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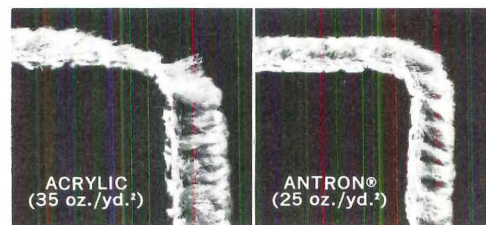
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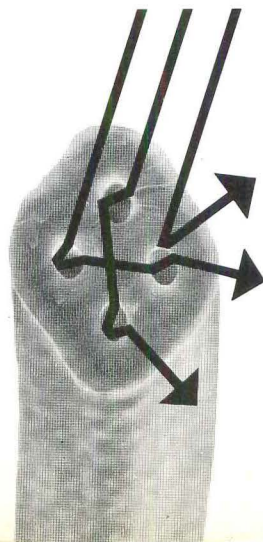
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Book Review

The Great Bridge by David McCullough. Simon and Schuster, New York. 636 pages. Illustrated. 1972 \$10.95.

Reviewed by Cervin Robinson

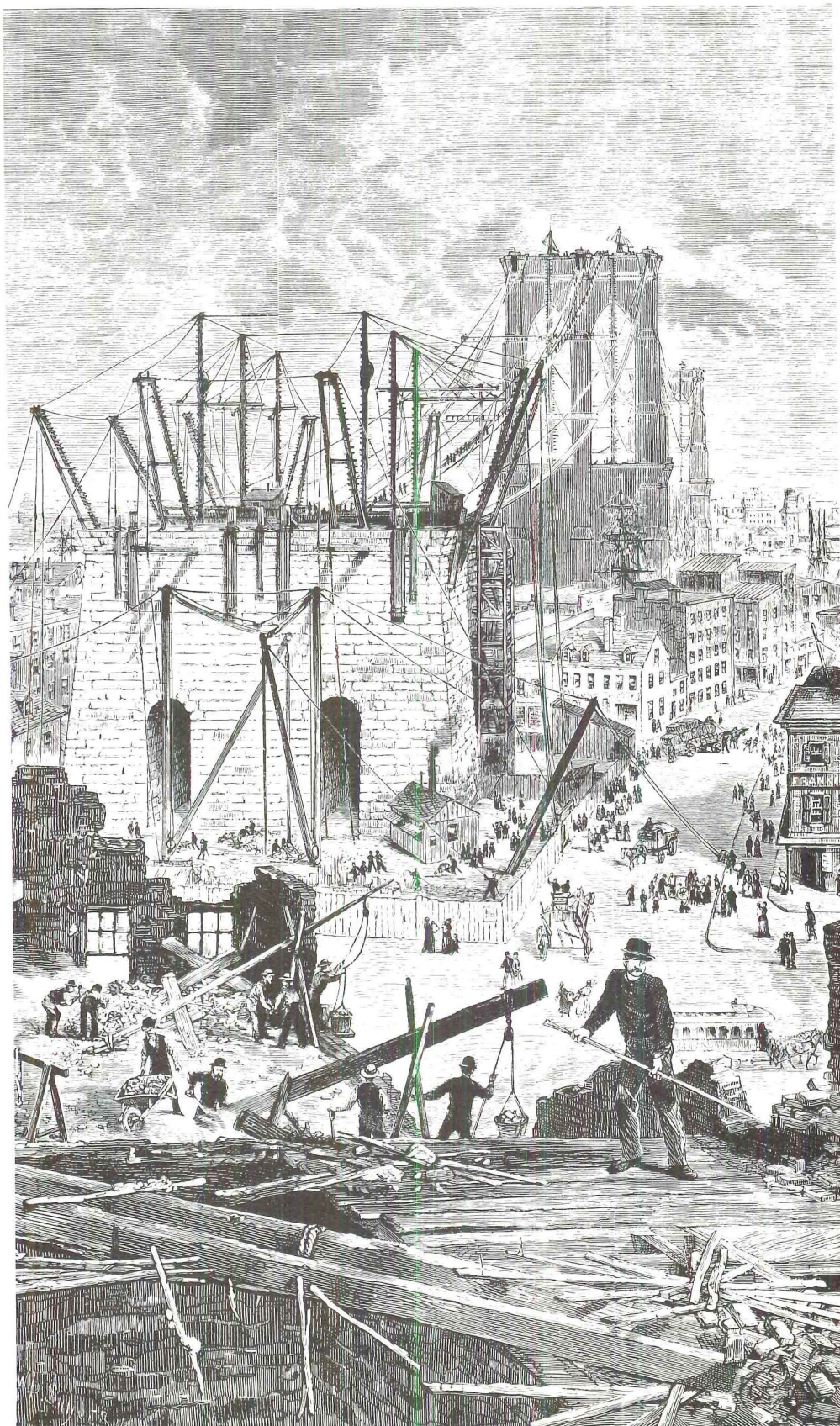
The Brooklyn Bridge is one of the great amenities of life in New York City; it is also simply and ineffably the greatest structure in the city. But we are not inclined to analyze the bridge as an object. That, of course, has not always been the case. Shortly after the bridge was finished, Montgomery Schuyler discussed the bridge at length and had reservations about the form of the towers; to Lewis Mumford in the late 1920s the towers were "the highwater mark of American architecture in the period between the design of the Washington Monument and the last phase of Richardson. . . . If any one doubts," he wrote, "that a bridge is an aesthetic object, if any one doubts that it reveals personality, let him compare the Brooklyn Bridge with the other suspension bridges on the same river. The first is in every sense classic." Le Corbusier's description, "Brooklyn Bridge, which is old, . . . is as strong and rugged as a gladiator," rather grabs us. But in general it no longer suffices simply to pinpoint in a word the character of a building or a bridge.

John Roebling had no doubt about the nature of the bridge he meant to build. "Its most conspicuous features, the great towers," he wrote in 1867, "will serve as landmarks to the adjoining cities, and they will be entitled to be ranked as national monuments. As a great work of art, and as a successful specimen of advanced bridge engineering, this structure will forever testify to the energy, enterprise and wealth of that community which shall secure its erection." The towers were, one gathers, the art; and the engineering, in the form of the wire tension structure, was added to them rather as to a musical instrument. Not that Roebling underestimated his engineering. "The completed work," he is quoted as writing, "will be the greatest engineering work of the continent, and of the age."

The bridge was neither a perfected form nor something possible only where it was in fact built. As visible engineering the Brooklyn Bridge differed from the major earlier Roebling bridges mainly in being bigger; and one rather gathers that some other community would have been offered it if New York-Brooklyn had not "secured its erection." The Roeblings were wire manufacturers. Was it Roebling wire that made

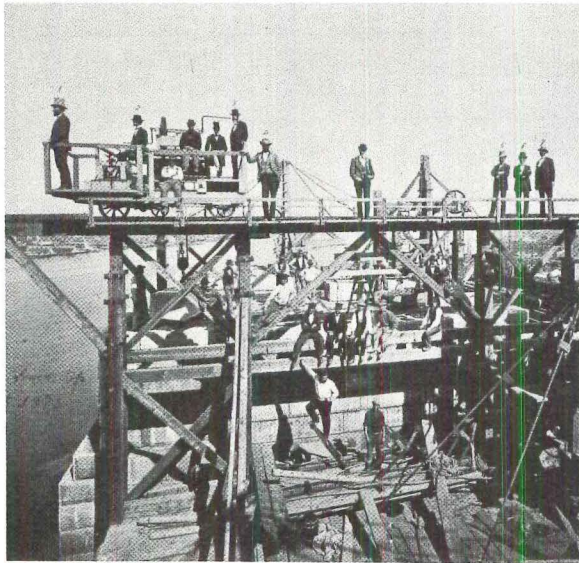
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Cervin Robinson, an architectural historian, writer and photographer, is the American correspondent for The Architectural Review as well as a frequent contributor to other professional publications.

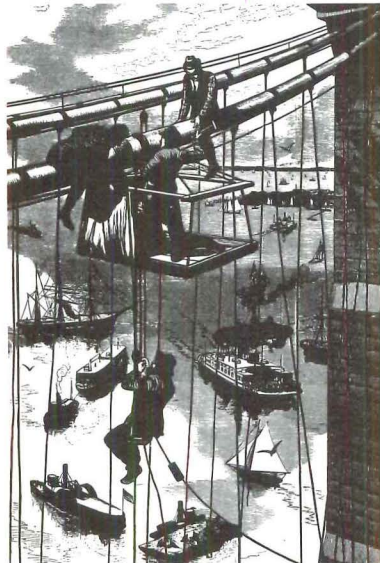


Book Review

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By 1872, the bridge had reached half its final height.

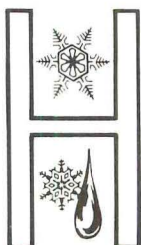
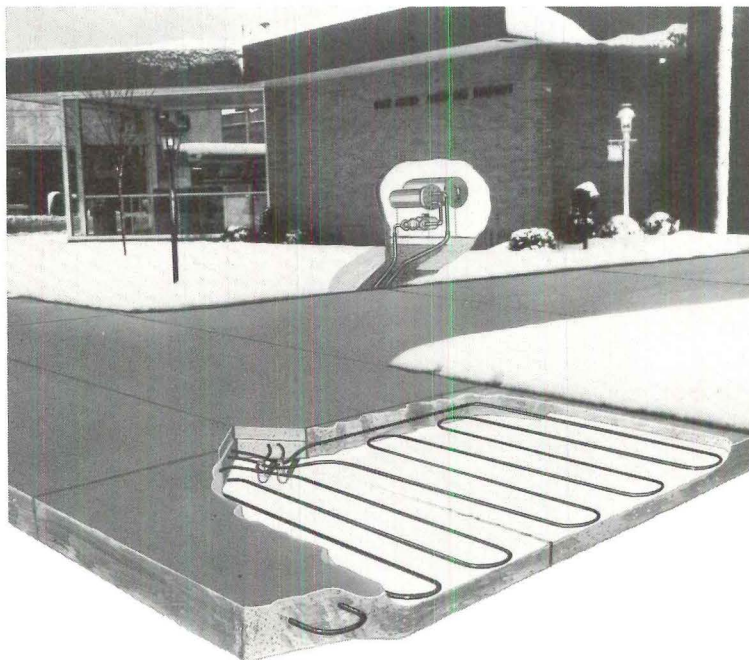


Wire ropes being hung from the cables.

the Roebling bridges possible? Not at all. Most of the wire on the Brooklyn Bridge is not their wire, and Carl Condit in his *American Building* writes that the elder Roebling used a British wire on his Niagara bridge since he "doubted whether any Canadian or American enterprise, including his own, was capable of the job."

Visually, as a designed object, especially now that it has lost the old commercial buildings that used to surround its anchorages, the Brooklyn Bridge may appear too absolute, too unresponsive to any particular circumstances. But in the story of its construction it takes on a different character. And so David McCullough (a former associate of many of the editors of this magazine) has rightly defined the bridge in terms of the human process of the building of it.

The building of the Brooklyn Bridge was a heroic achievement. Some of the story of the
continued on page 81



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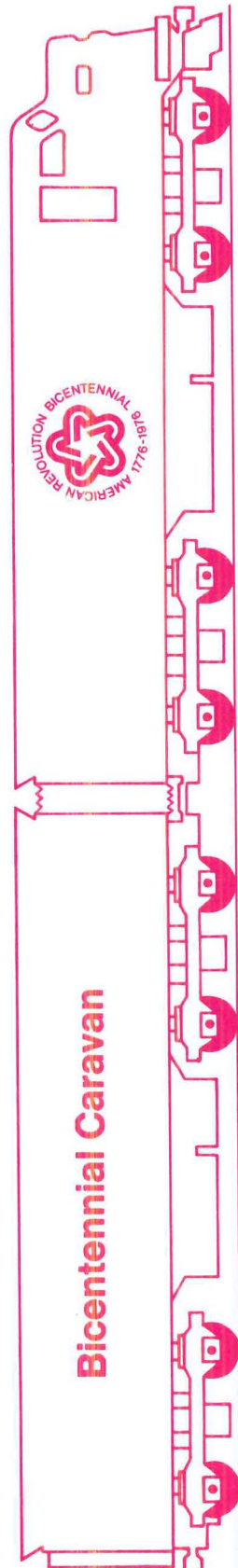
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A friend of ours who works for the U.S. Government in Washington, D.C., tells me that in the past, whenever somebody phoned and said, "This is The White House calling," people at the other end would try to stand at attention while shaking uncontrollably in their boots. Ever since Watergate, people at the other end just hang up.

Yet somehow the United States of America manages to survive quite well, although the nation has been without a *de facto* government for several months now. This merely confirms a sneaking suspicion long held by ourselves (and other anarchists and Goldwaterites) that having a government is really a very expensive and a quite unnecessary luxury.

Ever since the U.S. stopped having a government, things have been looking up markedly: some highway funds have at long last been allocated to mass transit; some impounded funds for cities have been unimpounded; a crazy farm program has at long last been scrapped; press conferences that used to be expensively and unconvincingly staged have been unstaged; and even that most bizarre of all U.S. Commissions, the one that is supposed to be planning our 1976 Bicentennial celebration, has shifted into high gear. It has produced a handsome manual, in at least three colors (red, white and blue) showing how to stick Bicentennial stickers onto Bicentennial trucks—thus answering a question that has deeply troubled the American people ever since, roughly, there were trucks.

The U.S. Government currently employs some 2.8 million men and women, and it is going to be tough to find jobs for all of them. Or perhaps not: the other day, a New York City policeman, who was off duty and wearing civilian clothes, was arrested for accosting a girl in Times Square who turned out to be an *on-duty* police-woman masquerading as a prostitute. This particular charade took place at 8:45 a.m. when neither real prostitutes nor their real "Johns" are ordinarily in evidence in Times Square or, for that matter, anywhere else.

What this suggests, of course, is that we could keep these 2.8 million men and women employed at simply *playing* "Government": sending memos to each other, preparing and then shredding reports, conducting hearings, and arresting each other. The Department of Housing & Urban Development could play "Monopoly" and "New Town" (see p. 72)—and leave the serious business of housing and urban development to those who understand it; the FBI could play "Watergate" (July issue); and the Pentagon could play with toy soldiers and model airplanes.

All of these games are a lot less harmful to you and me than the real thing. And having 2.8 million men and women *play* "Government" is sure to be a lot less expensive, too, and a lot more entertaining.—PETER BLAKE

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

A wedge in the skyline

A 46-story tower, rising to 910 feet, will be one feature of the new Citicorp Center, a full city block in midtown Manhattan. Hugh A. Stubbins & Associates of Boston are the principal designers; Emery Roth & Sons of New York are associate architects.

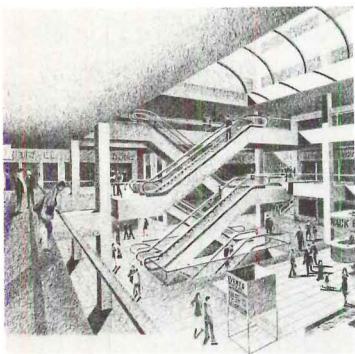
The tower, 157 feet square, with more than one million sq. ft. of office space topped by a wedge-shaped roof, will become the fifth tallest in New York. The client, First National City Bank, plans to occupy about one-third of the building. The tower will be standing on 112-ft. high super-columns, each one 24 feet square. The Citicorp Center project is a joint venture between the bank and St. Peter's Lutheran Church, whose building was on the site since 1902 and has now been demolished. The church will return to the site in a freestanding structure of its own beneath one corner of the tower.

An eight-story, stepped-back office building will nestle snugly beneath the other side of the tower.

A sunken plaza for pedestrians, 9,000 sq. ft., will have fountains and sculpture and places to sit. The plaza has two levels: one, 12 ft. below street level, tying into a concourse; and the other, 17 ft. below the street, has access to the subway.

A shopping area on the site, 7,430 sq. ft., will contain restaurants and boutiques, and will form a U around a three-story-high, skylighted Galleria.

Groundbreaking is set for February 1974; completion is planned for the fall of 1976.



Skylighted Galleria brings pleasure to shopping pedestrians



For every Australian a home

In July the Labor Government concluded its first housing-finance agreement with the six states. This annual hand-out for low-income housing is always the occasion for faked figures, recriminations and discontent.

This year the argument was over the right of the states to sell, rather than rent the houses built with federal money.

In Australia an unbelievable

85% of the population live in houses they either own outright or are paying off. These are mostly one-storyed, detached, brick veneer units. There are comparatively few flats in the country. Home ownership is a fact of life and politically important, but it does (in theory), affront a government that is socialist—at least in theory.

This year's federal handout was raised 25% to \$A218 million. The

Federal Government called it "a new era in housing for the underprivileged", but in return for the rise, insisted that only 30% of the houses to be built would be available for sale. The house sales are carried on 5% loan—low by private sector standards where 8% is now usual.

This year the highrise housing policy of the '50s is being phased out. The white towers surrounding

Melbourne and Sydney are to be replaced with traditional villas in the outer suburbs and the newly important provincial cities. Architects were the first to call for the high blocks and the first, 10 years later, to decry them. So with a new government and a new policy it is back to the quarter-acre block, the 1200-sq. ft. house and the Australian dream for all—at either 5% or 8%.—N. C.

La Pampa, Argentina



Some years ago Architects Clorindo Testa, Francisco Rossi and Augusto Gaido planned the general outlines of the Civic Center of Santa Rosa, capital of the Province of la Pampa. (They have also designed the Government House, the Provincial Hall of Justice, and the National Board and Bus Terminal—all of which are part of the Civic Center, and are now built.)

Now the same professional team, with the addition of Architect Hector Lacarra, has designed the Legislative Palace, construction of which is about to begin.

The Palace of Justice and other structures are near completion. They are situated between the Legislative Palace and the Government House.

The Legislative Palace consists of two main parts. The first is for the House of Deputies and the second has administrative offices, committee rooms and a library. The architects took into consideration expansion possibilities, should the Palace need to grow in the future. The interior spaces are flexible—compartments with modular partitions which are easily dismantled. In the exterior treatment of the building, elements of concrete will remain visible between surfaces of stone. A metal covering will protect the concrete roof.—L. A.

We don't do it for the money

The average annual income in the U.S. for a man with four years of college is \$14,451 annually. (*San Francisco Chronicle*, July 6, 1973.) According to the *OAE News* (Organization of Architectural & Engineering Employees) the average architectural employee in northern California with 5.6 years of college earns only \$11,835 annually from his architectural employment.

Pollution killed Lake Palic

Two years ago, in May, a five-mile-long lake in Yugoslavia near the Hungarian border was officially pronounced dead. One morning, thousands of fish floated to the surface and a rotten egg smell filled the air of the countryside.

The town of Subotica had been dumping its garbage and waste into the lake for decades. At one time, the lake had been a health spa where the royalty and rich of east-

ern Europe gathered. But that was seventy-five years ago.

Now the good people of Subotica have decided to restore Lake Palic to its former pristine condition. All the water has been drained out and a channel has been created to divert the town's waste waters. Bulldozers are attacking the lake bed and removing five feet of noxious muck. When that operation is completed, the lake will be filled with water and stocked with fish. The project may be the first of its kind anywhere in the world.

The cost of the reclamation has been estimated at \$4.5 million, which was raised by salary deductions agreed to by the townspeople in a referendum.

Hernmarck at the MOMA

The young Swedish-born weaver, Helena Hernmarck, whose work (see detailed story in our April issue) is based on photographic images, is showing nine tapestries at the Museum of Modern Art through October 10.



1971, "Mao Tse Tung"

Her tapestries combine strong narrative imagery with photographic detail. The procedure is to make photostats or enlarged Xerox copies of the subject, and fasten them to the weave with safety pins. The threads are then matched as closely as possible to the photographs. Miss Hernmarck received the 1973 AIA Medal for Craftsmanship.

Traveling design show

To handle "overwhelming public interest in the First Federal Design Assembly" (sic!) held last April in Washington, D.C., (May issue, p. 20) an exhibit has been sent on a tour of nine states carrying the gospel of "effective design."

The exhibition, called "Design Necessity", is sponsored by the Federal Council on the Arts and the Humanities under a grant from the National Endowment for the Arts, and gifts from General Mills, Inc. and Hallmark Cards, Inc.

Five modular units which can

Netherlands

While not very easy to describe, there is logic to the design of this building. Sited with a dike to the north and the town to the south, the new town hall for Terneuzen, Holland was designed by the architecture firm, van den Broek and Bakema.

The first floor houses reception, exhibition and community services. The entrance on the south is sheltered by the city council chamber which protrudes out and over it. To the south and dike, a similar protrusion provides room for the burgomaster and elders.

The center portion of the building ascends in half-story progressions on either side of the central core, so that each floor level is

open to the others immediately above and below it. Half-story-high staircases connect each level. These alternating floor areas house the various municipal administrative offices.

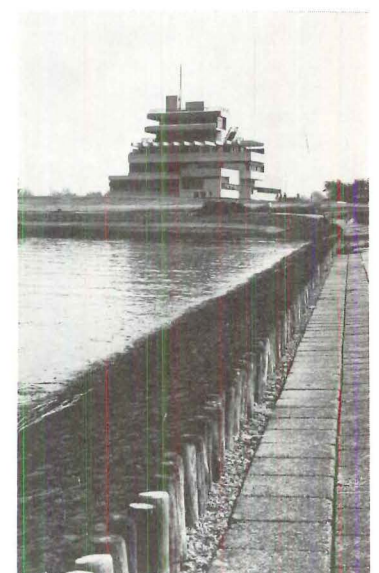
The central core, which also contains elevators and other mechanical necessities, is topped by a civic room, which enjoys a balconied view of the dike and canal.

The largely concrete structure (there are wood and stone accents in window and lobby detailing) is a purposely substantial and strong building in appearance. The architects say this is because it must visually compete with the ships, dikes, locks and industries that surround it.



Stairs criss-cross half-floor levels

Building overlooks dike and water



be arranged in various configurations contain the material in the exhibit, accompanied by a ten-minute color film, "What Do You Mean By Design?"

The exhibit was designed by Peter Bradford, written by Ralph Caplan, and researched by Jane Clark under the supervision of New York designer Ivan Cher-

mayeff and Philadelphia architect Richard Saul Wurman.

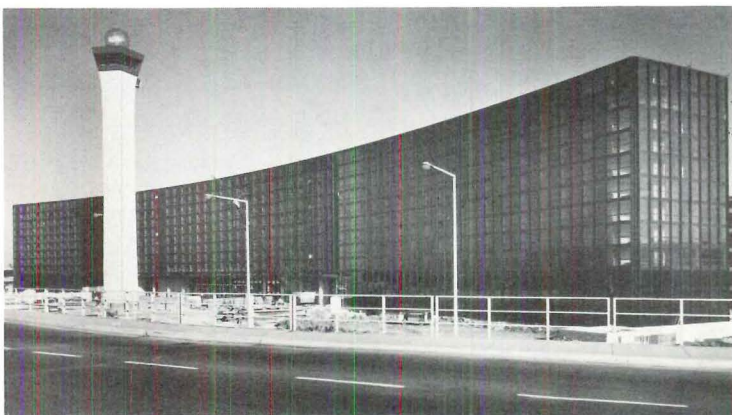
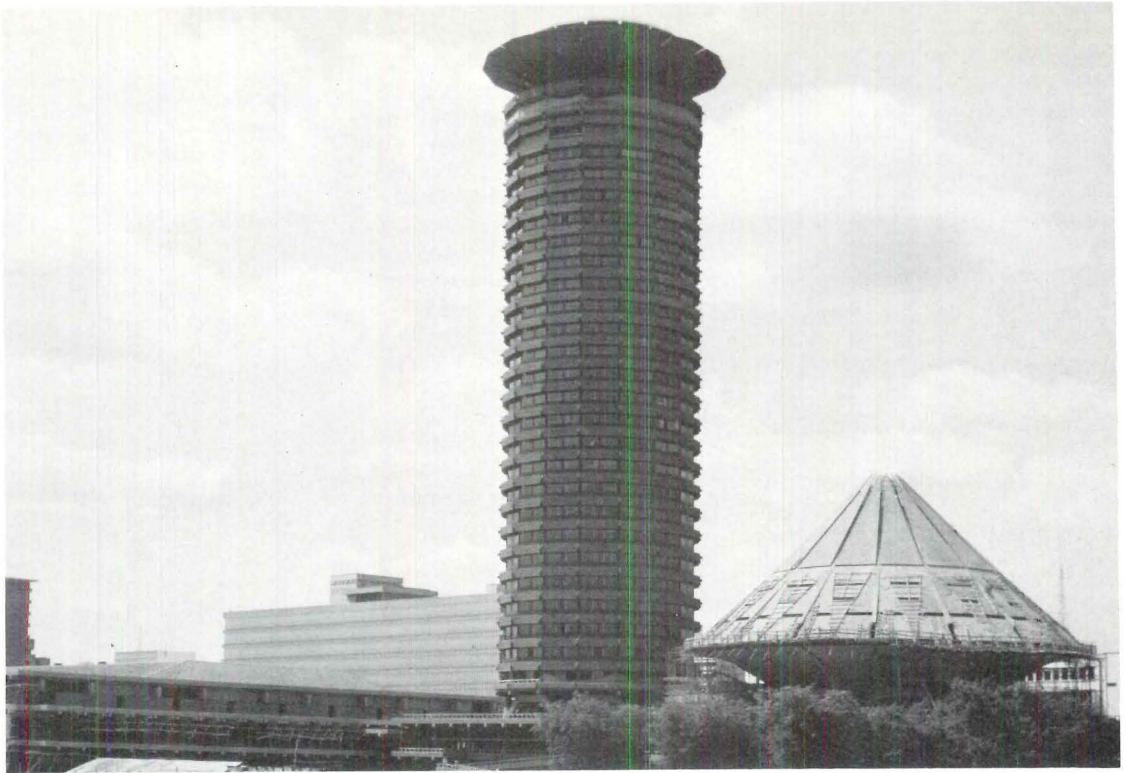
The show has already been to Des Moines and Milwaukee, and is scheduled to travel on to Chattanooga, Kansas City, Bloomington, Ill., Minneapolis, Detroit, Columbus, Ohio, finishing up with a last exhibition in April 1974 in Lexington, Ky.

Nairobi

The just-completed Kenyatta Conference Center in Nairobi will be the scene of two important international events during the next few weeks. On September 24, the World Bank will open its annual conference with the International Monetary Fund there. In addition to the members of those two organizations, 500 official guests from countries that belong to the World Bank will meet in the amphitheater for the inaugural event of the new complex. Then on the first of October, more than 100 employees of the United Nations Environmental Commission will officially move into their offices in the adjacent 29-story tower. Next March, the Governing Council of the Environment Commission will hold its first meeting there.

Originally commissioned by KANU, the ruling political party of Kenya, the flamboyant form of the buildings dominate Nairobi physically as well as symbolically. Even after a recent hotel building boom, the city has almost no buildings even half as tall as this one. The design, whose exuberance seems more expressive of African vigor and tradition than most new construction there, is saved from visual excess by extremely restrained detailing. Its Norwegian architect, Karl Nostvik (who lives in Nairobi), has limited the materials and colors of the project so that the forms are accentuated, not smothered by them.

All exposed surfaces of the in-situ concrete buildings, including a large convention center, have been dressed by hand (right) to remove one-half inch of material, revealing the split black aggregate. In addition to this technique, impossible where labor is scarce or expensive, the finishes are limited to dark gray carpeting and local woods. The pyramidal ceiling of the 1200-seat amphitheater, for instance, has cascading sun baffles of native mahogany. The top floor of the tower will have a large restaurant whose swelling crown will be lit from underneath and visible through sloping glass from the dining rooms themselves.—J.M.



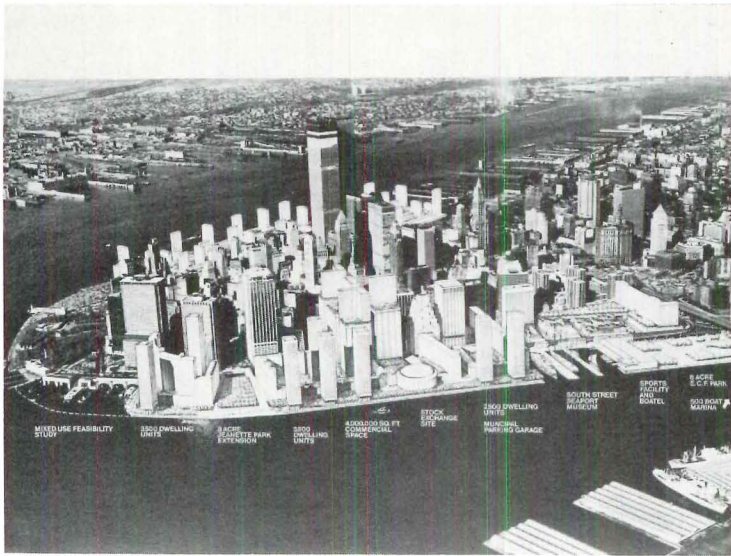
Just like home

Smack in the middle of Chicago's O'Hare Airport, in the very shadow of the control tower (left), is a new 979-room hotel that is connected to the terminal buildings by underground moving sidewalks. It is surely the ultimate airport hotel short of allowing people to sleep on the waiting room furniture itself.

In addition to the guest rooms which are remarkably soundproof (32-40 dBA), the hotel has meeting rooms for those increasingly common conferences where partici-

pants arrive from all points and never leave the airport. There is also a string of more-or-less convincing ethnic restaurants, the most interesting of which is a Balkan grill, with cembalo and violinists.

C. F. Murphy, architects of the \$25-million hotel as well as most of the airport, have neatly integrated the long, curving form into the tight surroundings and Norman DeHaan Associates have produced guest room interiors that are a good cut above standard practice.



Lower Manhattan is experiencing enormous growth and change

Lindsay's Wall Street walk

With the dedication of a vest-pocket park as his excuse, New York Mayor John V. Lindsay recently led a festive walking tour to show off the work of his Office of Lower Manhattan Development. And, as Richard Weinstein, Director of OLMD since its founding in 1967, pointed out, this is just the beginning. Future City administrations will be busy cutting ribbons for many years as projects still being planned are completed.

Yet for the Mayor, whose term ends soon, it was a summing-up of sorts and he was in a splendid mood as he strode ahead of the crowd. When he reached the next noteworthy building or park, he would turn and give a lively spiel to his audience, which ranged from television reporters to Wall Street workers who joined in just for fun. The range and size of the projects was enough to impress the most cynical New Yorker.

To begin with, 47-million square feet of office space has been built in Lower Manhattan in the past 15 years. More than in the next ten largest American cities combined, said the Mayor. Of that, 10-million square feet has been built on Water Street since 1968, including several distinguished buildings that have been widely published. (Water Street consists of land-fill in the East River.)

Weinstein called this area the second ring of growth to distinguish it from both the inner core of the neighborhood, with the narrow streets of Dutch New Amsterdam, and the future band of housing (Battery Park City and Manhattan Landing) wrapping both sides of Lower Manhattan, that will be built soon. Most of the completed work visited was in the second ring and chiefly represents provisions to bring those who will live in the new housing over the existing waterfront highways into the core.

Jeannette Park, which was dedicated during the tour, is a Paul Friedberg design that can be expanded, for instance, into Manhattan Landing where it will serve to keep views of the East River open as well as bring pedestrians over FDR Drive in a pleasant way.

Two major preservation projects in the area were also announced: a reuse study of the U.S. Customs House and large-scale development plans for the South Street Seaport Museum.—J.M.

A holiday for smog

Los Angeles, which suffers from severe attacks of smog, tested an ingenious solution to the air pollution problem one day in late July: all the federal government's IRS and Social Security offices in five counties closed and the employees were ordered to stay home, the idea being to reduce traffic and therefore lower the ozone level in the air.

The ozone level for that day reached 0.49 parts per million, lower than the original prediction for that day but still dangerously high. A spokesman for the L.A. Air Pollution Control District said the improved reading was attributable to an unexpected change in weather conditions and not to the stay-at-homes.

The San Francisco Environmental Protection Agency office, however, approving of the federal plan, announced that if weather conditions had not changed, the elimination of the federal office traffic, about one percent of the total, would have made a difference in ozone levels of one or two percentage points.

One wonders, carrying the idea further, if everyone in California would breathe easier if all government would go away altogether.

Just over one billion—cheap

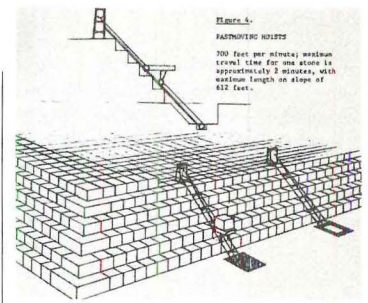
A head of state, contemplating a long-lasting memorial to himself, might consider that for a few pennies more than he planned to spend he could build a really enduring pyramid instead of a library for his papers. After all, a library, sixty years from now, could very well be judged obsolete by some earnest community group and torn down in the name of urban renewal. No one has ever heard of a pyramid being replaced with low-income housing.

A consulting firm, Gordon H. Ball of Danville, Calif., recently made a feasibility study for the TWA Ambassador magazine which went something like this:

A desert site in Arizona, at \$50 an acre, will cost \$64,000 for two square miles. Next, "setting up camp" (which includes a power plant and trackage from a nearby town) \$7,824,000.

Leveling the construction site to within a half-inch of true horizontal, which means pushing around three million cu. yards of sand, \$6,469,000.

Assuming that the "volunteer" labor of old would be replaced with modern machinery, 20 hoists can move 2½-ton limestone blocks up the sides of the structure at a rate of 700 feet per minute; the stone is moved into position by one of 70 rubber-tired forklifts. With this technology, 2,400 stones a day can

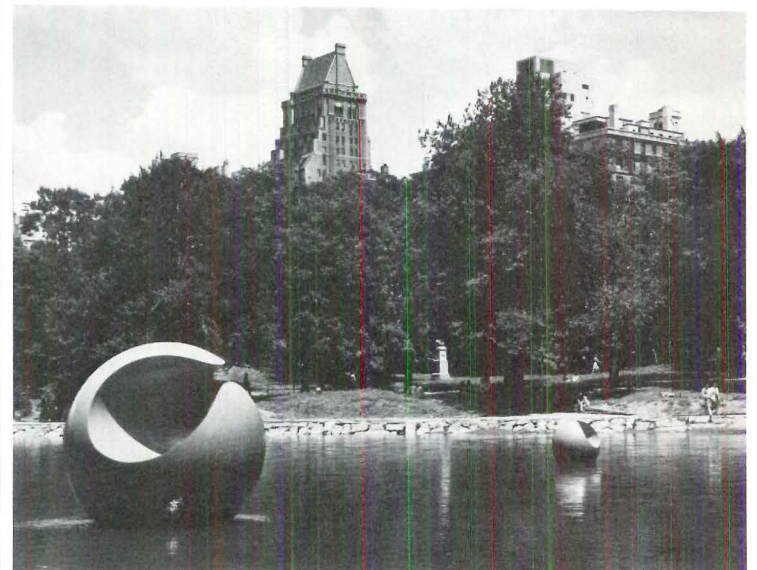


be placed. The capstone (6½ ft. high and 10 ft. at base) will be moved into place by helicopter. 405 men (with machines which can replace 100,000 Egyptians) will put the labor costs at \$55,411,000.

Now for materials: using construction quality limestone is o.k. for the interior, but marble is recommended for the apex. Statuary buff limestone, such as the type used on another enduring monument, the Pentagon, is suggested for the facing. All of this stone has to be cut to within 1/16 of an inch tolerance. 91 million cu. ft. of limestone will have to be shipped from Bedford, Indiana whose quarries produce pyramid quality limestone at \$6 per cu. ft. Six million tons of it, shipped to Arizona at a cost of \$46.20 per ton, would come to \$897,872,000 (incl. manager's fee).

Allowance for labor escalation and a contingency fund, would add \$15,295,000.

And six years to build the pyramid, with a generous profit to a patient contractor, brings the grand total to \$1,130,390,000.



Among the ducks and geese

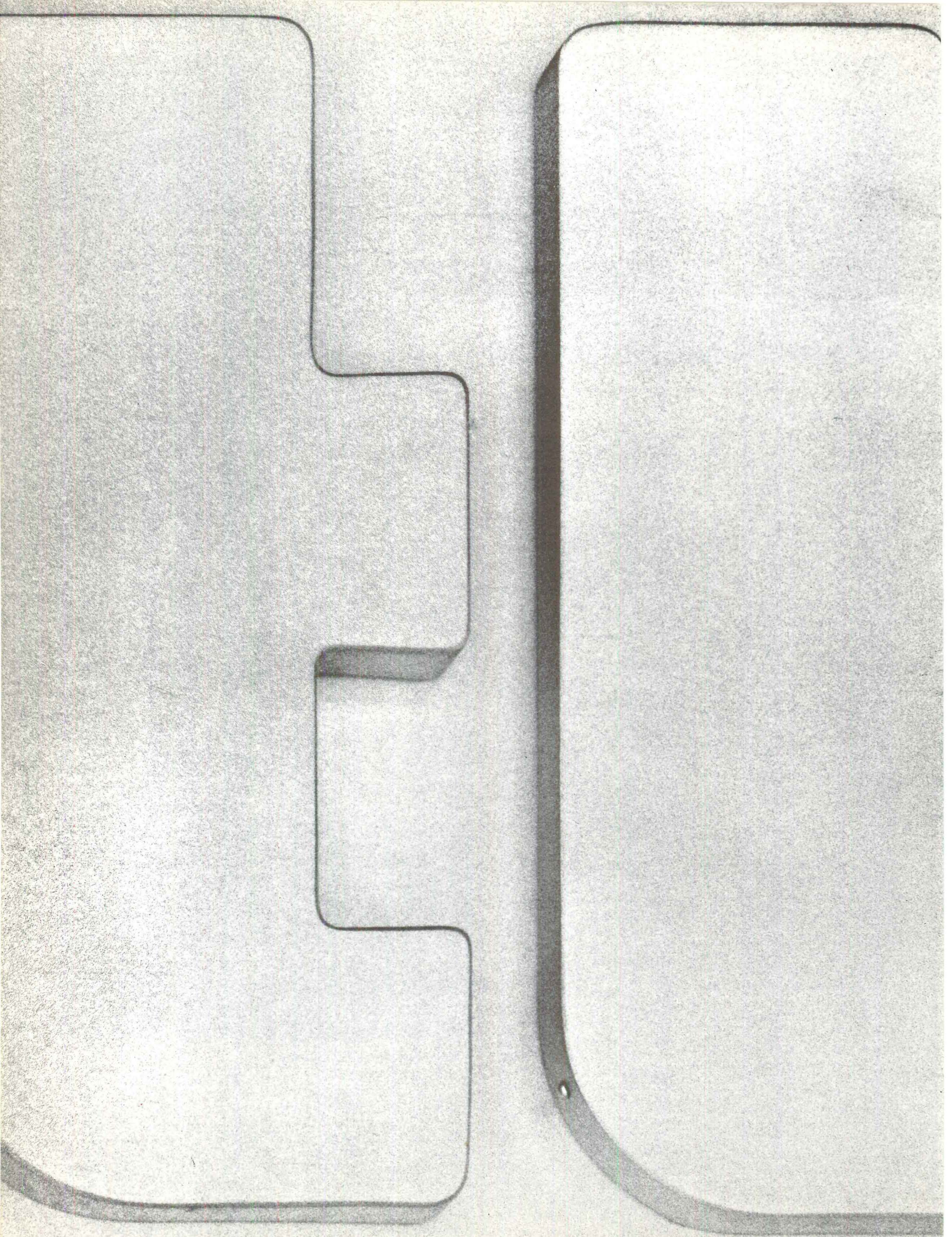
Two floating polyester sculptures have been lent to the City of New York for six months by the French sculptress, Marta Pan.

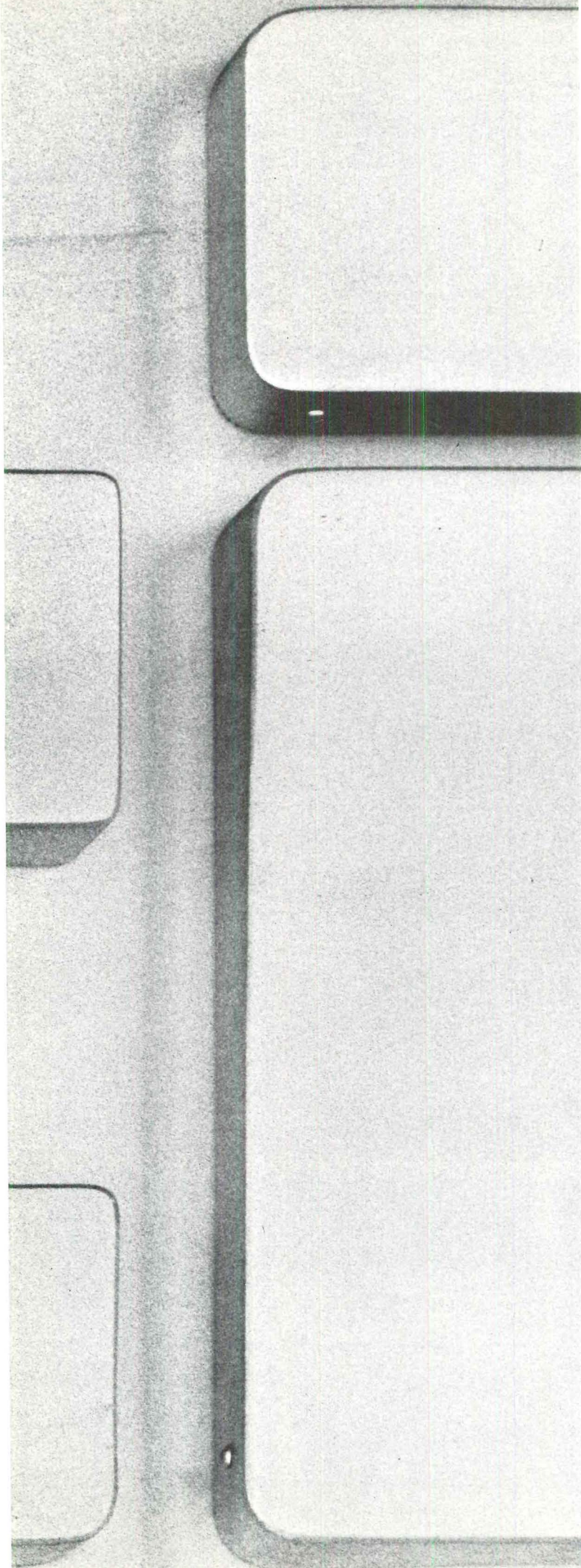
The larger red-orange sphere measures seven feet in diameter. Both are anchored to the bottom of a pond in Central Park to allow some freedom of movement (and to hinder their being removed by ardent art lovers).

The two spheres, one half the size of the other and each with a cylindrical section removed, are floating somewhat close together, like a mother and child.

Marta Pan has worked closely with architects, including her husband, André Wogenscky. A detail of a wall she sculpted for the Lebanese Defense Ministry in Beirut appeared on our May cover.

continued on page 70



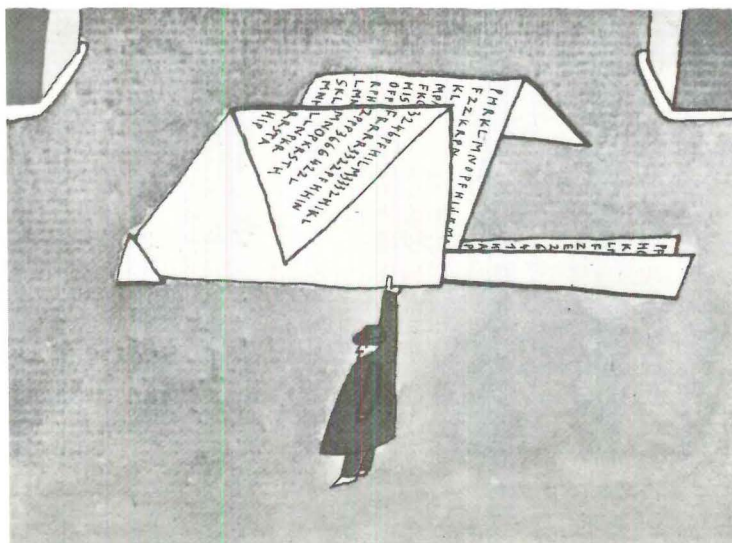
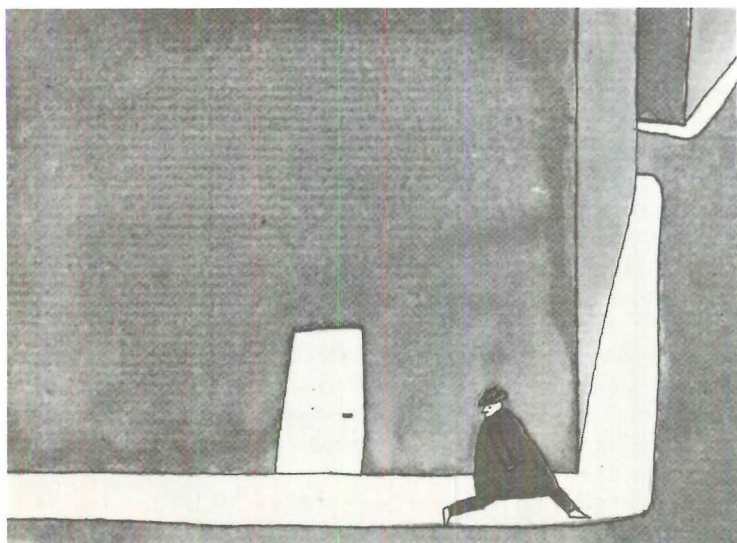
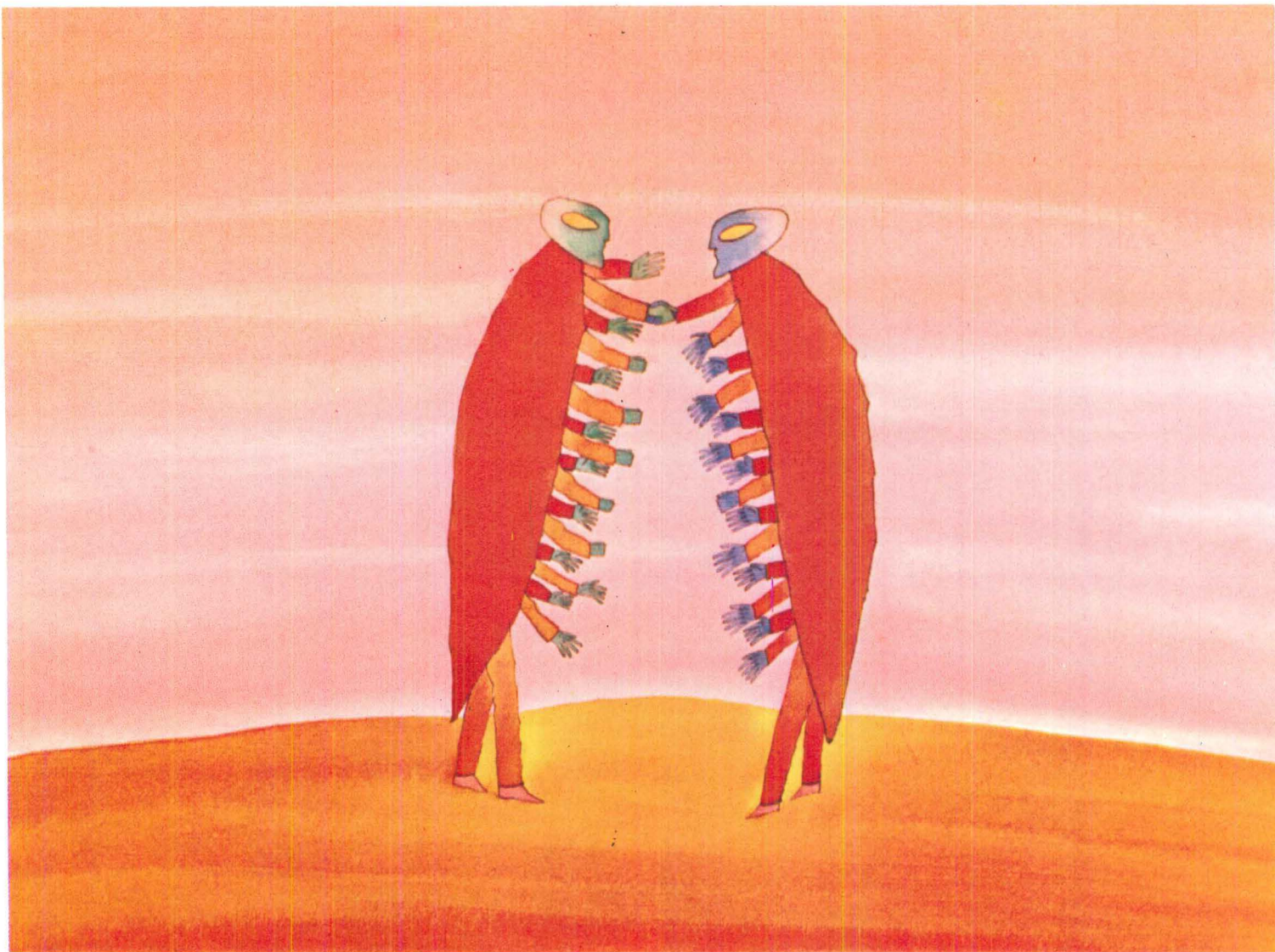


To anyone familiar with western typography of the past 50 years, the aluminum fragment shown at left is immediately and pleasurably recognizable. It is, of course, part of the handsome logo that, unmistakably, spells OLIVETTI on five continents—and, more importantly, spells also excellence in architecture, design, and innumerable other, cultural pursuits.

The Olivetti Corporation is primarily in the business of making and selling business machines: typewriters, calculators, adding machines, microcomputers, computer terminals, office furniture designed to support this hardware, and various other accessories. To make these machines, Olivetti has built some remarkable buildings in which to manufacture, to store and to administer. To sell these machines, Olivetti has commissioned some remarkable showrooms and some exquisite posters and other graphics. And to assure its position in the *avant garde* of Twentieth Century design, Olivetti has retained some of the most remarkable designers of our day: architects like Louis Kahn, Kenzo Tange, James Stirling, Egon Eiermann, and Richard Meier; designers like Marco Zanuso, Gae Aulenti, Mario Bellini, Ettore Sottsass, and Marcello Nizzoli; and graphic artists like Jean Michel Folon, Robert Blechman, Leo Lionni, Hans von Klier, and Giovanni Pintori. In fact, the history of mid-Twentieth Century architecture, graphics, and design could—almost—be written solely in terms of the men and women who, in one way or another, created that elegant image represented by the aluminum fragment reproduced here. And that is quite a tribute to a company primarily concerned with supplying hardware to bureaucrats.

But Olivetti is, in fact, a great deal more. In Italy, where there is no institution comparable to New York's Museum of Modern

Below: one of the illustrations by Jean Michel Folon for the new edition of Franz Kafka's "Metamorphosis," currently being printed by Olivetti. Bottom of page: two other cartoons by Folon, done for a small picture book called "The Message," and commissioned by Olivetti also. Opposite page: three cartoons by Robert Blechman for his book on the Birth of Christ. This book, like other special Olivetti gifts, was done under the art direction of Giorgio Soavi.



Art, Olivetti is not only the ever-present and ever-generous sponsor of the most adventurous exhibitions (and other manifestations) of far-out painting, sculpture, and related, as well as *unrelated* arts; but it is also Italy's ever-present "Cultural Attaché" to any number of countries—like, for example, Japan and the United States—that the Italian authorities had previously tended to overlook.

To Americans, the term "corporate image" immediately conjures up IBM and that corporation's excellent record in architecture and design.

Good enough. But one seriously doubts that IBM would ever consider commissioning and publishing a newly illustrated edition of Franz Kafka's "Metamorphosis." Olivetti is about to do just that—hard on the heels of several other, beautiful books, including a stunning volume of lyrical photographs by Lord Snowdon depicting "una immagine di Venezia." And one seriously doubts that the admirable gents at IBM would ever consider commissioning a comic strip to illustrate Chapter Two (ff.) of The Gospel According to St. Matthew. But Olivetti did just that—and only God (or St. Matthew) knows how many typewriters were sold by that beautiful piece of book-making! And, with all due respect for IBM's truly impressive Chairman Thomas Watson, Jr., it is highly unlikely that one might find, in the ranks of IBM's clean-cut management, such inspired artists as Giorgio Soavi (whose designs for Olivetti include what can only be described as a quivering paper weight of dazzling instability); or such improbable intellectuals as Dr. Renzo Zorzi, who came to Olivetti from the editorship of a small, distinguished avant garde journal on cultural affairs (*COMMUNITA*—still edited by Zorzi and still published with Olivetti's support); and who is, today, the overall design director for all of Olivetti's world-wide activities, and the man who decided, among many other things, that a great, American cartoonist be retained to depict the story of the Nativity.

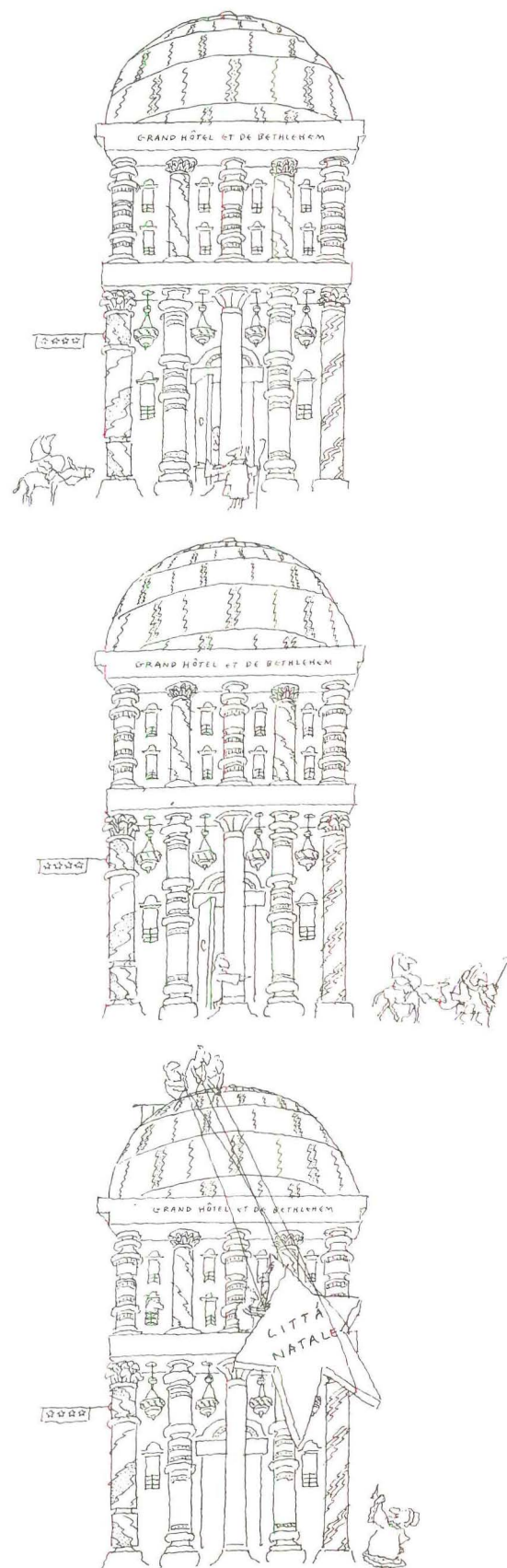
A few weeks ago, Dr. Zorzi was sitting next to the driver of an almost supersonic Mercedes that was barreling down the autostrada from Milan to Ivrea, where most of Olivetti's world-wide operations have al-

ways been centered. The interviewer was safely strapped into the back seat of the Mercedes, but Zorzi was relaxing up front, reading a small volume of poetry. "Dr. Zorzi," he was interrupted, rather rudely, "How many typewriters do you sell with all this culture?" Zorzi, who is rather unflappable, looked up a little surprised, as if so crass a question had never occurred to him or to his associates. "I would like to answer your question in writing," he said, and returned to his little volume of verses. The following is Dr. Zorzi's considered reply, reproduced in part:

"Olivetti's activities in these cultural areas are part of our sense of a corporate responsibility that transcends the search for profits... It seems to me incontestable that this macroscopic entity—the modern corporate giant—creates all sorts of problems of territorial organization, of human dislocation, of often deep and long-lasting sociological change, and of economic and physical transformation. And it seems to me, also, that if we assume any degree of responsibility for our actions, we must face their effects, their consequences. These consequences are, above all, cultural.

"An individual can choose to be passive or active; but an industrial corporation has no such choice. It must act. It must make decisions, proceed, change—with full awareness of the end results; whether a territory will be a better or worse place in which to live, whether human relationships and the quality of life will be enriched or impoverished, whether authentic reasons for living will be advanced or undercut. Unless an industrial corporation is aware of the impact it has on the lives and the environments it affects, it will behave like the character in Molière's play who didn't know he was speaking prose." The Olivetti Corporation, through people like Zorzi and the artists, designers and architects who work with him, speaks flawless prose in several languages—and lapses, not infrequently, into poetry. Most of this issue of *PLUS* is proof of that.

"Human life and civilization are global values," Zorzi continued, "and we must operate according to a global culture and a morality that is not simply the morality of profit. Our world is questioning everything, even the most cherished shibboleths; we understand, at last, that the values of the humanistic tradition must become real—not relegated merely to the prefaces to books,

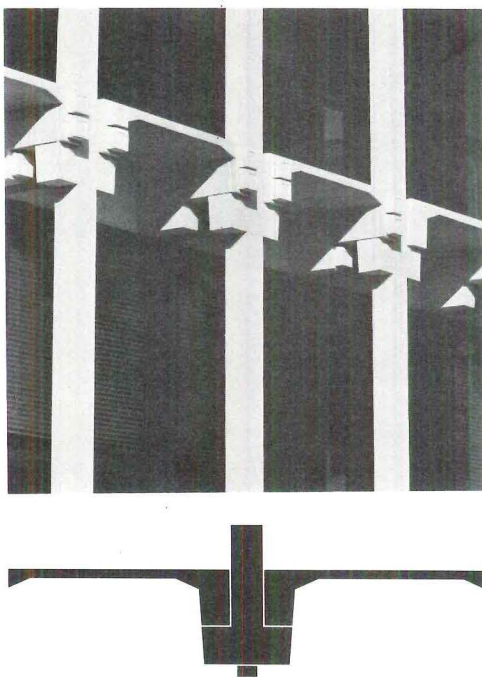


or to after-dinner speeches; we are rapidly arriving at the decisive moment, and a lack of foresight could render fatal the conflicts and tensions that have characterized our world."

What Zorzi seems to suggest is that the kind of enlightened and hugely civilized humanism pursued by the Olivetti Corporation is, conceivably, the only alternative to social, economic, and political conflict on a global scale. It is an interesting concept, and Olivetti seems deadly serious about it. The company's stunning designs are not a pretty, but thin veneer that helps conceal the avarice on the face of a Corporate Giant; these stunning buildings and objects and graphics are only the most visible evidence of the company's total dedication to man's cultural heritage, and the company's total commitment to man's creative future. It is not incidental that the late Dr. Adriano Olivetti, the oldest son of the firm's founder, who took over Olivetti's "publicity" operations in 1929 at the tender age of 28, created an oasis of intellectual freedom in an increasingly oppressive fascist state. (Adriano, a Jew, was arrested when Mussolini became anti-Semitic, and subsequently fled to Switzerland. He returned after the war.) And it is not incidental that when the Italian Parliament recently drafted a Labor's Bill of Rights, the model for this most enlightened document was the routine labor/management situation created, with considerable vision, by Adriano Olivetti and his successors.

So the frosting on the Olivetti cake—which does, admittedly, tend to preoccupy those of us who are architects and designers—seems to be a very genuine expression of much more profound concerns about the human condition.

It is possible, of course, to speak of Ivrea as a "company town" (which it is) whose inhabitants are run by some all-powerful Big Brother. But the fact is that Ivrea, with its highly experimental social, educational, recreational and cultural facilities—many of them built decades ago—is far ahead of most New-Towns-In-Towns built much more recently, and in just about every significant respect. And to anyone who was ever fortunate enough to encounter that charming, rather disheveled Dr. Adriano Olivetti, an intellectual who would much rather spend his time shooting the breeze with a bunch of far out artists than attend



a corporate board meeting, the idea that he or his associates were or are a cabal of Big Brothers is manifestly absurd. He was, conceivably, a Little Brother; and Olivetti's motto, unlike IBM's somewhat calculating THINK, might, under his direction, have become a much more gentle DREAM—in the unlikely event that he ever thought of inventing a corporate motto in the first place.

When Adriano took over Olivetti's publicity operations in 1929, the company had about 600 employees and produced 13,000 "Model-T" vintage typewriters a year. Today, Olivetti has 72,273 employees and sells more than a million typewriters, electronic calculators, accounting machines, microcomputers, data terminals and copiers annually in more than 140 countries.

Such growth is impressive, especially for a corporate giant very considerably dominated by artists, intellectuals, and patrons of the arts. Dr. Renzo Zorzi knows the story better than most:

"Milan, in the 1930s, was the Italian city most sensitive to change and to the new: the most interesting and innovative period of the century, in the wake of the futurist meteor that only a short time before had streaked across our skies. And that artistic world included not only painting and archi-

tecture but graphics and the applied arts. Through the efforts of Adriano Olivetti and of his collaborators who participated in this movement and in the new currents documented in magazines like *Casabella*, *Campo Grafico*, *Quadrante* and *Domus*, Olivetti became a center where ideas that had found their most important practical and theoretical laboratory in the Bauhaus could be absorbed, applied and diffused.

"The presence of such a center was particularly important for the Milanese rationalist school. Renato Zveterevich who, in 1936, was to be one of the signers of the 'program letter' for a renewal of Italian 'typographics' and graphics, was, from 1931, chief of Olivetti's Office of Development and Publicity. With him worked Xanti Schawinsky, Persico, Nizzoli, the architects Figini & Pollini, Bruno Munari and Luigi Veronesi, the printer Modiano, the Boggeri atelier, and the architects Banfi, Belgiojoso, Peressuti and Rogers (B.B.P.R.).

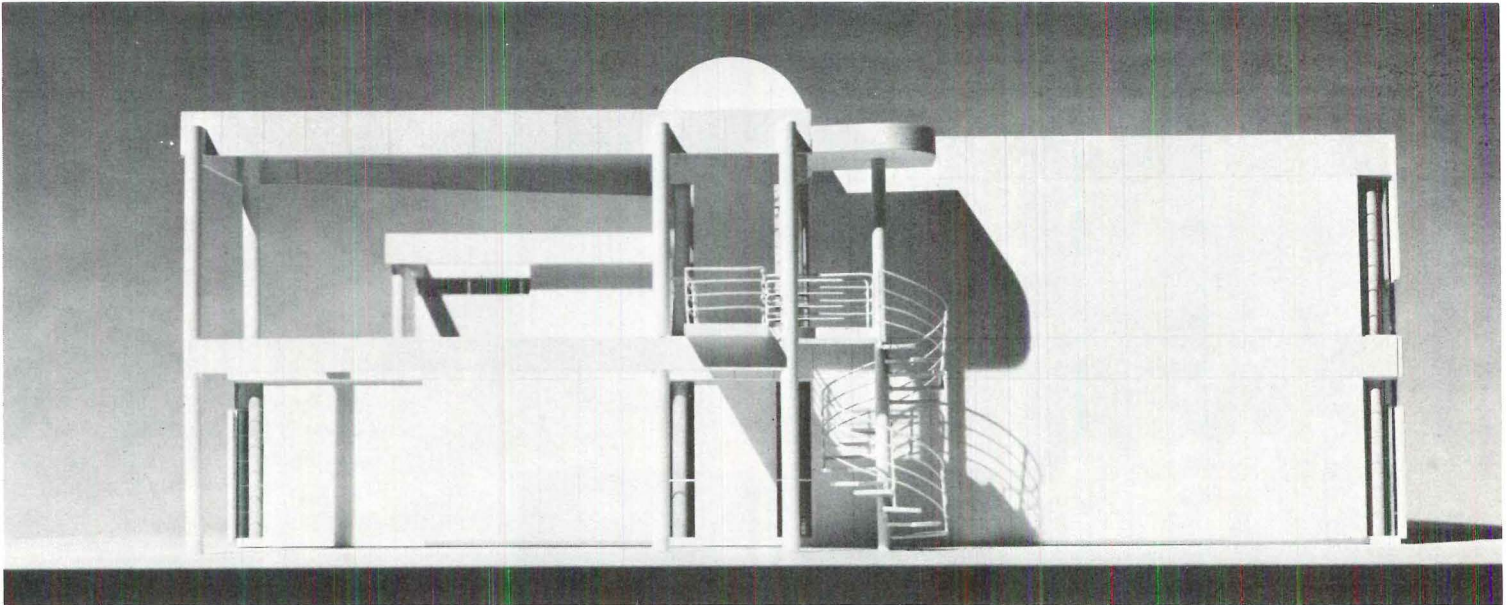
"In 1935, Olivetti brought out the *Studio 42*, a typewriter whose design was, for the first time, not the work only of mechanical engineers but, as well, of the painter Schawinsky and of the architects Figini & Pollini. Figini & Pollini began, in 1936, the rebuilding of the factory in Ivrea which was to be completed in various phases in the late post World War II period. In 1936, too, studies were undertaken for the *Regulatory Plan for the Valley of Aosta*, the first Italian example of a scientific regional plan.

"Adriano Olivetti had promoted these studies; but they were continued by a group of architects including Banfi, Belgiojoso, Bottoni, Figini, Peressuti and Rogers and by the engineers Lauro and Renato Zveterevich. In 1937 Figini & Pollini were commissioned to project an Olivetti 'workers' village' at Ivrea and, in 1938, Bottoni and Pucci planned the Massa factory, later destroyed in the course of the war . . .

"After World War II, Marcello Nizzoli became Olivetti's product designer. He is the designer of the *Lexikon* typewriter, the *Divisumma 14*, a printing calculator, and (in 1950) the *Lettera 22* portable typewriter which was chosen, by a jury of a hundred I.I.T.-selected designers as the first of the hundred best-designed objects of the past century . . ."

In the 1950s and 1960s there were also new factories throughout Italy, new build-

New Olivetti branch office building in Florence, by architect Alberto Galardi, is a suspension structure. Details are shown on the opposite page. (For more on this building, see page 48). Below: detail of a prototype branch office building for Olivetti in the U.S., designed for 12 different cities by architect Richard Meier. Bottom of page: apartment structure by architects Gabetti & D'Isola, in Ivrea. The building is a two-story arc, open to a valley on the inside, and buried into a hill on the outer perimeter.



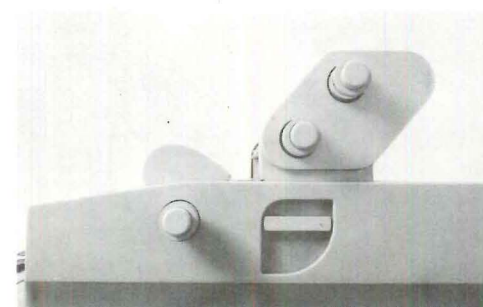
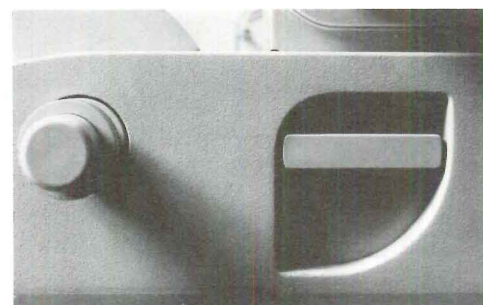
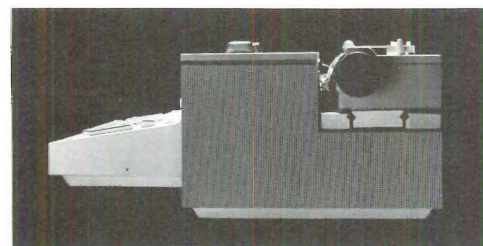
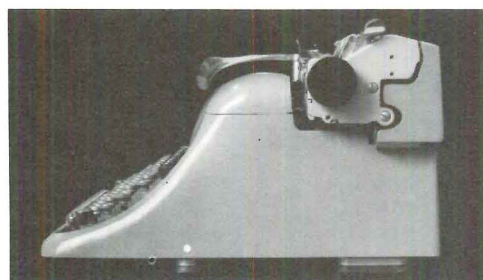
ings in Ivrea, new showrooms (like the B.B.P.R.-designed showroom on Manhattan's Fifth Avenue) and the new office building on the Via Clerici, in Milan, by Nizzoli, Fiocchi, and Bernasconi.

In 1957, Marco Zanuso designed the new Brazilian factory in São Paulo—and others, like Leo Lionni, Giorgio Cavaglieri, Figini & Pollini, Carlo Scarpa, Franco Albini, Edoardo Vittoria were designing facilities for Olivetti all over the world. Finally, in this decade, Louis Kahn, Kenzo Tange, Egon Eiermann, James Stirling, Edward Cullinan and Cappai & Mainardis have designed and built new facilities from Tokyo to Frankfurt. (Many of these are described elsewhere in this issue.)

In the area of industrial design, Ettore Sottsass and Mario Bellini have recently been most active; and in graphic design, Giorgio Soavi plans Olivetti's art publications, etchings, lithographies, multiples and sculptures by artists from Ben Shahn to Pomodoro.

The Olivetti Corporation has come quite a way since Dr. Adriano Olivetti infused it with his own vision of corporate responsibility and cultural action. In certain areas, particularly in architecture, Olivetti continues to lead, rather than follow the *avant garde*.

Those who are currently pre-occupied with technological "breakthroughs"—perhaps the prime pre-occupation of the 1970s—will find some of the new Olivetti structures among the most daring experiments in new building technology: Jim Stirling's British Olivetti Training Centre at Haslemere, in Surrey, is an extraordinarily adventurous experiment in prefabrication with plastic sandwich panels; Alberto Galardi's new office building in Florence is a polished exercise in suspension structures (this one using prestressed reinforced concrete); Egon Eiermann's double-towers in Frankfurt (Eiermann's final work before his death) are, among other things, a remarkable re-interpretation of the modern curtain wall—this one more curtain than wall; Marco Zanuso's, Kenzo Tange's, and Louis Kahn's recent buildings for Olivetti are convincing examples of the integration and expression of service as well as structural grids; and the marvelously zany community center designed for Ivrea by Cappai



& Mainardis, and now nearing completion, is a poetic summing up of all the above and more. It has prefabbed capsules, Archigram-type tubes, pseudo-space technology, wildly mixed uses, and even historic preservation—a Roman street discovered during excavations, and preserved in the building's spacious basement. (Olivetti is also building inflatables and underground buildings and spaceframes and everything else a technocrat's heart may desire.)

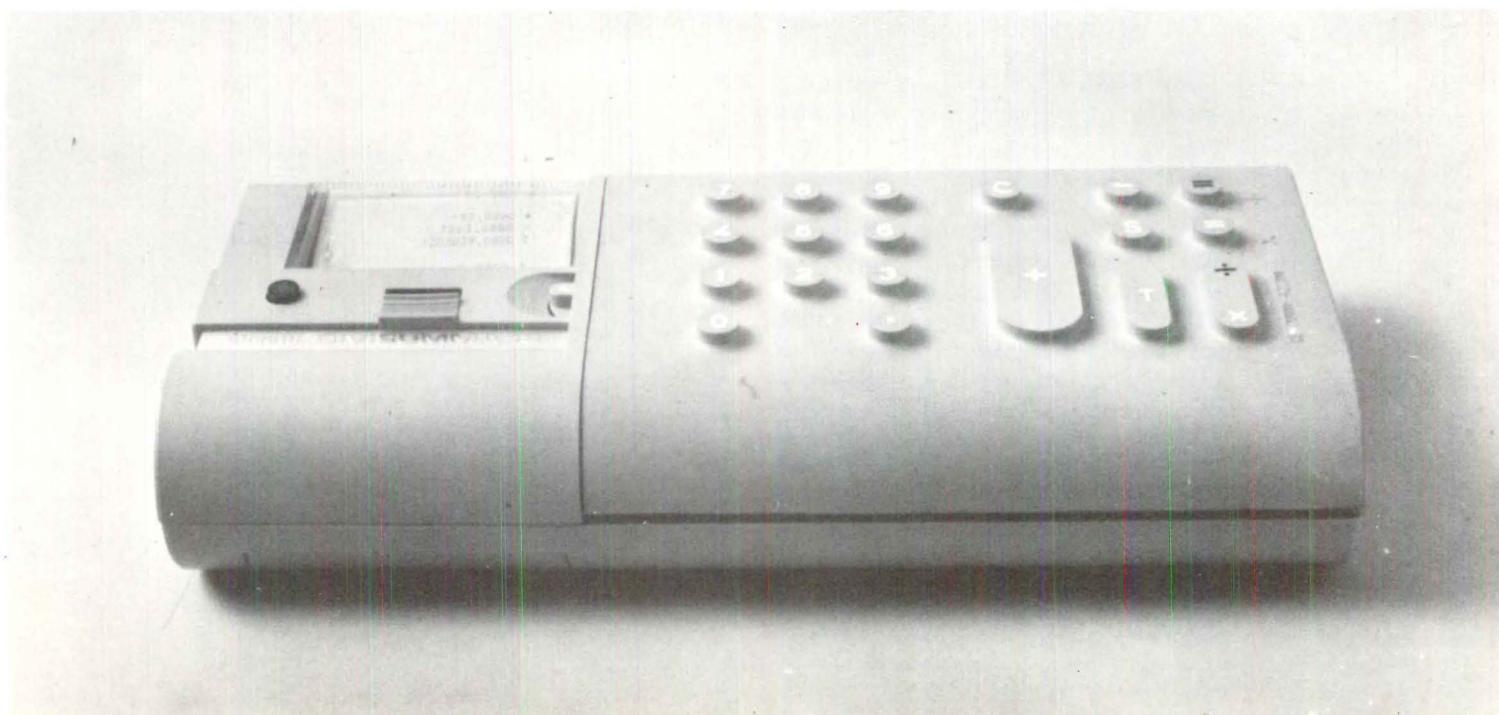
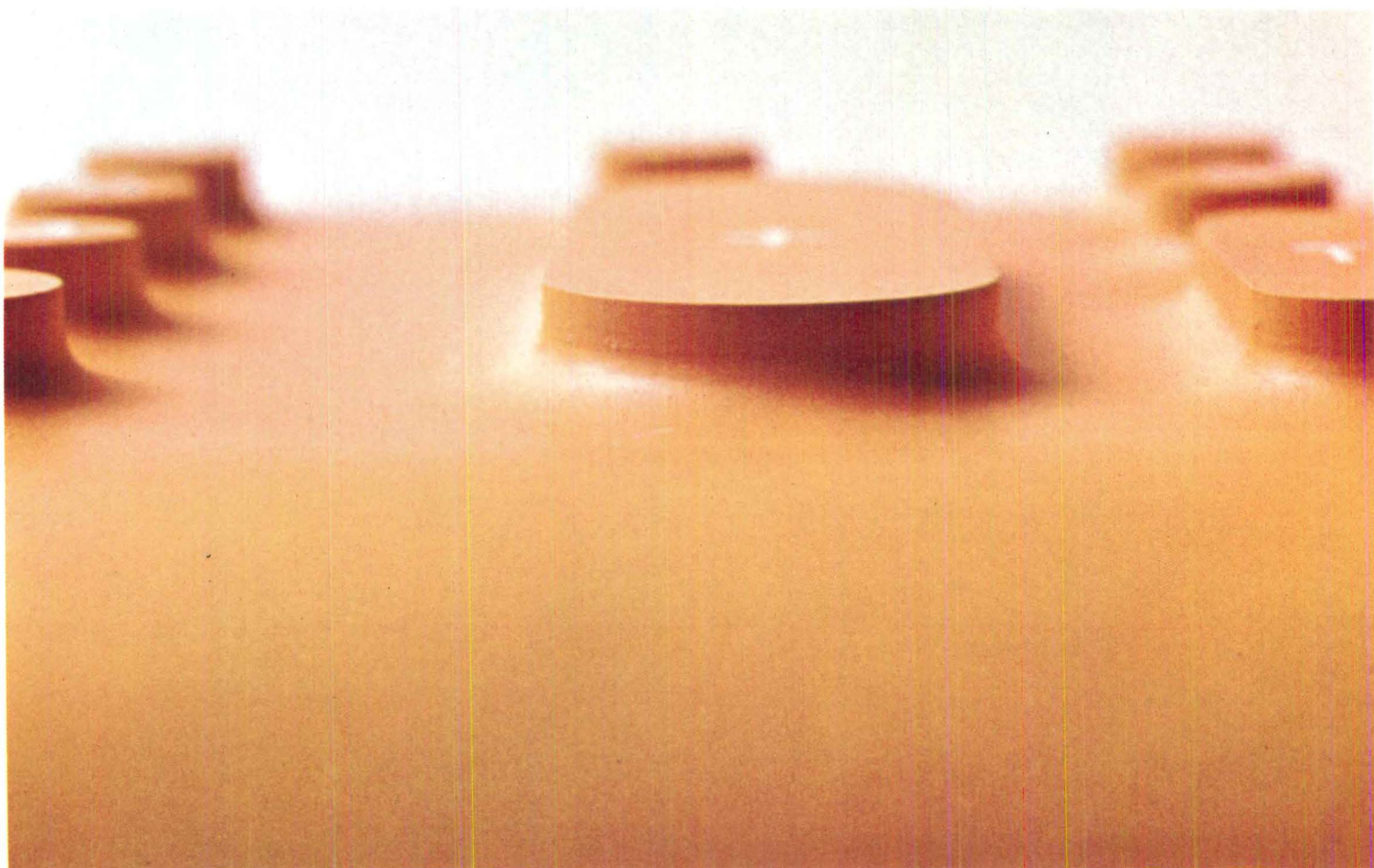
In industrial design, Olivetti's continued leadership of the *avant garde* is based on technology as much as taste. Briefly jolted by certain advances in Japan and the U.S., Olivetti has rallied and is back to designing and making typewriters, calculators and computers more elegant than any being produced by the growing competition. In the new furniture *Sistema 45*, Sottsass has come up with what is probably the first system of its kind specifically designed for an electronic office. And in all other areas of design—graphics, especially—Olivetti continues to commission the best artists available, anywhere. And the results show it.

"We are an Italian industry," Zorzi said recently, "but we work all over the world. We come into contact with many cultures, many ways of living that are different and interesting. We have been enriched in knowledge by all these countries and, towards them all, we have tried to bring some of the things that are peculiarly Italian—a sense of our civilization and the best of its artistic and moral expression."

Well, to return to the crass question posed earlier: does it or doesn't it pay off? It does. "A survey recently completed in Japan," Zorzi says, "shows that Olivetti is among the first fifteen firms that young Japanese turn to in search of a career. And this only twelve years after Olivetti established its 'presence' in that country! Certainly the qualities of our products and our organization had something to do with this; but it is also due to the many cultural initiatives we have undertaken in Japan—from commissioning Ichikawa to make films for us, to commissioning Tange to design our buildings."

But the fact that culture does pay off for Olivetti, at least in peripheral ways, is not the primary reason that motivates Adriano's heirs. "Things are to be done in a certain way because it is our duty to do them that way," Zorzi says. "The rest, to use an evangelical phrase, 'will be added unto you.'"

Some of the past and present business machines manufactured by Olivetti. Opposite page: an "undesigned" early office typewriter; next, Marcello Nizzoli's famous Lexikon 80, designed in 1946; below that, the more angular Praxis 48, designed by Ettore Sottsass Jr. in 1966; and, finally, the Auditronic 770, an electronic minicomputer, designed in 1969 by Mario Bellini in collaboration with Derk Van De Vries and Sandro Pasqui. Below, the soft-touch Divisumma 18 portable electric printing calculator, designed by Mario Bellini and just put into production. The detail shows the rubber nipples that have replaced conventional keys. Photographs: George Cserna p. 20, p. 26, second.



Kenzo Tange

The Metabolist tradition has strongly influenced this Olivetti complex near Tokyo

Given a site on the floodplain of the Tsurumi River in Yokohama, Kenzo Tange and his associates have turned the problem of flooding to their design advantage. They have also realized one of the most substantial examples to date of the Metabolist approach, a set of concepts developed in Japan, dedicated to architectural expression of the potential for growth and change in buildings.

Having raised the main floor of the Warehouse one flight above grade, they then provided an enclosed spine on that level that punches through the adjacent Technical Center (opposite) in anticipation of construction of a matching warehouse on the east. Forklift trucks use this passage to bring machines from the Warehouse to a workshop in the Technical Center for adjustment and repair. Above it, a corridor for employees runs between buildings and it is also used for spare parts storage. The vehicular tube continues right through the tall lobby of the Technical Center (right) punctuated by a few porthole windows that look into the space. Thus the noise and confusion of the warehousing operation is separated from the quiet of the lobby and the adjacent employees' cafeteria even though they are juxtaposed spatially.

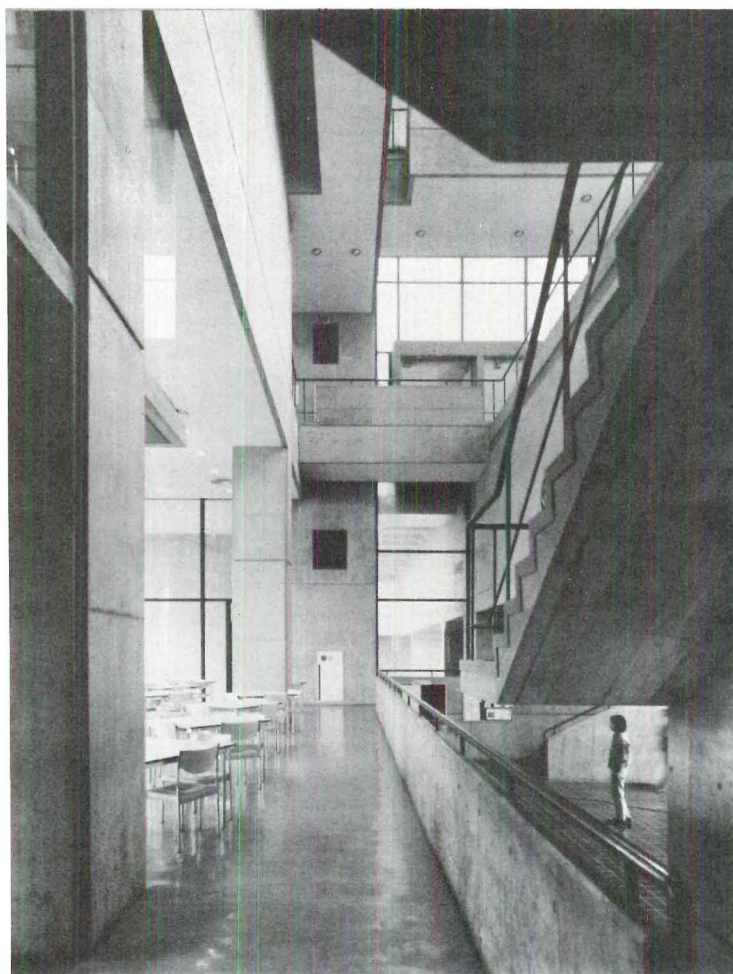
In fact, the two structures are quite different, each responding to its own program. Because the Technical Center is the place where the Japanese employees of Olivetti receive special training, the architects have organized the spaces vertically around a monumental four-story entrance hall. In their words, "Despite the strong technical function of the center, we did not ignore the fact that the space is basically for people." On the top floor, where the educational facilities are located, there is a roof garden. The Warehouse, on the other hand, is essentially horizontal because material-handling operations predominate. It has a steel roof framing system although its exterior is of reinforced concrete as is the Technical Center. But human considerations are not ignored in the Warehouse either. The elements on the Warehouse roof that look like jet engines (pages 32-33) are intake grilles which distribute air evenly across the width of the building through a series of nozzles. A continuous canted skylight runs along each side of the ventilator tubes.

To accommodate Olivetti's desire for easy expansion, two modes of growth are provided by Tange's scheme. The present Warehouse can be extended horizontally toward the river bank, effectively doubling its size. The second warehouse would probably then be built when growth of Olivetti's operations require it.

As it is, the Technical Center is the second stage of expansion because the Warehouse was completed in March, 1970 and the Technical Center in May, 1972. Unfortunately, when the flanking warehouse is built much of the visual drama of the present complex will be lost. The vigorous asymmetry of the tower and lower Warehouse, heightened by the vehicular tube thrusting from the Center's east elevation, will be replaced by a more static, classical composition of dominant central form with subordinate wings to each side.

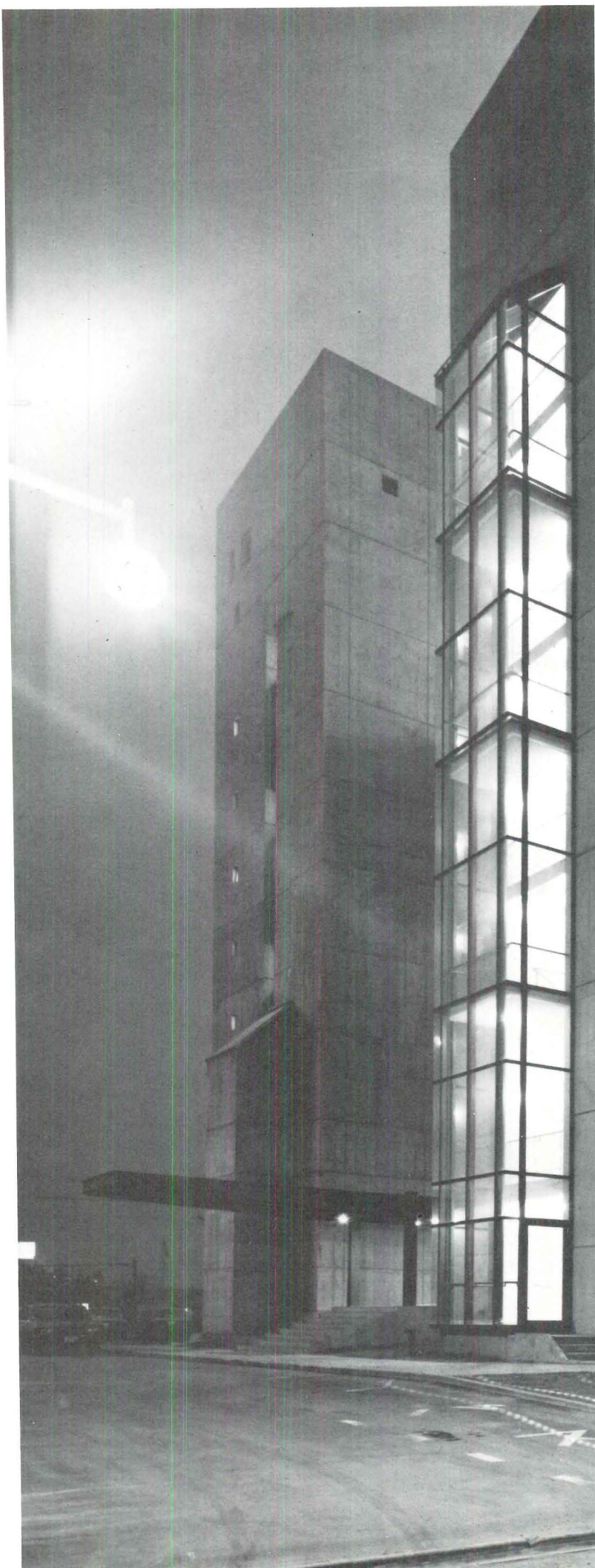
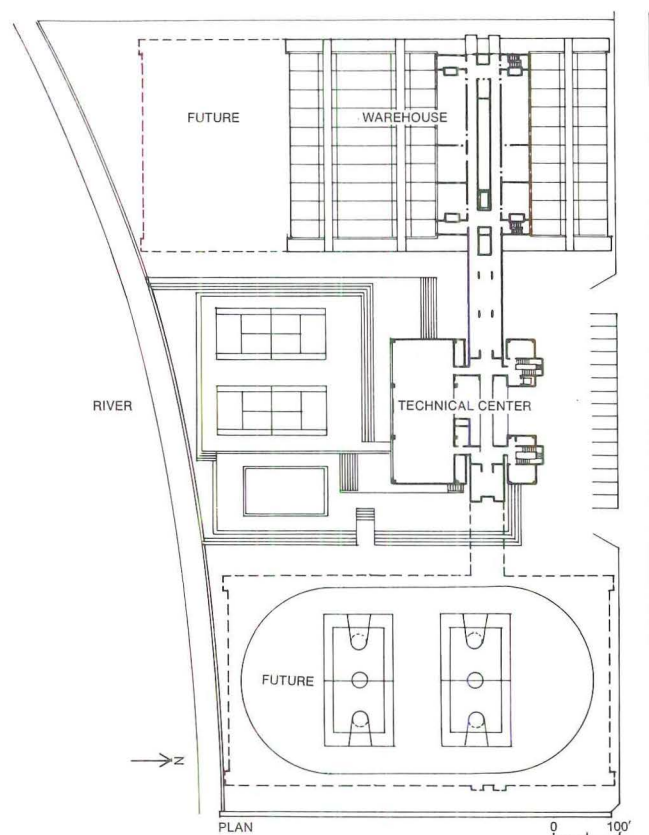
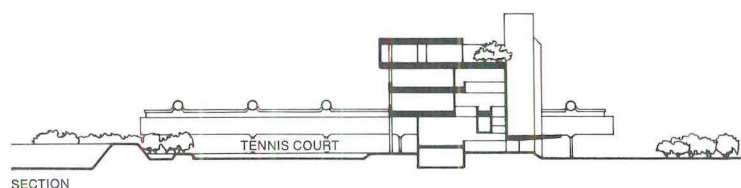
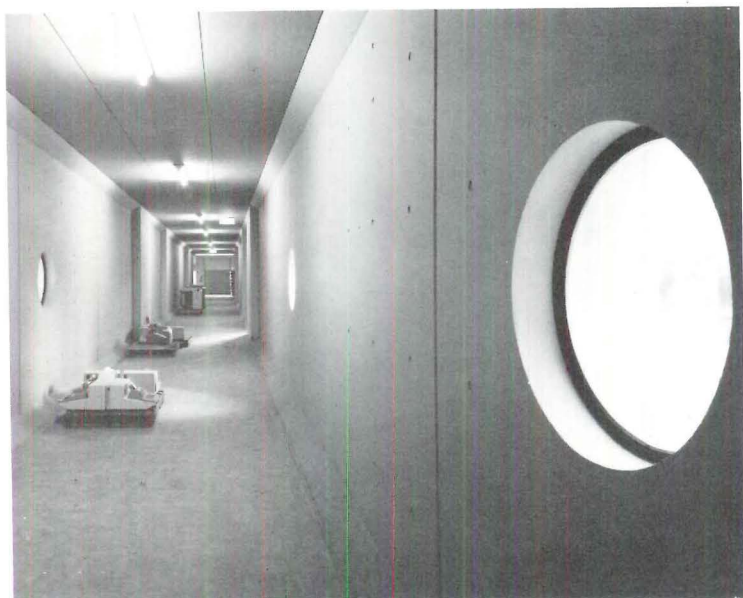
Facts and Figures

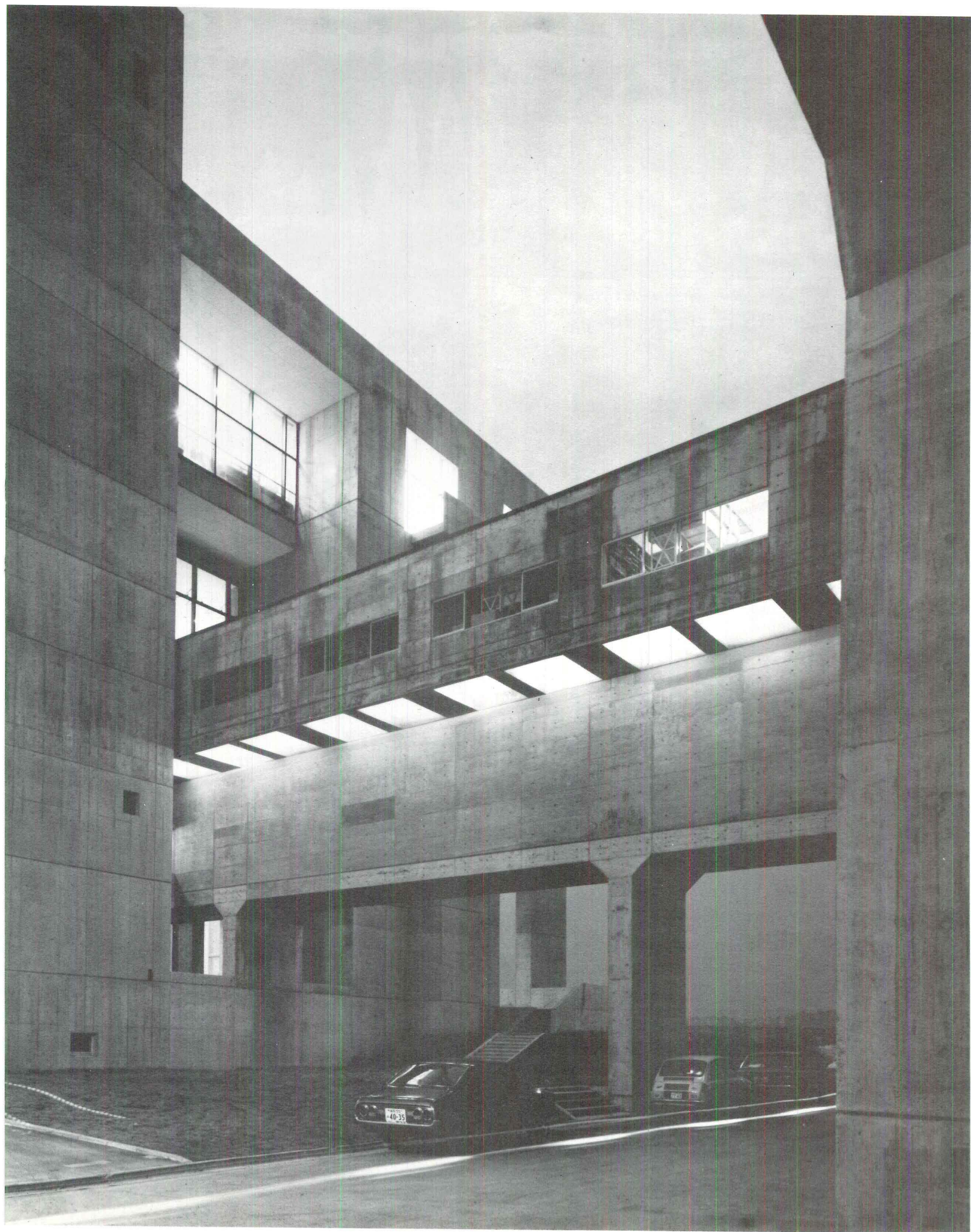
Olivetti Warehouse and Technical Center, Yokohama, Japan. Architects: Kenzo Tange and URTEC (Hiroshi Kimura, Jun Ninomiya, Takae Shoji). Engineers: Takumi Orimoto and Engineers (structural); Peter T. Morimura and Engineers (mechanical). Contractor: Takenaka Construction Co., Ltd. Photographs: Man Fujita.



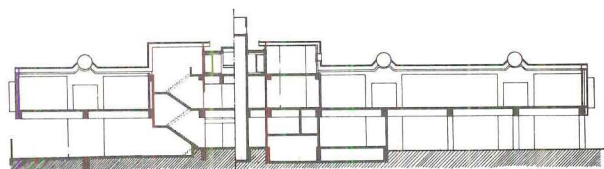


The Olivetti Technical Center, second stage of a complex near Tokyo, includes educational facilities for all Japanese employees, workshops, cafeteria and other recreational spaces. A two-level circulation spine connects it to the Warehouse, the lower passage (below) reserved for forklift trucks which shuttle machines from Warehouse to workshop. General pedestrian circulation is on the upper level.

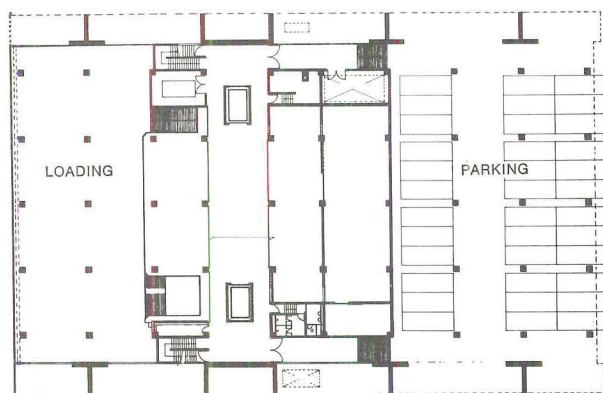




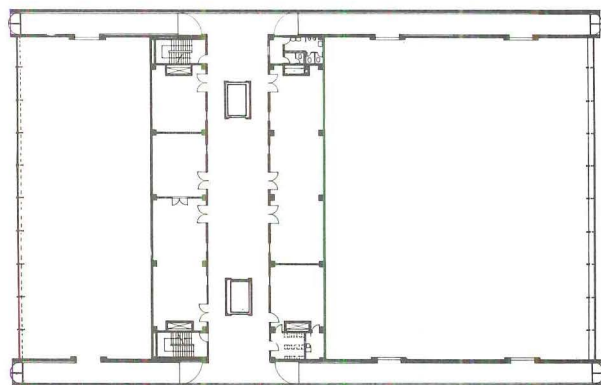
The Olivetti Warehouse, shown at right before the Technical Center was built, has its main floor one story above the flood-plain. The beginnings of the pedestrian walkways sprout from the top floor as do round ventilation tubes which distribute air across the width of the building. The steel roof structure also includes continuous skylights either side of the tubes.



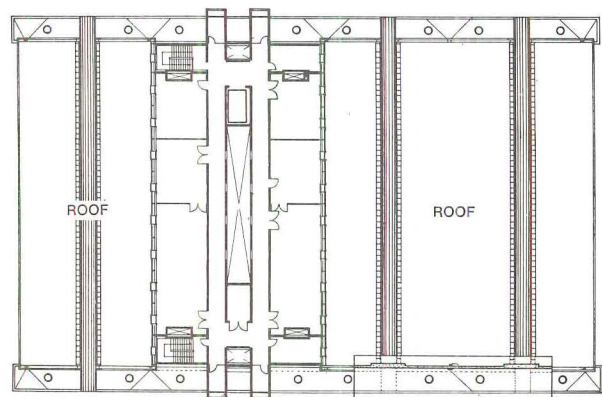
SECTION



GROUND LEVEL



WAREHOUSE LEVEL



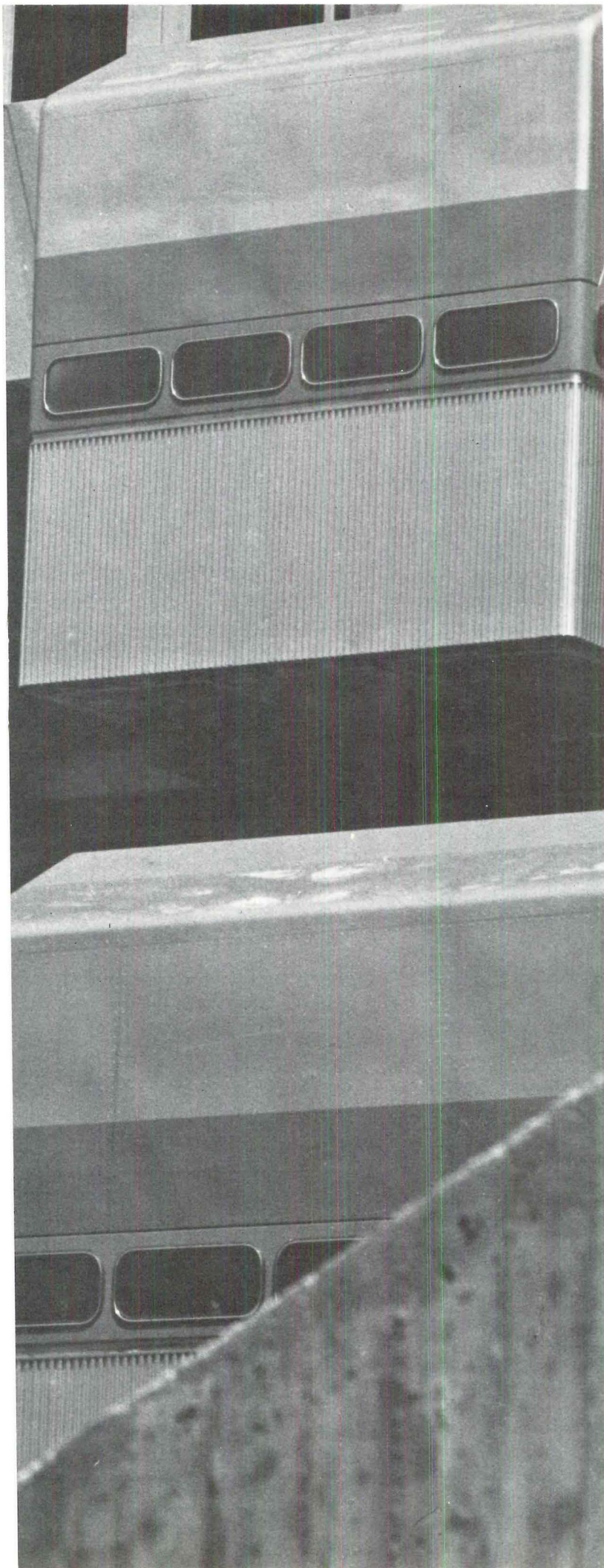
OFFICE LEVEL

0 50'









Cappai and Mainardis

Capsulated building for Olivetti employees in Ivrea is a beehive of many diverse activities

In the center of Ivrea, the "company town" which houses Olivetti's Italian headquarters and the bulk of its Italian facilities, there is a small park that overlooks the River Dora. Next to this park a slightly incredible, almost science-fiction structure is now nearing completion. It is a structure unlike any other in Ivrea—and not very much like any other structure to be found anywhere else in the world.

For want of a better term, the people at Olivetti refer to this structure as a "cultural center." The building is, in fact, a multi-use complex that contains, among other things, 55 mini-apartments in aluminum capsules (left), with raisable hoods that turn one end of each mini-apartment into a balcony; it also contains a restaurant seating 300, a 600-seat movie theater, a garage, a 25-meter swimming pool, a gymnasium, a sauna, two bars, a series of indoor shopping streets on several levels (connected by ramps), and a portion of a Roman and Early Medieval street (probably a market) that was discovered during excavations, and has been carefully restored. It is a building that has got something for everybody—and a great deal for those who have long been intrigued by technological adventures.

The reason Olivetti decided to commission this extraordinary structure is that the company wanted to attract and hold talented, young people who might be bored living in a rather small, provincial center, with little of the excitement of a metropolis like Milan or Rome. Ivrea has grown rather slowly, and half the men and women who work in Olivetti's factories still live outside town, in nearby villages. Meanwhile, the center of Ivrea seemed to lack "certain facilities and services—commercial, cultural, and recreational" (according to the architects) which are desired by people who have come here from larger cities. "For their amusement and for their more important purchases," the architects say, "these people go to the Via Roma in nearby Turin; they go to the theater in Milan; and to the swimming pool in Biella, farther north."

So the new building is, in its intentions, a "cultural center"—a place in which to live, play, relax, shop; it is a kind of diagram, at a fraction of full scale, of an urban megastructure, with all the various facilities and opportunities "plugged into" a multi-level system of indoor streets.

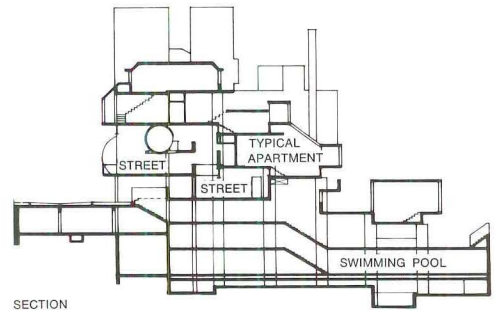
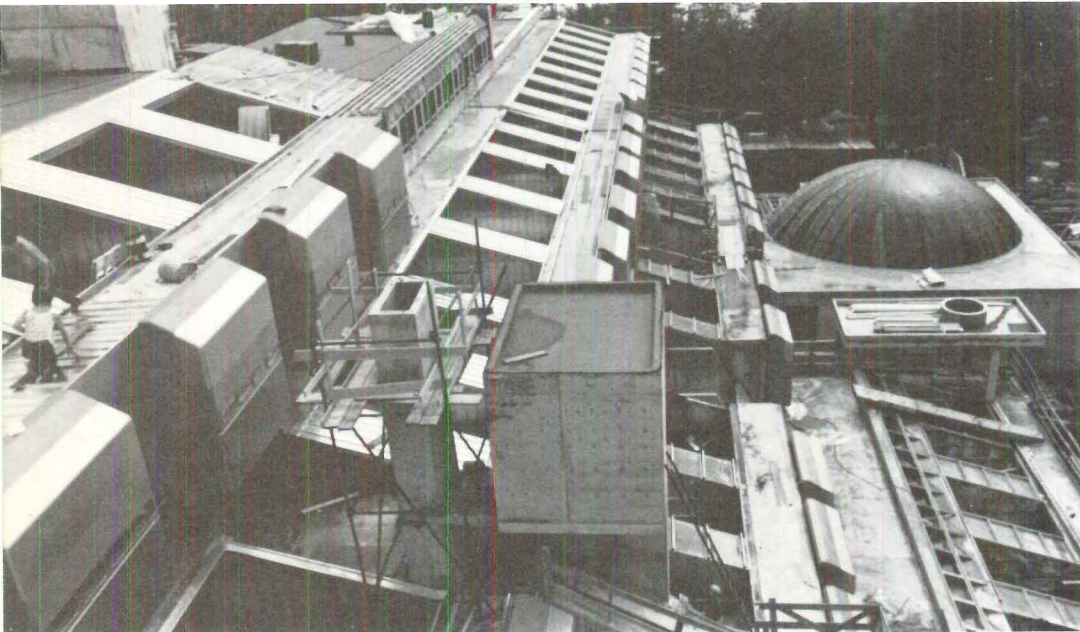
The resulting "ministructure" is at its most delightful in the tiny, capsulated apartments. These measure 10 ft. wide, 36 ft. long, and have four or five separate levels within! Everything is compactly built in: kitchens fold out of a wall here, partitions slide out of a wall there; tables and seats plop down and up; each capsule is a sophisticated adaptation of today's "mobile home"—or a living/sleeping/eating/cleaning/relaxing unit inside one of today's spacecrafts. The capsules are designed primarily for transients—recent arrivals in Ivrea who will move into more permanent quarters before long, or specialists visiting Ivrea to receive advanced training. In all likelihood, no one could endure life in these sleek living-capsules for very long; but for a limited period of time, life in this ministructure is certain to be fun.

Facts and Figures

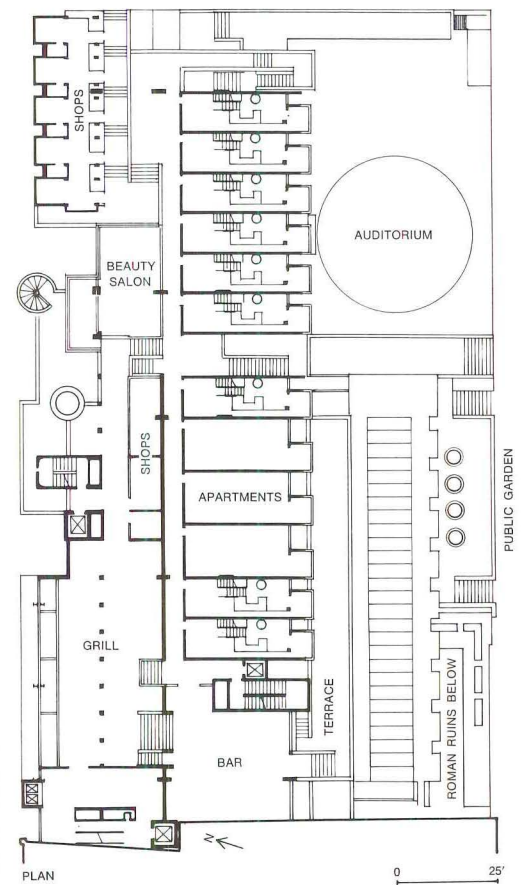
Olivetti Residence and Cultural Center, Ivrea, Italy.

Architects: Cappai and Mainardis.

Section and plan on this page show the many uses plugged into the multi-level spine that is the indoor shopping street. The most striking aspect of the building is the row of 55 living-capsules, with their raisable hoods. The dome visible at top left covers an auditorium equipped for shows, lectures, and debates. The public part of the building, below, includes two bars and a 300-seat restaurant (part of which occupies a long glass-walled veranda, jutting out from the facade, reminiscent of an airplane fuselage). The basement area contains the unexpectedly revealed archaeological ruins; and the building's foundations were rearranged so as not to intrude upon this archaeological find.



SECTION

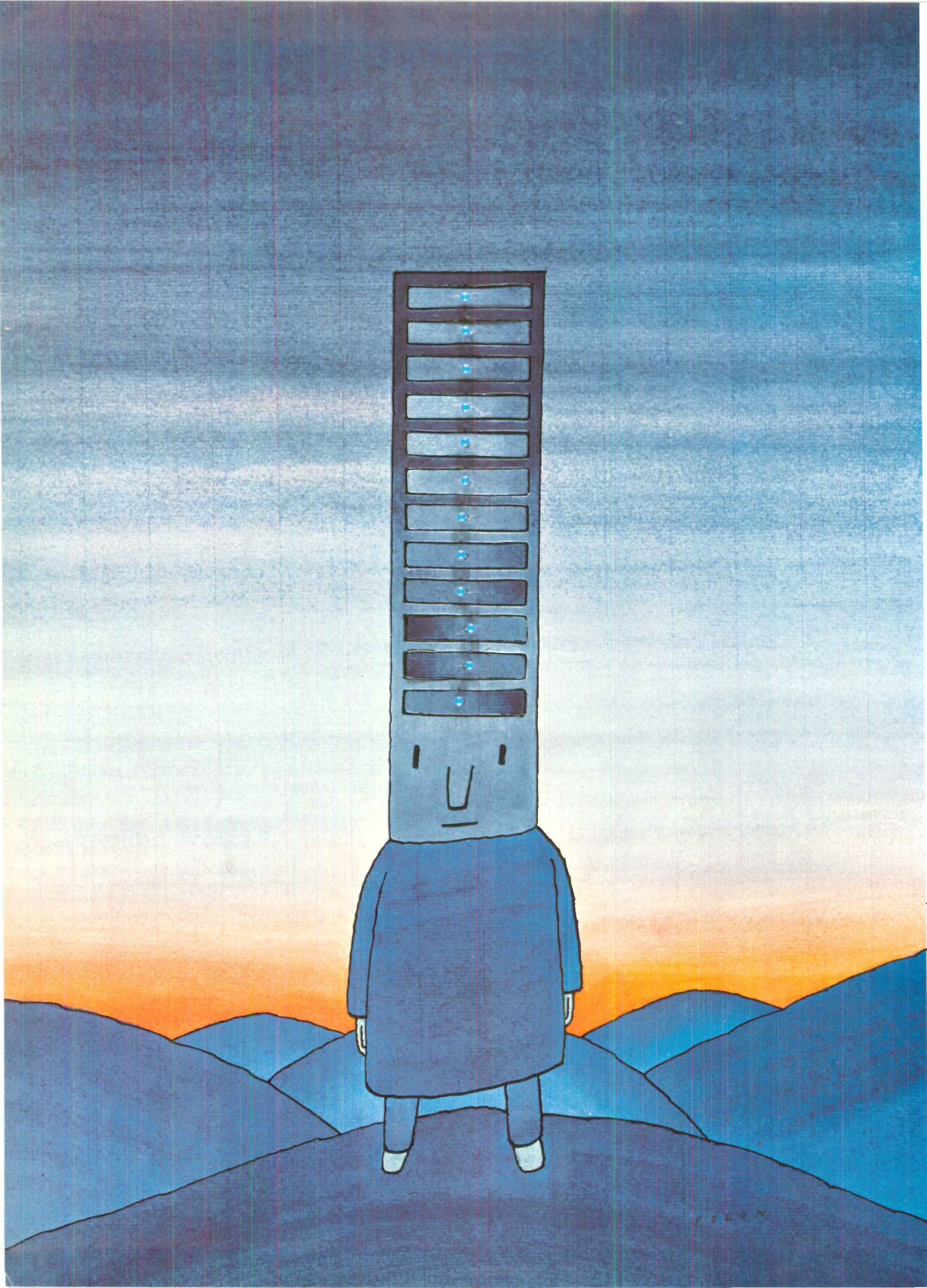


PLAN

0 25'







F. S. L. N.

Leo Lionni

Arrogance—a tool of management

For better or for worse, business has to deal with Art. It must communicate, create symbols, act visually. It may simply buy graphics to vitalize sterile walls, or sculptures to personalize anonymous buildings, or portraits to perpetuate retired presidents. It may even, in deference to obscure arguments, accept an agency recommendation to feature "great paintings" in advertising pages.

Seldom is Art called upon to satisfy a real irrational, visceral urge on the part of business management. It takes men in a position of uncensored authority who have the need and courage to participate in the cultural adventures of their times with significant creative acts, and the talent to transmit the impetus of their vitality to others—a constellation of qualities that can hardly be expected to irradiate from a committee meeting.

Adriano Olivetti was such a man. His utopia was a fully civilized community. His passion, coherently, was architecture and city planning. To express his ethics, his intellectual choices, his sense of his cultural moment and place, he needed the presence of a group of men who would make a cultural dialogue possible and who, within the confines of an industrial operation, would be able to provoke tangible actions and produce visible forms.

From the early thirties these men have proliferated in Ivrea and in Milan not only at the top level but throughout all decision-making centers of the company. Without a single policy memorandum or survey they developed the Olivetti style: a unique corporate image which, in reality, has little if any formal cohesion, and no trademarked esthetics except for a few logotypes. An infinite series of separate individual decisions dictated by personal taste, love, ethics, somehow moulded the miracle of a vital, recognizable presence. Unhampered by the imposition of programmed unity, uncensored, open to all valid adventures, the men at Olivetti, each one on his own terms, echoed Adriano's search for what is good rather than predictably successful. A form of arrogance, no doubt, in a world where one is not supposed to argue with success. Paradoxically Olivetti's arrogance paid off. It was successful.

The variety of artists who have contributed to establish the Olivetti identity over the last forty years spans almost every valid esthetic ideology of our time and includes names which, in different contexts, would be unreconcilable.

An example: the famous Olivetti desk calendar, one of the many brilliant inventions of Olivetti's art director Giorgio Soavi. It took off, modestly, five years ago with an Italian edition of five thousand copies, illustrated by Jean Michel Folon. Since then it has been adorned by Alechinsky, Sutherland, Marini and Rabutzin. Today the agenda is published in seven languages in an edition of fifty thousand copies.

The first aggressive gesture that brought Art within the Olivetti context was in the early '30s at the time of the first Triennales when a Fontana sculpture was placed in the Milan store designed by Marcello Nizzoli. Unfortunately the store and the sculpture have disappeared; but since then Guttuso painted the now famous mural for the Rome showroom, and the works of Viani, Cascella, Nivola, Marotta and others found their place between typewriters and calculators on display.

Leo Lionni, the painter, designer, graphic artist, writer, now lives in Italy. He was one of the first avant garde artists to work with Adriano Olivetti, later became the Art Director for Fortune magazine in New York, and is a member of the Board of Contributors of Architecture Plus.

Each year Olivetti commissions a dozen or so artists to produce original prints, mostly lithographs, to be used as presents for VIPs. The subjects are totally unrelated to Olivetti products. Many of the artists are young Italian painters but the names include such celebrities as Ben Shahn, Delvaux, Sutherland, Tamayo, Alechinsky, De Chirico.

Objects have been created by Munari, Pomodoro, Del Pezzo, Mari and by Giorgio Soavi himself, who likes to keep his fingers in the pie. Cartier-Bresson, Snowdon, Mulas, Shulthess and other photographers of integrity have focused their lenses on subjects that range from the Olivetti factory in Naples to the Venice fog. Kon Ichikawa was asked to do a documentary on Kyoto, and closer to the cash register but equally adventurous Folon, Blechman and Magri made animated cartoons with greater emphasis on visual fun than on the efficiency of Olivetti machines.

And then, of course, there is the immense graphic effort that includes practically every truly creative artist in the field.

It is not surprising that after some forty years of visual expression, from architecture to product design, from graphics to gifts, Olivetti looks at itself now and then—articulates its identity through publications and exhibitions and absolves cultural obligations that to most companies would seem absurdly gratuitous. New Yorkers may remember the famous Mattioli collection or the Florentine Frescoes. At the Musée des Arts Decoratifs in Paris Olivetti showed the works of Ceroli, Kounellis, Marotta and Pascali (four Italian artists beyond nature). It brought to Europe a large showing of the works of New York's Push Pin Studios. Roy Lichtenstein, Calder, O'Keeffe and Steichen were commissioned to do posters for a campaign against pollution (the Save our Planet campaign).

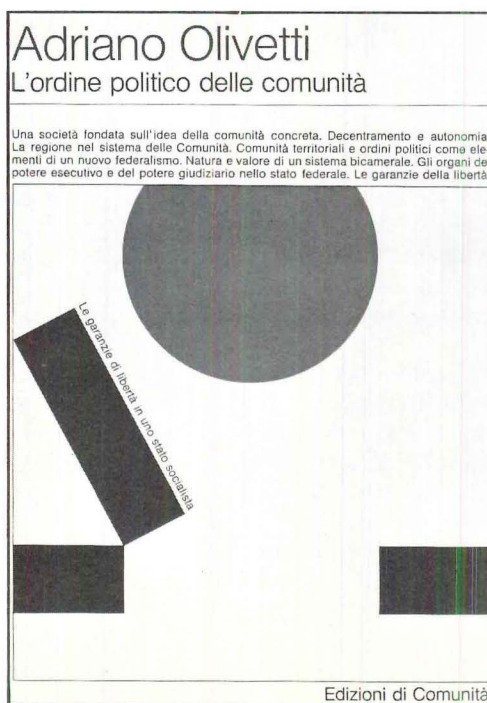
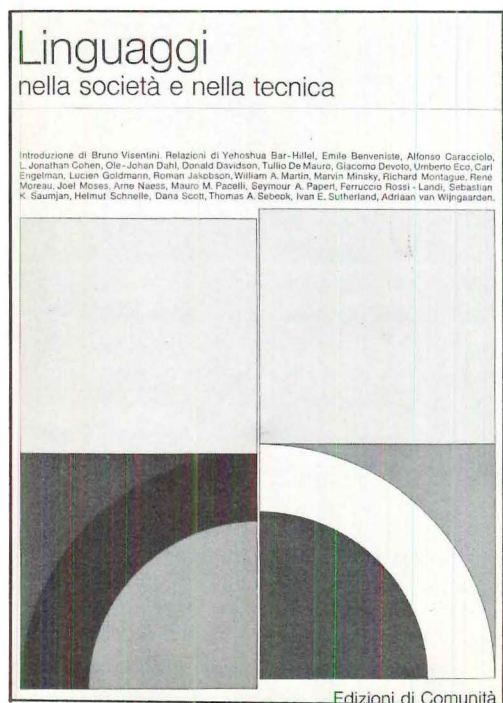
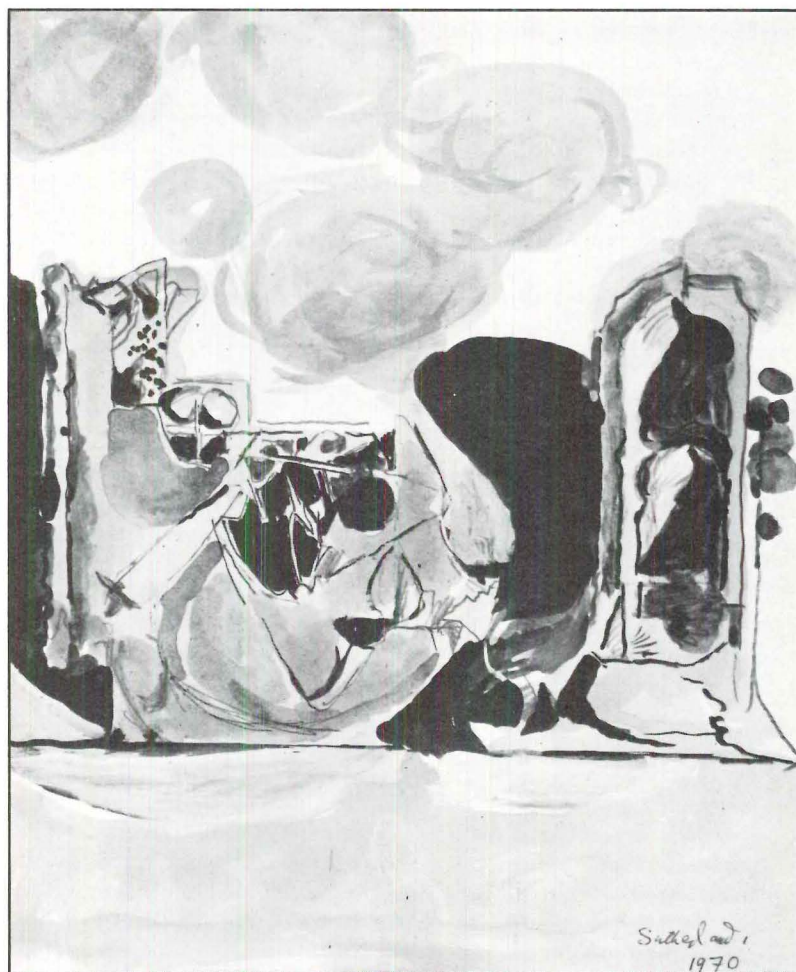
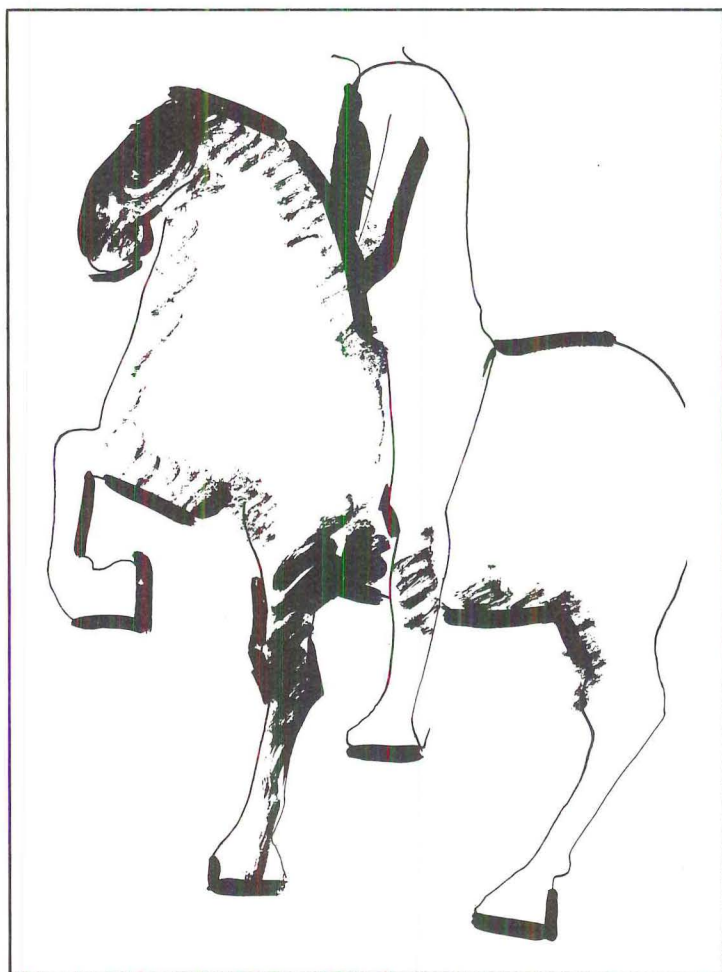
In Japan, where interest in Italian art has exploded with great vehemence in the last years, Olivetti decided to publish a magazine. It is called *Spazio*. In the maze of its Japanese characters it is virtually impossible to discover the picture of a single typewriter or calculator but, significantly, the table of contents of the last issue includes articles on Baroque music, Italian comics, the Tower of Pisa, the poetry of Cesare Pavese and a Japanese roundtable on Renaissance Painting.

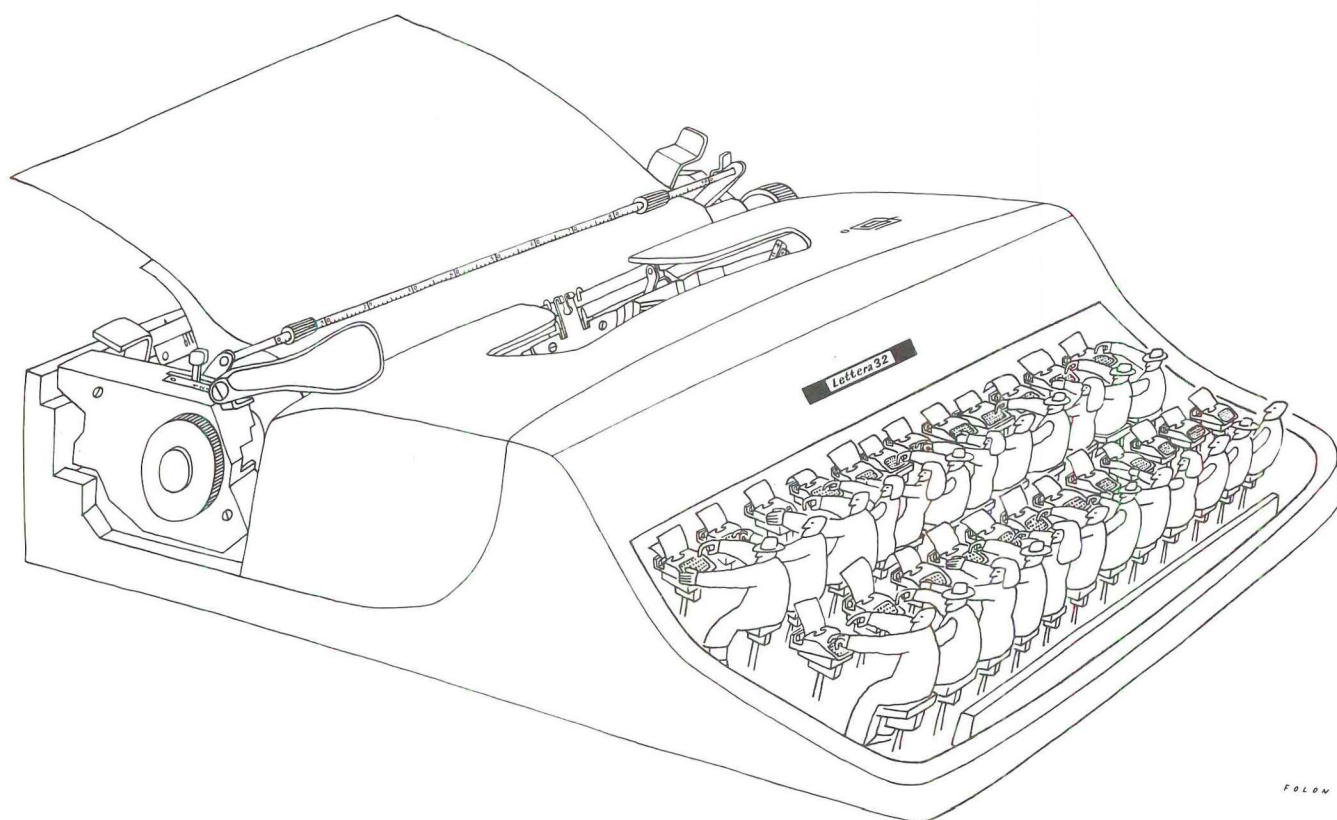
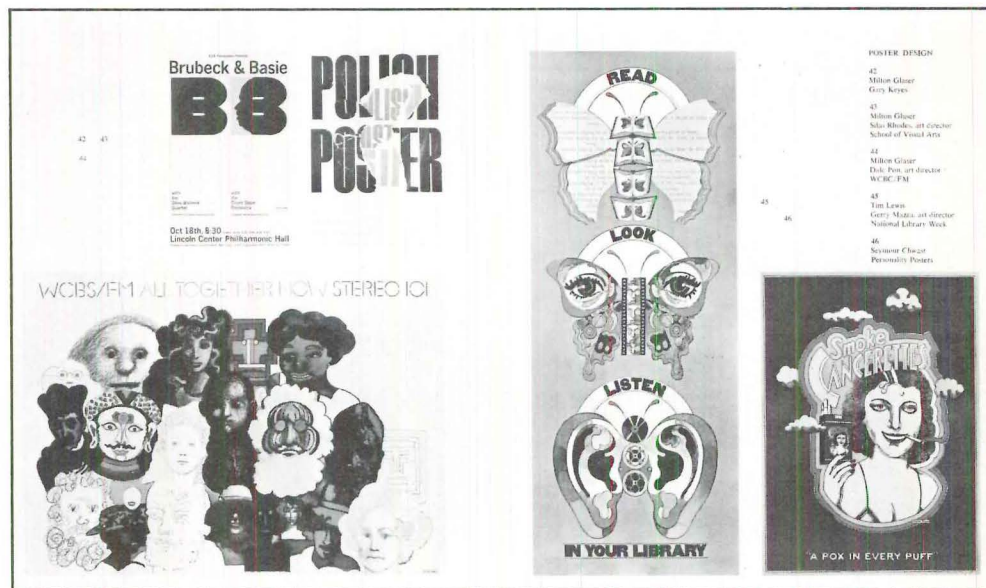
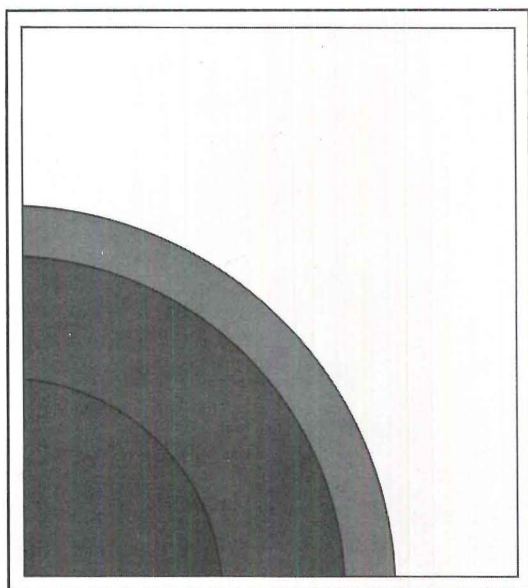
Those who are concerned with the development of public images may ask: what does it all sum up to? I have had occasion to identify, from a distance that neither the 18 pt. logo nor my professional E.S.P. could have bridged, an Olivetti poster. It was clean without being sterile, beautiful without being pretty. Instead of competitive aggressiveness there was a relaxed humor that implied honesty of doubt. It was on top of the wall that separates art from Art, ready to jump. Like everything Olivetti produces it somehow reflected the advancing edges of our culture.

It was visually civilized. Not much, in our manmade landscape, is.

Jean Michel Folon designed this limited edition calendar. Each drawer in the figure's forehead pulls off to reveal a calendar for one month of 1971.

Below: 1972 desk agenda book by artist Marino Marini (left) and 1971 agenda by Graham Sutherland (right), both under art director Giorgio Soavi. Bottom: Covers from the *Comunità* books, edited by Dr. Renzo Zorzi. Opposite, top: "Push Pin Style" a book about the Push Pin (graphic) Studio, in New York City. Below: One of several Olivetti posters by artist Jean Michel Folon commissioned by Giorgio Soavi.

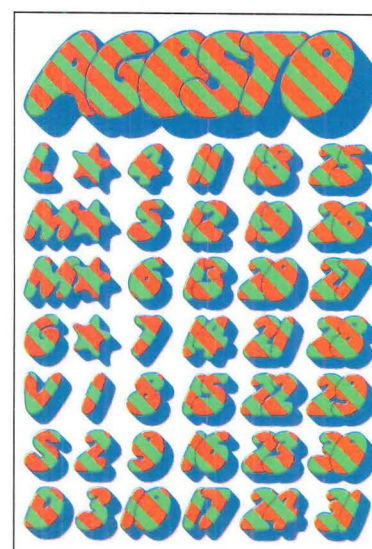
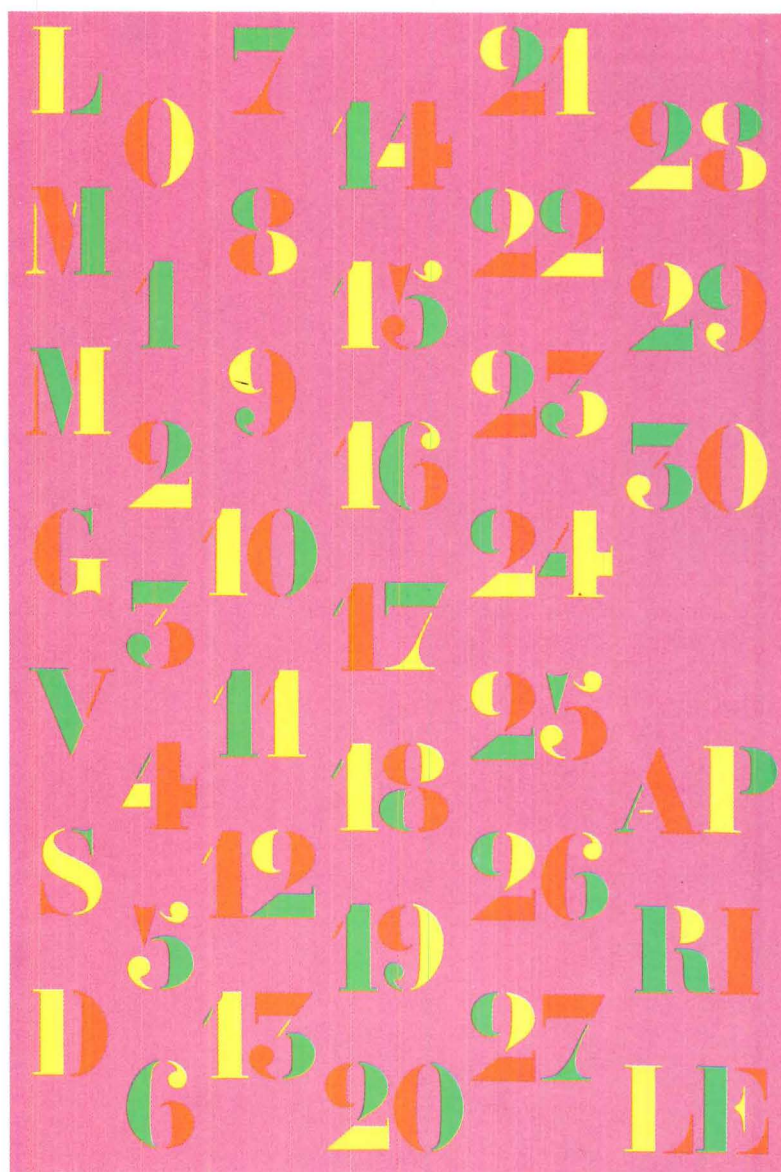




FOLD ON

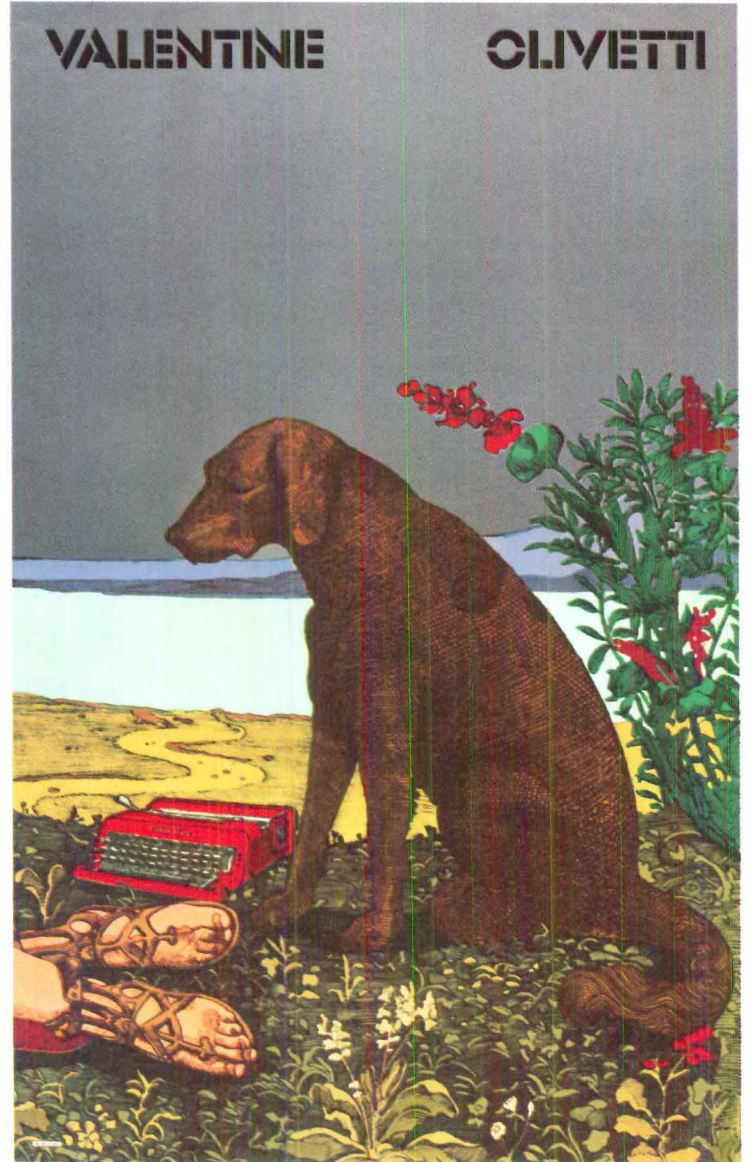
LETTERA 32 OLIVETTI PER TUTTI

Below: Big silk screen wall calendars by Giorgio Soavi, art director. Opposite:
Olivette posters by artist Jean Michel Folon as commissioned by Soavi (left)
and by artist Milton Glaser (right), of Push Pin Studios, as commissioned under
Dr. Renzo Zorzi.

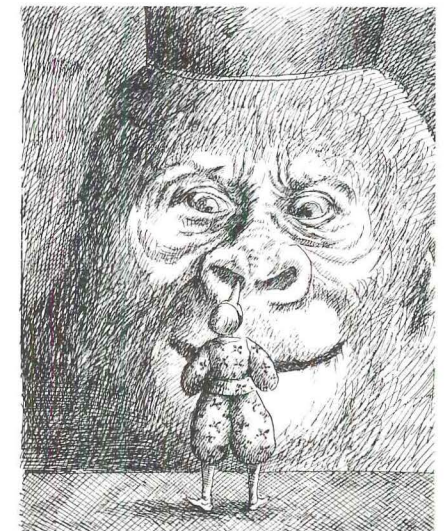
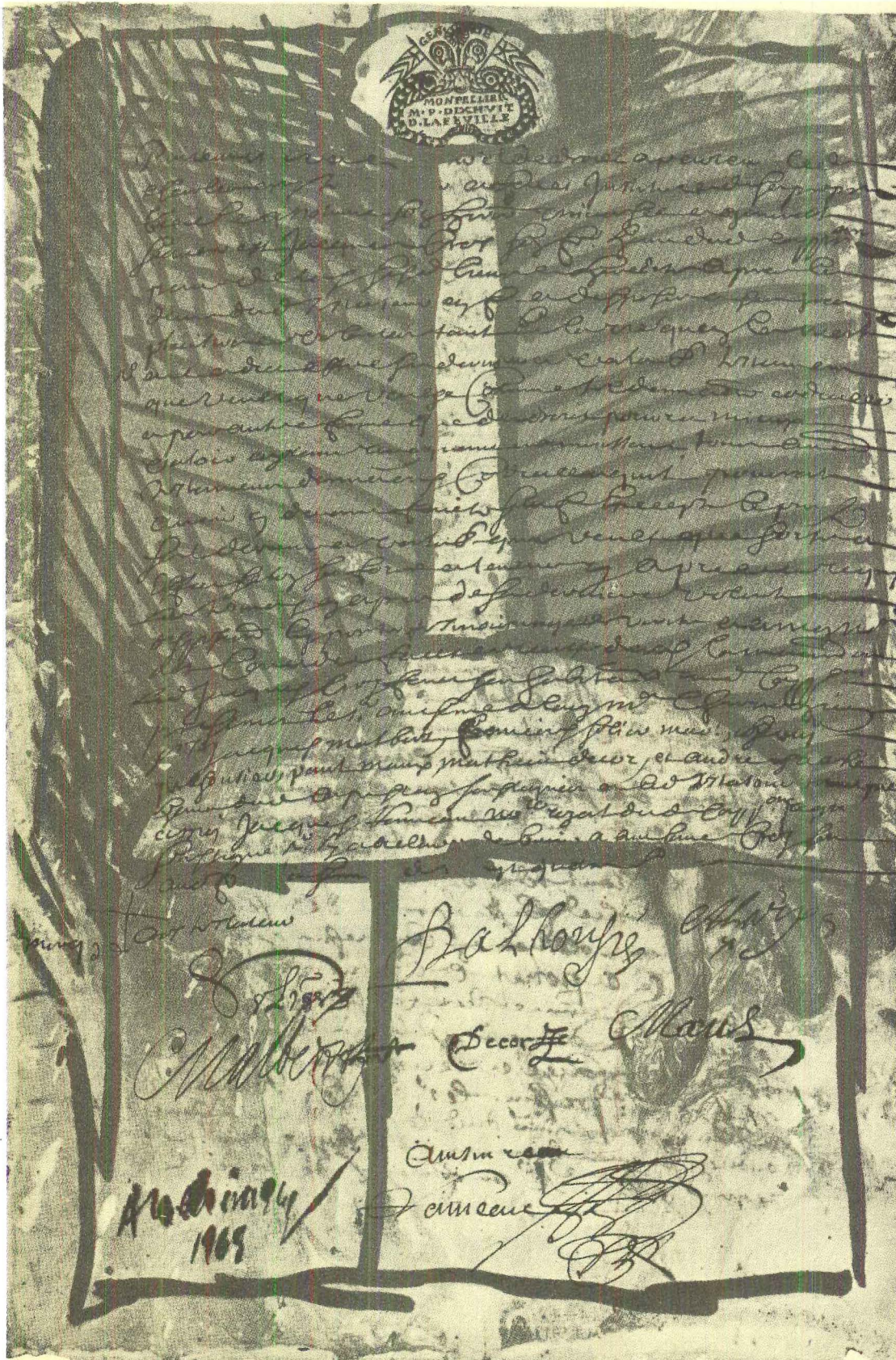


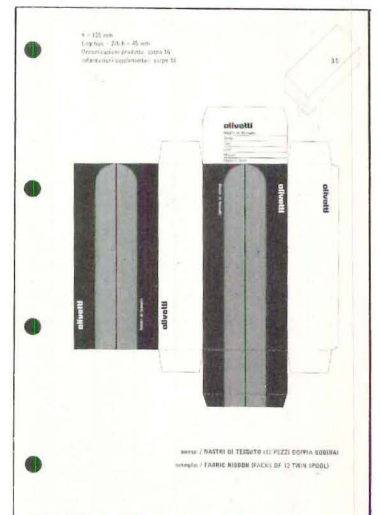
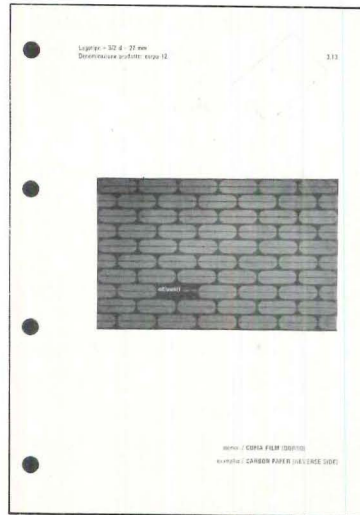
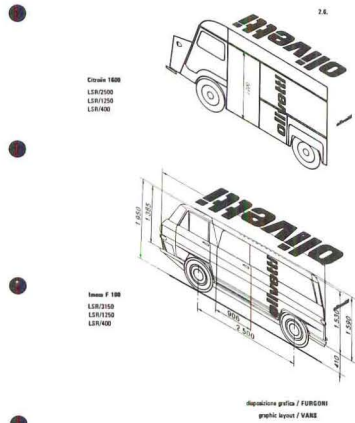
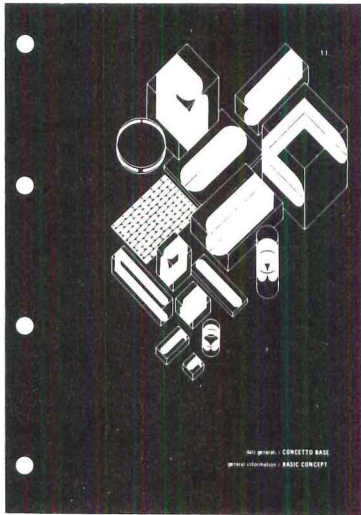


olivetti ОЛИВЕТТИ أوليفتي ९९+११८६ आलिवेत्ति カリベッティ ΟΛΙΒΕΤΤΙ



Below: Pamphlet cover by artist Pierre Alechinsky as commissioned by Giorgio Soavi.
 Right: Illustrations for new edition of Pinocchio, by Artist Roland Topor.
 The book was produced by Giorgio Soavi. Opposite, top: Illustrated pages from the comprehensive Olivetti corporate image manual, by Hans von Klier, art director and designer. The pages, left to right, deal with the total packaging concept for Olivetti, standards for motor vehicles, and specifications for two kinds of boxes.
 Below: The last lithograph done by the late artist Ben Shahn, and commissioned by Dr. Renzo Zorzi.





Sottsass and Bellini

Their latest designs for Olivetti are among the finest examples of modern industrial art

Only two of Olivetti's top industrial designers are represented by the objects shown on these two pages: Ettore Sottsass Jr., and Mario Bellini, both of whom practice (independently of the Olivetti organization) in their separate studios in Milan.

Sottsass is responsible for the Sistema 45 line of office furniture now being made and sold in Western Europe; and for the charming Valentine portable typewriter that comes in flaming red (and also in white, for less adventurous typists). Bellini, one of the wittiest Italian designers on the current scene (he recently designed a "Kar-a-Sutra"—a mobile environment for living in), was responsible for the three calculators shown here.

The Sistema 45 is an attempt to reconcile increasingly automated offices with those who use them, helping man and machine to function more closely and comfortably than before.

Sottsass started designing his new line of furnishings about ten years ago. He began with the premise that if an industry produces machines for offices, it "cannot limit itself to the responsibility of the functioning of the machine for what it is, but must pledge itself to assume the responsibility for all the reactions that can arise when machines invade the environment, men and their lives."

Sottsass determined that if Olivetti, a producer of machines, were to enter the furniture business, it must be concerned with these products and their impact on the office physically, operationally and psychologically.

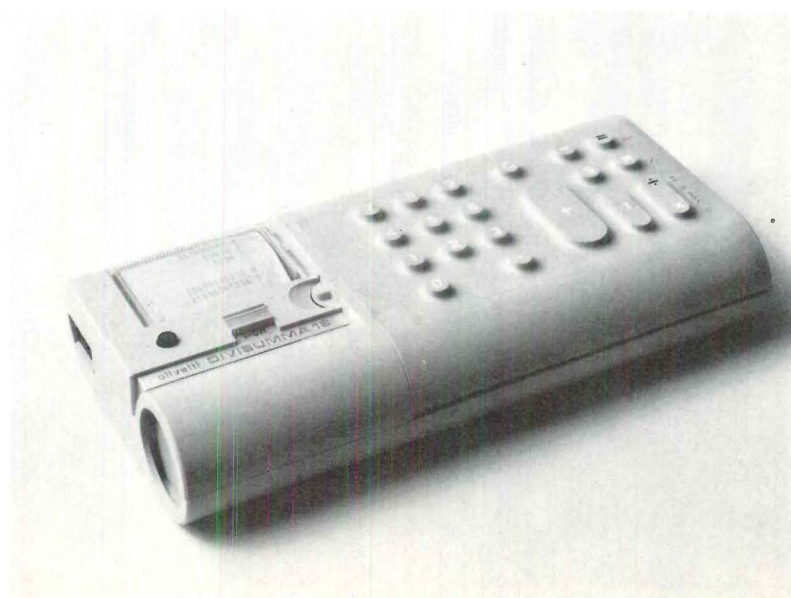
For four years Sottsass, some of his studio friends and Olivetti researchers, collected data on how man functions in an automated office environment. Statistics compiled included time studies as well as dimensional criteria for effective interaction between the office elements. "We started from the idea that large or small machines form 'furniture' and that therefore we should begin by establishing a few ideal spaces for the recurring basic operations, such as operating a keyboard, reading, working at a table, operating several instruments at a time, sitting, standing, etc.

"The idea was to arrive at a neutral type of design because we felt that only like this could we control the general construction of the environment. We thought we should exercise a kind of 'yoga' on design, liberating shape, . . . stripping it of every attribute, sex appeal and deception." Sottsass, who is given to philosophical excursions into oriental thought, concluded that he needed "a system of elements that would go together naturally in any situation, without effort, with an almost obvious simplicity."

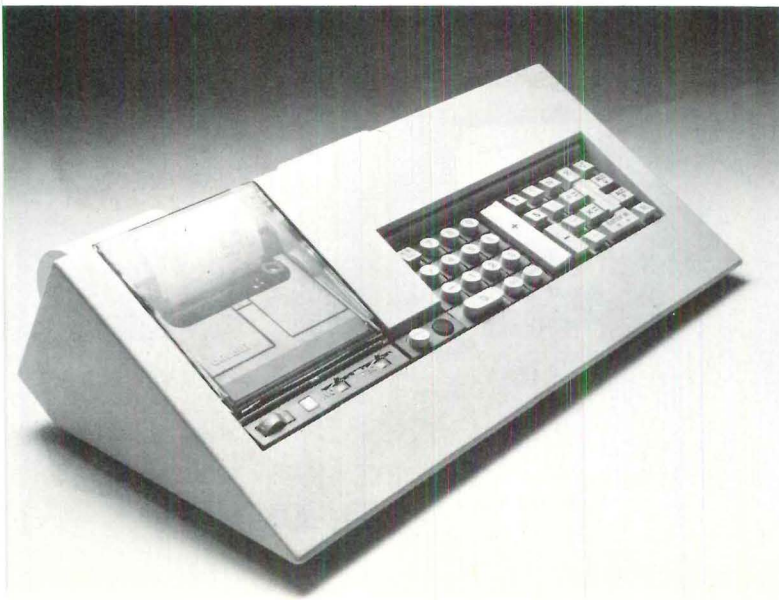
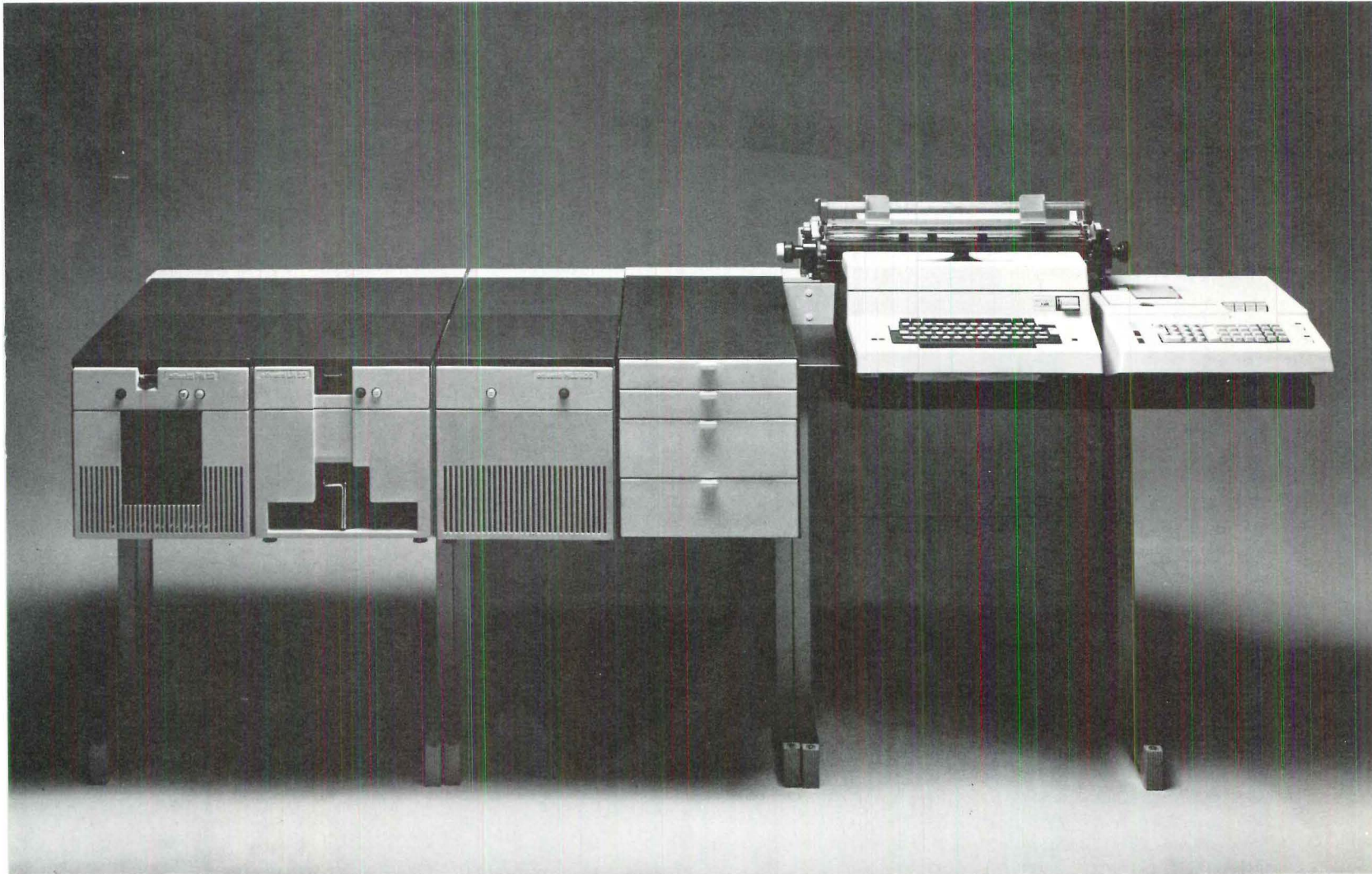
Sistema 45 does strike many people as having all too obvious simplicity. But this may also be its greatest strength.

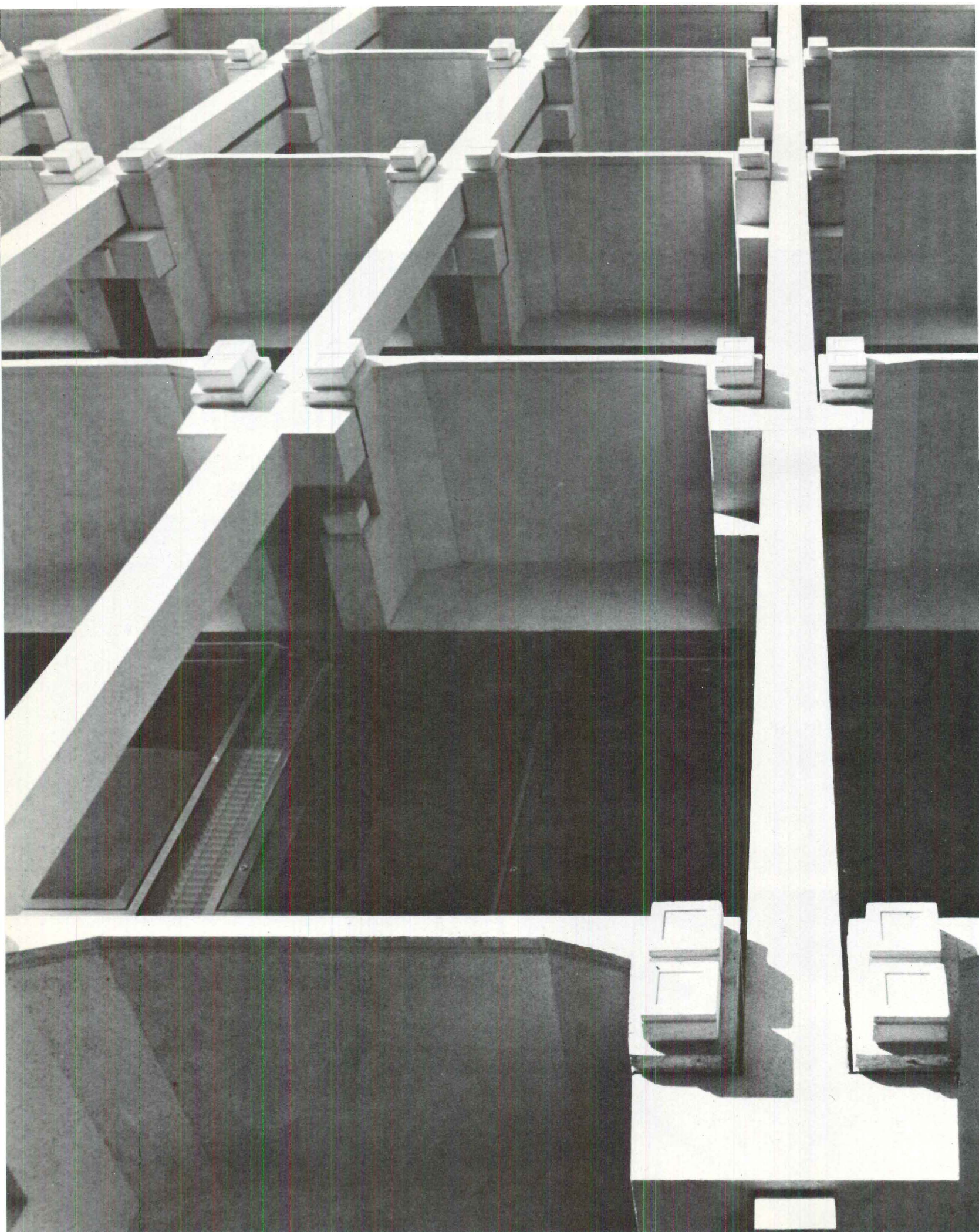
As completed (and produced in Europe), the product includes "universal supports" for all types of office machines. These steel members are designed to create "macromachines" from the individual machine components. The rest of the system's components, which are primarily plastic furnishings, use the same design forms to make up a more or less traditional office landscape system.

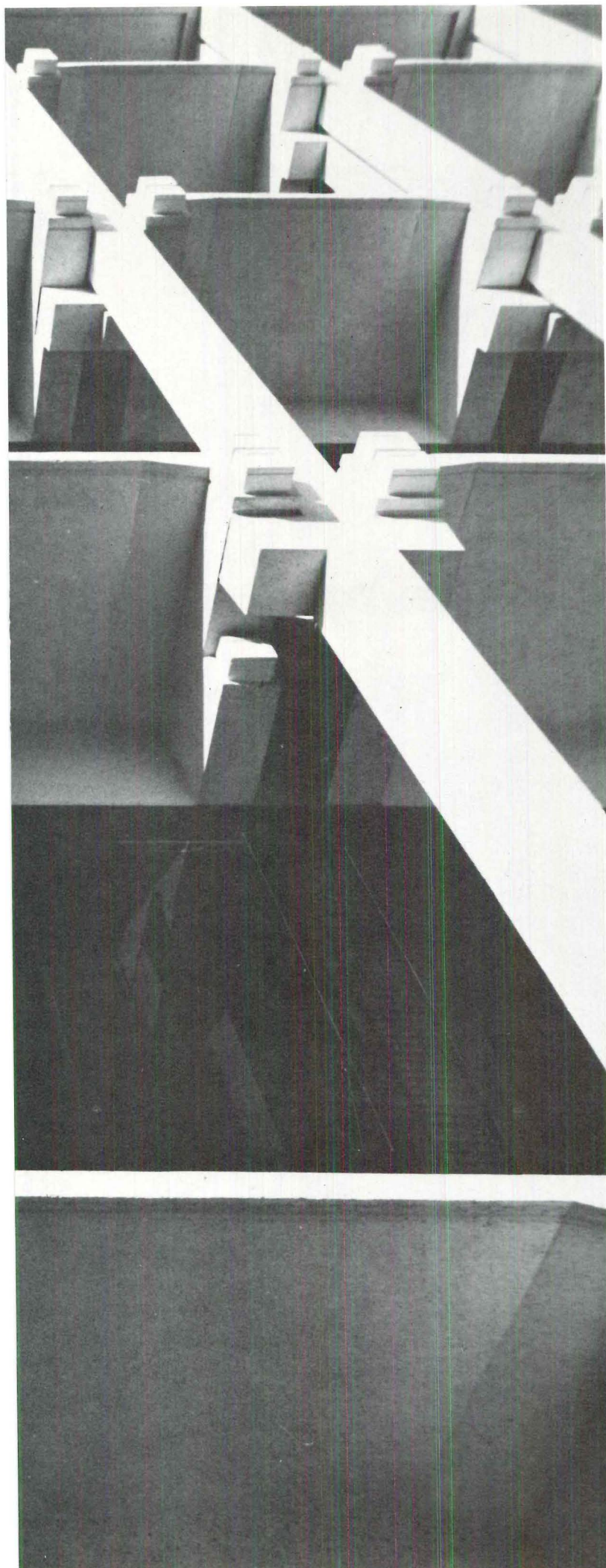
Bellini's calculators—like all good office machines—were designed, obviously, to serve the human eyes and fingers, and the brain that directs them. But, in addition, Bellini's calculators have a purity of form not found in other office machines: the wedge-shaped Logos 68, and the rounded Divisumma 18 are among the most elegant office machines ever designed. The typical Olivetti touch of bright color make these machines very nice to look at; the soft, nipple-like keys on the Divisumma are nice to touch.



Below: Office system designed by Ettore Sottsass coordinates different Olivetti machines into organized unit. Here, left to right, are a PN 20 tape punch, an LN 20 tape reader, an MLU 600 magnetic tape cartridge for random access storage, and a P 603 microcomputer system. Bottom: Bellini's Logos 88 (left), an electronic printing calculator and Logos 270 (right), a more advanced model of the same. Opposite: The famous, lightweight Valentine portable typewriter (top), by Sottsass, which slides into and becomes part of its own carrying case, and Divisumma 18 (bottom) by Bellini, a small portable (battery-pack) electric printing calculator.

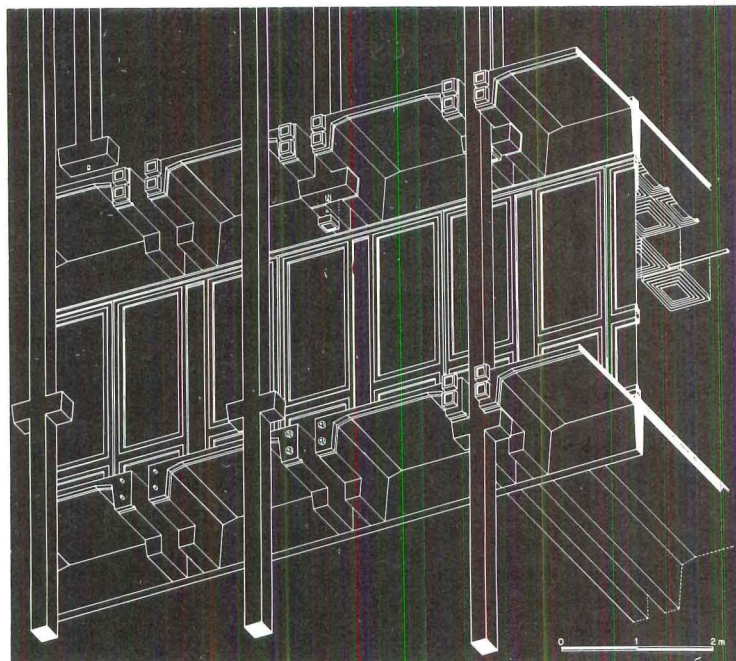






Alberto Galardi

In Florence, Olivetti's branch headquarters building is a delicately balanced suspension structure



The new offices built by Olivetti on the Via S. Caterina d'Alessandria, in the center of Florence, are not very large: the five floors above ground contain only 7,000 sq. ft. each, gross. But it is a significant building nonetheless, and in three respects: first, because it represents a conscious effort to create an ideal interior for "office landscaping;" second, because—to achieve the openness required by such a flexible layout—the building has no columns, and its floors are suspended from the roof, on prestressed concrete "hangers" made dramatically visible on the two principal facades; and, third, because the building contains a small (48-car), but efficient mechanical parking garage in the core of its basement.

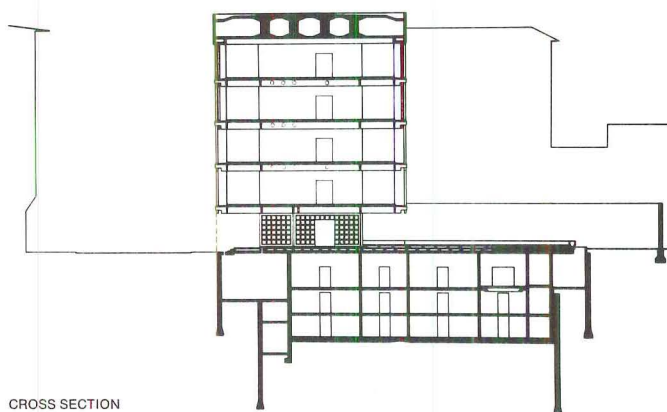
To create completely unobstructed loft spaces on every floor, the architect Alberto Galardi designed the building like a latter-day Ponte Vecchio—the famous building that spans the River Arno and forms a bridge: he placed a circulation-and-service tower at each end of the site; these two concrete towers, in turn, support a reinforced concrete roof that measures 60 ft. by 130 ft.; the roof is, in fact, a hollow, flat arch, and it bridges the entire site; and from this 8,000 sq. ft. arch, Galardi suspended the four floors below, eliminating all interior columns. The photograph at left, and the isometric above, show how the prestressed concrete structure was pieced together and post-tensioned.

The delicacy of the structure is dazzling, and it attests to the high quality of Italian precast concrete. In this particular building, the mixture of white cement with a white marble aggregate heightened the effect. The cast-in-place roof was bush-hammered; the precast elements were sandblasted.

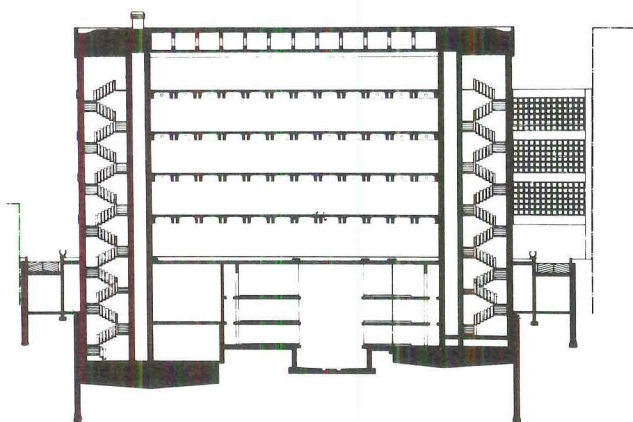
The suspension structure opened up not only the office floors, but eliminated columns (and their foundations) from basement areas as well. And this, in turn, enabled the architect to insert an automated, underground parking garage.

Unquestionably, some of the same results of openness and flexibility could have been achieved, in so small a building, by

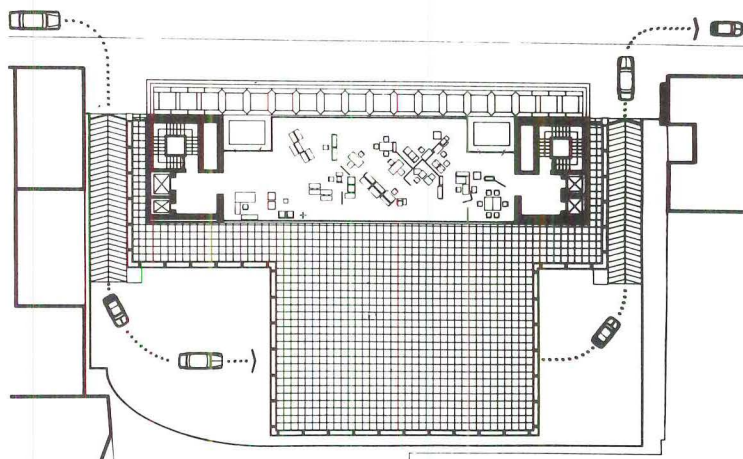
Sections and plan (below) explain the two-tower suspension structure employed to create complete openness on each office floor. The sunken court indicated in drawing (below) and shown in photo at right leads into the mechanical parking garage. The patterns visible on the roof fascia are, in fact, caps that cover the ends of post-tensioning rods in the bridge-like structure. The entire building is, in effect, a cage of prefabricated parts that have been threaded together and then tightened up with post-tensioning cables.



CROSS SECTION



LONGITUDINAL SECTION



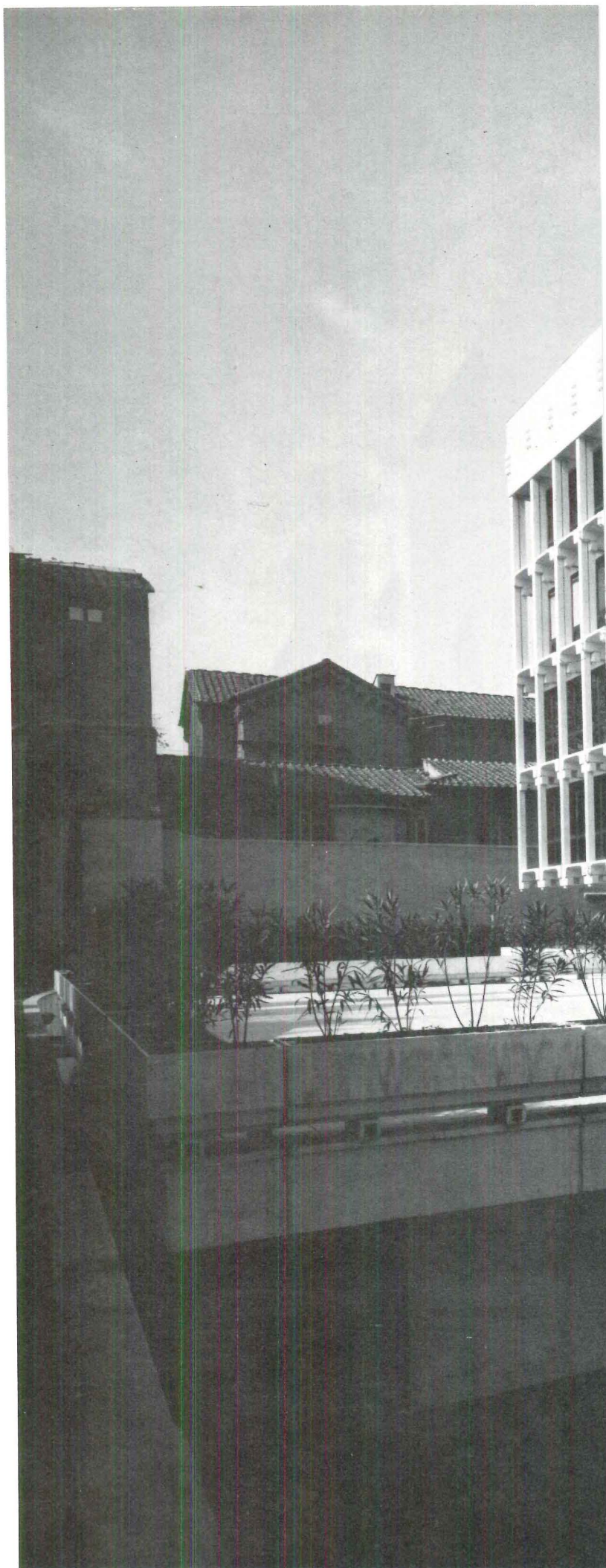
GROUND FLOOR PLAN

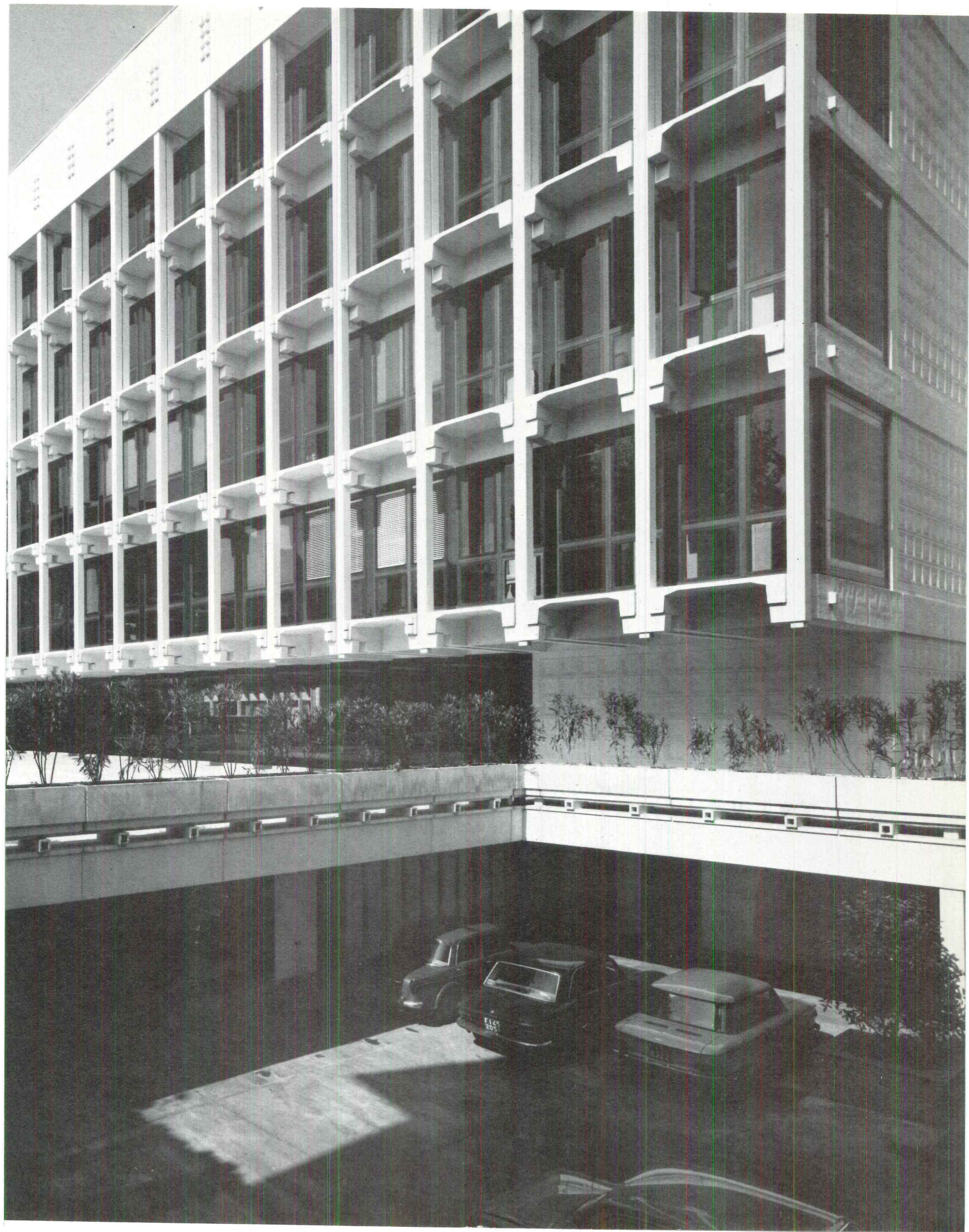
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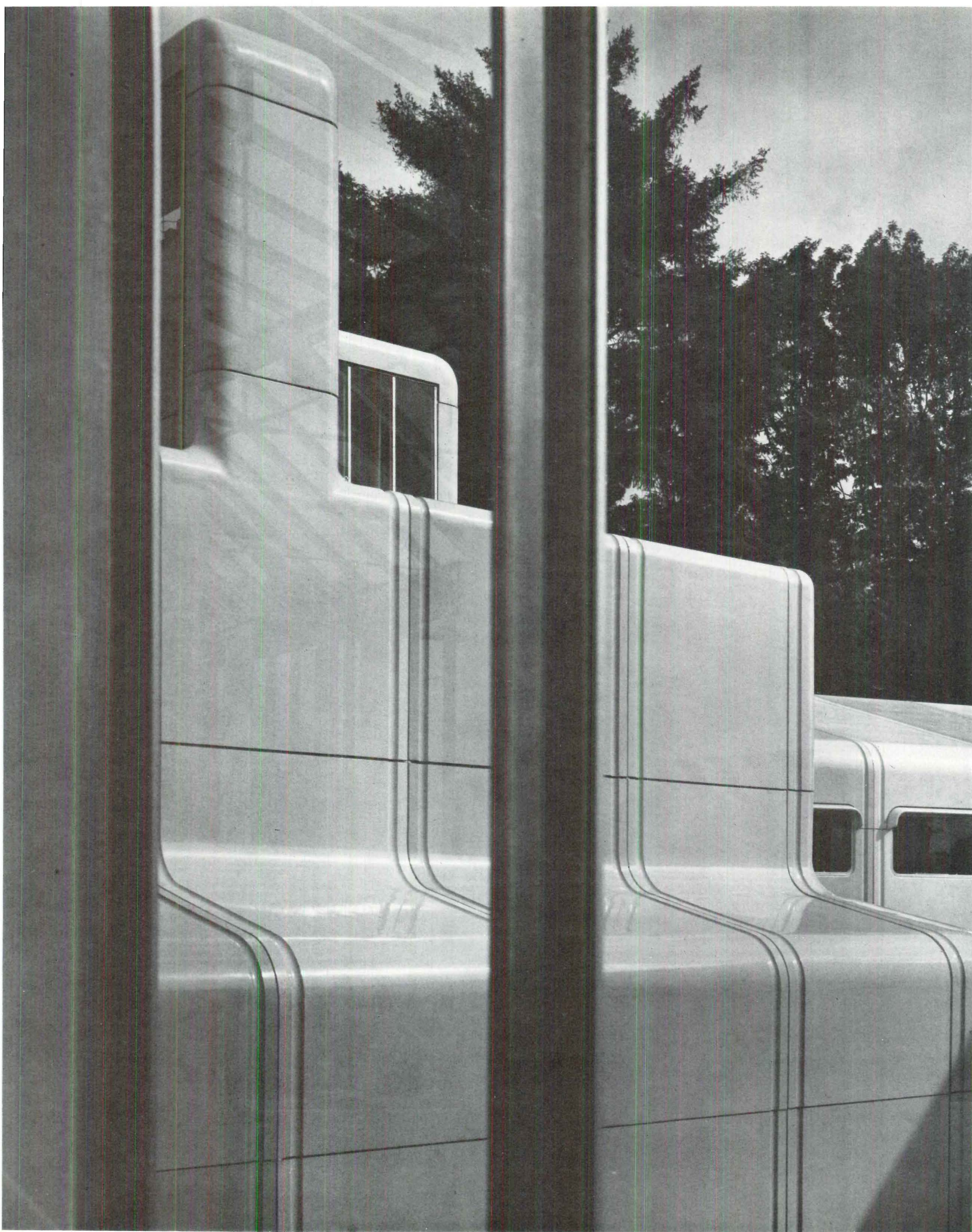
more conventional, structural methods. It is characteristic of Olivetti's attitude toward all design problems, however small, that the company and its architect decided to use this little building as a laboratory for a structural system with much broader technological implications.

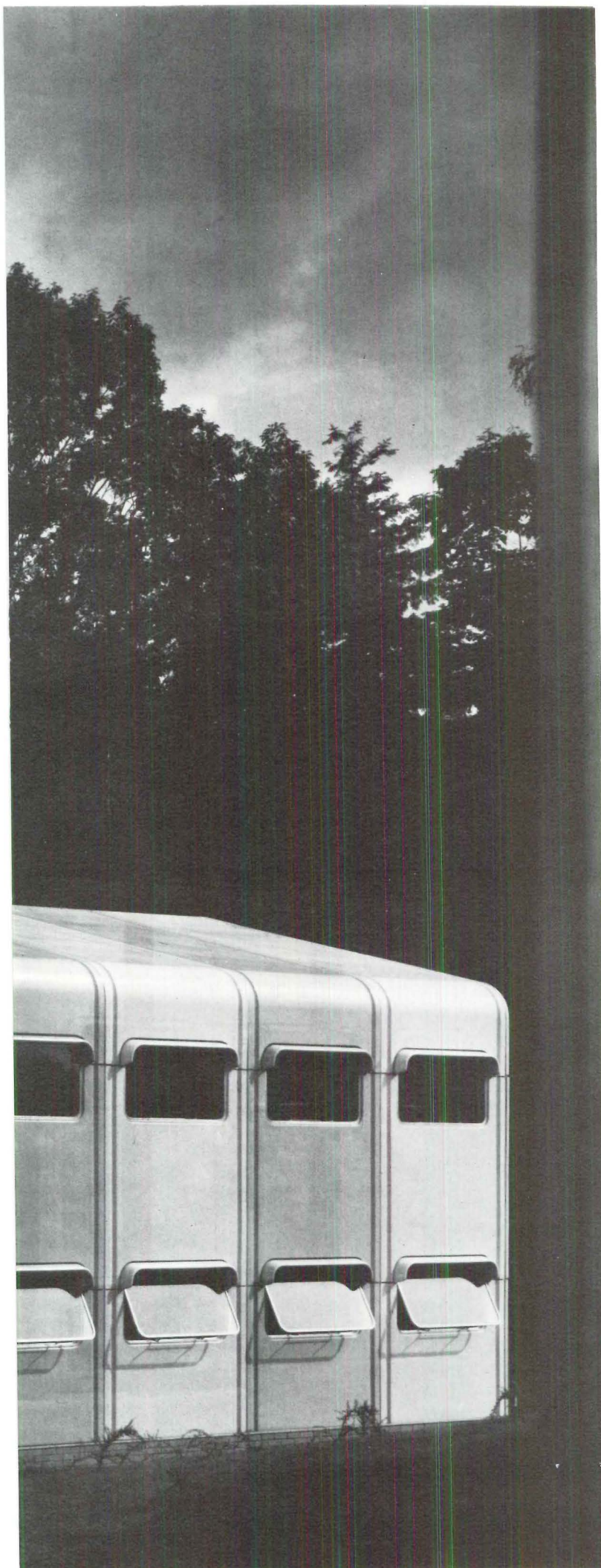
Facts and Figures

Olivetti Branch Office, Florence, Italy. Architect: Alberto Galardi.
Photographs: Gabriele Basilico page 48, Pino Abbrescia page 51.



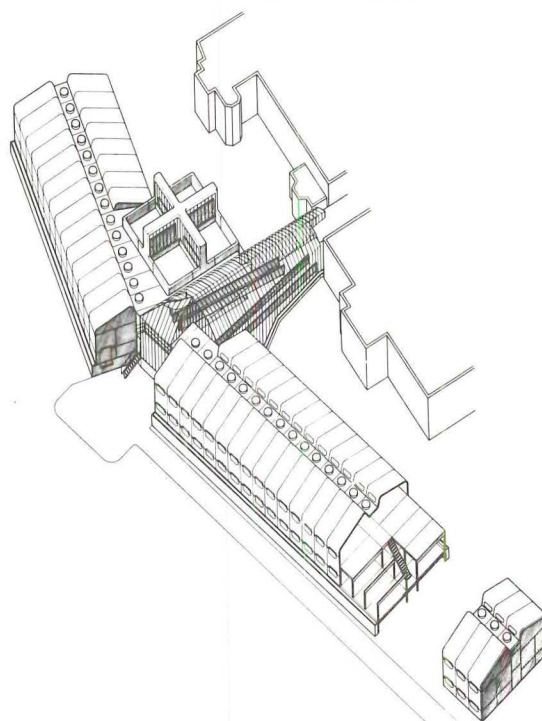






James Stirling

British Olivetti's training school is a teaching machine of prefabricated plastic parts



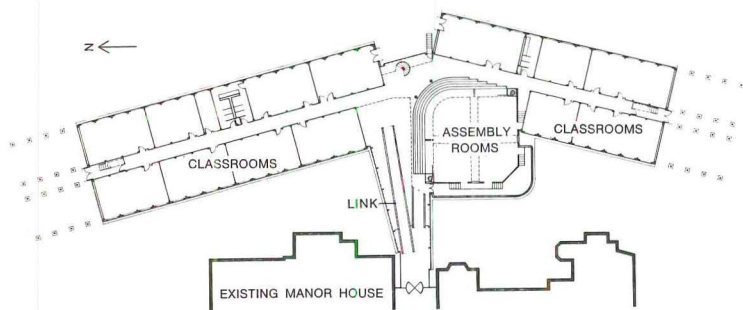
It is characteristic of Olivetti to have commissioned the leading *non-Establishment* architect in Britain to design this new building. James Stirling's training school for Olivetti is, actually, an addition to an Edwardian manor house in Haslemere, Surrey (see isometric, above). The house has been converted for use as a student residence and the new building provides the educational facilities for 150 trainees per session. Forty-two acres of land surround the buildings, much of it an arboretum of large and rare specimen trees. The remainder is used for sports facilities.

Stirling's architecture has been flirting for years with industrialization, and in Haslemere the flirtation has developed into a raging affair. Straight-from-the-catalog products have been parts of his work in the past. At his Florey dormitory for Oxford (see February, 1973 issue) the most prominent element in the building's central courtyard was a weathervane attached to a kitchen ventilator. Earlier, his Leicester Engineering Building (with James Gowan) sported a ship's ventilation shaft. Industrial ladders and absolutely-no-nonsense pipe railings have been seen in several Stirling buildings. These earlier works seem to use industrial elements only as occasional counterpoints, however, and they depend for their striking effect on the unexpected juxtaposition of light, replaceable parts with heavy and permanent ones—large areas of skylight tracery, for example, adjacent to brick or red tile masses of monumental solidity.

At Haslemere, the solidity is gone. The use of glass is still prominent—in the flared circulation spine which links the addition to the manor house (see next page)—but the rest of the new construction appears shiny, light, and susceptible to quick replacement, extension or dismantling.

It is the two classroom wings of the addition which represent the new departure for Stirling. They are constructed of prefabricated, fiberglass-reinforced polyester (GRP) wall/roof panels which were trucked to the site in sizes small enough to fit existing roads, and quickly erected. Each wing—one is used for sales training, the other for technical training—can be expanded independently to any length; the need to accommodate rapid but unpredictable expansion was an important element of Olivetti's program. Stirling sees this "clip-together method of building" as comparable to methods used in the production of Olivetti's office machines and equipment. The wall and roof units are integrally insulated, and since the wall and roof units flow smoothly

A glazed link of light metal construction, shown looking toward the classroom wings, connects the new building to the old manor house. Ramps with integral lighting make the transition from past to "future" especially smooth. The lower floor plan (below) shows how the steps adjacent to the assembly area can be used for overflow seating.



together, there are no eaves in the traditional sense; the gutter occurs at the base of the building. Thus the entire building works as a roof in terms of drainage.

Near the glass circulation spine, and abruptly interrupting one of the classroom wings is a cluster of four audio-visual areas which can be combined into a larger space by means of raising the dividing walls into a cruciform stage housing clearly exposed above the roof. These assembly spaces can be further opened, to the circulation areas around them, by horizontally-rolling motorized walls. A very flexible machine, indeed.

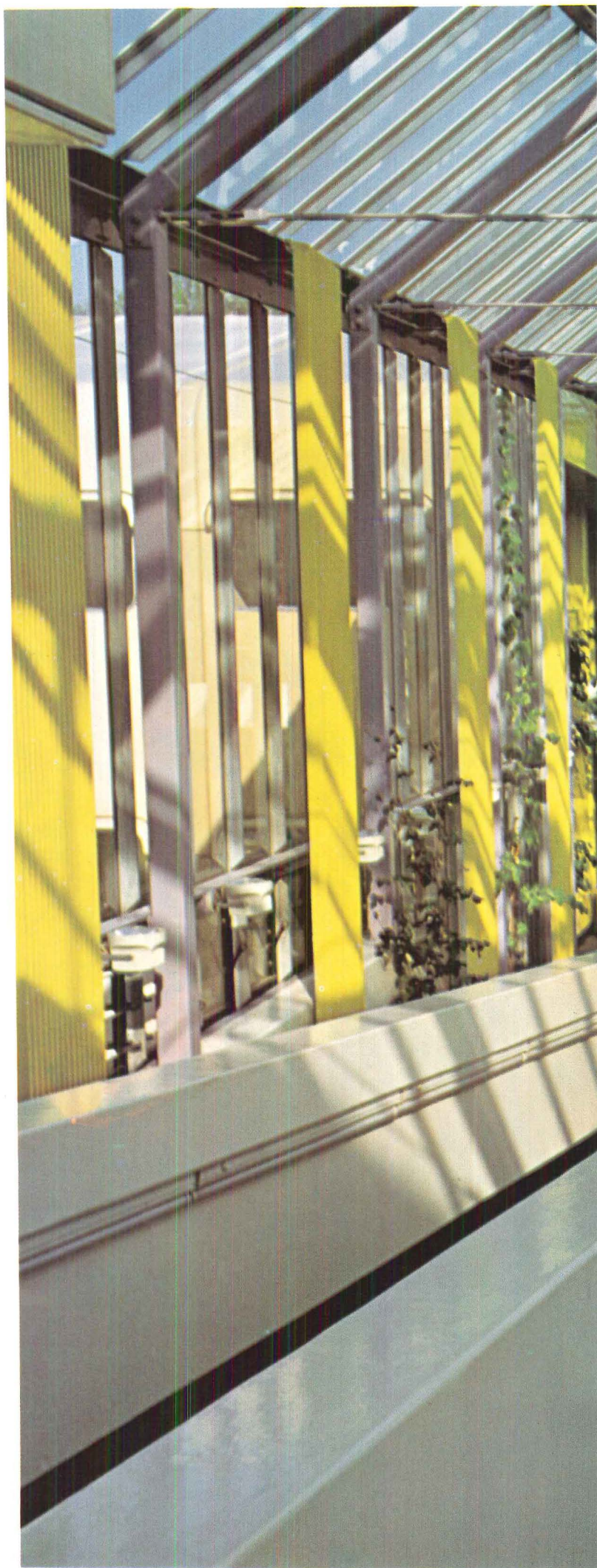
The mechanical character of the Haslemere school is, of course, partly deception: the brutal angular junctions of the building's main elements may give the impression of accident or even of mobility, but they are actually quite stationary and permanent. The particular angle at which the classroom wings meet the spine and assembly rooms was chosen by Stirling to avoid a group of rare trees. They are also oriented along level contours to facilitate future expansion.

The gasketed joints between polyester panels probably constitute the most critical technical problem here; but Stirling, in scraping masonry (and monumentality) from his palette, faces as well the problem of reconciling conscious design decisions with a ready-made machine esthetic. Reyner Banham, in his book, *Theory and Design in the First Machine Age*, warned that "it may well be that what we have hitherto understood as architecture, and what we are beginning to understand of technology are incompatible disciplines," and that "the architect who proposes to run with technology knows now that he will be in fast company..." In his past work, Stirling has proved himself a real thoroughbred, and if, beginning with Haslemere, he now "proposes to run with technology," it's a race we don't want to miss.

Facts and Figures

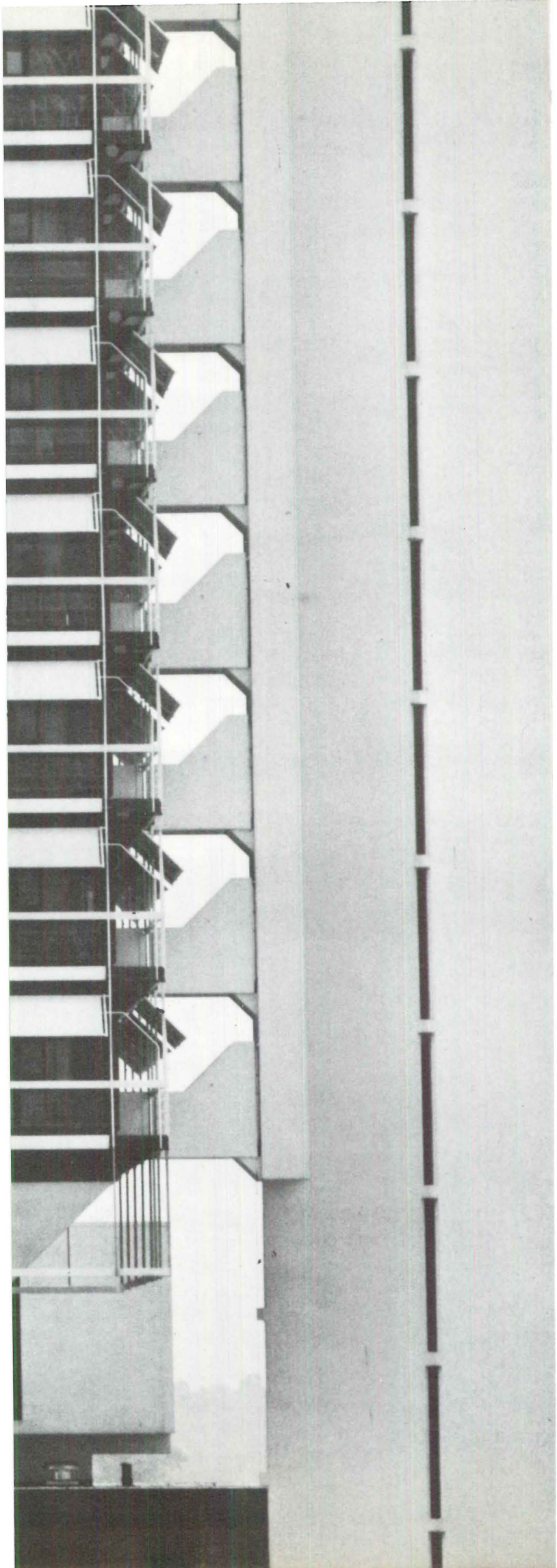
Olivetti Training Centre, Haslemere, Surrey, England. Architects: James Stirling and Partner. Senior Assistant: Robin Nicholson. Consultants: Felix J. Samuely and Partners (structural); Dale and Ewbank (services); Polyplan Limited (plastics); Mary Shand (interiors). Quantity surveyors: Monk and Dunstone.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

Photographs: Richard Einzig, except p. 55, Tim Street-Porter.



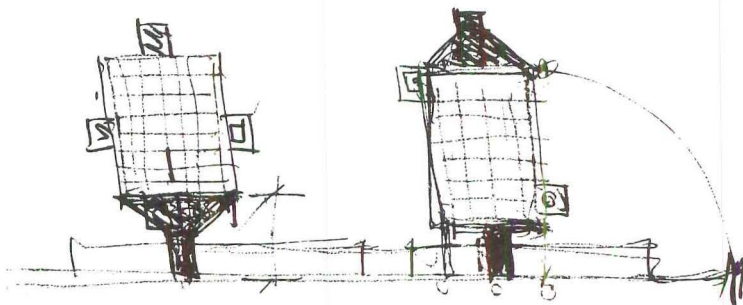






Egon Eiermann

The shaded twin towers for Olivetti's Frankfurt headquarters were his final work



When the Olivetti management in West Germany first approached the late Egon Eiermann (who had been the designer of, among many other important buildings, the German Embassy offices in Washington, D.C.), the architect came up with an entertaining idea: the program called for one tower for administrative offices, and one for hotel accommodations to house Olivetti trainees. Both were to be roughly identical in volume—so why not make them roughly alike? Except that one would be supported from below, as if teetering on a giant “golf tee”; and the other would be suspended from above, from the central core that contained all necessary services. Eiermann's sketches (above) suggest, roughly, what he had in mind.

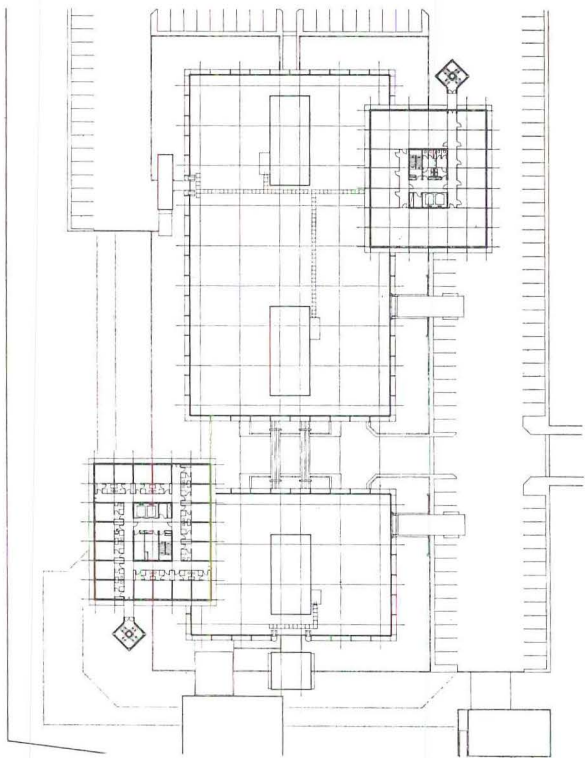
Unfortunately, things didn't quite work out the way he had hoped. The hotel tower required only seven inhabitable floors, initially; whereas the office tower required nine. And the suspension-scheme, it seemed, would cost significantly more than the “golf tee” structure. And so both towers ended up using the same, more conventional structural system.

Actually, the *raison d'être* for the Olivetti towers outside Frankfurt is a training center, housed in a large, three-story structure that forms the visual base of the two towers. Here, the company puts its future personnel through their paces—and in an environment that will, coincidentally, imbue the trainees with a degree of respect for good design.

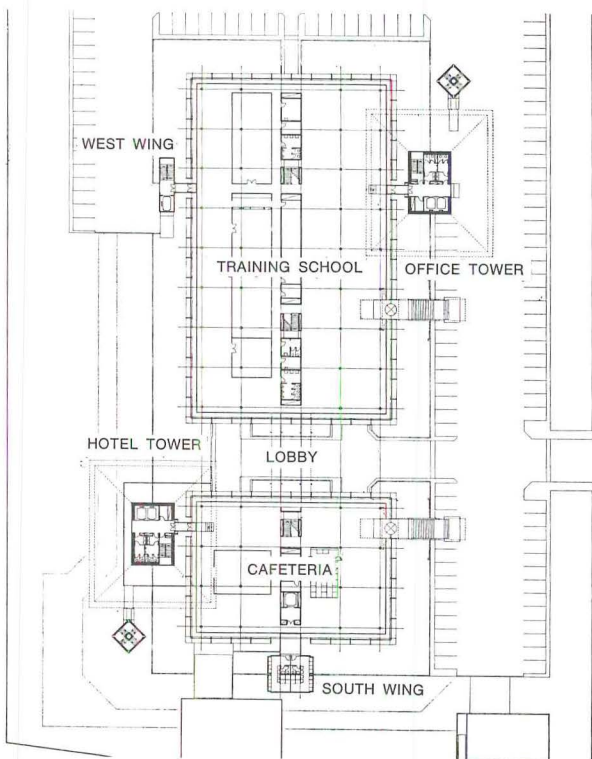
Few architects of the past 25 years managed to convey their convictions about design (and related matters) with greater clarity than Egon Eiermann. He had been brought up, almost literally, in Mies van der Rohe's shadow. (His family lived next to Peter Behrens' when Eiermann was a child, and when Mies, Le Corbusier and Gropius were Behrens' apprentices.) Yet, although Eiermann's finest buildings (like the German Pavilion at the 1958 World's Fair in Brussels) had the structural clarity and the modular planning discipline of a Miesian cage, they also went beyond the glass skin and the steel bones, and added to these an outer garment of steel, canvas, wood, planting or whatever, which helped make the steel-and-glass cage more habitable in terms of heat and light, and the qualities thereof. Unlike any other architect working in the basic, Miesian tradition, Eiermann really tried to “humanize” the master's stern pronouncements; and in Washington, Brussels, and—finally—in Frankfurt he succeeded.

The two towers are raised on their “golf tees” so that their lowest inhabitable floors clear the roofline of the three-story training center that links them below. Each floor measures about 75 ft. by 85 ft.; each tower has a slipformed concrete core that contains elevators, stairs, and toilets. The hotel has 126 rooms for trainees; the office tower contains 55,000 gross sq. ft. of space on its nine

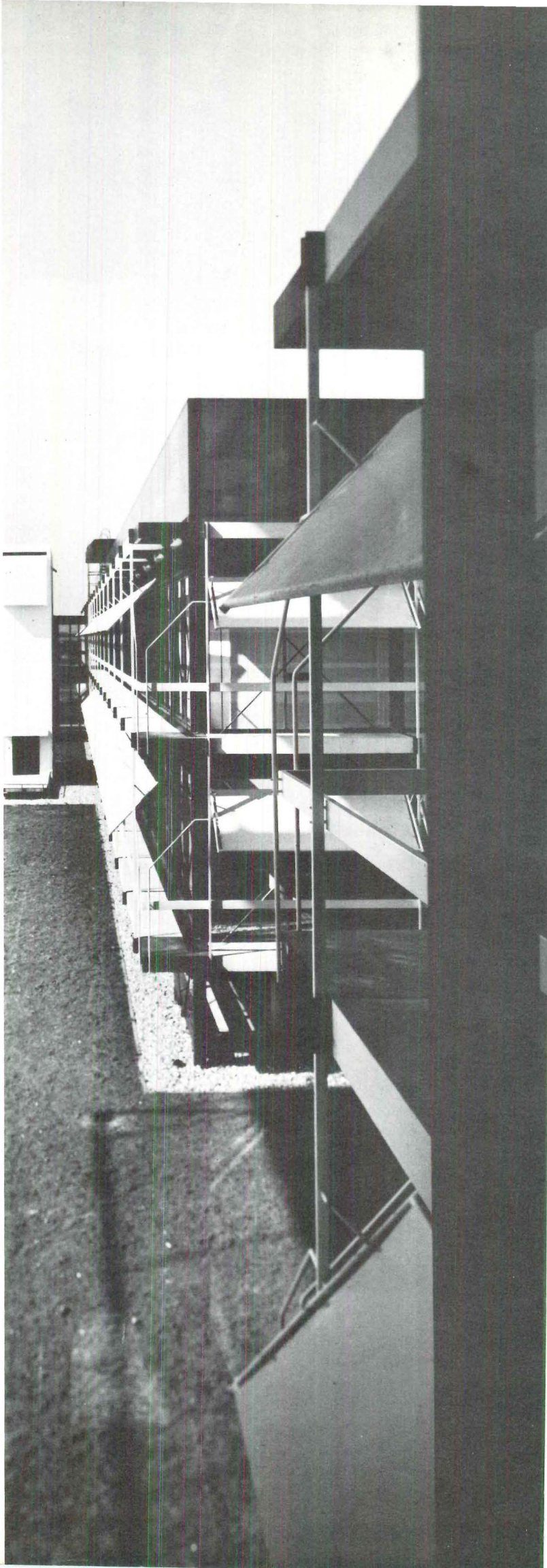
The 3-story building which forms the base of the two Olivetti towers near Frankfurt measures about 120 ft. wide by 330 ft. long. It is shown in the two plans below, and in the photographs at right. Actually, the building consists of two, rectangular blocks: the smaller one contains the hotel lobby, cafeteria, and other communal facilities; the larger one contains the Olivetti training facilities. The two blocks are linked by an enclosed bridge. The lowest level contains covered parking for close to 60 cars. Views at right show the elaborate sun-control devices that protect this structure, and the cafeteria suspended within the building, its floor kept clear of the outside wall to permit circulation of air.



TYPICAL UPPER FLOOR

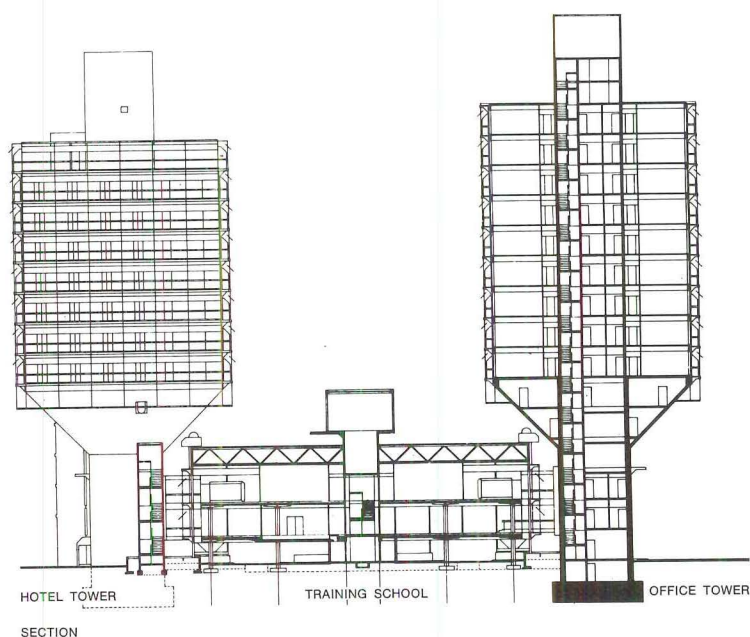


MAIN FLOOR





The two towers shown in elevation/section below, and in the photo at right, are the 7-story hotel at left, and the 9-story office building at right. The free-standing stairs attached to each tower are emergency exits, and the 3-story block that connects the towers below contains the training school facilities, as well as communal spaces related to the hotel. The latter has an enclosed roof garden. Eiermann's initial proposal called for two towers of equal height, but differently supported: one more-or-less conventionally, as if on a huge "golf tee"; the other hung from above, from the central core. This proposal lost out for programmatic and cost reasons.



principal floors. And the two are accompanied by stand-by towers that contain the fire stairs. Finally, there are bridges that link the various elements on different levels.

Eiermann was a master of detail, and his three finest buildings—Brussels, Washington, and Frankfurt—are detailed to perfection. There is not only the curtain that shades the wall; there is also the articulation of everything within—and the articulation of such outside elements as the entrance canopy suspended from the 3-story training center, and the articulation of the cellular steel floors within that center, which are platforms constructed inside the glass-and-steel cage, and held back from the outer skin to permit circulation of air through the entire volume.

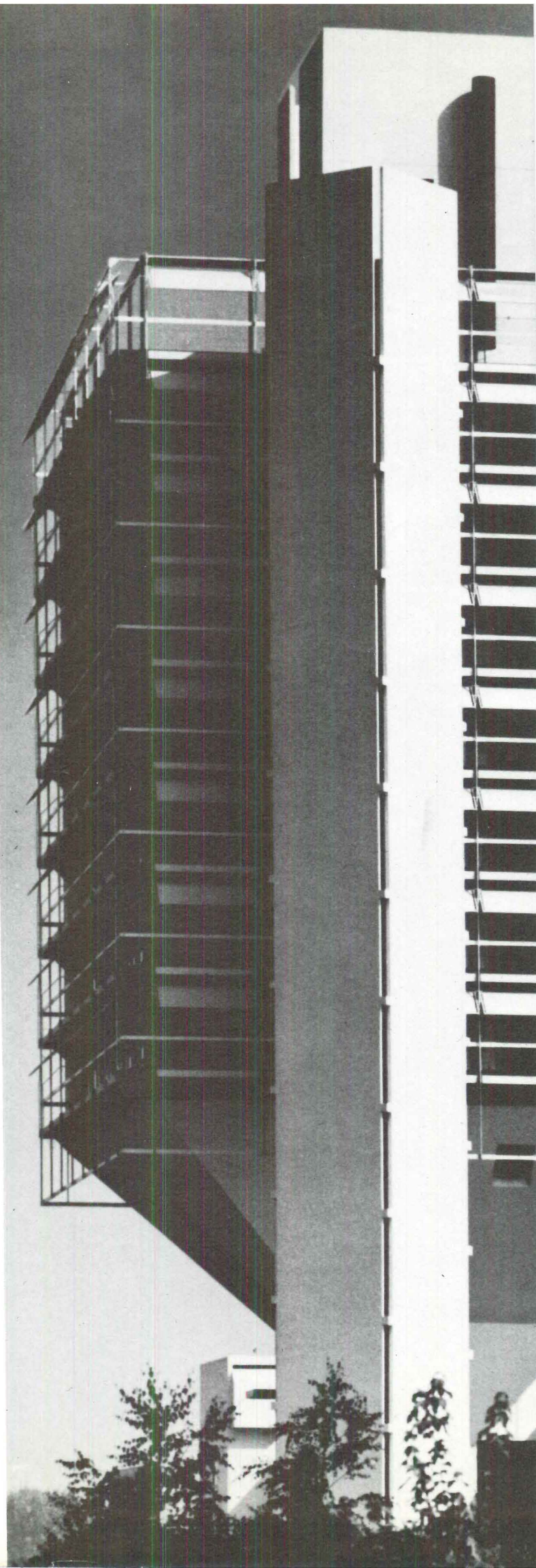
In the Mies/Eiermann vocabulary of rational detailing, there have never been any near-misses. Everything falls into place, because everything *has* its place. The only flaw in this particular group of buildings is that they occasionally seem over-detailed—as if their designer could not resist trying to perfect his own perfectionist solutions. But how many other architects have ever cared enough to slide over that particular edge?

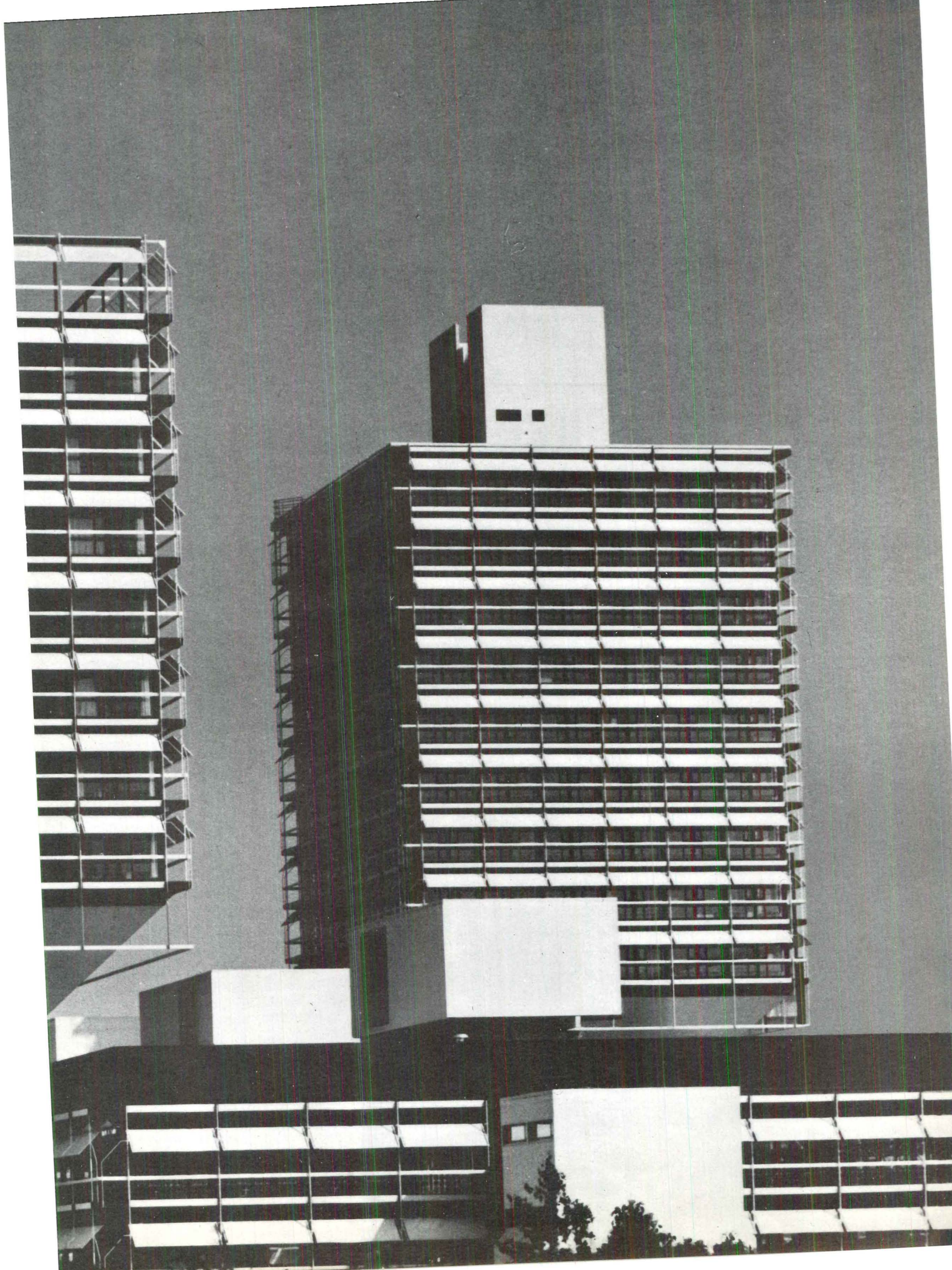
Frankfurt's Olivetti Center is located a 15-minute ride from the Rhein-Main Airport, in one of those synthetic office parks that can be found in Los Angeles, Yokohama, or on the outskirts of London. On such another, mediocre skyline, Eiermann's final effort (despite its modest size) stands out unmistakably. It stands out because he was a great architect, and because he had a great client who trusted him.

Facts and Figures

Olivetti Headquarters, Frankfurt, Germany. Architect: Egon Eiermann with Richard Greff, Peter Poike, Rudolf Wiest. Supervision: Volker Heidelck, Hans Stieff. Assistants: Klaus Vorhauer, Wolfram Bieler.

Photographs: G. Berengo Gardin, except p. 58, 59, by Von Horstheinz Neuendorff.





Special report:

A conversation with Philip Johnson

A couple of years ago, two critic-historians met with Architect Philip Johnson at the latter's famous Glass House in New Canaan, Connecticut. The visitors were John W. Cook, Professor of Religion and the Arts at Yale University's Divinity School, and Heinrich Klotz, Professor of the History of Art and Director of the Marburg Institute, Marburg, Germany. The purpose of their visit was to record an interview that would, subsequently, appear in a book published in July entitled Conversations With Architects (© 1973 by John W. Cook and Heinrich Klotz. Reprinted by permission of Praeger Publishers Inc.). The Johnson interview is the first chapter in the book. It is reprinted here, in slightly abbreviated form, in order to entertain and to warn our readers: to entertain you by exposing you to one of the most delightfully irreverent tongues that is wagging today in the English language (and several others); and to warn you never, under any circumstances, to grant interviews to critics or historians.—ED.

JC: Mr. Johnson, let us first turn to one of the most celebrated buildings of your later works, after you had dismissed the Miesian credo, the Kline Biology Tower (photo below).

PJ: Is it really celebrated that much? Well, I guess it's certainly one of my favorite buildings.

JC: It is sited on the top of that hill so that nobody can ignore it!

PJ: Oh, yes, the setting is perfect. There

couldn't be any better site, up on that hill.

HK: Now, that doesn't mean that we are in favor of it in every respect.

PJ: You aren't? Well, you are European. And the Europeans don't like my later works, not one of them. You are still thinking in terms of Gropius.

HK: Don't you think that Gropius was one of the major architects of this century?

PJ: Who is he? By all means, who is he?

HK: Well, I have objections against your selection of materials, for instance. Don't you hesitate to use travertine?

PJ: Michelangelo used travertine!

HK: Hitler, too—it was his favorite material.

PJ: Well, does one dismiss a material because Hitler used it?

HK: For the Europeans, or at least for Germans, even material can acquire a certain meaning—travertine, for instance, reminds us of a fake monumentality.

PJ: Oh, does it? I never thought of that.

JC: At the Kline Tower, you use red sandstone.

PJ: Yes, for the slabs in between the columns.

JC: You call them columns?

PJ: You might call them pilasters—and of course I used the brick facing.

JC: Now, when one looks carefully, the Kline Tower is actually a copy of the Seagram Building, in spite of the surface differences.

PJ: Well, that's right. You are the first who observed that. Yes, that's right! It's a very similar model; it even has the "risalit."

JC: You mean that center part that sticks out, which corresponds to the rear of the Seagram Building?

PJ: Yes, that's right.

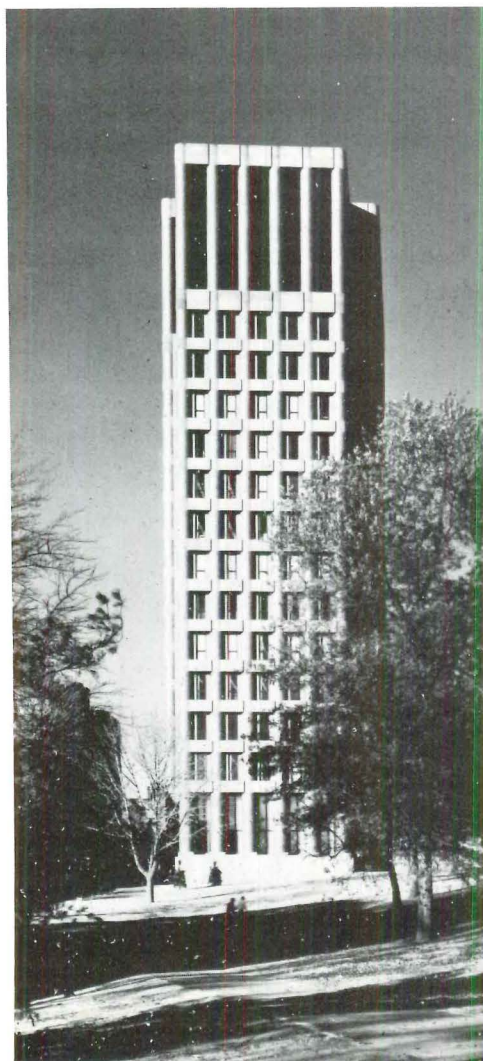
HK: Well, there is, of course, that very strong difference between both buildings—instead of Mies's flat curtain wall, you introduced that very plastic, massive façade, a dramatic happening on the surface...

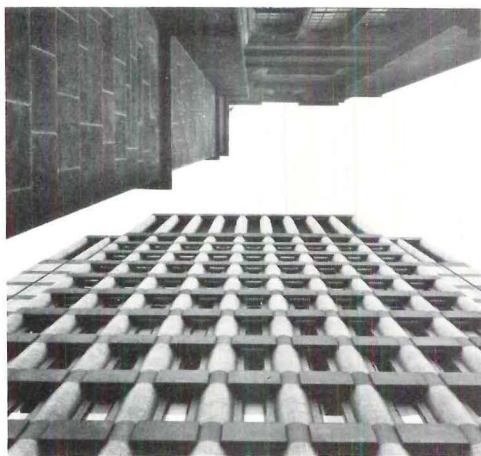
PJ: Not only on the surface! Look at the columns down below. The building ends up with those columns; the pilasters are carried all the way down; they really support the building; they are the feet of the building! What's wrong with that?

HK: O.K.—You create the impression that those columns support the building. However, it's the skeleton frame—the inside, which you faced with that dramatic façade. It's actually the Seagram Building that you covered up with columns, pilasters, and sandstone slabs.

PJ: Yes, that's right, except when you use the word "façade," you give it a pejorative meaning.

HK: One enters the building by going through a monumental colonnade. Every column is stretched upward throughout the façade. The surface of the column melts into the wall of the window jamb. It's a smooth transition from column to wall, and





suddenly it's not a column any more (photo above).

PJ: It becomes a waving wall, something that might have been done in Spain in 1914.

HK: Gaudí!

PJ: Gaudí, very conscious. The first time I did those pilasters, whatever they're called, I did not reverse the curve. Then I asked, "Why worry about separating the pilaster from the wall? Let's make it an undulating wall." You're right to point out the inconsistencies, but they didn't bother me at the time. I was too busy with this part today and that part tomorrow. The building that is most like my building, strange to say, is Eero Saarinen's CBS (photo below), which has a diamond col-



umn that is fake. I think the base of that building keeps on going down into the earth too far. My [Glass] house, for instance, is not an indoor-outdoor house. It is not on the same level as the ground. There's a very bad step, intentionally bad, to hold you in, and the same thing with the rail. Those two items keep you from being in a Miesian building.

HK: That is a very classicistic attitude.

PJ: It is classicistic, by all means.

HK: You want to differentiate?

PJ: Yes, from the ground.

JC: So plinths are necessary?

PJ: Plinths were very necessary for me. I doubt if they are now.

HK: You don't object to the columns as a tired, used-out form?

PJ: Heavens, no. Maybe I do now, but I certainly didn't at the time. But I started the other way around. I started from the undulating façade up above, and then the bridges, which look like small balconies. Those are empty, you know. That third-dimensional undercut was what I was after. It's really a façade feature. And I said, "What do you do with these rounded forms, these half-columns, when you come toward the ground?"

HK: So, you were not designing from the ground up, but from the façade down.

PJ: "How would you take that undulating wall to the ground?" I said. I came down the Miesian way; I emptied it out, rather than—well, the worst building in the world, no doubt, is Wallace Harrison's steel building in Pittsburgh, where the building just keeps right on going. Well, I think the CBS Building is just as bad; you don't know when you've hit the bottom.

HK: Down below, Saarinen used the sides of his triangular columns as portal jambs, door jambs. It is interesting that you object so much.

PJ: My classicism!

HK: Rushing into the ground.

PJ: I have this old phrase that every building has five edges. One of them is against the ground. Well, that's no edge.

HK: The ground itself is no edge.

PJ: No, you've got to *do* something.

HK: Then you need postament?

PJ: I'm not sure if you need a socle of this kind or that kind. This [Glass House] is pure classicism.

HK: The Wiley House in New Canaan—the whole lower story is a socle (above right)!

PJ: It's a contradiction to the upper story. What I don't like about the Wiley House is that the bottom and the top don't meet; it's like not having a bottom on a building. It is not inevitable. It floats. Nothing must float.

JC: And you noticed that when it was finished, or just now?

PJ: It's the first time I ever thought of it, right now, right this minute. I just thought, "Now I know what is wrong with it." This building [Glass House] can't go down into the ground because it is



held by that brick band [socle]. Nowadays, a lot of buildings go right down into the ground. They just keep right on going; they don't stop.

HK: To me, your objection is very interesting. I have a different feeling about that. To me, the Saarinen building is good because of that...

PJ: Ah hah!

HK:...because there is no interruption.

PJ: You don't particularly like the reversed socle, do you? The depression? One of my own principles is, "Never go down into a building."

HK: But Saarinen designed it that way. You are led to go down.

PJ: Never. You have to, but that's not good.

HK: The steps lead you down.

PJ: I know, but that's wrong!

HK: You hate that.

PJ: Oh, as a classicist!

HK: Does one have to go up? It is a marvelous understatement, to go down.

PJ: That denigrates the building. It can't be a very important building if you have to go down into it.

HK: I object to the monumental.

PJ: I certainly hear this every day. I still want to be monumental.

HK: You want to be monumental? You still want to?

PJ: All architects do, I don't care what the hell they say. All architects essentially want to be monumental.

JC: What do you think of the termination of the CBS Building at the top?

PJ: I think it's the same problem. It doesn't really stop. The Seagram Building does. That was Saarinen's point. He said, "I want to build a simpler building than any that's ever been built, including the Seagram Building." You see, the Seagram Building was the building to beat for him, naturally. I don't want any top or any bottom. The corners, for instance, are execrable; the two diamonds fit together in that terrible flat (photo overleaf)...

JC: You put a hollow concave corner here in the Pavilion where the arches meet. You have, actually, the same problem.

PJ: Yes, but I could have filled that in the way Saarinen did. It's not a corner, nor is it even logical with the rest of his



grammar to me. He should have spread those apart. Mies's corners are the greatest: the Seagram Building. Here [Glass House] I spent more time on the corners than I did on the whole house. I failed in one place, but I ain't going to tell you. I still don't know what I should do. Mies didn't like this corner. He said, "You come see the Farnsworth House; I will show you how to turn a corner." And it is beautiful—by keeping the column away from the corner.

HK: He was here?

PJ: Many times. But he hated this house. We got into a terrible fight, late one night, and at two o'clock, he said, "Philip, take me somewhere else to sleep." He had slept over here the night before. I said, "Mies, you must be joking. It's two o'clock in the morning." He said, "I don't care; get me out of here." And he never came back.

HK: That was the end?

PJ: No, I saw him again, and he apologized the next morning. We had had quite a lot to drink. But I had to find a friend of mine who would take him in. He never would come near this house. You see, this was before we built the Seagram Building.

HK: Let's go back to Kline.

PJ: My top of Kline is the same as the top of the Seagram, exactly. And for the same reasons.

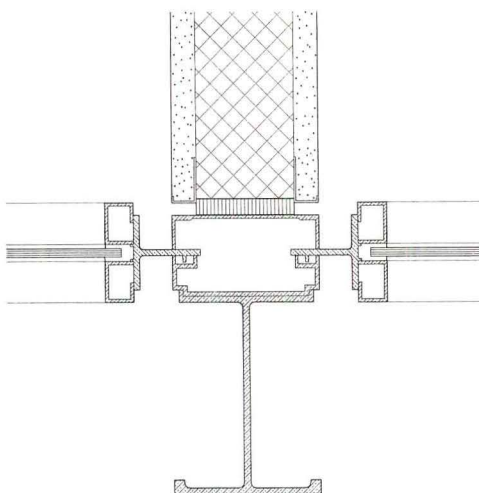
JC: And it houses the services. I wanted to ask about the sandstone slabs, which look like balconies. They are not functional; they simply add dimension to the façade. Dimension. Shadow. Show. At night, the lights are supposed to be on.

PJ: You mean those bulbs behind each slab, which have no other purpose than to add effect? I put the lights in later. That was not part of the essence.

JC: Why did you put in the lights? In order for the building to be admired at night?

PJ: Well, the owner said, "Why don't we do something to light it?" And I said, "If you want to, you can put little bulbs in behind there." I never thought they'd do it. They did.

HK: The slabs turned out to be the shadow walls for the lights. Your only in-



tention was to give the façade...

PJ: Third dimension!

JC: Day and night.

PJ: Of course, that was Frank Lloyd Wright's main objection to modern architecture—flat-chested.

JC: You put these slabs in just for an aesthetic sensation?

PJ: Of course, that's why you do everything... I get into silly functionalism now and then, but then I go back. Actually, a façade is a plaid. It's a series of horizontals and verticals, whether it's shadow, change in material or fenestration. There are many ways of expressing it, but every façade that has a repetitious background, like an office building, has to be a plaid. So it's the relations, isn't it, of the vertical to the horizontal.

Now, you can do the vertical, like the Seagram Building, with its exquisite shadows, caused by those H beams (section above). The discovery of that H in 1947 is a turning point in façade design. That H column, which makes that shadow, was an absolute revolution, you see, because it gave you your third dimension. It gave you an incredible shadow. You wouldn't have gotten it with many mullions sticking out flat because of the undercut. Mies said he studied it by hanging various shapes out the windows and looking at them. But the application of a common, ordinary H beam was a turning point for the third dimension in façade design.

And what do the Miesians do? They copy everything but the most important thing. The Bunshafts of this world use just a plain mullion. Then it's just a sheet of glass again. The Seagram Building is not glass. Unless you are looking right at it, you get mostly the light of the front of the H and the black of the interior of the H. I think it is the work of genius...

JC: You are called the one who brought elegance to modern architecture.

PJ: Yes, I don't mind that.

JC: Is the Kline Biology Tower "elegant"?

PJ: Well, that's a very rich building in comparison to university buildings. It's no richer than any nineteenth-century university building. It doesn't pay any attention

to the usual economies of façade design that is required of any tall building.

JC: Do you mean it is rich because of the budget?

PJ: No. In the material. The budget would naturally go up with that.

HK: It is certainly not a plain façade.

PJ: It's a plaid. The word "façade"! You still have a prejudicial reaction to the word "façade"?

HK: Yes, you are correct. In this case, I intend to use it in a pejorative sense. However, I might change my mind.

PJ: I know you are struggling... *Facadenarchitektur* is the worst thing you Germans can say about any building.

HK: Because of the arbitrariness. It is not only freedom; you can be arbitrary. You can apply anything to a wall. Your free-hanging sandstone slabs, for instance, are very arbitrary.

PJ: Ooo! Expensive, too! The most important part is that little cut.

HK: It's that very sharp cut in the sandstone horizontal, separating the half column from the slab.

PJ: But it is cut in exactly the wrong place. If the slab was to hang, it should be strong at the hanging point. And it is weakened there by the fact that the column comes around a little further and there's that little V cut which is the most important thing in the building. Otherwise, there would be no vertical.

HK: This becomes very expressive on the small side of the building, where the columns are in the wall.

PJ: Where there are no windows. Of course, that's the best part of any building, where there are no windows.

JC: As far as façade design is concerned, even in the Seagram Building there is a fake façade (photo below). On the north side, Mies simulated the grid design on that solid marble wall, and that's fake.

PJ: Totally fake. That's a solid wall.

JC: Why fake the windows on the solid wall?



PJ: Because Mies had an idea of a glass building with a certain rhythm of mullions. While he was working on that, the engineers said the building would fall down in the wind. So we put a shear wall there. We didn't need the plaid. That's solid concrete, the most expensive part of the building. I received a letter recently from an architect who asked, very sensibly, "Why wasn't it plain, like the U.N. building?" He commented that it is just a piece of marble, that you don't have to decorate it with those mullions. I must say it never crossed my mind. It seemed most logical to Mies and me that the building all look the same. And you don't really notice it. That solid wall even goes around the corner of one window bay. That happened just before the construction started because the air conditioning people said we didn't have enough vertical risers. And Mies said, "Okay."

JC: He was after something like the Lever House...?

PJ: Oh, my God!

JC: ... a continuous grid façade on all sides?

PJ: Oh yes, sure. His logic, you see, was a very flexible kind of logic. Take, for instance, Mies's famous remark that until he got a bay size, he wouldn't work on a building, a 3 by 5 bay. Then he could work, because a column is a column is a column. All right, you get this rhythm of columns every 27 feet in our Seagram Building. However, in the dining room of the Four Seasons, the central column is just taken out. All right, you say, "Take it out," but what happens to the beam? The beam should get twice as deep! But we couldn't make the beam twice as deep because of the ceiling. On the outside, the size of the spandrel had to be kept. Oh boy, so you see, I lost all respect for honesty, the logic of buildings. The only way to build logically is to build the way the cheap people build. They would never do that, leave out a beam! Look at the Glass House. Look at that chimney. That chimney goes right through the beam!

JC: Do you still like this house?

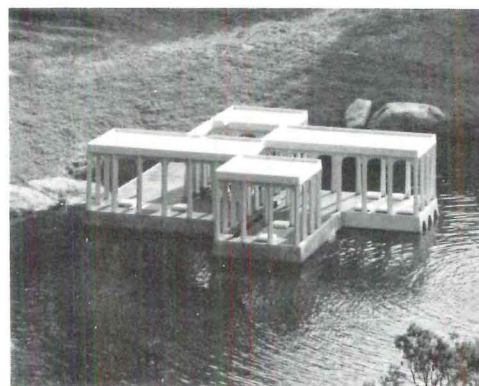
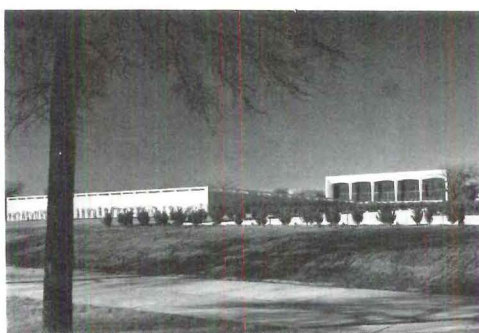
PJ: I never think of it. I just live here. I wouldn't live any other way.

HK: Mr. Johnson, this conversation gives me the impression that it is difficult to attack you, to pin you down.

PJ: Because I'm not consistent myself. However, you *have* pointed out the inconsistencies in the waving walls and the columns of the Kline Tower.

HK: I don't object to a waving wall, as such. I question with you the whole façade idea. You still are an art historian. I wonder if you are able to build without being so much aware of the *history* of architecture.

PJ: It would have been different. I remember the headline in a show I did, "You cannot not know history." It's just part of us, whether it is self-conscious in my case or unconscious, but I exaggerated terribly in the interim [architectural] period. In the



Fort Worth Museum (photo above) or in this [Pavilion] down here (photo above) it became *spielerisch* [playful] to a degree that borders on irresponsibility.

HK: Your Pavilion is almost a toy. However, I think that there is some humanity in it, in that you are able to play, and not only to build monumentally...

JC: Play is also in the Kline Tower—those slabs, for instance.

PJ: That is a much more serious statement. It is not quite as absurd as a Yamasaki or even Johnson in Fort Worth.

HK: I think you mentioned once that you wanted to build a "Parthenon of science."

PJ: Did I? I hadn't thought of that.

HK: The Kline Tower standing there on the top of a hill as a symbol of science! Of course, it's far from being a temple, but is it a symbol?

PJ: That is what I meant it to be.



HK: You wanted more than a functional box. You wanted to make the building state its meaning. You wanted to show how powerful science can be, and you did that with these huge columns.

PJ: Actually, I didn't. That is your interpretation.

HK: But that's the way I experience it. ... One enters the Kline Tower through your enormous colonnade (photo below left).

PJ: Yes, I like that.

HK: This colonnade is one of our major objections. There are, in our opinion, not only fake details like the plinths of these columns, but there is also an exaggerated scale which alienates the individual, which diminishes him.

PJ: Ah, well, that's a good criticism. I'm just on the other side. I think it's wonderful; it's fun to be small. I mean, I love Bernini colonnades. You may not. It's a difference in taste on monumentality. I don't think there's a European who *would* like it. That's one reason that Kevin Roche and I get along well.

HK: Being European, this kind of monumentality reminds one immediately of Stalin and Hitler.

PJ: Or the Leningrad Embassy [by Peter Behrens and Mies]? Mies didn't deny those times. He was very proud of the Leningrad Embassy (photo below).



JC: The problem for architecture today is to create an environment which responds to human values rather than the architect's quest for immortality.

PJ: Of course, that humanist argument against monumentality is Frank Lloyd Wright's. He resented our work because it was monumental. He resented this house [Glass House] because the ceilings are too high. Of course, Mies himself liked low ceilings. I took Mies to the Wiley House and he said, "Philip, why did you make the ceilings so high?" I laughed and answered, "It's about two feet too *low*!" Mies is also of that generation, in spite of his own classicism, you see. He's not late enough in the nineteenth century. He would have preferred Karl Friedrich Schinkel; I would prefer Henry Hobson Richardson.

In the 1870's, in this country, in the great county courthouses, Indiana for instance, a ceiling under 18 feet was unthinkable. That's what I like! I was with a lot of people in the McKim, Mead, and White

Municipal Building in New York City. They said, "Oh, it's too Russian, too monumental, isn't it?" I said, "I'm sorry, it's wonderful." All built of granite. You look out the fourteenth-story window, and the reveal of that jamb is a piece of solid granite, none of this thin stuff we use now. That, in itself, is worth the price of admission. I don't care if it's Russian, or what it is. But we carry a big, bad ballast on monumentality. The library at New York University is going to be very, very unpopular because it doesn't have the in-and-outness of today. It has no slanted wall, no glass at all. It has symmetry, which is of course considered to be very bad.

HK: Not necessarily.

PJ: It's not forced symmetry, but...

HK: Symmetry is almost a special feature of modern American architecture.

PJ: Is that so?

HK: Take, for instance, in my opinion, the fascist ground plan of Stone's Albany campus. Note the symmetry of recent American embassies, or, on a much higher level, the ground plans of the great Louis Kahn.

PJ: Of course, he's an old Beaux Arts man. Take the towers of the Richards Laboratory. They're just decoration, but they're very strong and very, very beautiful. But Kahn, of course, is a total phony, a worse phony than I am. Well, we are all phonies. Wait until you get into some of Kevin Roche's work. But the tricks Roche goes through to get his windows 3 or 4 feet back from the façade—the tricks are unbelievable. But if it works, who cares? It's just marvelous. I think his Ford Foundation is his least good building. That's an early building, but his work is going to be, I think, stupendous...

JC: You said that the NYU Library was going to be unpopular. What about your Boston Public library (photo below)?



PJ: The Boston Public Library was designed about six years ago. It's just going up now. That's my most controversial building because it's the most enormous, I mean, out of scale. It's the most small-making, makes people look small. It's not a human building. You see, I've always been violently antihuman because of Frank Lloyd Wright, who thought that any ceiling higher than six feet three inches was unnecessary and not cuddly enough.

HK: You're an aestheticist, as well.

PJ: Of course. I always thought that was what architects were for.

HK: You believe that an architect has to be an artist. The setting and landscaping here [New Canaan] is a very aesthetic environment.

PJ: "What's wrong with that?" I always say!

HK: I wonder how you would build a housing project?

PJ: Well, I'm doing that now—Welfare Island.

JC: Is that a housing project for low income families?

PJ: All housing is for low income. It's all very virtuous.

JC: How do you approach a welfare housing problem, being an aesthete?

PJ: I figure out what the streets should be. The opposite of Corbusier's is the simplest way to put it. The isolated block in the park—fuck that! The point is, what do you do when you step out of that building of Corbusier's, I mean, Unité or anywhere, you're just dead! Now, here I'm getting human, too.

HK: Very surprising.

JC: You say the Unité is antihuman?

PJ: Oh, I think so, but it's also anti-architectural, antistreet architecture! You see, you can't deny the street—but to Corbusier the street was just something to carry trucks to the building. The roof was important to Corbusier. I think the roof is something to pretend doesn't exist—I think he was wrong on several questions. He was a terrific sculptor, you see. I think Marseilles may be one of the greatest buildings of all times... if you don't go there too often. But under *pilotis* is one hell of a place to be unless you want to pee! It's just a great big place where you go in a corner. Just terrible. But that enormous building floating on those beautiful feet... Who could do feet like that? Well, Mies and I just take the columns and run them on down. How silly and cheap can you get? Of course, Corbusier could only do it once. It was too expensive, but who cares how expensive it was? How expressive to have those feet! And that fantastic roofscape! But all those things don't have much to do with the problems.

JC: Would you be more receptive to the Peter and Alison Smithson solution of streets in the air, where people gather on an exterior level outside the building?

PJ: I'm very much against that, for the simple reason that I don't think there are enough people in the world to take care of the streets we have... That's not where the action is—on anybody's fourth floor! The action is where the girls are with the loosest blouses, wiggling their asses. They don't do that on the fourth floor. No, sir! Always go to the ground floor.

JC: Would you call those dead spaces?

PJ: I sure would! And all two-level towns agree with me. You go to Hartford just once! Whoever goes up to that

place in Hartford [Constitution Plaza]? And that's easy compared to other two-level cities. All these English two-level cities make me tired. They're all theory, you see...

To me, my way of approaching the town is pure aesthetics. There is the aesthetics of a street where the whores walk—the *Strich*. What do you call it in English?

HK: Isn't there a word for *Strich* in English?

PJ: There's no such thing. The Kurfürstendamm in the 1920's, before you were born, was the greatest *Strich* that the world had ever seen. Every other person was a whore. Berlin in the 1920's was something! And the Kurfürstendamm was a street! Goddamnit! The only problem was the Kurfürstendamm didn't have any end, but there was a certain block where everybody turned around and walked back.

HK: And you would like to have a certain emphasis at the end?

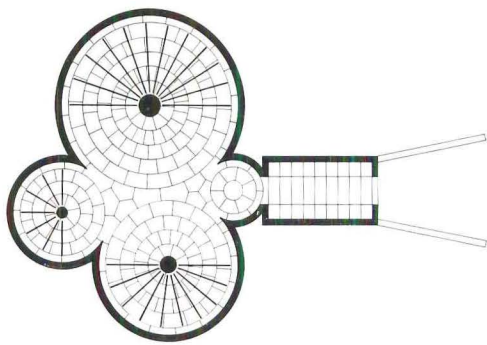


Alexandre Georges

PJ: Oh yes... [My own] house could not be possible without that granite garden wall. This house is a Chinese box in a box in a box. It starts with the coffee table. That is the first unit, and that has never changed. A carefully designed living room that is outlined by the edge of the white rug. The white rug is a raft. The living room is the next box, and the living room sits in a bigger living room, which is outlined, interestingly enough, by the Poussin, the cupboards, the chimney. And then you jump to the kitchen, the sculpture, and the plant. That's the next envelope. That envelope sits in the Glass House. The Glass House sits on the lawn, which is stopped by the lawn grass and by the parking space. But this grass carpet again is another microcosm, which is held by the edges of the woods, which are, of course, the wall and the woods and the woods and the woods. So it's a set of enclosed things within things (photo above).

JC: As your house has been photographed over the years, the arrangement of the furniture has never changed.

PJ: Never. It's not supposed to change. No, it's the Miesian principle. Mies never knew that. I told him how he did furniture in the Tugendhat House, and he said, "Yes, that's right. I do arrange furniture like architecture." Today, however, I arrange furniture like my gallery [New



Canaan], in clusters, everything movable (plan above).

JC: You became an architect when you were thirty-four or thirty-five, after you were already an architectural historian. What were your first architectural designs?

PJ: My first building was a thing copied naturally from Mies's Barcelona Pavilion. It was in my first year, the usual problem given beginning students, to do a pavilion in the woods.

HK: That means that you started immediately with the International Style.

PJ: Pure Mies! I am the first Miesian. But my very first house wasn't built until 1940. I brought Mies first to the attention of the Americans, you see.

HK: And also to many Europeans.

PJ: Yes. It was silly, the way they denigrated Mies. Of course, it was the International Style people who hated him most because he used silk, you know, marble. Yes, he was not living well when I first met him. Breuer was my teacher, and I learned more from him than from Gropius. I graduated from college in 1930. There was no architectural school that anyone could go to.

HK: You mean you never went to any architectural school until...

PJ: Until 1940.

HK: And where did you go to school?

PJ: Harvard.

HK: When Gropius and Breuer were there. Then you didn't have any of that old Beaux Arts ballast?

PJ: No, never had any. My start you see was with Hitchcock.

HK: Did you meet Hitchcock in Europe?

PJ: I met him in Paris in 1930. Then we wrote the book *The International Style*. Well, he wrote the book!

HK: You are too modest.

PJ: Not true. Not at all modest. It just happened that way.

JC: Looking back to your beginnings, it's surprising to observe your move away from Mies's sobriety toward your decorative arch façades of the late 1950's.

PJ: The British call it my "ballet school" period. The British are the most bitter critics, you know. . . .

There is no point in staying a Miesian *Schüler* [disciple], although I think it's perfectly all right, mind you, to do pupil architecture. It's natural.

JC: Well, you did things Mies never did.

PJ: Then I did it unconsciously, because

I was very consciously trying to understand Mies.

JC: Later, there was a conscious break. Do you recall why you felt strongly about getting away from these pure Miesian forms?

PJ: Well, I was just growing up kind of late.

JC: It's important to document this transition, it seems to me. It's such a distance away from Mies. Would you say there are stylistic reasons, psychological reasons, perhaps frustration, that drove you away from Mies?

PJ: I always called it boredom.

JC: Why would you be bored with it?

PJ: Why, wouldn't anybody?

JC: You were very successful at it.

PJ: Yes, I was a good Miesian. But then to go on doing it, you see. . . . Unlike Mies, I'm too romantic a person perhaps to want to do anything *again*. I should think Mies would have got so bored with himself he wouldn't have been able to design these buildings.

JC: Were you looking for a new form, an original form?

PJ: I never believed in originality. I thought Mies was right about that. Better be good than original. So that's why I defended my use of classical motifs.

JC: But Mies himself was always original.

PJ: Mies never got anything from anybody else. He was adamant; he was *sui generis*. He was a success because of what he did for the American steel fabrication system. For him, that was no accident because *bauen* [to build] means the technique of our time, the technological expression of our day. He didn't even think he was an artist. He felt that he was making forms that anybody could use. Why didn't everybody build that way? He thought we were all crazy. Not only my generation, but the next one. He thought we were all going to pieces. . . .

HK: The so-called brutalist movement didn't make any impression on you.

PJ: Not to me. I never liked concrete as a material.

HK: Do you perhaps remember what brought you back to sculptural qualities?

PJ: Well, I remember a luncheon in Rome with Frank Lloyd Wright at the Scarlini. We went from one room to the other; there was this enormous thick wall through which they had cut an arch. He hit the side of the jamb and said, "You see, Philip, the third dimension!"

HK: But Wright was always thinking in those terms.

PJ: That's why he hated me, you see, and the whole International Style. He called it flat-chested, like a woman with a flat chest. It was just something unhuman to build these flat buildings. But it had been in my mind and Hitchcock's mind that the third dimension, the shadow, was coming in in the 1930's. I was so convinced that everything had to be two-dimensional that

I... was very amused to discover this whole third dimension business. . . .

JC: Were you looking for forms that were aesthetically appealing or for a historic model with which to realize the third dimension? Or did you want to originate a new form?

PJ: No, I didn't.

JC: What were your sources for selection?

PJ: Oh, I got the feeling—everybody does this, of course, whether he admits it or not. You take a strong modernist like James Stirling, whom I admire enormously, you see. He has a whole file of pictures of back alleys in Liverpool, Mendelsohn's great ridge for silos, *Wie Baut Amerika?* [*How Does America Build?*], that great book, or Corbusier's interest in ocean liners. We all get things from other visual impact. With me, it was certain periods of history.

HK: You were not interested in the machine?

PJ: My God! That was absurdity. Think of J. J. P. Oud's *The Bauhaus Book*. He thought it was absurd to compare the ocean liner to the Parthenon. I never liked machines just for machines' sake, even back alleys for back alleys' sake.

JC: Do you tell the story about lunch with Frank Lloyd Wright in Rome because that is the turning point for you?

PJ: Yes. Yeah. I don't know why, but it just sticks in my memory as the time when I realized what he meant by the third dimension.

JC: Would you say that your arch façades are an outgrowth of that?

PJ: I think that that was my struggle to get out from under Mies. I let myself go in my own fashion for history. Why be a pupil of one international style when you have the *récit* of the world's history to draw from?

JC: Did you make a conscious decision to move to a particular period in history?

PJ: No.

HK: What would you call it, Romanesque?

PJ: No, not Romanesque, but *Rundbogenstil* [round arch style]. It wasn't Romanesque in any sense. I never understood Romanesque architecture. I still don't. I'm much more interested in romantic Romanesque. It's entirely different.

HK: It's of course quite a step at a time when everybody thought that the arch was not possible any more.

PJ: I know, but that's another thing that I have, a Peck's bad boy feeling, you know. I wanted to be the bad boy of *some* kind. I was bad enough when I introduced Mies to this country. Everybody thought that was horrible. It was still worse when I did my arches. . . .

JC: Are you out of the arch period?

PJ: Oh, Lord, yes.

JC: You still feel positively about the Nebraska Museum and the Pavilion here at New Canaan?



PJ: That's right. . . . But now I resent the arch period very much. We now have a greater freedom in the treatment of masses. Take, for instance, my Art Gallery [New Canaan], where those four circles of space merge and you get those interior cuts. That's the only thing that interests me.

JC: You mean those sharp edges which jut into the space?

PJ: Yes.

JC: Before you discovered this freedom, why did you begin again with arches?

PJ: Well, I always liked the *Rundbogenstil* of Perseus, but that's too simple an answer. It has to do with the whole idea of the continuity of the wall. A series of arches keeps the architrave going, keeps the wall going, and doesn't cut into it. You get a tenseness in an arch, a continuity, that you don't get in a Greek temple colonnade. The arch connects the columns in a pulling way that a series of columns does not. . . .

HK: Corbusier introduced that flat segmental arch along with his new treatment of masses in the houses of Neuilly. It was the first domestic arch in contemporary architecture.

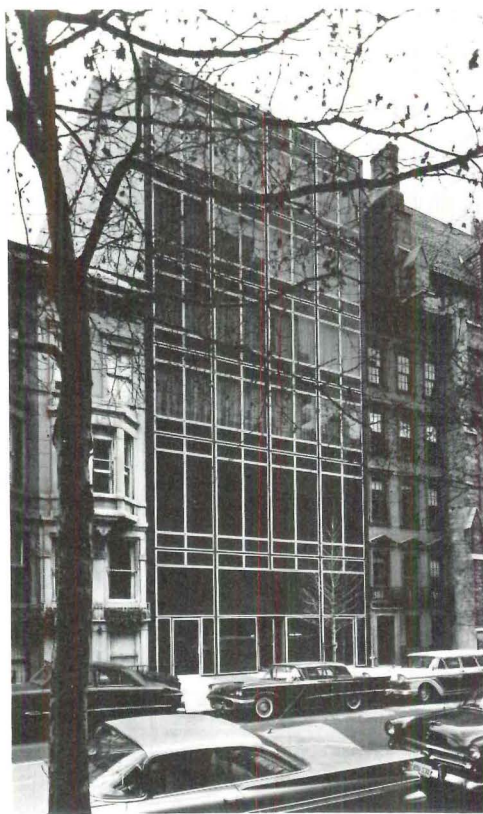
PJ: I introduced it in an entirely different sense. "Very historical, very decorative," anyone would say. All I was doing was decorating a block wall.

JC: Was that purely decorative?

PJ: Oh, yes. It was obviously decorative.

JC: And you were not interested in having the exterior define the interior?

PJ: Actually, Nebraska denied entirely any differentiation of interior spaces. What I had there was taken more from Schinkel's Berlin Museum than from the normal way of pulling apart functions and expressing them.



JC: In this arch period, you were returning to a historical preference.

PJ: One I've never forgotten, still haven't, I guess, of the romantic period, the early nineteenth century.

JC: It is evident in your early proposal for the Asia House (photo above left).

PJ: That's when the first word came from the English magazines that I had proposed a new Art Nouveau.

JC: You have an arch sequence on the top.

PJ: That's right.

JC: Without a cornice.

PJ: Yes, there wasn't any top on it.

HK: It's very interesting that the final result, however, is a Miesian façade (photo above).

PJ: No, a Bunshaft façade.

JC: Now, that's an interesting distinction. . . .

PJ: Oh, yes, Bunshaft isn't Mies!

JC: . . . because you have criticized architects who copy Mies but did not understand his H beam. Now, in the Asia House, when it's finally built, you have done the same thing for which you criticized other architects.

PJ: I did, that's why I call it my Bunshaft period.

JC: Why did you?

PJ: Cheap. The second version, you know, has some dignity to it, still Miesian perhaps, but I saved only \$50,000. But Mr. Rockefeller said, "I want to save \$50,000." Mr. Rockefeller liked glass buildings.

JC: Do you mean that the client wanted such a façade?

PJ: That's right.

JC: And he did not like your arch façade?

PJ: Oh, no. That wasn't modern. He

used money as the reason, but I can't believe that for him \$50,000 was the reason.

JC: Did you have any problem building the final façade?

PJ: Oh heavens, no. How could you? It's stock, right out of the book.

HK: At that time, in 1959, you were already aiming at a new concept, whereas your commissioner still wanted the stock glass façade.

PJ: Still dragged me back to Bunshaft. Bunshaft represents the accepted style of our time. That's one of the secrets of Bunshaft's success. Now he's moved on to heavy things, but it's still right in the line of acceptance. He and I dislike each other very much. A very famous dividing of the ways was written up in one of the magazines when I had a meeting of six architects at my house to discuss where we were all going: Saarinen, Bunshaft, Rudolph, Mies, Johansen, and myself. We met for two days at my house. No reporters, no wives.

It was before Saarinen's last building, CBS [started 1961]. There we really disagreed. The six of us hardly spoke after that. You see, each of us was showing what was currently on our minds, sketches or anything else, and the rest of us would jump on him!

JC: You didn't call on Louis Kahn?

PJ: No, he hadn't appeared yet.

JC: When you called the five other architects to your house, was this the time when you were making designs for Lincoln Center?

PJ: No, long before that.

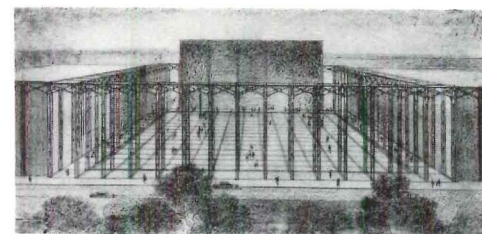
JC: Do you recall what inspired you to propose those concrete arcades, which look like Art Nouveau decoration in the early Lincoln Center drawings (photo below)?

PJ: Precast. I was fascinated with precast. I knew it wouldn't be built, but that wasn't the point.

JC: You were after something.

PJ: Oh, certainly. It would have at least been a center.

JC: But now you are just as unsatisfied with the results as we are?



PJ: Oh, it was terrible. The only thing that was left from my plan was the placing of the buildings. They are where I put them, but they're not unified. The space leaks out everywhere. . . .

HK: The first design for the Asia House was the beginning of your arch period. This is the moment when you turned away from Mies, and we were very surprised to notice that you were drawn to the great American architect of the nineteenth century, to Louis Sullivan, especially his Guaranty Building in Buffalo, which seems to resemble your first Asia House project.

PJ: You're absolutely right. Guaranty in Buffalo! It is exactly! Gaudí, of course, was in there, too, but the front plane, and then these three long inserts, got into the frame, which is more like Sullivan's Gage Building, a very narrow building on Michigan Boulevard, Chicago, which has a plane base. I never could come to peace with Sullivan's way of hitting the ground, with the glass going up and cutting across the columns. So I made the first floor solid with only the door, and then I depressed the glass, and ended with an arcade, instead of with Sullivan's heavy cornice, but there was Sullivan in it.

HK: Had you been looking at Sullivan's buildings around that time?

PJ: I spent a whole summer in 1932 with Russell [Hitchcock] in Chicago, looking up Sullivan. Obviously, it stayed with me. It lies around, for the very good reason that Sullivan was faced with the same problem I was: What do you do with a façade along a city street? I suppose my final solution was the very worst. It was minor Bunshaft.

HK: It's not that bad.

PJ: Oh, it's not that bad, and it's quite interesting. I like the white and black.

HK: It's the best Bunshaft in New York.

PJ: Oh, ha, ha, ha. I was trying to break away from the flat and get some character, but still carry the street, and it seemed to me the only way was depressing the windows into a deep column, which was Sullivanian. Before Sullivan in New York, as far as history is concerned, the buildings are Gothic, and they are terra cotta, which you no longer can buy. But the spandrels and windows are all set back. The shafts out in front run all the way up, and are connected at the top. It was one skyscraper solution or façade solution of the high period which was viable, I thought.

JC: You're very much aware of formal effects.

PJ: Very. To me, architecture is all about form, in spite of Mies.

HK: You consider an architect as an artist. Many would deny this, maintaining that an artist and an architect are not necessarily identical. In Germany and France, an architectural school is incorporated into a technical university, rather than in the art and architecture school of an American university, such as Yale.

Where does architecture belong? You seem to be saying that architecture has little to do with engineering or technique.

PJ: Well, you see, not with what we're talking about, because what we're talking about is the way a building finally looks. There's a great deal to do with techniques, just as designing the house has to do with designing the kitchen, but it's nothing worth discussing because you get technologists of kitchens that do better than architects, anyhow. And, to talk about architecture as a technical matter, or a social matter, or a participatory democracy matter, is not the point to me. So I don't really know how to discuss it any more because, really, the old boys are winning. I've been asked to do an article for the *Architectural Record* on the relation of the present attitude toward functionalism to the 1920's. You see, I get a feeling of *déjà vu*, whereas by far the majority of writers, as it appears at least in the magazines, are for participatory democracy and socialism in the broad sense, and architecture as a technique of satisfying the needs of the masses. This is exactly what Mies was up against when he did the Afrikanerstrasse [Berlin] in the 1920's. Gropius thought "Wohnungen für das Existenzminimum" ["housing for minimal existence"] was a perfectly good phrase, and Mies's answer was, "Well, if my buildings are too expensive for the workers, why don't you give the workers some more money?" which I think is the most delightful way . . . to slice through it . . . and that was the big fight of the 1920's, when they threw Mies out of the local CIAM chapter for using silks. So, today, we have it, but in slightly different things. We don't have *Neue-Sachlichkeit* [new objectivity]; we don't have *Maschinenarchitektur*, that wouldn't interest anybody; but we have this vast participatory democracy, community, boards. . . . I asked one of the Negro architects who was here the other day what he did all the time. He says, "I go to meetings." Every single night. Every single night. He's bankrupt, by the way. In other words, he doesn't fit into our culture, but he thinks the only thing to do with architecture is to meet with these community people every single night of his life. Well, I still think architecture is more than that. And I resent deeply that the U.S. Government is influenced by this ideology, putting post offices into the ground floor of business buildings. I'm a nineteenth-century man, I guess. In my day, the post office was the pride and joy of the city. And where is the new one? I look at it out of my window. It's the ground three floors of the big skyscraper on Third Avenue.

So, somehow, my attack on functionalism is about "business functionalism," which says, "I'll do whatever the client says, instead of standing up for art." But the client demands this kind of functionalism because this *Weltanschauung* is permeating our society. Fortunately, in the

German Weimar Republic this did not happen. Then, of course, it went too far with Hitler, who was, unfortunately, an extremely bad architect. The only thing I really regret about dictatorships isn't the dictatorship, because I recognize that in Julius's time and in Justinian's time and Caesar's time they had to have dictators. I mean I'm not interested in politics at all. I don't see any sense to it. About Hitler—if he'd only been a good architect!

HK: Mussolini didn't object to good architecture.

PJ: At first. He built the Casa Fascismo in Como, a perfectly fine building. And lots of *Terza Roma* is good, but you can't talk about it because it was done by Mussolini. But, if you go to Rome today, you'll find that the *Terza Roma* was much better than what's been done in the Republic, in the same area, since the war. So let's not be so fancy pants about who runs the country. Let's talk about whether it's good or not.

JC: The so-called Architectural Resistance today among the students. . . .

PJ: Oh, yes, attack Skidmore, Owings, and Merrill for cooperating with the apartheid government of South Africa. Oh, the kids. Very simple: Do away with architectural schools. They have no more meaning; they never had any meaning.

JC: Is there a commission which you would refuse?

PJ: Of course not. I'd work for the devil himself.

JC: Are there ethical standards an architect must reflect?

PJ: There are building standards. I disobeyed them in the Epidemiology Building at Yale (photo below). That's a sin against the Holy Ghost. The real sin is to build something that stands there and says "Philip Johnson" on it and it isn't right.

JC: Not that Hitler may have commissioned it.

PJ: No! Whoever commissions buildings buys me. I'm for sale. I'm a whore. I'm an artist. What did Michelangelo say when Julius locked him up? What the hell



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Dreyfuss collection

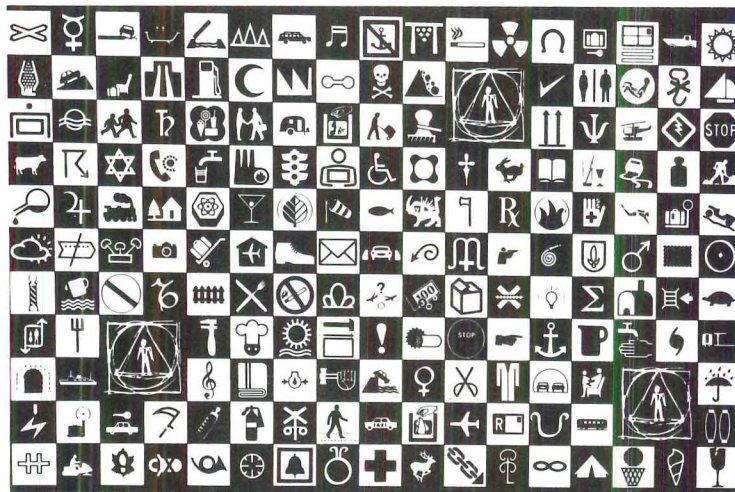
Henry Dreyfuss' designs affected the lives of almost every American. During a 40-year career before his death last October, he designed scenery for the Broadway stage, Bell telephones, Polaroid cameras, Hoover vacuum cleaners, Big Ben alarm clocks, John Deere tractors, the New York Central's *Twentieth Century Limited*, planes, knives and forks, the American Export passenger ships *Independence* and *Constitution*, and was responsible for the design of the Bankers Trust Building in New York City.

The Dreyfuss files, including drawings, correspondence and speeches all relating to his career, have been acquired by the Cooper-Hewitt Museum of Design in New York, a member of the Smithsonian Institution. The Dreyfuss material includes the world's largest data bank of symbols. *The*

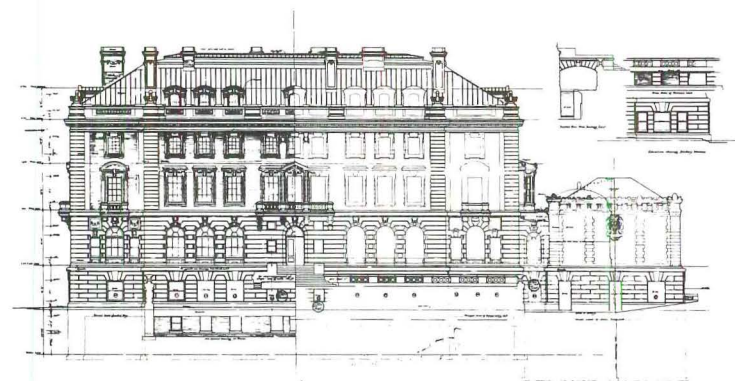
Henry Dreyfuss Symbol Sourcebook, the result of 20 years of work, was published in 1972.

Lisa Taylor, director of the museum, in announcing the acquisition, also told of the museum's plans for establishing a "Doris and Henry Dreyfuss Memorial Study Center."

The Dreyfuss collection will be housed in the old Fifth Avenue Carnegie mansion given to Cooper-Hewitt last year. When the remodeling work on the Carnegie is finished next year (Hardy Holzman Pfeiffer, architects) that building will become a Smithsonian national museum of design, a major research institution, with fully equipped studying spaces for working designers. Cooper-Hewitt Collection, although part of the Smithsonian Institution, is a private, non-profit museum.



The Carnegie Mansion on Fifth Avenue



Henry Dreyfuss at work on one of his symbols



Sunshine power

Sun is perhaps the most obvious and inexhaustible source of power for this earth. But we have done little to harness it for practical use.

Last month, over 600 scientists and engineers from more than 60 countries (including Russia, but not China), met in Paris to discuss what has and can be done with sun power. Named *Sun in the Service of Mankind*, the conference proved the need for a great deal more research even as it illustrated that much of the basic technology already exists. There was widespread agreement that solar energy must be explored and managed on a worldwide and not a national scale and that now is the time to move basic research out of the laboratories and into practical applications.

Most of the work presented was specialized and fragmentary in nature. The warmer countries have done more work generally than those in the colder climates, and academic and scientific research has far outweighed work by practitioners in the fields of engineering, industry, power utilities, etc. One of the purposes of the conference was to provide an international forum for the exchange and coordination of solar information. There was little consensus on any topic.

The range of papers was immense. The conference ran with concurrent sessions on sun and man (behavioral and physiological aspects); sun and energy; and sun and housing. Subjects included: sun and lighting, sun and community planning, measuring the sun (there have been gross inaccuracies), helio-thermal problems in buildings, satellite solar systems, legal and political considerations, solar heat engines, seawater desalinization, solar cells, celestial systems.

There was, however, little discussion of tides, winds and the other meteorological data that must be assembled to install and predict the behavior of solar systems. Costs were bandied about, but with little apparent accuracy since most researchers seemed to err on the side of financial optimism. There was little demonstration of hardware and most of the installations that were discussed were in houses, where solar energy is now being used for distilling cooking water, heating domestic water and supplementing heating and cooling systems for the house. Since people do not always want to be warm or eat only during periods of sunshine, storage, both short and long-term, was an important topic. So far, water seems the most common system, although research includes rocks, salts, paraffin waxes, photosynthesis and other storage methods.

Fabulous fakes

The Minneapolis Institute of Arts is presenting a major exhibition of forged art, "Fakes, Forgeries and Other Deceptions." To demonstrate the special skills of forgers, some original works of art which served as models will be shown alongside the fakes.

The easiest method of forgery is the signing of a famous artist's name to an existing unsigned painting; the only skill required here is a facile pen and a good instinct for judging what kind of work the master whose name is signed might have done.

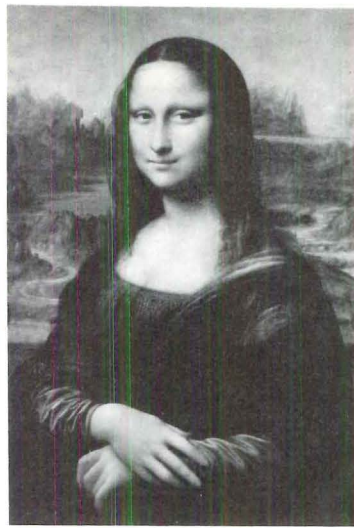
The most popular fakery is the simple direct copying of an existing work, an art form requiring extraordinary craftsmanship, one which has never achieved its proper place among the disciplines. To test a connoisseur's eye, or perhaps as a practical joke, Michelangelo, at the suggestion of Lorenzo de Medici, carved a cupid which was sold by a Roman dealer to the well-known collector of antiquities, Cardinal Riario.

There are many Mona Lisas around: needless to say, the one hanging in the Louvre is the original. Or is it? It was stolen in 1911 and many copies were made before it was returned. To this day there are those who hold to the theory that the Louvre never did recover the right girl. As is apparent in the photographs shown here of the "real" Mona Lisa and an anonymous fake, it was hard for the fake painter to get that smile sufficiently wistful.

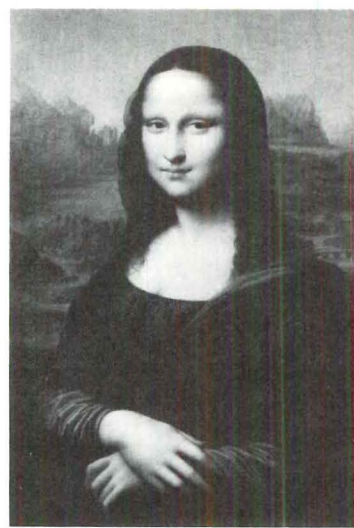
The "portrait of St. Peter in the manner of El Greco" became suspect only when surface cleaning revealed easily soluble pigments, and subsequent x-rays identified an 18th-century portrait of St. John underneath. A small window to the hidden St. John was opened at St. Peter's ear creating a much more interesting painting than the original fake.

The Dutch painter, Hans van Meegeren, who died in prison in 1947, painted many 17th-century Vermeers. He might never have been exposed if he had not been charged by the Dutch Government with selling a Dutch national treasure, a "Vermeer," to Hermann Goering for Hitler.

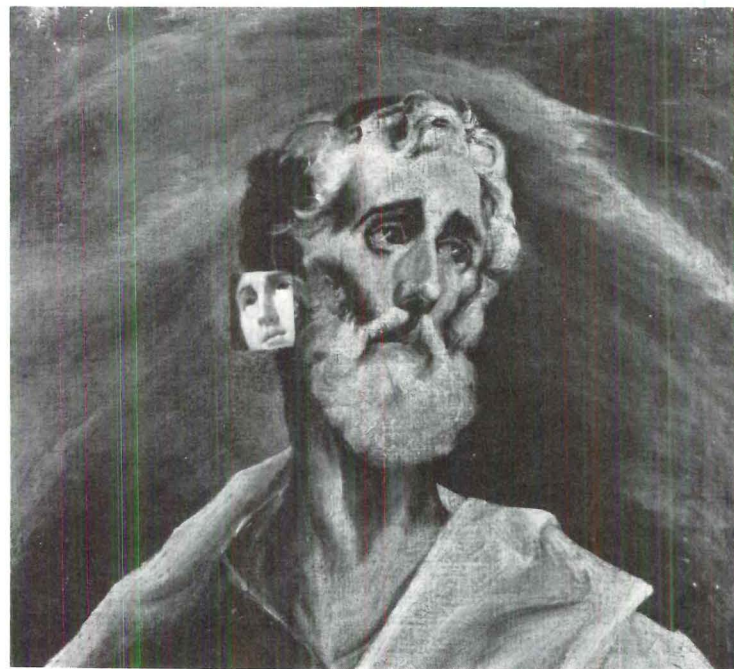
Studio copies were done in workshops where apprentices painted "in the manner of" the master. These were not considered to be deceptions. In the case of the Flemish artist, Peter Paul Rubens, the master "touched up" or "corrected," the paintings of his students to look more like his own work. The majority of his works were produced in this manner, though there was no attempt to deceive the buyer.



The real Mona Lisa



A fabulous fake



St. John peeks out from the ear of an "El Greco" St. Peter (detail)

Some masters with apprentice workshops wrote on their paintings, "This is the original," which, as one might imagine, caused no small amount of confusion years later.

In pastiche forgeries, the hands from one portrait and the head from another are copied and combined until the final version certainly looks like something a particular master *might* have done, and detection is hampered when there is no original around to prove the deception. This method of forgery is most subtle and generally left to the master fakers.

The Italian sculptor, Alceo Dossena (1878-1937), the "king of forgers," innocently took orders from his dealers for pieces "in the manner of" this or that master. He became quite expert in the manners of Giovanni Pisano, Simone Martini, Vecchietta, Donatello and Mino da Fiesole. He was paid very little for his work, and it was not until the discovery of forgery in the Renaissance sarcophagus called the "Mino Tomb"

which he executed and which was widely publicized, that Dossena realized he had been duped and that his friendly dealers were passing off his work as Renaissance originals (and becoming wealthy in the process). For a time thereafter he was something of a celebrity and had exhibitions of his work at The Metropolitan Museum of Art in New York. Though a skilled artisan, he died a pauper, with the label of forger.

What separates the true art fraud from an honest misattribution is the intention to deceive, the attempt to pass off a work as the product of a different hand. Although scientific techniques have been of great importance in detecting fraudulent works, it is still the knowledgeable eye which best distinguishes the authentic from the forged.

The show (July 12 to September 8) is in temporary galleries on the 11th floor of the IDS Center in downtown Minneapolis while the Museum is closed for expansion and remodeling.

Rome prize fellowships

The American Academy in Rome announces that submissions for Rome prize fellowships should be received by December 31, 1973.

Fellowships will be awarded in architecture, environmental design, landscape architecture, sculpture, and history of art.

The purpose of the awards is "to provide the facilities and program within which individuals of exceptional promise have the opportunity to pursue their creative work and research." There is no formal course of instruction and no formal teaching staff, though artists and scholars-in-residence are available for consultation.

Architecture historian Henry A. Millon is the new director of the academy. Among the residents for the coming year will be Dimitri Hadzi, sculptor; Robert Hamilton, painter; Richard Meier and Thomas Vreeland, architects.

Awards are open to U.S. citizens, and carry \$4,600 a year in addition to free residence and studio and use of the facilities of the academy in Rome. Write for details to the Executive Secretary, American Academy in Rome, 101 Park Avenue, N.Y., N.Y., 10017.

Library in Syria

A design competition has been announced by the International Union of Architects (UIA) in Paris. The client is the Ministry of Public Works and Hydraulic Resources of Syria. Entries are invited for a one-stage international competition for a library at Place des Omayyades in Damascus, for which 10 million Syrian Pounds have been budgeted (approx. \$2.5 million). The jury is composed of architects from seven countries.

The first prize is 50,000 Syrian Pounds. Registration deadline is 15 December 1973. Closing date for actual entries, which may be written in English, French or Arabic, is 15 October 1974.

Registration fee is approximately \$12. For details, write to the Public Library Competition Committee, Ministry of Public Works, Damascus, Syria.

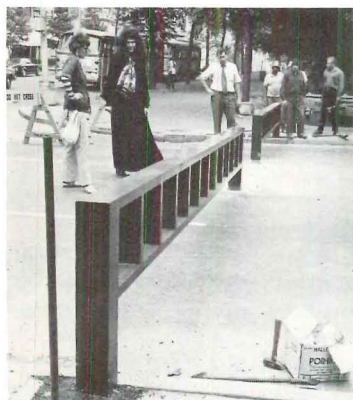
Cibernetics in Santiago

The industrial design team of INTEC/CORFU led by Gui Bonsiepe has built a cibernetic control room for the government in Santiago, Chile.

Economists sitting in seven large chairs with command consoles control and guide an electronic complex of information for the handling and making of decisions with respect to multiple variables concerning the productive industrial activity of the country.—L.A.

Better than sawhorses

Architect Adrienne Bresnan of the NYC Parks Department (wearing the black dress in photo) designed the newly installed gates for the entrances to the roads in the city's parks. The aluminum structures shown are 18 ft. long and 3 ft. tall, and painted the color of bronze, later to be painted in bright colors if the bronze color presents visibility problems at night. Each gate weighs 340 lbs. When pivoted open to allow traffic in the park, the gates form attractive and sturdy park benches.



In commenting on the new barriers, Parks Administrator Richard M. Clurman said, "These gates are not only effective barriers but also handsome pieces of sculpture."

The gates are designed to stand 8 ft. 6 in. apart so that an emergency lane is open to vehicles at all times.

Chichester Harbour

Deck houses designed specifically to meet the needs of families who enjoy sailing have been built at Chichester Harbour, an inland bay of sea water on the coast of England.

The structures stand on four rolled steel stanchions cased in reinforced concrete. There is enough room underneath for storing boats up to 21 ft. long. The walls are PVC boarding with permanent white finish.

The houses have a living room 19 ft. by 14 ft. 6 in. with French windows opening onto a sun deck, as well as two bedrooms, a kitchen and a bath.

These clean white boxes, reminiscent of square binoculars, are effortless to maintain, cool in summer, and warm in winter. The architects are Vernon Gibberd Associates of London.



The best bus in Bombay

When is a bus not a bus? When it is a bus stop! The apparition shown here is part of a deal by which private firms construct bus stops at their own expense in exchange for which they are allowed to advertise—discreetly of course.

This particular one has been put up by a firm which has never heard of Warhol—or even of Campbell soup, if it comes to that. The girl getting in at the door at right is a permanent fixture; she is made of aluminum sheet, painted over.

The legend BEST stands for Bombay Electric Supply and Transport Company. The whole thing is gleaming red and white and a big success with the public.

Perhaps the next step is to actually use old discarded buses as bus stops—think of all the money we would save! Then again, perhaps old Electras and Super Connies can be used for airport lounges; imagine a whole airfield of them—Dulles Airport on the cheap!—C. C.



Fun on Third Avenue

Lollipops, ice cream cones and freckles seem far more appropriate to the office buildings put up by Mel Kaufman than do the businessmen and pinstripes found there. Kaufman, a Manhattan builder, seems determined to prove that life is fun and fantasy is real and his buildings prove it.

Previous Kaufman buildings, which sit in the staid environs of New York's Wall Street area, have included an entrance designed as a 69-ft.-long neon "love tunnel," a 19th-century candy store with a striped awning instead of a lobby, and a World War I airplane on an astro-turf runway on top of the building "so neighbors can have an interesting view."

Kaufman's latest building is 747 Third Avenue and it is in the grand tradition. The plaza and the lobby are by designer Pamela Waters. It is built over and around an old brick Italian restaurant that refused to die for "progress"; it has a horse and buggy mural identifying the truck docks; the lobby features exposed ductwork; and outside there is a plaza that extends to the curbs. It is covered with undulating brick "hills" and has canopied benches and lazy susans beneath trees. Kaufman calls it people-oriented and notes that even the elevators have been humanized—they have windows so passengers can look at graphics as the elevators move.

Review of a game

I played this game called "New Town" with Margot Villecco who is a senior editor of this magazine. It took us about 20 minutes to figure out the instructions. In the beginning I barely understood it, but after a while it became easy and very interesting.

The game is about all kinds of tiny wooden blocks which mean department stores, apartment houses, schools, parks and a lot of the basic things that are in the cities. The board has roads, a river and a railroad. You can bid for parcels of land to build shopping centers but you can't pollute the river.

You roll the dice five times in each round to gain houses and buildings. For example, a 12 gets you an industrial plant and a 3 gets you a department store. A seven gets you a Happening. There are nine possible Happenings. An example of a Happening is like this: *Traffic study dramatizes need for road improvements. Each property owner taxed \$100. Pay clerk.*

After ten rounds, the game is over and the players count up what their property is worth and add that onto their spending money. Whoever ends up with the most money after taxes has won the game, but maybe he didn't build the best kind of town, because you don't have to build a school if you don't want to.

The game of "New Town" was thought of by Dr. Barry R. Lawson at Cornell University in 1967.—Tarek Dajani (age 12).

The thief has good taste

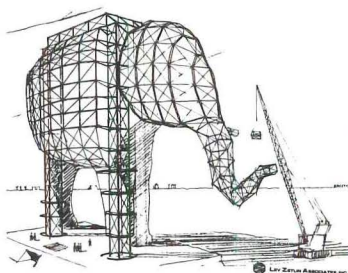
Success has its risks. Cacharel, a leading French designer of ready-made clothing, hung 612 enormous multi-colored plastic panels—setting into them a selection of the shirts he designs for men—in public places in 50 towns in France. Predictably, they were all stolen. Each panel contained three plastic shirts except those on the Champs Elysées which had eight shirts in each panel.



The biggest success to date has been outside France, however. In Naples the display was emptied only four hours after having been installed.—G. de B.

The view from the howdah

For anyone who has ever felt that a ride in a high-speed elevator up the leg of a 19-story elephant might be just the thing for curing the blues, here is some good news. Circus World, a giant amusement park now under construction in Barnum City (where else?), Florida, has commissioned Lev Zetlin & Associates of New York to design a mammoth bejeweled elephant measuring 120 ft. from trunk to tail, and towering 350 ft. above sea level, surely the largest animal in the world. At night, the jewels will light up creating the illusion of a kaleidoscope.



The massive interior of the animal just may be larger than Grand Central Station. It will contain souvenir shops and snack bars, and places from which to peek out at the rest of Florida.

A system of rings braced together will form Jumbo's ribs. The skeleton of this huge pachyderm will require more than 600 tons of structural steel. The actual skeleton of the real Jumbo (that famous circus elephant bought by P. T. Barnum from the London Zoo in the 1880s and exhibited by Barnum for many years as "The Largest Brute on Earth") is in storage at the Museum of Natural History in New York. Several engineers from the Lev Zetlin office took exact measurements and photographs from every angle and projected them onto a large screen to get an accurate sense of scale in designing the beast.

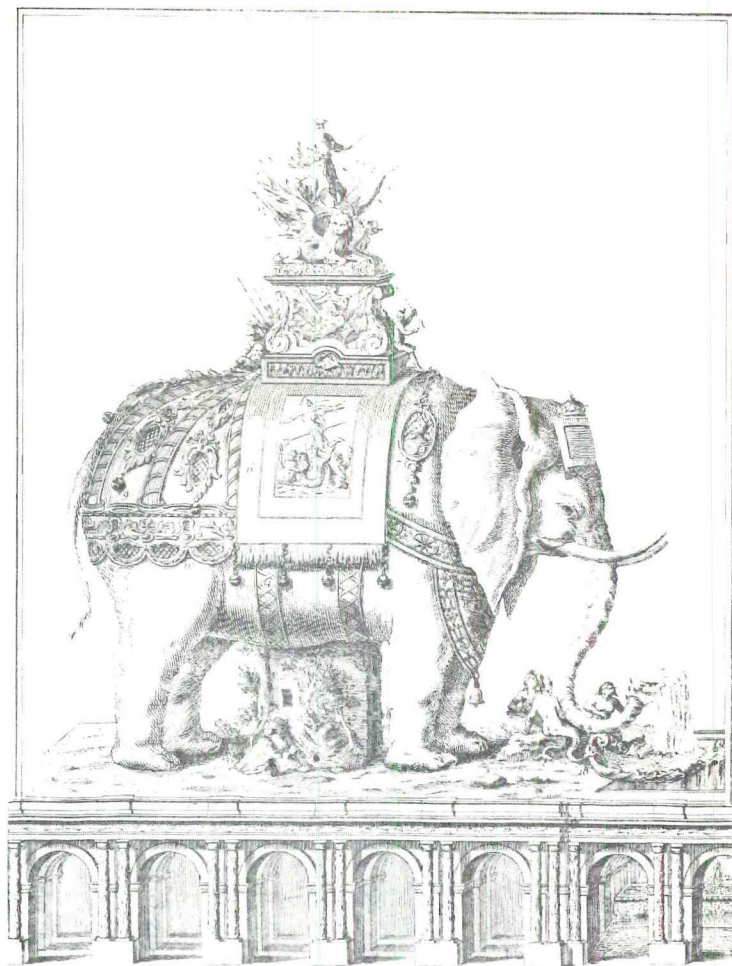
Photographs: Page 17 (Mao tapestry) Museum of Modern Art; (right) J. A. Vrumof. Page 18 (Nairobi) James Morgan. Page 70 Cooper-Hewitt Museum of Design. Page 72 (top) Charles M. Correa.

Of elephants and kings

Building oversized elephants is not a new idea—in the 19th century the practice approached the significance of a cult. One big beauty known as Lucy stood for years on the boardwalk in Atlantic City, N.J., and for all we know may be there still.

In 1753, the engineer, Ribart de Chamouss, proposed to build, in honor of Louis XV, a huge elephant (114.77 meters high and 102.86 meters wide) with a statue of the king on its back and a two-story palace in its interior. The royal dining room, decorated to resemble the center of a large forest, was designed so that guests would be served by machines. The bathroom included a large marble reservoir. The beast was to stand in the center of the Place de l'Etoile in Paris. In spite of the enthusiasm of the architect, the project was rejected; the spot remained monumentless another half-century.

At the beginning of the 19th century, after the Battle of Austerlitz, a triumphant Napoleon decreed that a triumphal arch should be erected there, and thus was born the Arc de Triomphe on August 15, 1806. Obviously, the man had no imagination at all.



Obit

In 1960, or thereabouts, Sigfried Giedion told me that the most interesting young architect working in Europe at that time was an American called Shadrach Woods, who had once been in Le Corbusier's studio, and who was now associated with Candilis and Josic, in a place on the Rue Dauphine, in Paris. Giedion and I (and a great many others) were attending some conference in West Berlin; so it was a simple matter to stop off in Paris on my way home. That's how I met Shad, who died, in New York, on July 31st.

Well, in those days I didn't know Shad from Josic, or from Candilis for that matter; but I did get to know him soon enough. I also think that, with the growth of our friendship, I began to understand a new dimension in architecture and urban design of which I had been quite unaware until I met him: an "indeterminate dimension" may be the best way to describe it. Shad understood, more clearly than anyone else I had met until then, that a time of unpredictable, revolutionary change demanded an architecture that would not only *accept* change but, in fact, *welcome* it. His competition-winning design for the New Town of Le Mireil was a revelation to me—as it was to everyone I knew; and his

competition-winning design for the new campus of West Berlin's Free University was a further revelation, now translated into reality.

Shad was an intellectual of the New Left before there was a "New Left." (He had started out by studying philosophy and literature, and only later, after reading Le Corbusier's books, had he become an architect.) His notions about architecture often seemed abstract when presented on paper; but his notions about life were wonderfully earthy. While others



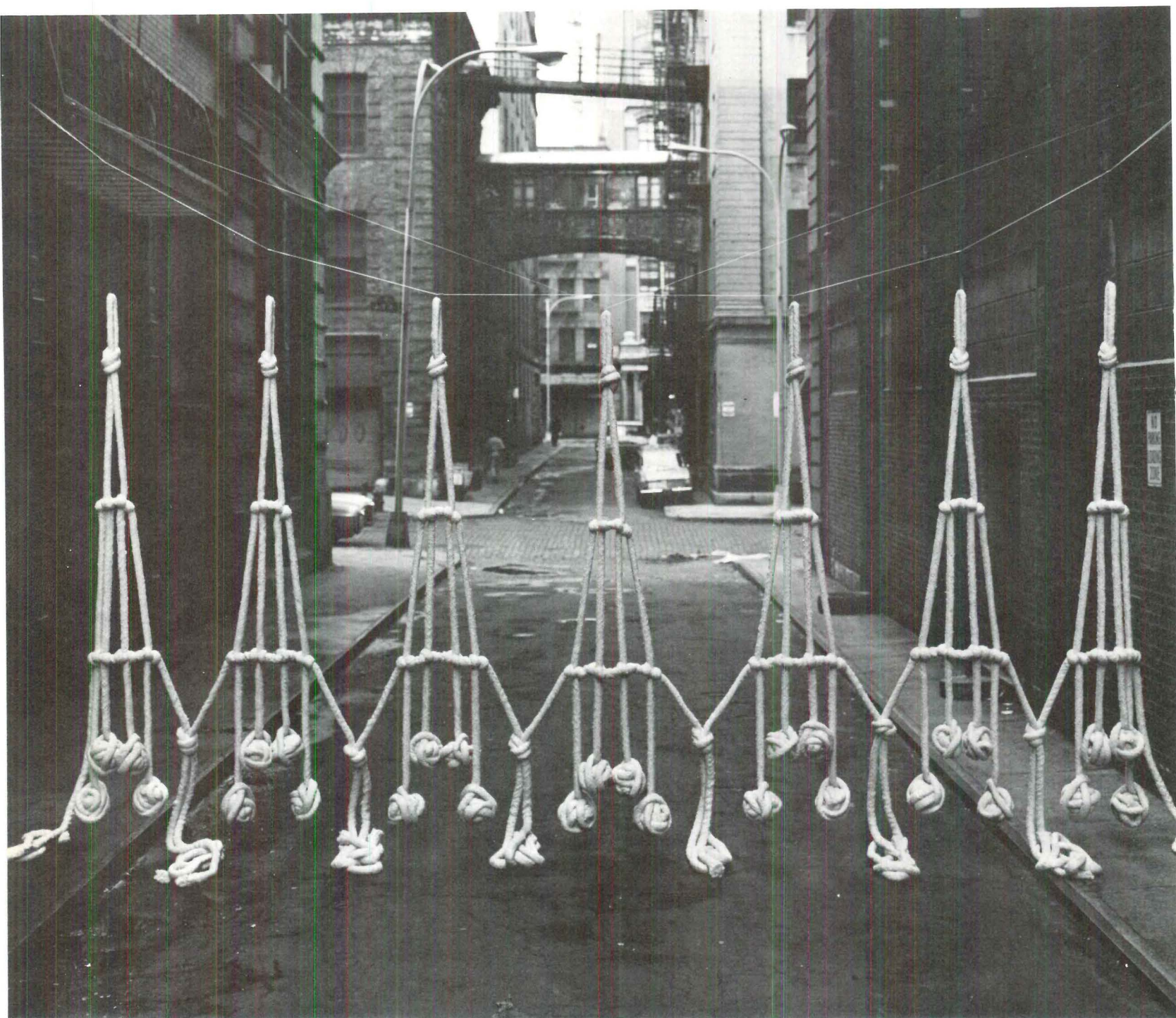
were in despair over the cores of our cities, Shad said that "the core is the essence of the city... it is a shifting scene; it is everywhere—a continually changing, continuous web of human activities

and relationships. It defies definition in the map-law terms of city planners. For each of us it is somewhat different. For each of us, the core changes with the time of day, week, or month. *The core is where the action is.*" And architecture, to Shad, was one possible way of generating such action.

On one of his last evenings, when he was dying but still able to talk a little, I asked him if I could look at something in his studio, down the hall. He opened his eyes and said, with that crooked smile: "Feel free." I think he made all of his friends feel a little more free, in their hearts and in their minds.—P. B.

• Roy Frank Larson, FAIA, died in Philadelphia in July at age 80. During his long and rich career he designed many structures in Philadelphia, and was a leader in the planning of the historic area of that city.

A one-time president of the Philadelphia Art Commission, Larson was supervising architect for the Jefferson University Medical College and Hospital. He received his architecture degree from the University of Pennsylvania in 1923 and ended his career as a senior partner in the firm of Harbeson, Hough, Livingston & Larson.



Footnote

The line of upside-down people shown here was photographed, one quiet Saturday morning in downtown Manhattan, while nobody was looking. The upside-down people are a rope sculpture by Artist Françoise Grossen, who works in various kinds of fibers, both knotted and twisted. This particular hanging (entitled "Contact, 1971") measures 9 ft. by 22 ft., and was made of white cotton piping cord. Photograph: Tom Crane.

A conversation with Philip Johnson

continued from page 69

difference does it make who locks whom up? It's what you *do* when you get locked up that...

HK: You only care if the building is "good."

PJ: Is good... yes, of course. The sins that I've committed are all my own. They are all against my own integrity as an artist, and I've done plenty.

JC: You've indicated, too, that you have a desire to build for Washington, for the...

PJ: The emperor, whoever he's going to be. *Architecte du roi*. I'd love to build the Vice President's house, for instance, which is up for grabs now. Say, give us a couple of million, but it would never happen.

JC: And you wouldn't care who the Vice President was.

PJ: Agnew? How could it be worse?

HK: But you still would build his house. But maybe you could influence Agnew by your architecture.

PJ: Tish-tosh. I don't think people influence people by architecture.

HK: Mies...

PJ: Yes. Mies was a moralist. He was Muthesius's student.

JC: I've got to hear this again. You have said that you don't believe architects influence people by architecture.

PJ: I don't think they influence their *moral* life. I think to gather in Chartres Cathedral is an experience that makes all of us atheists want to be Catholics, just to enjoy it more. When I'm in Chartres, I wish that I could have been born and *brought up* a Catholic, I wish I could have had twenty years' background in the Catholic faith, because I think I would enjoy it even more. But even as an atheist, or whatever the heck I am, not *that* bad, just the same, I have an overwhelming feeling that's almost unbearable, just walking in Chartres Cathedral. Well, that's to me what architecture does. I mean, I could have a black heart and be cheating at cards all day, but I would still get this feeling. You don't have to be a *good* person to enjoy Beethoven. I mean, the *maffioso* can enjoy Beethoven.

JC: Why not!

HK: Do you prefer to build for a dictator or for democracy?

PJ: Well, I prefer democracy because it's a little easier, I think, but maybe not. A dictator might be a friend of mine. I'd

prefer a democracy for a simple reason: that I would get a better chance. In the pluralistic system, there's more chance of finding a patron. A dictator says either yes or no. If you're on the outs, you're out. Why did Mies leave Germany? He didn't give a damn who was running the government, but Hitler liked pitched roofs. That's why he left Germany. He didn't leave in 1933. He stayed till 1937, after all.

JC: It's not only the younger architectural students who would object to...

PJ: What do you think the youth were saying in 1925? That Mies was the invention of the devil, and should be put in jail for using silk and matching marble slabs. He's book-matched his marble! Shocking! That's the way you *hang* marble, by the way! Mies was terribly hurt by it. He couldn't understand why people all hated him. He went on book-matching it. Until the end. We all book-match marble. But Mies was able to stand all that, and I hope some of us can stand it now. The battle, believe me, is the same. They were all Communists in those days. It's not popular now to call yourself that. Now, it's the New Left, which is much more respectable, and really much sweeter, because they don't carry guns so much. Not as aggressive. But Hannes Meyer was a Communist, and was a damned good architect, and the more I see of Hannes Meyer the greater man I think he was. But I don't like what he *said*...

You see, in those days I hated Hannes Meyer because I thought that the shit of the *Neue-Sachlichkeit Weltanschauung* [new objectivity as world view] had something to do with architecture. The only mistake I made was to try to think that somehow the political opinion had something to do with the architecture. Not true at all! At that time I was just antifunctionalist, you see. I was never anti-Marxian. Who cares who runs a country! I still believe *that*. I loved Stalin. He was splendid because I thought he was going to build something. I felt as a youth that anybody that built was good. Of course, Hitler was a terrible disappointment, putting aside the social problem...

HK: But you hoped that he might...

PJ: Of course. I think it shows in my article perhaps, written for a Jewish magazine in 1940.

JC: I can understand your thinking as

an architect, but how does your citizenship relate to your architecture?

PJ: It's disconnected. Totally disconnected. Of course, with whom *hasn't* it been? Michelangelo did run into trouble in Florence, but what did he do? Did he stay and fight? He went to Rome. He believed, I suppose, that he was doing his duty. Nationality didn't exist then.

JC: But Mies is considered sometimes a hero for coming to the States.

PJ: Mies was no hero at all. That's just a myth. You can't like Mies and think he was a Nazi, you see. That wouldn't fit the American dream. Everything has to fit into the myth in this country, doesn't it? But he remained a *stiller Deutscher* to his death. He never told anybody. But the Americans, of course, created Mies in their own image, which was a revoltee against Hitler. He wasn't. He was a revoltee against a law that said he had to put pitched roofs on his buildings...

JC: This generation is going to want to force you into a sociological or political camp.

PJ: All right. I can put on the coloration...

HK: Do you consult sociologists?

PJ: Good heavens, no. *They* don't know anything about how to build a town. It's only artists who know how to build a town.

HK: So you think to consult sociologists shows a lack of imagination on the part of the architects?

PJ: I use structural engineers. I use mechanical engineers. I use housing architects to tell me how big an apartment is because I don't know. How to build a cheap apartment? How would I know? I'm not interested. I have people to do that. But *sociologists*—what in heaven's name can they do? I ask the finance people how much rent to charge and if I'm in the ball park.

HK: Well, the sociologists and psychologists said that olive green is the best color to use inside a school. That idea has become so dominant in the past ten years that now even the blackboards in schools are olive green. The olive green classrooms are now just as aggressively boring as the old-fashioned grays and browns.

PJ: That shows you about sociologists. Nobody these days will believe anything that is spontaneous or artistic. Everything is scientific. Sociologists pretend that so-

ciology is a *Wissenschaft* [science], which of course it's not. It's just abracadabra. It is the role of the artist to show what the town should be like. Sociology in architecture is a crutch.

JC: Do you ever read any sociology and city planning?

PJ: I glance through their books.

JC: And you never find anything helpful?

PJ: No. I learned about city planning by walking around the streets of cities. I have seen how people feel and how I feel.

HK: Sometimes little things can mean a lot, like benches.

PJ: Benches. But, you see, a bench is not good without sitting in them. Think of the acres of unused benches in New York parks.

HK: Because they are badly designed?

PJ: No, they're put in the wrong place. They're very comfortable, those benches, marvelous benches.

HK: Sometimes, one wishes for a different kind of bench, not just huge concrete blocks in front of insurance companies where you get hot, wet, or cold.

PJ: Oh, yes, we're doing new kinds of benches for the plaza at NYU. But it isn't the bench that is important. You have to have the people. We designed those blocks in front of the Seagram Building so people could not sit on them, but, you see, people want to so badly that they sit there anyhow. They like that place so much that they crawl, inch along that little narrow edge of the wall. We put the water near the marble ledge because we thought they'd fall over if they sat there. They don't fall over; they get there *anyhow*.

HK: Well, it's the only place you *can* sit!

PJ: I know it. It never crossed Mies's mind. Mies told me afterward, "I never dreamt people would want to sit there."

HK: It is significant that Mies complained about his chairs in the Barcelona Pavilion, which were never used because they looked so . . .

PJ: Beautiful.

HK: *Too* beautiful! That is what is meant by hygienic aestheticism.

PJ: Well, there's no danger. People use it if it's good.

HK: You once said, "It doesn't matter how comfortable a chair feels, it depends on how it looks."

PJ: Oh, that argument, yes. You feel comfortable *if* you like the chair. But actual comfort this one hasn't. I can't sit on one of Mies's chairs. I never *do*.

HK: In one of your articles, probably the best known one, "The Seven Crutches of Architecture," you state that functionalism alone cannot create good architecture. Your effort to get away from the International Style, from the Miesian style, appears to have been a quest for a new monumentality. It seems also that you were consciously longing for beauty independent of function. In the same article,

you also state, using the words of Nietzsche, a building should express the "will to power," should *be* "will to power."

PJ: Oratory. I read it in German. Then I found an English translation.

HK: Architecture as "will to power," doesn't that mean monumental architecture, as we were discussing earlier?

PJ: *All* architecture is monumental.

HK: I don't think so.

PJ: I know, but . . .

HK: Monumentality can be interpreted in a very superficial and ambiguous way.

PJ: The word smacks of Napoleon and Hitler, and all sorts of terrible things. But what I mean by it is different. As all music is intended to impress your emotions, so all architecture, no matter how small, can be monumental. I'm afraid I used the word wrong, or you used it wrong. Everything I do, my little Pavilion, everything is done for a feeling of monumentality.

HK: Even your Glass House is a monument?

PJ: Of course. It has nothing to do with a house. I live here, but I'd live in a barn. You know, people laugh at me for saying that I'd rather live in a cathedral and go outside to the toilet than live in your comfortable American suburban houses. They become crazy. I don't see why. It would be wonderful to bed down in a cathedral. The toilet functions, you can handle that somehow. It's never important. That's all I mean. I rouse hackles everywhere because no one in this country thinks we should build for monumentality. Monumentality is *vorbei* [passé], as it is in Germany. I use it mainly to . . . just to annoy.

HK: To annoy?

PJ: Yes, to annoy.

JC: Now, wait a minute, you used the term in a positive sense earlier in this discussion. Now, you're using it in a negative sense. It's no longer clear.

PJ: Apparently, it is not clear at all.

HK: As your concepts change, you adapt the word to fit them.

JC: You are referring to this toy, the Pavilion, and to the Kline Biology Tower, both as monuments?

PJ: The Kline Biology Tower, obviously. I use the term in the sense of being anti- or nonfunctional, with other impulses being the important thing. The desire for immortality is the only proper aim. How are you going to be immortal without a monument? I know where I got it—Hitchcock, in his first book on modern architecture in 1929, called any building we went to see a monument. Monument means maybe a house by Choisy [Auguste] or Muthesius. They are all monuments to him as an architectural historian. And if you call them monuments, you can't think that they're just functionalist *objects*, *Gegenstände*. They are monuments. I mean that very particular use of the word, and I was wrong to use it in any other sense; but in a way it makes me nose-thumbing at the people who say *machina habita*; it puts me in

complete opposition by the use of a single annoying word.

JC: It is a polemic . . .

PJ: It's a polemic stance that has nothing to do with any other definition of the word.

JC: What *are* you after, besides thumbing your nose at antimonumentality? There must be something positive which you want to put in its place.

PJ: I think what I mean is . . . What do I mean? That's a good question. Every object, even something as small as this microphone [of the tape recorder], should be designed, and in fact is, as a monument, although they would deny it because that very shaping was done by an idiot who wanted to give it some aesthetic quality. I know what we can use, a very simple word, "aesthetics," which of course has a worse reputation than the word "monument." The reason I use "monumental" instead of "aesthetic" is because I refer to scale and dignity.

From the point of view of eternity, *sub specie aeternitatem*, it's everything you do. I design *sub specie aeternitatem*. If you leave out that desire for immortality, you just get cheap design, or the diagonal line that is "in" this year, rather than a sense of monument—you see, I use the word all the time! Because if you think it's going to live on, if you think it's part of your desire for immortality, everything you do should . . . I am a moralist, of course, like all myth-makers and people who tell people what to do. Although I don't believe in morals, I use them myself. I am a moralist: I can't help it. To me, every artist should be conscious of his place in history. He's destroying a piece of the landscape when he builds. Therefore, he'd better be monumental. I use the word now for the lack of another one.

JC: We're afraid of the word "beauty."

PJ: Yes. I'm not, of course. And fortunately the kids are not again. . . .

We all want to be original in one sense or another, in order to be good, but the idea of borrowing forms doesn't bother me at all. I think the search for originality can lead to things like Johansen's Clark University library [Worcester], which isn't very amusing. On the other hand, the reappraisal, for instance, of expressionistic architecture the last few years has certainly affected me, as it has everyone. It was amusing to see the photograph in the *Time* magazine obituary of Mies. How beautiful the Friedrichstrasse Building looked. I haven't seen that picture every day, and I remember when I first studied it, I said, "How funny that Mies started with these angles." Well, it doesn't look funny any more.

HK: Now it looks up to date.

PJ: Amazing. Today the trend in architecture is to get away from the Miesian box. His earliest high-rise designs are being rediscovered. The use of voids which break open the volume and displace the mass is

no longer strange. . . .

HK: For you, it's not the question if something works or not, if something functions. It's a question of how it looks, if it's enjoyable, if the building is enjoyable as a visual structure in the city.

PJ: All buildings work. That's not an argument. The Parthenon even works. I don't know why, but nothing ever happens to it, I suppose. Rudolph and I have this fight all the time. I say I'm the only functionalist architect around because I'm very careful about my basements, whether you can find your way around, and all that. Rudolph thinks *he's* a functionalist. So, you see how silly the word is. But I think one should ignore it. I learned that from Hitchcock, early on. The only answer is what is the building, in the last analysis, in the end; what came out. In a hundred years from now, the functions will have changed. Look at the redoing of the interior of Renaissance palaces. You leave the outside; you can do what you want. Any building is functionalist. If not, you can always tear out the inside. It's whether it's successful as a form.

HK: So you are conscious of creating monuments for yourself.

PJ: Sounds arrogant. I think everybody does it, whether they say it or not. Frank Lloyd Wright was the clearest about it. Of course, I'm arrogant. It is better to have an honest arrogance than a dishonest humility, but at the same time Wright was tor-



tured with doubts, as every other architect is, I know.

HK: One could ask if other values get lost with such a *summum bonum*. It depends on your primary goal; the question of value hierarchies arises. I sometimes ask myself if you don't sacrifice other values by creating monumental masses like the Kline Biology Tower.

PJ: You're mistaking my original use of monumentality: The Friedrichstrasse sketch of Mies's, which is all glass, is monumental. It has nothing to do with massiv-

ity, you see. You're influenced by your own post-Hitler background (sketch left).

HK: I think I have a right to understand your building as *I* experience it.

PJ: But not my *words*. I have to get my words straight for you.

HK: That is not necessary. I understand what you mean. Nevertheless, I experience that colonnade of the Kline Tower as very massive monumentality.

PJ: That's right. It is.

HK: Okay.

PJ: I think we can leave out the word "monumental" till we find something else. The most *massive* building is, of course, the Kline Tower, but at that time I was most under the influence of my own feeling of Richardson. I still think he's the greatest American architect.

HK: There's a certain distinction to be made. When you approach Saint Peter's in Rome, and you are encircled by the colonnades of Bernini. . . .

PJ: You are very small. . . .

HK: Still, there is a possibility to maintain individuality there. But there is also another kind of monumentality, one which diminishes you, and makes you feel out of place. Monumentality can be a hollow and empty roar.

PJ: We've got to stop using the word because, obviously, you have something entirely different in mind from what I've got. So, let's just talk about building. *All*

continued on page 80



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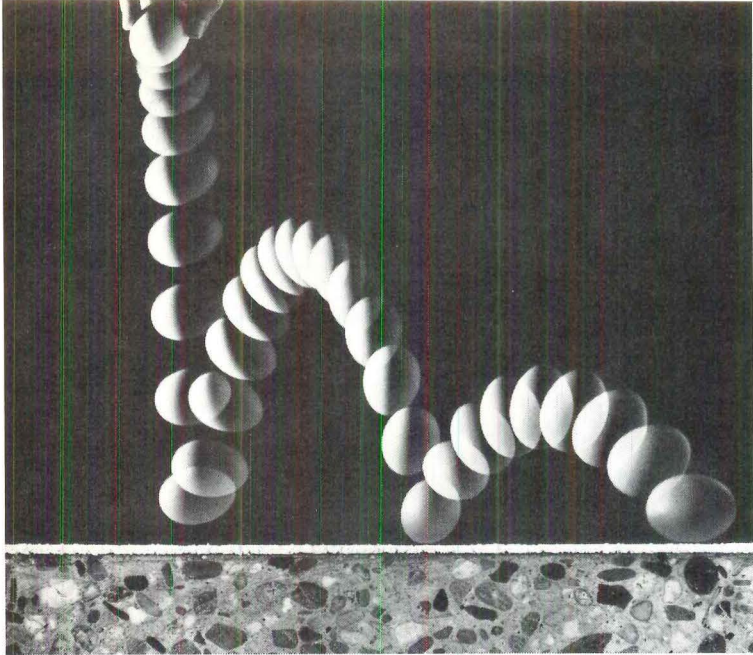
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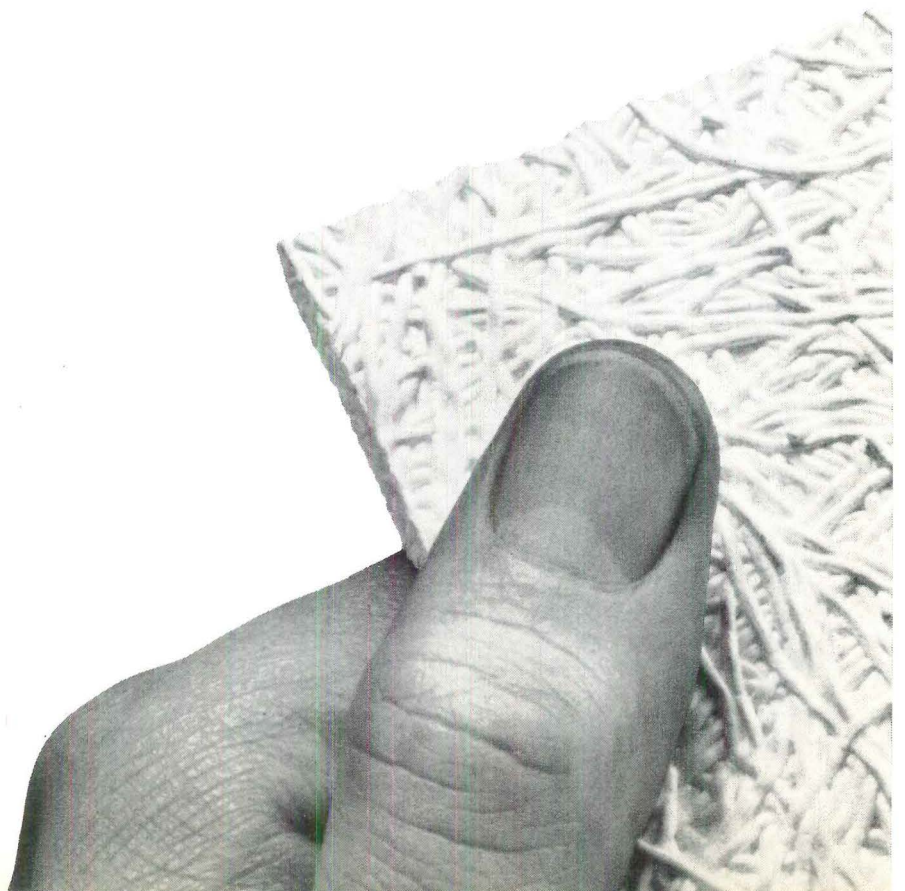
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A conversation with Philip Johnson

continued from page 77

buildings are monuments, so let's just say, "building." In other words, what you feel is that the scale of the Kline Tower is inhuman, more inhuman than the Bernini colonnade, which is human although big in scale. The interior of Saint Peter's—does that also do that to you? Is it okay? What other building, besides the Kline Tower, is too monumental or too massive, too inhuman?

HK: The whole problem for me is that several hundred years have passed since Saint Peter's. And I ask myself if we should still compete with that kind of monumentality. We cannot get rid of this word as a critical tool. We can't simply eliminate it.

PJ: I can. I simply won't use it any more. And I don't see why *we* should bring it up because it's a pejorative word in your prejudicial mind, and it's not in mine. You mean to say that the impetus for that kind of space, as exhibited in the sixteenth century, is not here, so we should not build vast spaces and heavy things. Heaviness is Hitlerian, Mussolinian.

HK: Let's say it could be authoritarian.

PJ: "Authoritarian" is not a word that has anything to do with architecture. Justinian was not authoritarian by building the greatest building in the world in five years [Hagia Sophia]? Of course he was. A more authoritarian government surely never existed. Or the pyramids. Are the pyramids therefore faulty because they are not sweet and nice? You see? I'm trying to get at your thought, not trying to contradict you, because I don't think we're in that much disagreement. But anyone can feel that the Kline Tower is heavy. To me, it isn't. You see, Hitler's post offices and Mussolini's town halls are ugly, not monumental. If you copy a Borromini façade at the post office by Mussolini, it doesn't destroy Borromini; it destroys Mussolini.

HK: Of course.

PJ: It isn't the monumentality that's wrong. It's the architect that's wrong. Baalbek isn't wrong! Let's go back to what the real criticism is of the Kline center: it's dark; it's out of scale. I understand words like that. It's too tall for its square. The cylinders come down in an inexorable way that makes you feel you'll be killed if you go between them, as you would indeed in Luxor. But you don't think Luxor, or maybe you do think Luxor, is too heavy. I don't know.

HK: If it would be built *today*, I would

object to it.

PJ: Ah, you see, I don't have this prejudice about today. To me there is no today. There are just wonderful things and not-wonderful things.

JC: This would agree with your eclecticism. Because you borrow forms, you wouldn't feel badly borrowing forms a thousand years old, if you found them aesthetically appropriate for your purpose. . . .

HK: One can be historically conscious and creative at the same time.

PJ: I wonder. The jury is still out on that one. How good an architect can you be when . . .

JC: How spontaneous can you be . . .

PJ: When you know too much? You see, these artists are pretty stupid people, intellectually speaking. Somebody like Lou Kahn, you see, hasn't the foggiest notion what's up and what's down. And that's a very great help. Mies! He wouldn't admit it, but he was a violent anti-intellectual. He said, "I've been reading," so I looked at his library, and he hadn't—only three books, anyhow. Not one of them had left the shelf for years.

We really need mavericks, disgruntled, ignorant—there's a phrase in our office, "Let's get a high school dropout with twelve years' experience." We don't want educators. Education must be canceled. I'm violent on the subject. I'm influenced by the fact that none of the architects I've known has ever been to school, including Michelangelo and Bernini.

JC: Do you lament your education and intelligence?

PJ: I do. But it's much too late. No, I don't. I've got to find a niche where the educated person can do something. Where that fits into the history of our times is not important, because somebody will fit it in. I happen to feel that, among the younger architects, there are some very good people coming up. We don't know whether they'll blossom or not yet—like what's-his-name in Toronto, who built Scarborough College—Andrews.

JC: Or the Smithsons.

PJ: Oh, no, God help me, there's a case of intelligence ruining architecture! Stirling may or may not; it's too close to tell. What I don't believe is that the future of architecture is Frei Otto. To me he's para-architectural. And Buckminster Fuller is simply not an architect.

JC: But do you think your Pavilion is

architecture?

PJ: There is as much Mondrian in it as—what is it?—Greek?

JC: Why did you make it underscale?

PJ: Because I think that makes you feel better. Feeling is the only thing I'm interested in, and since I got that feeling at the dwarfs' quarters in Mantua—at the palace of Mantua, the Duke put in a whole suite of rooms for dwarfs, and I felt very big and important in them. It's underscale, so you feel big.

JC: And then you overscale.

PJ: And then you feel small. And there's nothing wrong with feeling small. I like the interior of Saint Peter's. I am very aware of proportions. All architects are. As Mies said, "The only important thing in architecture, but you can't talk about it, is proportion."

HK: The choice of materials can create a purely aesthetic environment, which may be aggressive. Take Mies's use of material, for instance, which has long been admired. Now, these materials become offensive. They are too clean, too laboratorylike, too hygienic and sterile. There is always inhumanity in aestheticism.

PJ: But you see, you use "human" as if that was a value of any kind. I don't mind inhuman. Your use of the word "human" sounds to me like Lewis Mumfordism. To Lewis Mumford, architecture was not important if it didn't have a sort of human character. That's why he likes the Bay Region style, which is all wood and lovely overhangs and . . .

JC: Frank Lloyd Wright.

PJ: And, of course, it comes from Wright, but Wright wasn't that way at all. Guggenheim? Human? Nuts. No, the word "human" is one of those words we all agree with, like "motherhood." I'm not against motherhood. Or children! Or honesty! Look! I'm not building for orangutans or elephants. I'm building for people, by the very jobs I get.

HK: How high are your ceilings?

PJ: How high? How high? Well that's a mad . . . That's an interesting point. How high are ceilings? Mies never could understand why I made my ceilings so high. I think that now we're very, very sick of low ceilings. "Human" to me is not a word that we can use in architecture, simply because everything is human. I don't want to talk about humanity and monumentalism as a dichotomy, because I think it's entirely meaningless to what I'm trying to do.

Book Review

continued from page 13

Roebblings and their bridge we have always known: the German-born, elder Roebling died before the bridge had been fairly begun; the son, who saw the structure to completion, was struck down by caisson disease during the construction of the bridge towers. But David McCullough has also used a wealth of hitherto unused material in his book. We learn about the lives of the Roebblings, father, son and daughter-in-law, and the training and experience they brought to the bridge; we learn about the trustees for whom the bridge was built and about their actions during construction; and we learn about the matrix of politics within which the bridge company operated. The sinking of the half-city block size wooden caissons took place under conditions literally hellish; the rigging of the suspension structure, we are convinced, was a truly unforgettable spectacle. Construction of the bridge took fourteen years and took place to the accompaniment of conflict of interest, fraud, bribery, and profiteering on the part of some of the directors, later trustees, for whom the younger Roebling worked and the collapse in scandal of the municipal administration of one of them, Boss Tweed. The story of the bridge is a great one and McCullough tells it well.

He does not tell about the impact of the bridge on the generations that followed the younger Roebling's; for that we must still turn to Alan Trachtenberg's earlier, fine *Brooklyn Bridge: Fact and Symbol*. But the story McCullough does tell and the age it takes place in—post-Civil War America—have a special resonance for us. Our own age has much in common with the older one (corruption in government is only part of what is shared). Where there are differences, they may be ones we regret. Those who witnessed the bridge's erection (from 1869 to 1883) recognized it as a work which surmounted the venality around it and which, constructed, would confirm the community's greatness. The building of the bridge was the kind of accomplishment which, to our frustration, eludes us.

The Prairie School; Frank Lloyd Wright and his Midwest Contemporaries by H. Allen Brooks. Published by University of Toronto Press, Toronto, 1972. 374 pp., many photographs, plans, sections and perspectives. \$25.00.

Reviewed by Macy DuBois

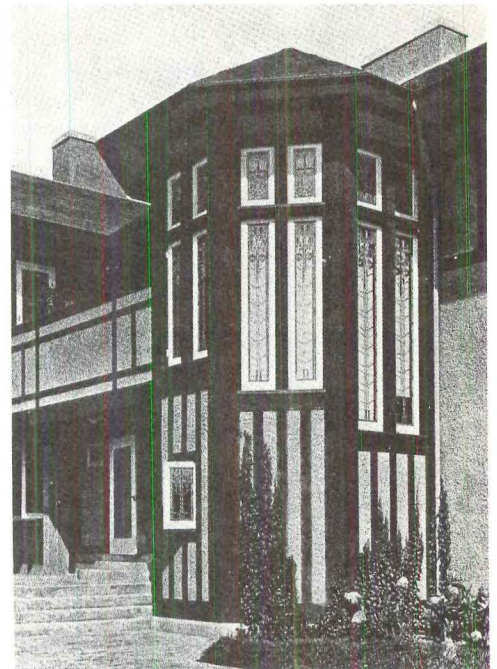
The architecture of the Prairie School is the greatest achievement of American art. I can say that after reading first Grant Manson, now Brooks and after seeing some of the work itself. Perhaps because architecture is an unmovable art, unable to be collected in museums, and,

Macy DuBois is an architect practicing in Toronto.

perhaps because the Prairie School centered around midcontinent Chicago, many of us have been blind to the magnificence of the work of these architects, of which Wright's work was clearly the greatest.

I have long been rankled by the cunningly stupid remarks of architects such as Philip Johnson's 1954 comment, "Wright (was) the greatest architect of the nineteenth century." In much the same pejorative sense, I have often heard other architects say something like, "Wright was pretty good as an architect, but he could never pass on his particular way of looking at things except to men who were no more than poor copies of the original." I have often wondered why this was considered a criticism of Wright rather than, as it should be, a criticism of those who failed to draw inspiration from him.

Brooks shows that the entire Prairie School was the first real architecture of our century. It was as devoid of stylism and historicism as the American democratic system itself. It was an architecture of spatial and, to a lesser extent, technological innovation, reflecting, in a theory I have long held, the vitality and openness of the



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Book Review

society it was serving. Along with Wright, we look with admiration on the work of Walter Burley Griffin, William Drummond, George Elmslie, John Van Bergen and, that rarity in American architecture, the woman architect Marion Mahony.

Brooks has answered the fallacy of communicableness by showing the interdependence of the Prairie architects. Prior to working for Louis Sullivan, who himself had been the guiding spirit of the younger generation, Wright worked in Silsbee's office alongside George Maher and Elmslie. When Wright went out on his own, Griffin, Drummond, Mahony, Van Bergen and others worked in Wright's Oak Park studio. If the dazzling body of Wright's work were put aside, we could see the great achievement that this group represents. But it was Wright, of course, who was the supreme visual artist. His only rival in our century was Picasso, and he would have stood out in any time or place.

Brooks shows, with the most even-tempered and easy-flowing prose of any architecture book in memory, that there were others in the group who produced work at the beginning of the century that was far superior to (and had more of the ingredients of the new democratic age than) anything being done elsewhere. Brilliant buildings full of verve, honesty and richness poured out of the offices of these bright designers. We do not see an architecture of bland cardboard two-dimensionality such as was done and widely hailed decades later as the International School. Rather, we see an architecture with volumetric, tactile and spatial life. Even their renderings show this understanding and conceptual commitment.

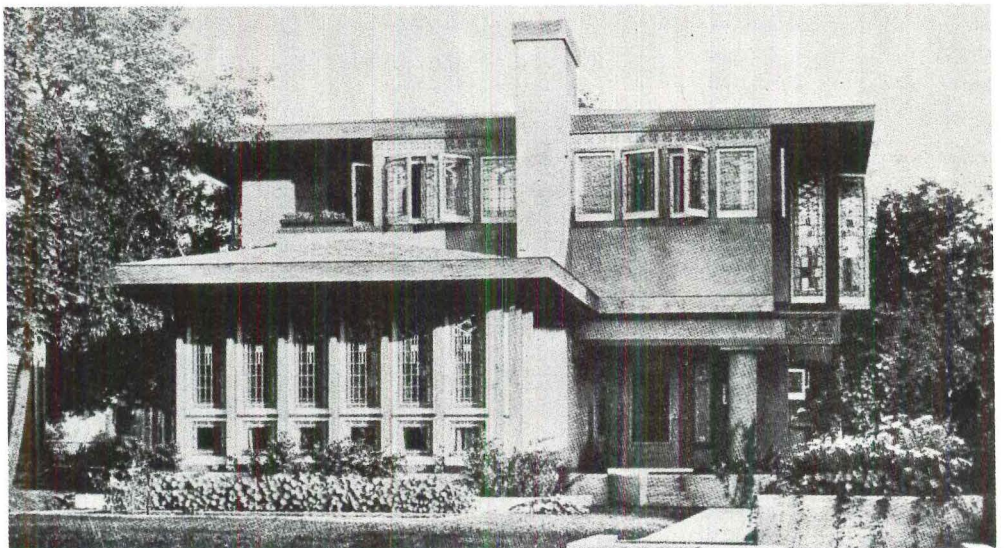
Brooks tries to get to the matter of how much the Prairie School and Wright interacted by citing various descriptions of the early days in Steinway Hall where Robert Spencer, Myron Hunt, Dwight Perkins, Birch Burdette Long, Wright and others had a collective office with an outer office in common. Members of this group worked together on projects such as All Souls Church done by Perkins and Wright for Wright's uncle, or the Catherine M. White house done by Hunt and Wright. It seems clear that this collection of young architects, all responding to Sullivan's artistic and intellectual lead, were drawing artistic strength from one another. For instance, "The exhibition sponsored by the Chicago Architectural Club in 1902 was dominated by the group from Steinway Hall..." For the catalogue of that exhibit, "Sullivan designed the special frontispiece, and between Sullivan and the original four from Steinway Hall were divided some 60 per cent of the plates—these being placed in the most prominent locations. First, after an introductory plate, came Perkins' work, followed by the designs of Hunt and Spencer. Wright was honored in a special section at the end, with its own

frontispiece announcing 'The Work of Frank Lloyd Wright'."

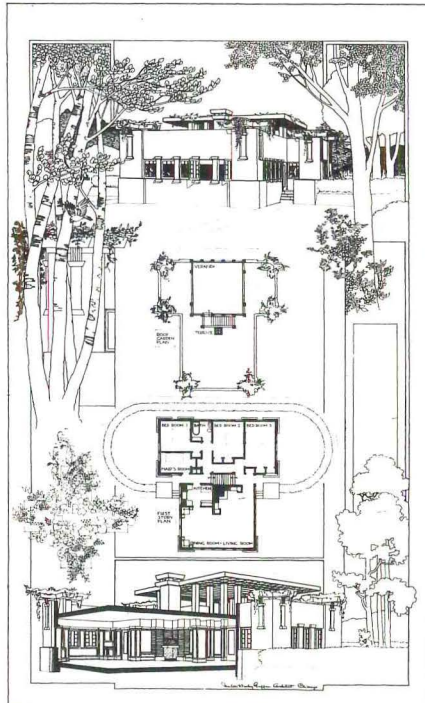
The tragedy of the Prairie School is that its great achievement has been so studiously ignored not only by the unseeing public but also by architects who should have known better. Arthur Drexler has said that the source of Mies' great power is his architecture's teachability. The Prairie School has perhaps suffered in appreciation because it is more difficult to teach. It involves so many inter-relating aspects of great architecture—space, materials, and scale.

There were no easy formulas as there were in the International Style.

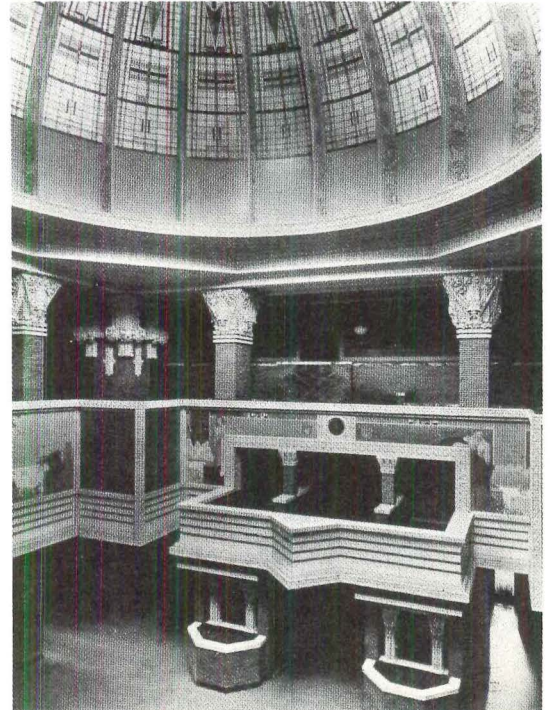
As Brooks has pointed out at the end of *The Prairie School*, both Hitchcock's *In the Nature of Materials* and Manson's *Frank Lloyd Wright to 1910* are "helpful in approaching this" book. It was Manson's book in 1958 that, for me, was dazzlingly clear-eyed about Wright and his generating force. *The Prairie School* is so about the entire group. Books like that change your view of the world after you have read them. Such books are rare.



1913 Edna S. Purcell house in Minneapolis by Purcell, Feick and Elmslie.



1911 house by Walter Burley Griffin.



Courthouse by Purcell and Elmslie (for William L. Steele).

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Details of its Model 70R Alarm Lock have recently been released by Alarm Lock Corporation. Applications include hospitals, universities, libraries, and computer rooms where confidential data is being processed. Reader Service Number 230.

STEEL FRAMES

Amweld Building Products has just issued a new four-page brochure which features its line of steel adjustable frames for drywall openings and plastered openings. Reader Service Number 231.

WALL SYSTEMS

The American Plywood Association has revised "Architectural Plywood Walls" to include more joint details plus illustrated sections on curtain walls, plaster channel trim, cross hatch design, and picture framed panels. Reader Service Number 232.

WATER FOUNTAINS

A pedestal drinking water fountain, made of vibracast concrete and with vandal-resistant features, has been introduced by Haws Drinking Faucet Co. Reader Service Number 233.

WOOD PRESERVATIVES

Osmose Wood Preserving Company of America has available literature on their WeatherShield™ wood preservative, and fire retardant for wood products. Reader Service Number 234.

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