

Powerful tower, delicate shell

The Pirelli building in Milan fulfills most of the great promises of Ponti and Nervi—but not all.

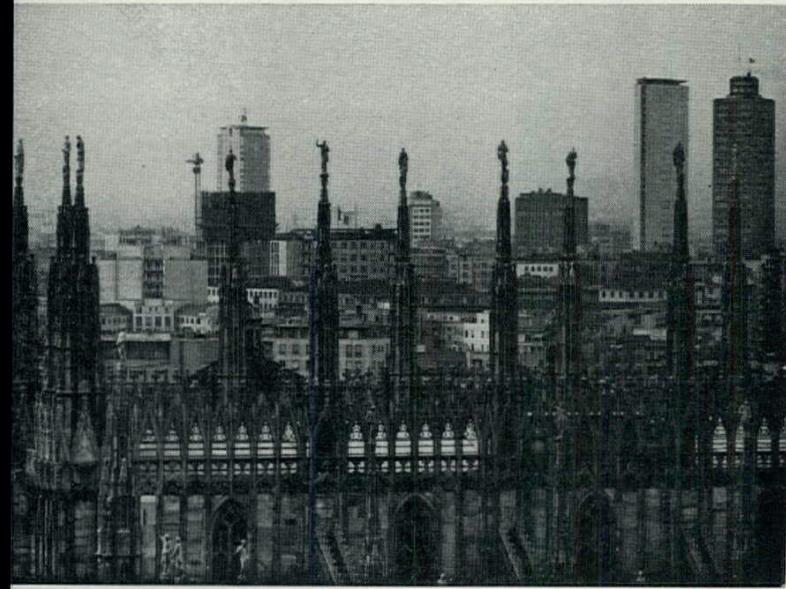
BY WALTER McQUADE

Milan is a very businesslike city, but one which preserves the ancient Italian graces. The streets of the city are shambles because of the subway being built beneath them, but elegantly dressed policemen (2) still direct traffic with the dignity of the maestro at La Scala. Manufacturing plants have sprawled onto the pleasant plain surrounding the city, but, between the factories, farmers still plow their fields with the help of oxen, creating scenes like those in travel posters. In the evening, it is true that the old statues near the entrance of Milan's fourteenth-century cathedral, the vast *Duomo* (1), are doomed by progress to stare stonily across the paved plaza at a wall of commercial buildings solid with illuminated advertising spectaculars, flashing cascades of light bulbs chasing themselves in endless maniac cycles. Industrialism has arrived. Coca-Cola is for sale on the roof of the cathedral, and there is even an *American Snack Bar* in Milan, where people stand up to chomp rapidly through industrialized lunches, a module of ham on rye with a chocolate malt.

But when Architect Gio Ponti gathered a large team of collaborators and consultants together in American fashion several years ago to begin plotting the slim shaved slab which was to bear the name of a famous Italian rubber manufacturer, Pirelli, he scorned the snack-bar approach, it is clear. The team must have begun with a conference in one of those incomparable courtyard restaurants which stretch the Italian lunch hour into a cultivated rite. For Ponti was to think deeply and speak loquaciously about the Pirelli building. A reinforced concrete structure, it was to be poured into a formwork of strongly expressed ideas, then wrapped in glittering logic.

He made it clear from the beginning that the building was intended to be an unashamed work of art, an expression of machine art, but beyond the machine, back into the mind of man: "The desire to return to a finite form, that is to create a form, a composition, has haunted me . . ." (3).

It was not to be whimsical or pretentious, however. Stern demands were made upon the design: its construction system had to be reduced to essentials, he ruled, and



MARK KAUFFMAN—LIFE
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had also to be inventive, not just another exercise in slide rulery. To ensure this, he engaged as structural consultant none other than Pier Luigi Nervi.* Ponti also demanded a building which would have more character than the sum of its inevitably industrialized parts. It had to be a building to excite the public, not just the architectural profession—an expressive building.

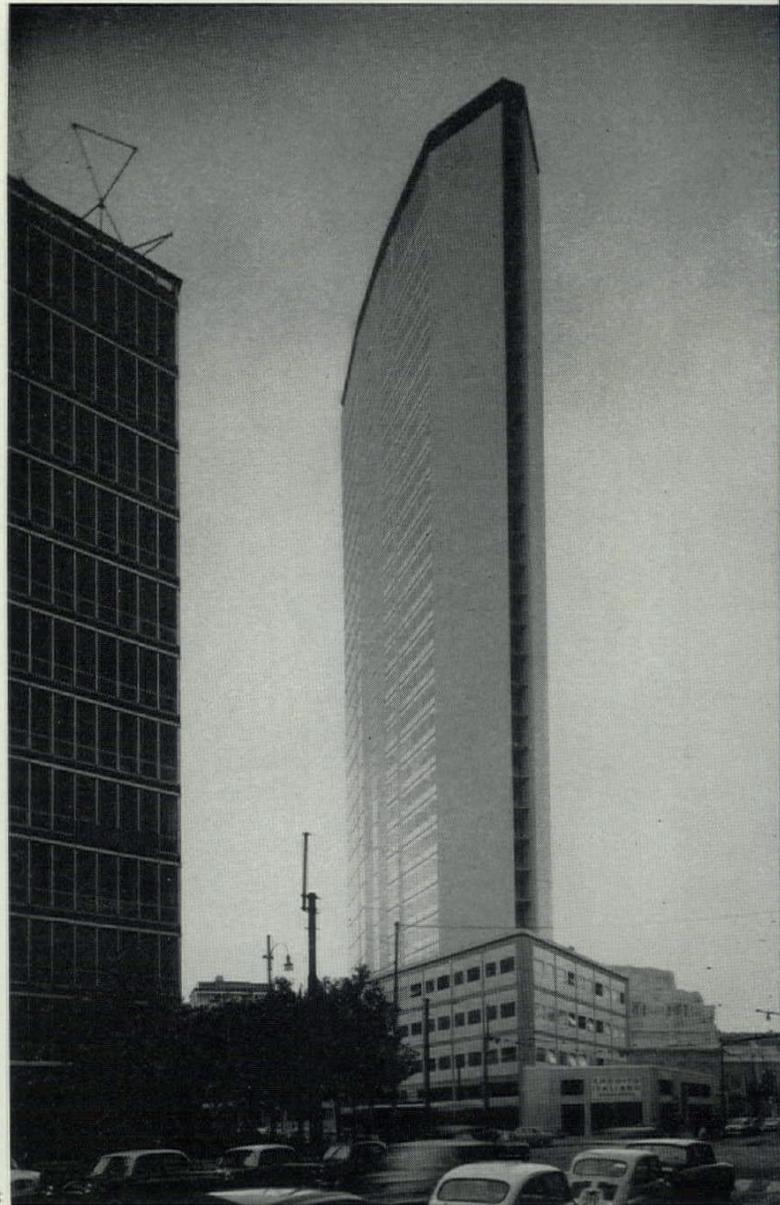
The search was to be toward an essential “illusiveness”—this must place the building on a poetic plane, without which it cannot become architecture.” Ponti pontificated that the building must be a success in the city at night as well as by day, in its “luminous nocturnal aspect.” It must also be a serious, civilized building for the sake of its hard-working employees, and must be built of “incorruptible” materials that would not wear or soil easily. It had to be a good citizen of its city, providing parking for its large population, and it had to be a tall building, but not overbearing—a light, exciting building, not a brutal one.

Seldom has an architect put himself so far out on a limb, and Ponti knew it. He called for “enterprise and courage. History is a record of human endeavor and achievement, and architecture is one of the greatest testimonials that man can leave behind him.”

The surprising thing about the completed Pirelli building is that so much of Ponti’s own advance praise does come true. It is a lean, handsome skyscraper with as much presence as any new skyscraper anywhere. It is also one of those rare commercial buildings which can afford to be gloriously impractical for the greater glory of its owner. Pirelli wanted a monument to signal the completion of the company’s post-World War II reconstruction program (plants and offices, both, were hit hard by allied bombers), and Pirelli was willing to pay for one whose tower has almost unheard-of luxury, in American terms, in terms of usable tower space. The eight bulky reinforced concrete piers which taper up through the building for vertical support (and for windbracing, the major structural requirement in this wafer-thin building) eat up a great deal of space (4), counting in their adjunct service stairs, emergency elevators, and all vertical service runs; but the clusters of elevator shafts are placed and supported separately, so another big chunk had to be cut out of the center of the small floor space for these. In shape, Pirelli is a successful poem. U.S. adaptations of this form now under construction will be stockier and thus more practical, and a Canadian version completed at Vancouver is more consistent, but it is already obvious they will not have the visual excitement Pirelli achieved—that side view, the steep silhouette stabbing the sky.

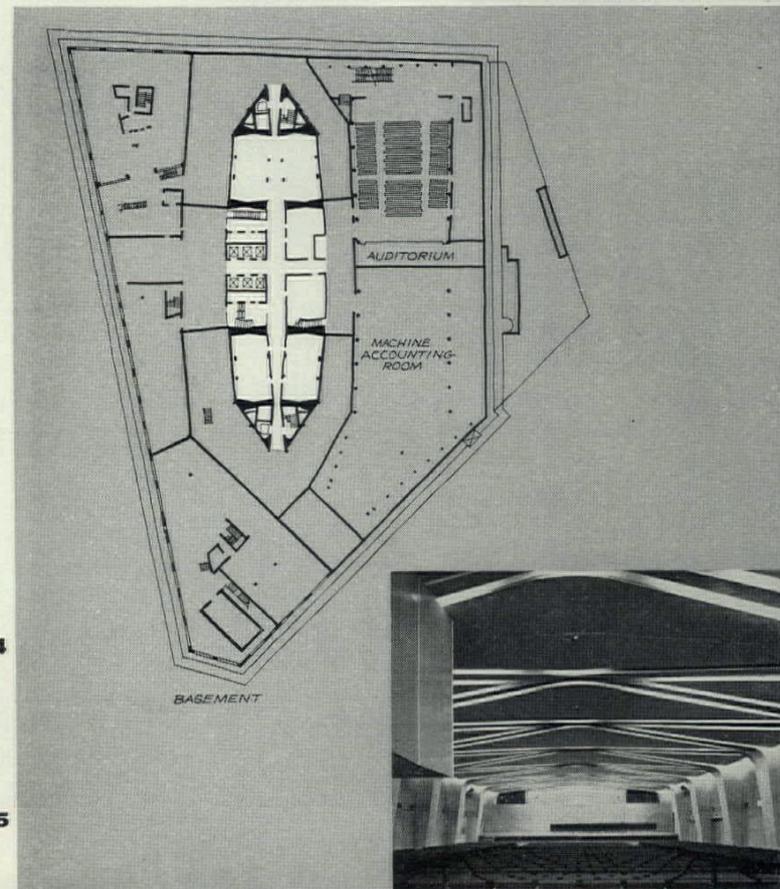
Putting aside visual drama for the moment, actually a more significant aspect of the building is its organization of interior spaces, which has a kind of culminating skyscraper logic—function set to music. The most evident part of this is in the hallways of the tall starved slab, which start wide at the central elevators and narrow toward the ends of the slab, where there are fewer people using the halls. This of course is mostly design music. The real quality is in the cross-section of the lower floors under the tower.

Most skyscrapers are rather pedestrian designs, by force of necessity, because to earn the ability to go high they have to sacrifice two things: dignity of approach and the glory of large rooms. Their entrances have to be fairly ordinary, with everyone—stenographers to visiting satraps—using the same door off the street. Their rooms



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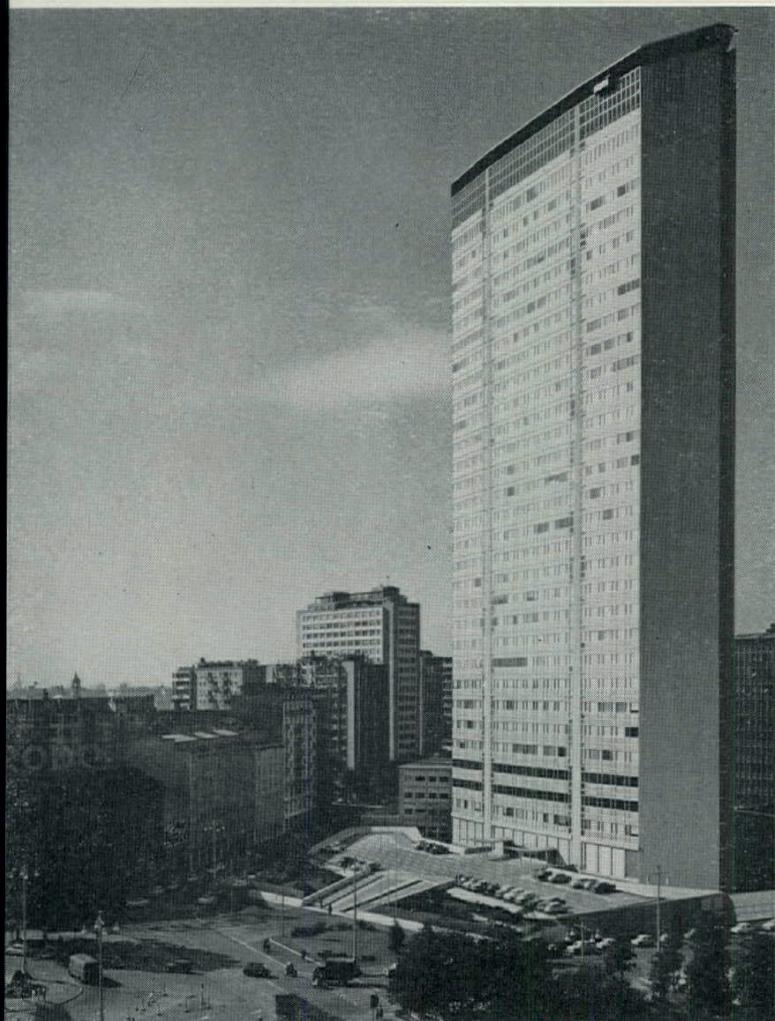
SALA DINO
PHOTO: CASALI STUDIO



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*Other collaborators and consultants: Architect Alberto Rosselli; Engineers Antonio Fornaroli, Giuseppe Valtolino, Egidio dell’Orto, and Arturo Danuso.



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PHOTO: BALTAZAR KORAB

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have to be small, because big rooms do not fit into the forest of vertical structural elements implied by tall buildings.

But Ponti swept the first of these practical handicaps aside by putting the Pirelli tower up on a platform which clearly marks off the formal entrance (in front, up a ramp) from the employees' entrance (in back, at street level). Then, under the broad, deep stage on which he set the Pirelli slab, he put the large rooms, such as the auditorium (5). Upstairs in the tower, of course, are the hives of offices.

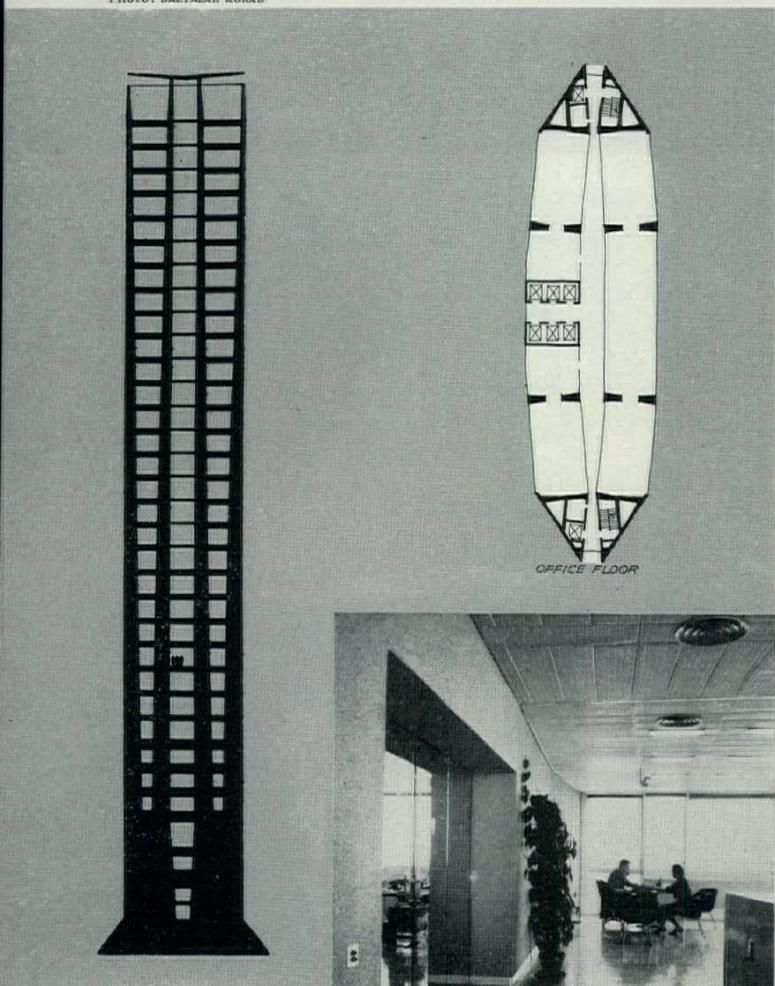
It was a shrewd move in more than two ways. When permission was first sought to build a skyscraper on this site, the city of Milan had wanted to limit Pirelli to 11 stories. Their reason: the plaza facing the site is presently dominated by the Milan railroad station (perhaps the limpest piece of concrete pastry-chef architecture in Italy), and the highest building fronting on the plaza is a heavily anonymous office block of 11 stories. It was only by agreeing to back off from the plaza that Pirelli got permission to go up to 34 stories.

But Ponti played a trick on the city when he built his platform. His Pirelli shaft will always lord it over the open space of the plaza because its formal entrance looks down upon it. The building sits over the square like a house over its gardens (6). To get to the entrance the visitor drives up a steep ramp finished in Pirelli rubber and heated by pipe for the few freezing days Milan expects each winter. Rubber mats also carpet the plateau used for visitors' parking in front of the building. Then, inside, the elegant lobby has a different Pirelli rubber floor, of yellow-puddle pattern. No snobbism over the ordinary employees is implied, incidentally, by this division of entrances for visitors' parking; the ground-level approach is simply a much faster way for anyone to get to work. Living up to its civic responsibility, the Pirelli company has also provided a parking building for employees' cars across the street from this entrance; and inside the main building, in one of the basements, is plenty of stall space for the motor-scooter fans who can make Italian evenings hideous.

Buried glory

The massive structural system of Pirelli is very impressive, thanks to Nervi's vivid but dignified touch. Eight huge stalagmites of reinforced concrete rise inside the slab, and ribbed floors are hung on these (8). Inside, the big concrete tusks are left exposed (7) as they taper up through the building, and their rugged porosity is an effective play against the slick aluminum-and-glass movable partitions on the typical floors. On the top floor, the concrete shapes finally break out of their office imprisonment and stand free, sculptural, in an open gallery for visitors—as exciting to see as the view of Milan. Also sculptural is the structure of the big meeting room 37 floors down, (5) and, its continuation, the even-bigger machine record room where electronic tabs are kept on all operations of the far-flung Pirelli empire. The atmosphere of the floors of offices (9) between ground and gallery fill an early prescription of Ponti's "homage to work," but there is a good deal of spare style, besides. The deliberate exoticism found today in much Italian design, varying from elegant nuances to outright corn, is firmly controlled in this context. The sauce is not allowed to overcome the taste of the roast.

These are some of the high qualities of the Pirelli building. All these rational effects are apparent to the visitor, as predicted lyrically by the designer. But is the



OFFICE FLOOR

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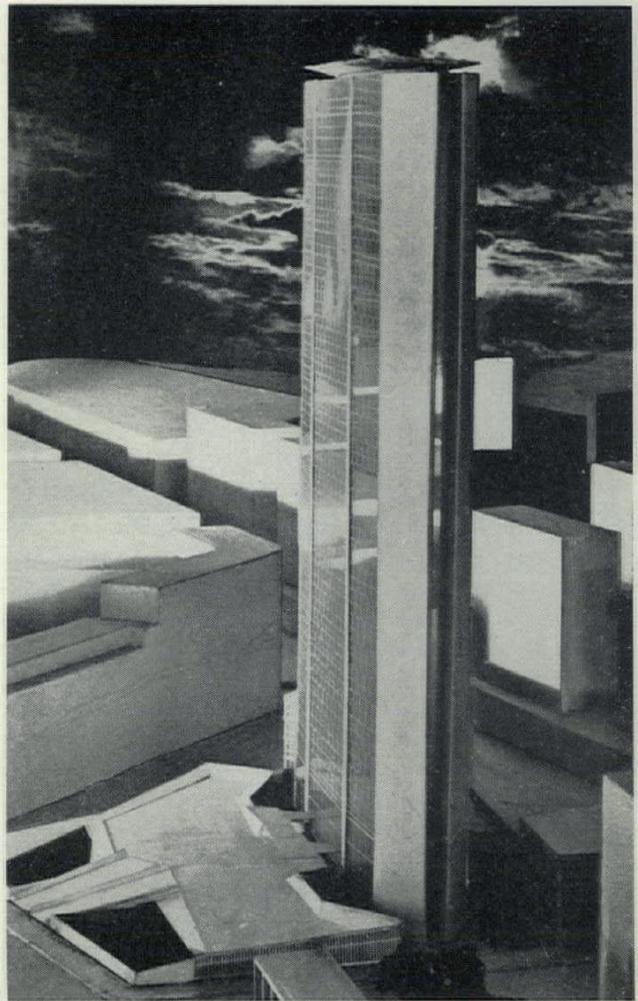
building itself strongly lyrical, the finite work of art that was attempted? The final test for this is visual, and the building does not come up to the concept in that regard.

As expected from the model, Pirelli is a blade of a building, slicing the sky, but it is slicker in final effect than it is sharp. There are reasons for this. Because of the sun-heat problem, the window wall, in all intelligence, had to be changed, not built as Ponti showed it in his model (10). The result is that it is no longer the crystalline thing of the model, but a rather pedestrian curtain wall (11), and one which is not very well proportioned in its parts. (The feeling the viewer gets is that it was deliberately made featureless.) In side elevation the verticality of the shaft is still present, but in broadside view Pirelli wears horizontal stripes of spandrels which largely kill the effect intended, day and night.

It also might be that Ponti and his collaborators made another mistake, one which has been made endlessly in America: overestimating the quality of glass as a material which would contrast strongly with the masonry flanks of the Pirelli building. Recent designs of tall buildings in the U.S. suggest that American architects finally are accepting the truth that glass can be a dull material in a building, appearing opaque, if it is not used carefully. Seen from outdoors, under most conditions, it is reflective, not transparent. And the glum Milanese sky (200 days of rain, snow, or gloom per year) reflected in these finished windows is a long way from the glittering delight promised by the model of Pirelli. The walls do not glisten; their façade does not float upward. Ponti did produce a good deal of the lightness in effect he predicted, but it is a relatively wan lightness, not soaring. In sum, the dramatization simply does not come off so well as intended; the simplicity of it seems, in some lights, to be somewhat frail, in other lights, somehow a little fancy.

Something that is hard to forgive is the fact that the contribution of Nervi to the structure is so subdued. This was perhaps inevitable, since the structural system is intrinsic, not extra-skeletal, not an outer garment. But the fact that this noble frame is not realized in the sleek skin of the building puts the architectural expression out of balance. It is true that the strength of this inner structure against windage is implied by the thin end elevations, but this essential component of the building is not expressed well in the front view. The little canopies that project out into the visitors' parking lot might have implied this structural technique if designed in a way reminiscent of Nervi's rugged, massive frame. They might also have enlivened the aloof, dispassionate air of the building to the passer-by.

It is the spirit of any design which is most vulnerable in execution; it generally is not delivered to the site intact. Ponti wrote a really marvellous program—in intangibles as well as tangibles—and had the strength necessary to deliver a great deal of it. Some practical considerations tortured him along the way, evidently, and robbed him of his full triumph. But this is a building that would grace any city in the world, especially the vertical city of New York, so much of which is becoming a plastic elephants' graveyard of synthetic ivory towers. It is a building which can instruct anyone who is even aware of architecture. It is a building which must irritate Ponti when he thinks what it might have been, but is not, quite. There are few architects, however, who would not be pleased to have designed such a building as "one of the testimonials that man can leave behind."



PAOLO MONTI

