mexican-Americans, Indians, Puerto Ricans, Chinese, and whites. "But right now," said Gilmore, "we're \$25,000 in the hole."

"The leaders of the youth groups," said Sillin, "are tough, intelligent, dedicated, and would make excellent revolutionaries. Instead, they are directing their talents to build their communities."

"But their belief in our democratic and capitalistic system is under constant challenge by others who advocate destruction of our society. They must show progress to be listened to. If they fail, the burning will begin. This is a fact. Not a threat."

Meanwhile, Gilmore's old gang, the Conservative Vice Lords, announced in June that they had received a \$36,000 grant from the Labor Department to assist in a management training program. The group also has a \$130,000 Ford Foundation grant to be used for hiring business technicians to help sharpen the CVL's growing management skills. CVL currently operates a restaurant, poolroom, two ice cream parlors and the African Lion, a boutique that specializes in African clothing and jewelry.

## ENVIRONMENT

### REPORT FROM BERKELEY

The following observations are from FORUM Correspondent Roger Montgomery who lives a few blocks from "People's Park" in Berkeley, Calif.

Early in April, when the rains let up from the wettest winter on record, the Telegraph Avenue "street people" moved onto a derelict lot belonging to the Regents of the University of



California and began building People's Park (preparing the ground for sod, bottom). As the weeks went by, university students, little old Berkeley ladies in tennis shoes, public school kids, and good citizens joined in. By early May, thousands of sq. ft. of sod, trees, flowers, vegetable gardens, sculptures, an amazing variety of purpose-made park furniture, an amphitheater, and a fantastic spirit had transformed the winter's mud hole into a happy, habitable public



open space, the happiest in Berkeley (clock tower and notice board, above).

Suddenly, the University announced that it needed the land immediately. It was required, said Chancellor Heyns, for intramural soccer. The park building continued. A couple of weeks went by. Then at 6:00 a.m., May 15, the Berkeley Police walled off the ground with an 8-ft. chainlink fence. The confrontation that followed, between street people and hundreds of soldiers and cops (top) turned the season's most exuberant exercise in participant design into a bloody battle that left between 30 and 40 injured by police buckshot (one, James Rector, died of his wounds; another will be blinded for life).

In the month that followed, Berkeley residents, now frightened into hysterical silence, witnessed a full-scale military occupation of the campus and the South Berkeley community. I was gassed three times, my



oldest son was gassed in his public school classroom, my wife and other sons terrified by the occupation. Many of us who lived through it felt we had watched a full-scale demonstration of the latest technology of massive repression, such as heretofore had only been dared in the ghetto.

Why this official response? Clearly the issue transcended People's Park. Peter Marris, noted British sociologist and a visitor at Berkeley, listed among more familiar student grievances "the tyranny of the majority, the autonomy of scholarship and the moral neutrality of science."

People's Park, Marris said, "was illegal, ungoverned by any committee, responsible to no one yet responsive to everyone . . . dedicated to trees, flowers and play, spontaneous and humane. . . ." And, he concluded, the reaction of government and university to the park confirmed "the worst accusations against the society it [the park] challenged. . . ."

A strangely hopeful, certainly brave effort to mediate the immediate issue came from the College of Environmental Design at the University. Under Professor Donald Appleyard, new chairman of the landscape architecture department, a couple of hundred design students and faculty made an heroic attempt to legitimize participant design, to provide a legal vehicle for reopening the park, and to verify the vast popular support it had received in the surrounding community. CED Dean William Wheaton tried valiantly to broker a resolution including a momentarily hopeful, now

collapsed, attempt to build a second People's Park on unused BART land.

And, on June 20, the Regents of the University of California voted 16 to 7 to build married student housing on the site of People's Park "as expeditiously as possible," ruling out a user-developed park in the interim before construction can begin.

## PEOPLE

### THE LARGER PICTURE

"An ecological approach to design," is the sensible and unusual task set for the new California Institute of the Arts' School of Design by its dean, Richard E. Farson. No stranger to dual disciplines, Farson founded the Western Behavioral Sciences Institute in La Jolla and was an Oscar-winner in 1968 for his feature-length documentary film, *Journey Into Self*.

Appointed associate deans of the school, now under construction in Valencia, are Craig Hodgetts and Designer Peter Pearce. Hodgetts, experienced in automotive design, sculpture, drama, and architecture, fits well into "the larger picture" of which Farson speaks: "After all, the great environmental problems we face . . . were caused, at least partly, by designers unable to see the long-range consequences of their work."

Pearce, formerly with Charles Eames, is the author of *Structure In Nature As A Strategy For Design*, to be published next year by MIT Press.

The Institute begins its first 12-month session in October, 1970.

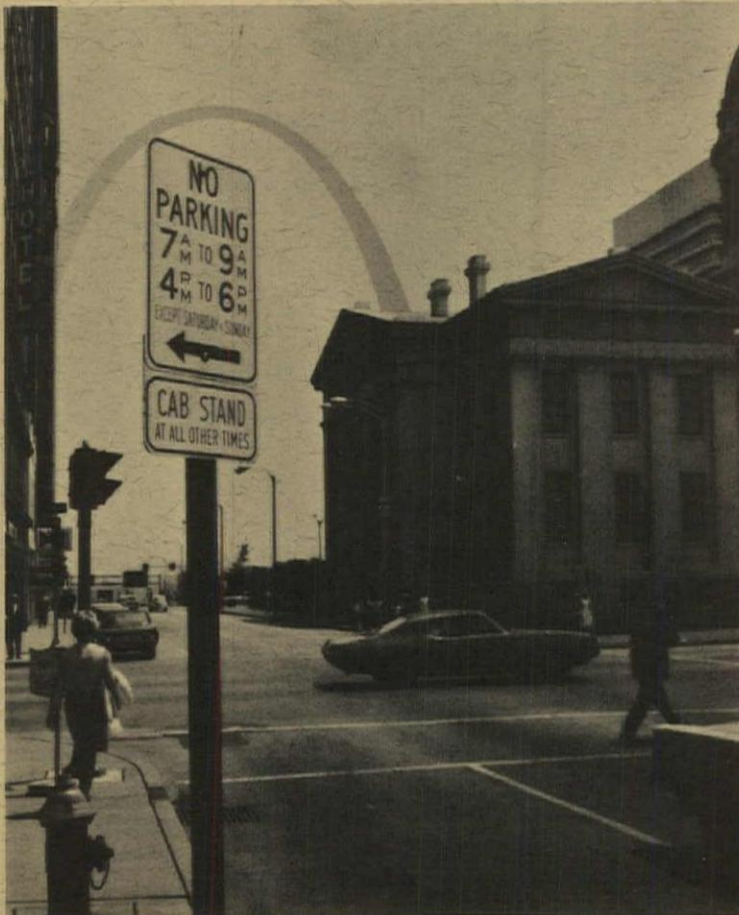
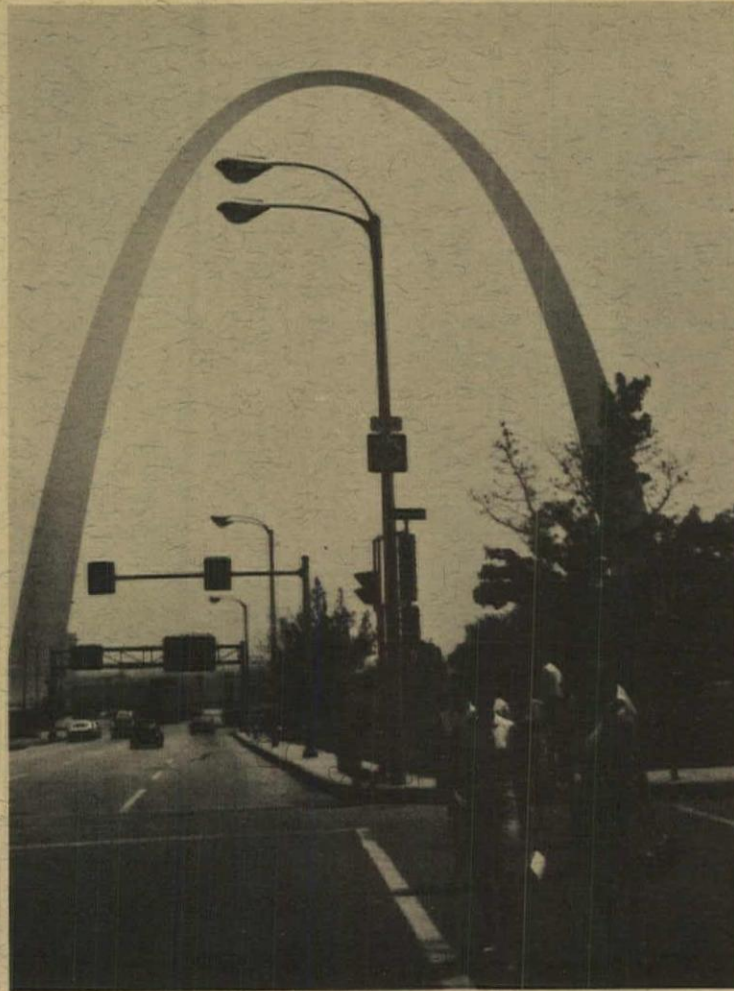
## WALTER McQUADE

### UNDER THE RAINBOW

The snapshots on this page of the late Eero Saarinen's St. Louis arch are from a group sent me by Harry Weese of Chicago, one of Saarinen's close friends from his Cranbrook days. In his note accompanying the pictures, Harry writes: "This is the way it really looks." Right he is.

The elegant curve was Saarinen's first achieved success, but one of the last completed. If, as threatened, the polar ice cap ever does really melt enough to put the continent under water, and then nature relents—as with Noah—and causes the flood to retreat, the arch is going to look awfully good emerging from the ice water.

Meanwhile, in its aloof imperturbability, it, like the Washington Monument, does its bit to lift attention from some of the nonsense we humans necessarily devote our time to down below.



PHOTOGRAPHS: Page 41, 42 (bottom left) James Eisenman. Page 43, Ellen Perry Berkeley (center). Page 109, John Donat (top). Page 111, UPI (top); Clare C. Cooper (center and bottom left).

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INDUSTRIES

# PREVIEW

The low and scraggly skyline of Worcester, Mass., will have an emphatic center of interest when the Worcester County National Bank completes its new headquarters, a 695-ft. office tower designed by Kevin Roche John Dinkeloo & Associates.

At the base of the tower will be an addition with a glass roof swooping up 80 ft. above the entrance (model photo, right). Beneath this plane of glass will

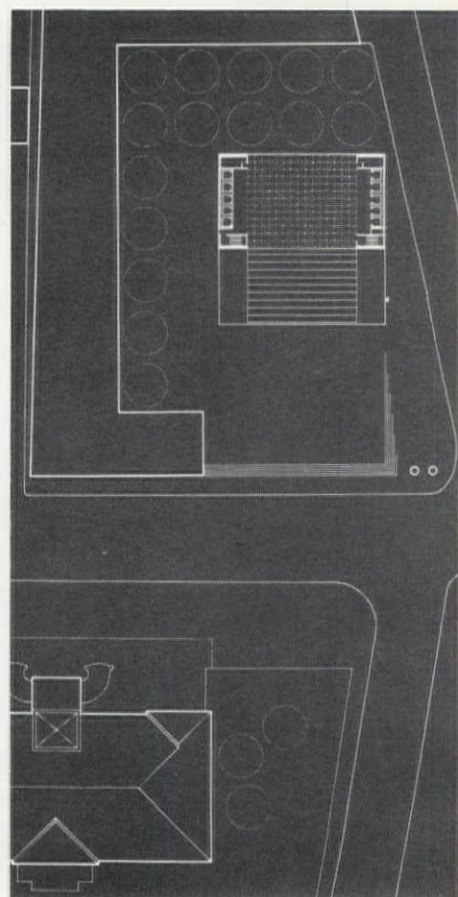
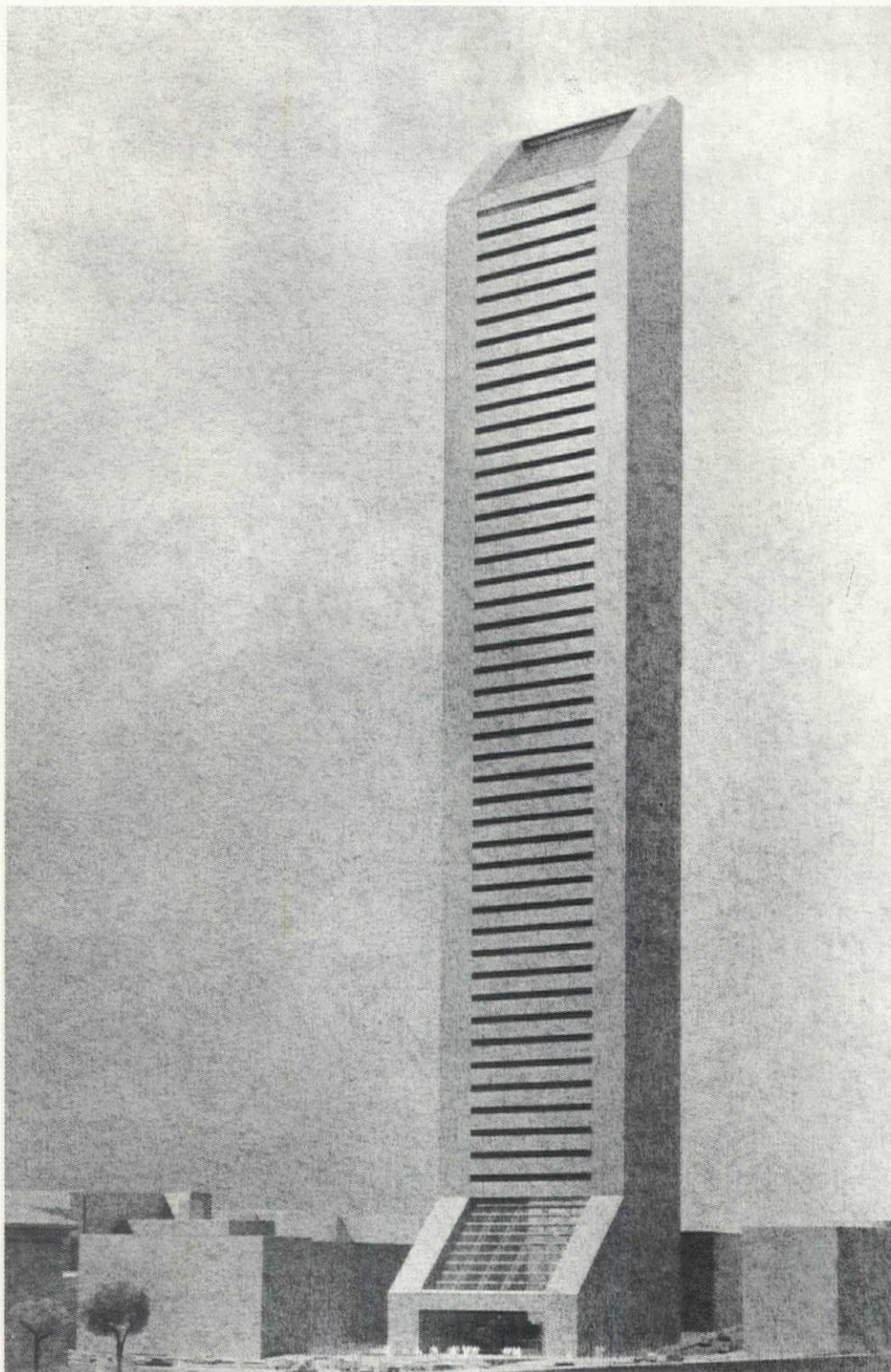
be an indoor park reminiscent of the enclosed garden Roche-Dinkeloo designed for the Ford Foundation building in New York. Passing under the trees, visitors to the building will either go down half a story to the banking floor, or up half a story to the elevator lobby, which forms a balcony around it.

Each of the 45 office floors will have about 5,700 sq. ft. of completely unobstructed space be-

tween service cores at either end. At the pinnacle of the tower will be another tall, glass-roofed space which will probably be used for some kind of public facility—perhaps a restaurant.

After the tower is completed, existing buildings around it will be torn down in stages to open up a 2.9-acre plaza (plan below), laid out as a carefully framed extension of the Worcester Common, across the street.

TOWER ABOVE A GARDEN



(continued on page 120)

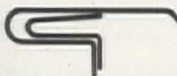


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**INLAND** \*  
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# PREVIEW

On a hillside 120 ft. above Little Neck Bay at the outer edge of New York City, steel framework is already in place for the Student Lounge and Cafeteria of Queensborough Community College. The new student facility is one of several buildings designed by Architects Holden, Yang, Raemisch & Corser and Frederic P. Wiedersum Associates for the 34-acre campus, on the site of a former golf course. The existing

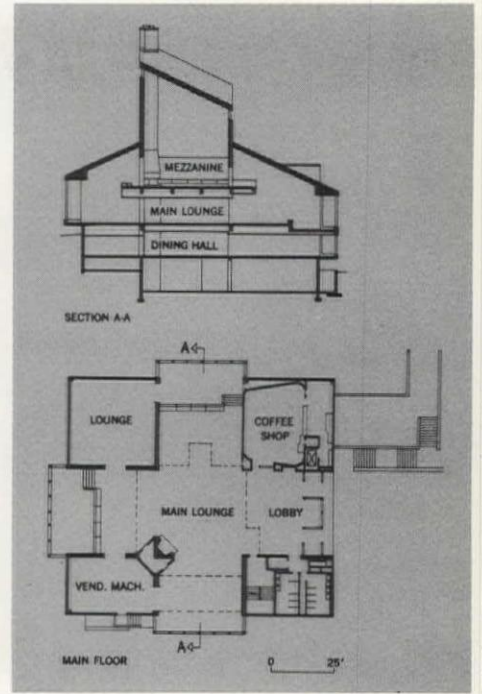
clubhouse (right in photo) will be used by the faculty.

The student building has been fitted around its knoll to offer the greatest variety of views out across the campus and the bay. The dining hall, on the lowest level, has cantilevered bay windows facing north and west; the kitchen is notched into the slope, its roof serving as a terrace for the main entrance above.

Most of the main floor is de-

voted to a single large, cross-shaped lounge, with broad bay windows facing out in three directions. Windowless auxiliary spaces fill the corners between the arms of this cross-shaped space. Above the center of the lounge is a mezzanine, with clerestory lighting around the edges of its tall, canted roof. From this crow's nest, it is possible to look out four ways across the main lounge to the campus.

STUDENT VIEWPOINT






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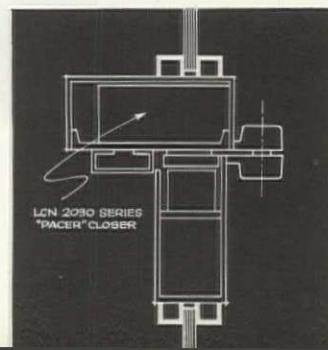
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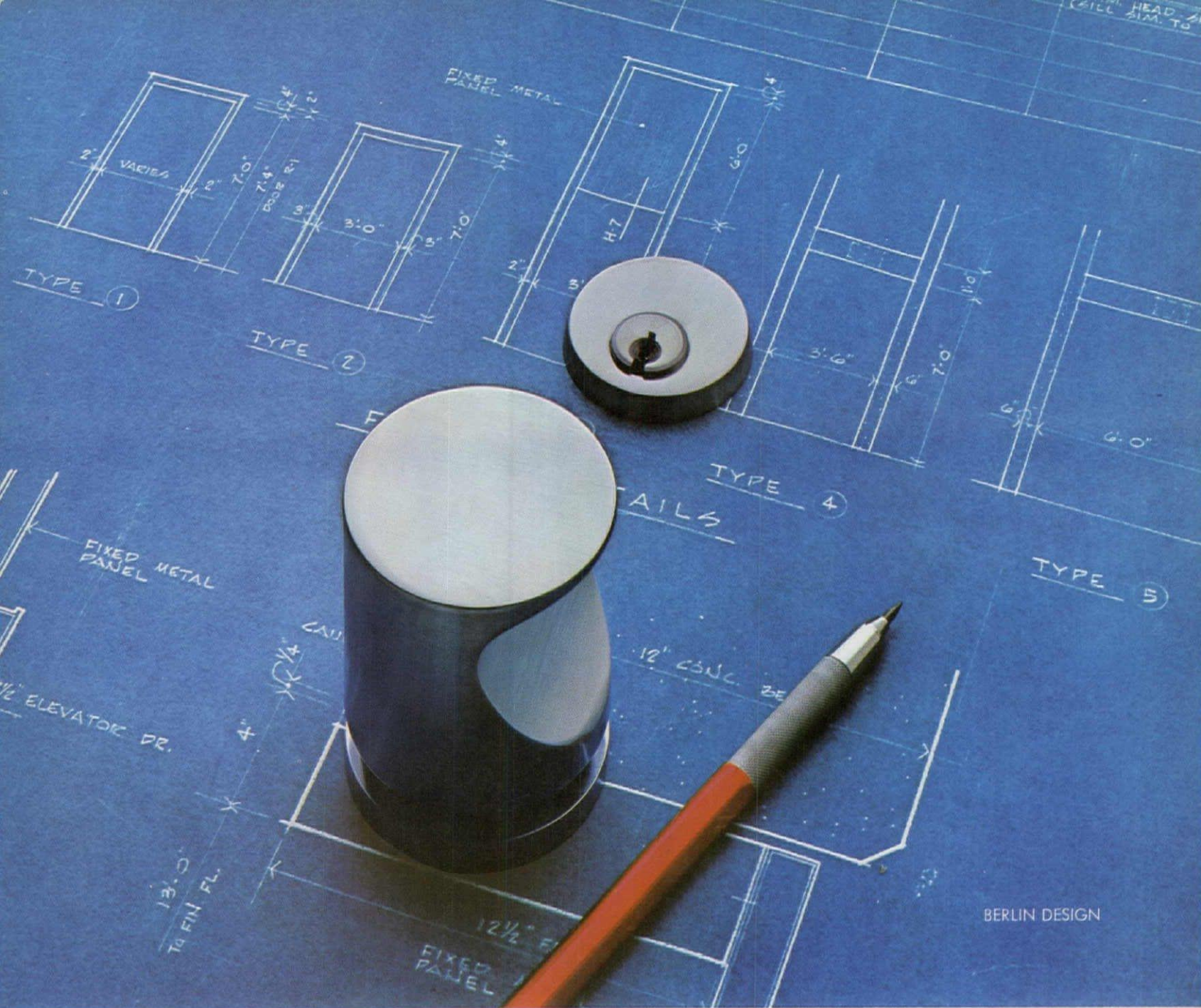
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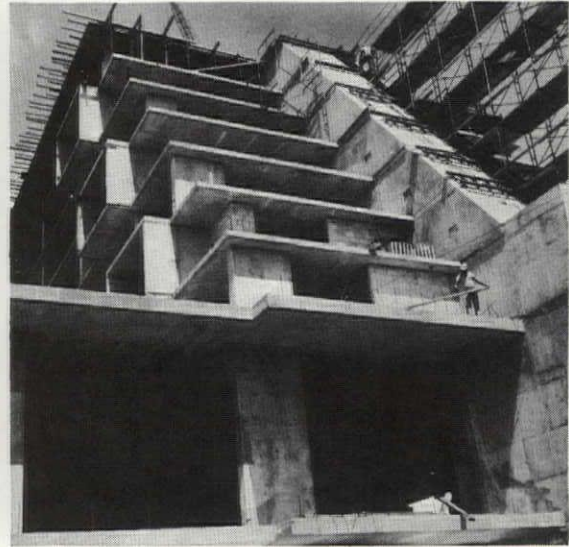
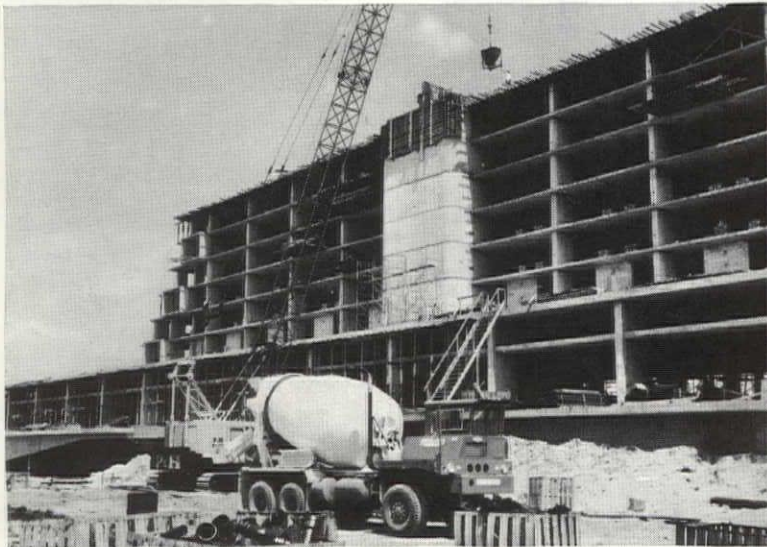
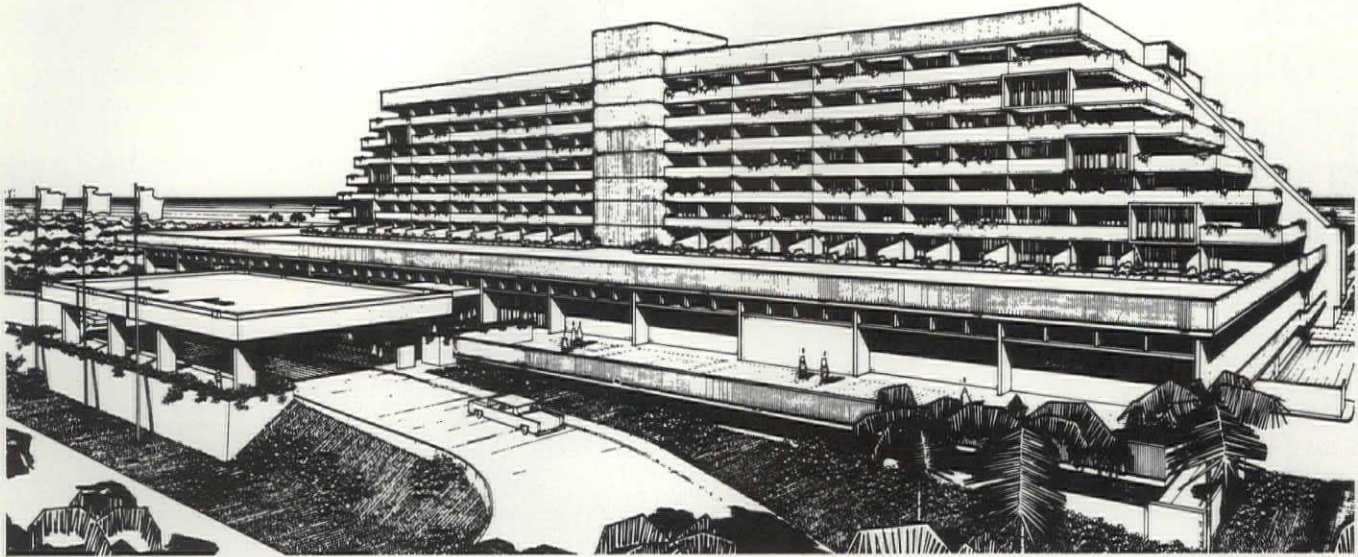
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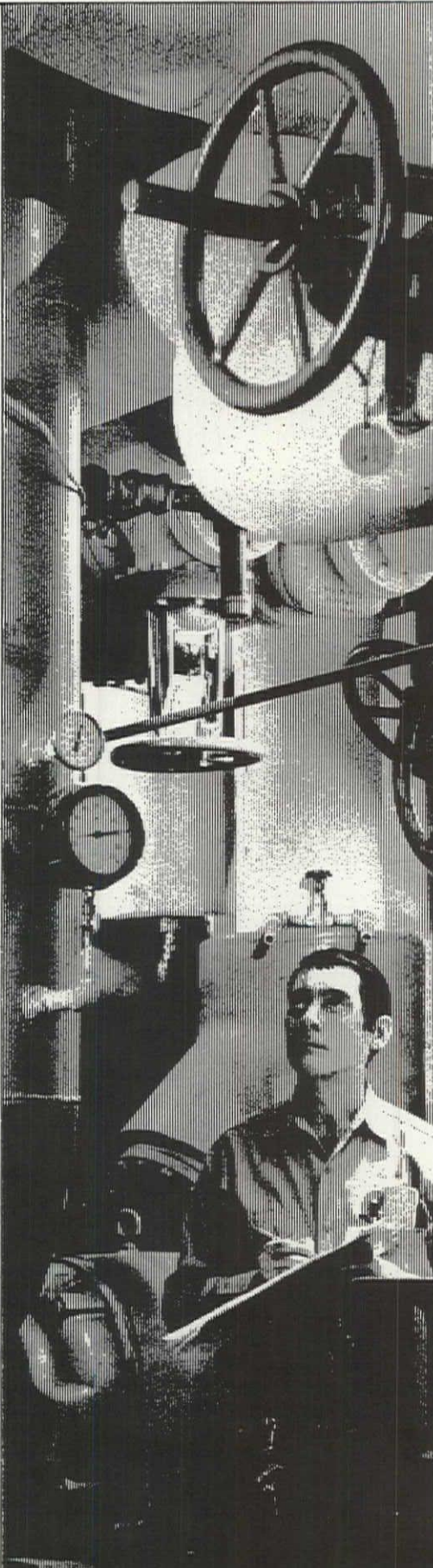
*Owner:* A. J. Andreoli, Akron, Ohio  
*Hotel Operator:* Hotel Corporation of America, Boston, Mass.  
*Architect:* Keith Haag & Associates, Cuyahoga Falls, Ohio  
*Structural Engineer:* Ernst J. Troike, P.E. & S., Cuyahoga Falls, Ohio  
*Contractor:* Associated Biscayne Companies, Inc., Miami, Fla.

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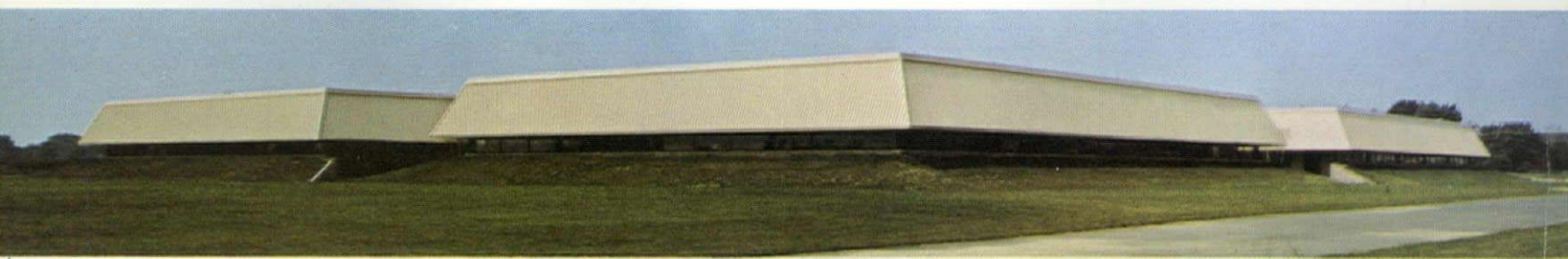
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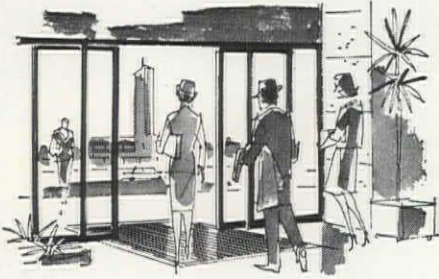
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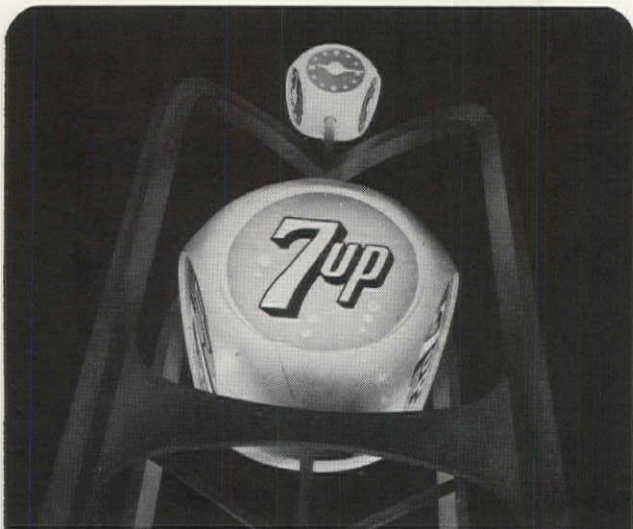
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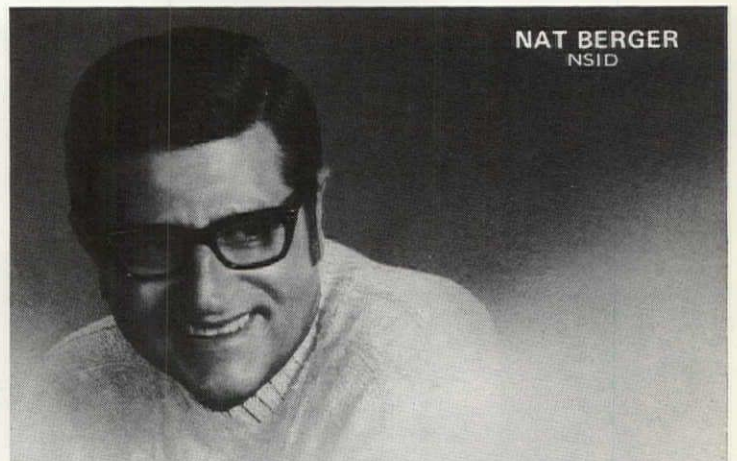
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(continued from page 99)

Professor Gans might be worth considering as an action model. First, he is able to consider and comprehend complexity and then conceptualize it without oversimplifying. This kind of mind is rare and, while it cannot effectively be emulated by many, I feel it might be given some attention, and occasionally followed in our difficulties, with something of the instinct that steers a businessman to profit. He seems to know about ideas as well as facts, so, to the extent that those ideas are relevant to our tasks and we are less knowledgeable than he, we might do well to heed his mind and its products. I think he would himself argue that we should be wary of his prejudices lest they not suit our purposes, but this need not blind us to the advantages of considering alternatives to our own thinking.

Second, he communicates with an easy-to-read, direct style of writing. This makes his knowledge and ideas accessible to anyone who is willing to read about them and thus useful to many people.

Third, I appreciate many of his values, but especially his respect for the differences between himself and others. As I read his work my conviction grew that he sought, not to kidnap or coerce my mind, but simply to be heard in order that his ideas would be tested in the arena of our society. This permitted reading less warily than I might otherwise; ultimately I don't care if he was right or wrong but was curious about how I could use his ideas myself. In short, the man I met in the book combines qualities of intelligence, accessibility and self respect which seem particularly well suited to coping with life in our times. In the confusion of life styles, isms and appeals that fill our society I find such encounters valuable as a source of guidance in my own activities.

I was surprised to discover a feeling of suspense building up as I read through the essays. The

closing observations on our society constitute a lady/tiger conclusion which gains impact from the fact of its concern with my life and world rather than a literary fantasy. This is in no way a function of narrative style (Professor Gans maintains his academic cool throughout until Part VI, which constitutes a postscript to the rest of the book), but rather a coincidence of his and my personal histories.

For my part, I have learned through my own architectural work that the man-made environment is influenced as much as possible by those who are able to do so in order that their own mental state will be embodied in and reflected by what surrounds them. This to me seems equally true of the stylistically insistent architectural client ("We just love colonial!"), the domineering architect ("I can't let you do that—it would destroy the design's integrity."), the suburban tract dweller ("Let's get the brick front, dear, it will look more impressive.") and, I suppose, any people who cannot make choices about where or with whom they live or what conditions of community service and maintenance they must endure ("Why clean this place up? The neighborhood is full of slobs, so it'll just get into a mess again and nobody will care.").

I have observed several urban renewal programs in process and noticed their inability to achieve desired goals, in spite of combining power with idealism and hard work by the staff people involved. Along the way my attention turned from formal and esthetic matters, which were vague and indefinite. For his part, Professor Gans, through discipline and techniques of sociology, investigated the development of suburbs and backtracked the trail of population to the city. There his attention was drawn to the plight of those people whose choices were steadily decreasing in the face of intensive architectural and planning efforts to improve their communities.

When, in the preface, I read his conclusions, I deemed them reasonable generalizations and consistent with my own experience, but not particularly exciting. When I read the essays which amplified them I encountered their evolution as ideas born of experience because the chapters are arranged to make

sequences of ideas rather than of chronology. Their actual chronological sequence approximates the development of the ideas, however, so the impact of his experience came through subtly but emphatically. With age and experience Professor Gans seems inclined to range farther and faster, to repeat less, to make more points in fewer words, more ideas on fewer pages.

The more I read the more gratified I was to find information and insight which illuminated my indefinite questions of social process and behavior. With each insight was a proposal for action which supported the rising tempo of self-doubt about my professional role in society. At the end, his ambient predictions for our nation did nothing to resolve those doubts, but throughout the book his insistence on proposing specific solutions to specific problems were valuable.

Part IV consists of five essays, all but one previously unpublished, which address all the major issues examined in the previous five parts. Beyond demonstrating that a sociologist/planner can—if not must—maintain a sense of humor through his labors, Part VI reveals the spark of Professor Gans' literary creativity, and from that I drew support for my frustrations with *People and Plans*. It is a book which documents the mounting concern of a scholar for his community; its notations describe an increasing level of political awareness and activity. In the final analysis I cannot escape inferring that its major significance lies in its utility as an instrument of social change.

Measured against that criterion my feelings about the book are divided both because of and in spite of all the good things it is. On one hand it is the work of a man trained in certain disciplines and he cannot easily abandon those standards without risk of distorting that work; on the other hand the very nature of that work (a collection of essays which support the conclusion that we all can and must change) is too redundant, drawn out and inefficient to demonstrate what it counsels.

I cannot deny the value I have placed on those essays and their relevance to me; yet I cannot avoid feeling shortchanged because Professor Gans did not write a brand new book to describe what is on his mind now.

I hope some day he will write such a book, as much for himself as for the rest of us. And soon, because we need all the help we can get.

Scholarship demands that an author present his facts and sources in a clear way. Like some other scholars in recent years, however, Professor Gans' work has brought him to conclusions which imply the added need for immediate impact on an audience much larger than scholarly work would ordinarily reach. The impact requires the literary power of clarity and responsibility combined with synthesis and drama and humor. The first five parts of *People and Plans* bring together a conveniently bound source of valuable information. Part Six implies that its author has an undeveloped potential for using that information. I keep wondering on what he bases his hopes for political, economic and social learning in our communities if he is as reluctant as he seems to be to move beyond his own scholarly ways. It seems hard and inconsiderate to urge a man who is running as hard as he is to do better. It seems equally inconsiderate for a man to return from the mouth of the cave with less light than he is able to bring.

Probably because I am an architect, I see a particularly architectural message in Professor Gans' work. I believe the days of the "Compleat Architect" are numbered and the process of specialization which has been at work in other professions (notably medicine) is raising many questions about the role and training of the architect. *People and Plans* describes many of the pressures in our society which sustain that process and, as such, constitutes another spike in the coffin of the "great man theory" of architecture which we have been testing for twenty-five years. That alone would be a valuable social contribution, but it goes beyond that to define goals, processes and areas of knowledge which can be useful to architects. In a day when we are examining the worth and meaning of architectural activity in terms of computer technology, theoretical research, administrative procedures, political activism and social philosophy, this book may inspire examination of a direction for many who wonder where to go to be an architect.



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It has become clear in both moral and economic terms that our nation can no longer afford or pretend to intervene in the political and military affairs of nations throughout the world, maintain a military and weapons establishment of unlimited size, explore the moon and, at the same time, rebuild our decaying cities, provide an adequate supply of housing, and finance domestic programs needed to solve pressing social problems.

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One. We call upon the President and the Congress to assume responsibility for a comprehensive reexamination and reordering of our national priorities, recognizing that we have neither unlimited wealth nor wisdom, and that we cannot sensibly hope to instruct other nations in the paths they should follow when we are increasingly unable to demonstrate that we know how to maintain a viable society at home.

Two. We call upon our leaders, at all levels of government, to recognize that an efficient and humane environment is basic to the maintenance of a harmonious and prosperous society and that the skills to produce it are well within our grasp. At the same time, we wish to remind our representatives that neither hope, time, nor technology will solve the problems that presently make urban life a dirty, difficult and dangerous experience. Only a wholehearted commitment of will and money will enable us to apply the skills needed to erase the shame of urban America.

Approved and adopted by The American Institute of Architects at its annual convention in Chicago, Illinois, June 26th, 1969.

The American Institute of Architects  
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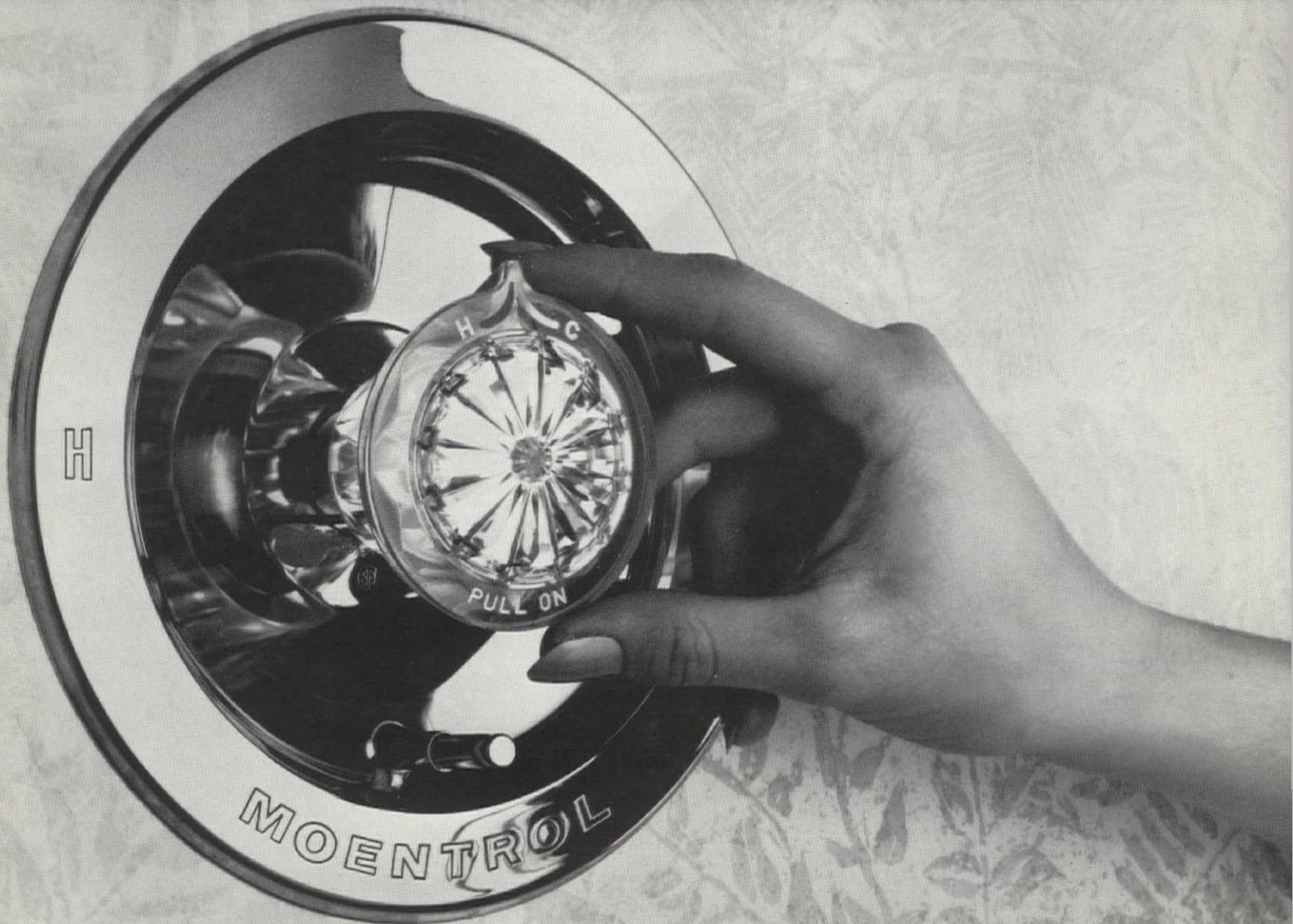
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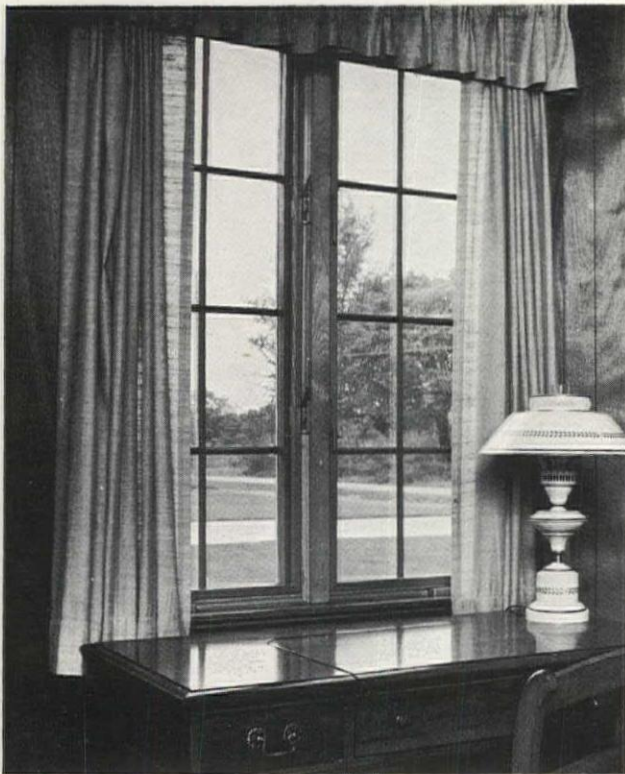


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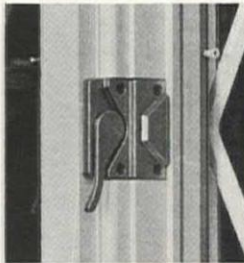


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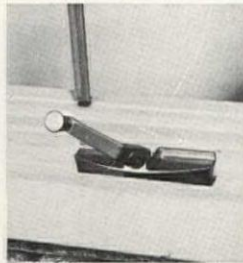
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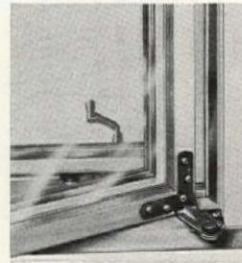
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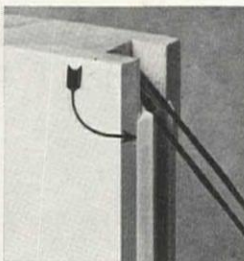
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