

From Milan to Auckland: The Strange Flight of the Pirelli Skyscraper

KEITH EVAN GREEN
University of Auckland

Now [Marco Polo's] accounts were the most precise and detailed that the Great Khan could wish.... And yet each piece of information about a place recalled to the emperor's mind that first gesture or object with which Marco had designated the place. The new fact received a meaning from that emblem and also added to the emblem a new meaning. Perhaps, Kublai thought, the empire is nothing but a zodiac of the mind's phantasms.

— Italo Calvino, "Thin Cities - 1," *Invisible Cities*¹

The *Pirelli* skyscraper is not alone. While there exists *the one* Pirelli skyscraper — the one designed by Gio Ponti, completed in 1961 in Milan — there exist still other "Pirelli skyscrapers." Counted among these other "Pirelli skyscrapers" are the *Pan Am* building of New York, the *Phoenix-Rheinrohr* building in Düsseldorf, the *West Plaza* of Auckland, and the unrealized *20th Century-Fox* skyscraper of Hollywood. While none of these other Pirelli skyscrapers were either designed by Gio Ponti or sited in Milan, they clearly owed a debt to Ponti and, in a curious way, to Milan as well.

What all these "Pirelli skyscrapers" have in common, of course, is their distinctive lenticular or elongated "lozenge" form — a volume defined by two convex-curving façades extending to the point of nearly touching at either of their extreme ends. The visual effect of this is remarkable: face-to-face, the Pirelli is an imposing wall of glass that coolly pushes the outside away from it; but on-end, the Pirelli becomes the slightest of obelisks that, like a Giacommetti sculpture, almost begs for support. Gio Ponti took great pleasure in creating effects of this kind. He called them "miracles": miracles that architects are capable of performing; miracles that offer, to the people of our imperfect world, some semblance of magic.

In architectural details, spaces and volumes, the prolific Ponti created many such "miracles." Still, the miraculous quality of Ponti's architecture is immediately apparent in the Pirelli skyscraper because of its immense scale and prominent setting. To no surprise then, the element of Ponti's magic that traveled the farthest was the architectural sorcery he performed with the Pirelli skyscraper. And though it took its time getting there, the Pirelli traveled half a world away — assisted by the expanded means of printed communication that followed the Second World War — arriving finally in Auckland, New Zealand in the form of the *West Plaza* building, a skyscraper realized in the early 1970s by the New Zealand firm *Price, Adams, Dodd*.

The *West Plaza* obviously has something of Ponti's magic: its distinctive lozenge form set slightly upon a podium.² But if it were only for the lozenge form (set upon a podium) that linked together the Pirelli and *West Plaza* skyscrapers, then the tale of this architectural "odd couple" would be short and simple. The Pirelli and *West Plaza* skyscrapers, however, are not isolated phenomenon but rather

prominent buildings within particularly active urban contexts.³ The Pirelli stands assertively next to Milan's gargantuan *Stazione Centrale*; the Pirelli's curving face helping to frame the *Piazza Duca d'Aosta*. The *West Plaza* skyscraper meanwhile stands boldly nearby Auckland's monumental *Ferry Terminal* building; the *West Plaza*'s curving face helping to define the city's harbor-side edge (at least until the recent proliferation of towers in this city). At these two prominent urban sites of arrival and departure, visitors and residents visibly associate the Pirelli skyscraper with the city of Milan and the *West Plaza* skyscraper with the city of Auckland. So while the distinctive lozenge shape established a formal relationship between these two buildings, their prominent locations extend this relationship to the cultural and "semiological" dimensions as well. And this multi-dimensional relationship between the two urban artifacts begs the question: *What does the Pirelli skyscraper — "the" post-War architectural icon of an old Italian city — offer the new city of Auckland, New Zealand?* From Milan to Auckland, the strange flight of the Pirelli, considered here in formal, linguistic and cultural terms, underlines an unmistakable urban phenomenon of recent decades: the character of old and new cities is increasingly unstable and confused.

THE FORMAL DIMENSION

While the Pirelli and *West Plaza* skyscrapers share the same distinctive lozenge form, they are clearly not identical objects. Many of the formal concerns that motivated Ponti's design did not translate to the *West Plaza*. If some of Ponti's formal concerns were compromised in the *West Plaza*; then *which ones?*, and *to what effect?*

As Ponti often did in his work, he envisioned the Pirelli skyscraper as a "closed" or "finite form" analogous to a crystal.⁴ Like a crystal, the two "curving" façades of the Pirelli are not geometrically curved as they are in the *West Plaza* but instead faceted. And "like a crystal," fantasized Ponti, the work of architecture can be equally "magic, closed, exclusive, autonomous, uncontaminated, uncorrupted, absolute, definitive. It may be either a cube, a parallel-piped, a pyramid, an obelisk... — closed shapes that stand."⁵ Among this list of formal possibilities, the Pirelli skyscraper would surely be associated with an obelisk, particularly when viewed from either of its two slender ends. Ponti's Pirelli, however, would not be *any* obelisk; it was to be *the most slender, the most extreme* obelisk, described by Ponti as follows:

The obelisk stands in a dangerous equilibrium at the brink of balance. We fear it may fall and consider it a miracle that it stands. Its base must be as small as possible; its height, as great as possible. A solution of continuity, a separation, a juncture must exist between the base and the precarious shaft

resting on it. The scintillation of architecture springs from this negative-positive contrast.⁶

At least in this respect, both the Pirelli and the West Plaza skyscraper are “obelisks”: slender blades of concrete and curtain wall, separated from their podium-bases by a ground floor of glass. This miraculous quality, realized with the help of engineers Nervi in Milan and *Lewis Williamson* in Auckland, was achieved in both cases through structural innovations that limit the physical expansion of either building beyond its particular height and floor plate. The adherence of these two architectural forms to the law of statics is analogous to the adherence of crystalline forms to the laws of nature. “Reinforced concrete,” as Ponti described it, “rises from the ground...as pure as a crystal (as opposed to steel which is as empty as a tree).”⁷

The critical difference between the Pirelli and the West Plaza skyscrapers is not the innovative engineering that makes possible these distinctive forms, but rather *the architectural expression* of this same innovation. Unlike the West Plaza, the Pirelli expresses its innovative structure in the façades, where the concrete structure becomes *visibly* more slender and light as it extends thirty-three stories to a height just-short of the roof deck.⁸ In Nervi’s eloquent solution for the Pirelli, four pairs of laminated-concrete shear walls diminish in cross section as they ascend vertically. On the Pirelli’s façade, from the ground upwards, one recognizes the end profiles of these concrete fins emerge, each located at a fold in the envelope. With great precision, the ever-diminishing thickness of these concrete fins is compensated for by the corresponding widening of the adjacent windows which span between them. The whole of the concrete structure is then stabilized by two triangular tubes at either end of the lozenge-shaped plan which house the building’s stairs and services. To use Ponti’s expression, the “fantastic precision” of the curtain wall becomes obvious in a close-range photograph of the façade which illustrates how the windows on either side of each vertical concrete fin progressively widen as the fin’s width tapers. The window system as a whole wraps the stacked assemblage of thirty-three lozenge-shaped floor plates, forming the multiple facets of the “crystal.” “Thirty-three” was the divine number Ponti selected for his “closed,” “finite” architectural structure (as “thirty-three” was the divine number of Dante’s careful poetic structure): no floor (or canto) could be added to, or subtracted from the work without destroying the “crystalline” quality of its form. To terminate the “finite form” of the Pirelli, Ponti capped the skyscraper with an upturned roof, supported not by the concrete fins that structure the mass of the building, but by an additional structural system that allows the roof to “float” above the building mass — an expression of the lightness and rigor of Ponti’s architectural pursuit.

The West Plaza building has neither of the Pirelli’s essential architectural expressions of “finite form”: there is no visibly tapering structure nor is their any element, such as a floating roof, to terminate its form. Without these, the West Plaza appears to be prepared to accommodate the addition or subtraction of one or more stories — a taboo for Ponti, whose notion of the “finite form” forbids the alteration. Ponti was adamant on this point, arguing that a work of architecture (like the West Plaza), “made of equal and repeated horizontal and vertical elements is without a finite form” and so “does not belong to architecture as art.”⁹ Based on the same criterion, Ponti was even critical of his own design for the *Montecatini* building (Milan, 1936) which, he lamented, could have been extended or diminished indefinitely without violating its formal precept: “to what extent can this building, which relies for its image on a rhythmically ‘endless’ wall, and to which another story was easily added after the War, be called architecture, if architecture is (as in the Pirelli building) a ‘finite form’?”¹⁰ Based on this criterion alone, Ponti would have disapproved of the West Plaza’s architectural expression, a poor translation of the formal concerns he so carefully, so deliberately considered in both the structural and architectural

design of the Pirelli skyscraper. Thankfully for Gio Ponti, *Price, Adams, Dodd* failed to publicly acknowledge their debt to Ponti and his Pirelli; instead, the New Zealand firm attributed their design to “a town-planning set back requirement” applied to this “difficult” Auckland site, which resulted in a “natural” response discovered by Neville Price during the course of “seven hours work at home!”¹¹ From Milan to Auckland, the model skyscraper of an old Italian city arrived in the new city, strangely, as a ghost.

THE SEMIOLOGICAL DIMENSION

After the Second World War, cultural information traveled among free nations at an unprecedented rate, allowing important post-War architectural works as the Pirelli skyscraper to be recognized by architects as far away as New Zealand. Among the many international journals which published reviews of the Pirelli, *Domus* — the journal directed by Ponti and founded by him in Milan in 1928 — had itself presented two features on the skyscraper. Both features were authored by Ponti; and both were available in Italian and English texts within New Zealand. The first feature appeared in March 1956, entitled “Espressione dell’edificio Pirelli in costruzione a Milano” [Expressions of the Pirelli building under construction in Milan]; the second feature appeared in June 1961, entitled “Si fa coi pensieri” [One does things with one’s thoughts].¹² In the second of the two features, Ponti responded to his critics’ charge that a *Domus* feature on the Pirelli was a conflict-of-interest. As he wrote, “my presentation of the Pirelli in *Domus* was deliberate: an act of conscience in order to subject it to judgment, as well as an act of good will.”¹³ Whether one accepts Ponti’s defense is less important than the particular issue it raises for Ponti himself; that is, as he wrote, “the question of ‘what advertising does to architecture, and to what extent architecture is a fit medium for advertising.’”¹⁴

As Ponti envisioned it, the Pirelli had an existence beyond the physical fact of the concrete-and-glass skyscraper in Milan; for Ponti, the Pirelli was also a printed image. Indeed, above the title of the first *Domus* feature Ponti placed what he called his “graphic slogans” of the skyscraper; and these evocative images appeared not only in *Domus* but also in Ponti’s popular treatise of 1957, *Amate l’architettura* [Love Architecture], in which he defined architecture as “the creation of immense images as if they were real.”¹⁵ So in Ponti’s fertile mind, the Pirelli skyscraper was an immense image that could travel the world.

So what did *Price, Adams, Dodd* and their West Plaza building want of the Pirelli’s “image”? The “semiological dimension” of the relationship between these two skyscrapers begins with the Pirelli itself: a work of architecture that has served as an expression of the “virtuous” city of Milan even before the building’s completion, thanks to Ponti’s publishing efforts. More particularly, the Pirelli expressed the many virtues of Milan as alternatively: an urbane, dignified, elegant city; the post-War city reconstructed; the international city; the city of commerce and progress; the city of miracles; the city of culture; and so on. In semiological terms, the relationship between the Pirelli skyscraper and the city of Milan (e.g. signifier and signified) is called a “system of signification.”

In the early 1970s then, *Price, Adams, Dodd* designed the West Plaza which looks conspicuously like the Pirelli. To help construct the image of a “virtuous” Auckland, the West Plaza draws upon the existing relationship between the Pirelli and Milan to construct a new Auckland. In other words, the West Plaza building takes the form of the Pirelli to lend to Auckland some of the virtues of Milan. In semiology, this odd coupling of significations defines a “metalanguage.” In the operation of metalanguage, the second system of signification subsumes the first system of signification.¹⁶ So the West Plaza subsumes the powerful relationship between the Pirelli and Milan (signifier and signified) in order to construct a new image for Auckland: Auckland as a virtuous city, much like Milan (Auckland as alternatively: an urbane, dignified, elegant city; the

post-War city reconstructed; the international city; the city of commerce and progress; the city of miracles; the city of culture; and so on). But while Auckland becomes a little bit more like the “virtuous” city of Milan, Milan meanwhile becomes a little less like its old “virtuous” self.

This semiological (or so-called “structural”) analysis illustrates how a new architectural object (like the West Plaza building) can subsume the meanings of an old architectural icon (like the “Milanese” Pirelli) towards creating an image for a new city (like Auckland, New Zealand). But as Manfredo Tafuri warned, “a completely structural criticism... can never ‘explain’ the sense of a work. It can do no more than ‘describe’ it.”¹⁷ Tafuri here added, “what amazes is that architectural self-criticism does not go to the root of the matter and has need to hide behind a new ideological schemes borrowed from the semiological approach.”¹⁸

THE CULTURAL DIMENSION

From the very start, the Pirelli skyscraper was envisioned as a cultural expression of Milan. The Pirelli skyscraper was in fact part of a cultural legacy established by Giovanni Battista Pirelli with the founding of the *Pirelli* company (the industrial producers of rubber articles). In 1872, on the same site now occupied by the Pirelli skyscraper, Giovanni Battista Pirelli built his first manufacturing facility with the understanding that it would participate in the cultural evolution of the city.¹⁹ In the air-raid of August 1943, Pirelli’s manufacturing facility was destroyed; and the skyscraper that took its place became, ever more-so, a “building-symbol — for Pirelli and for Milan” by virtue of the building’s “facile formal expression and in its ambitious constructive feat, neither of which had [in fact] abandoned the traditions or sentiments of the city’s collective history.”²⁰ The Pirelli company’s decision to site the new skyscraper on this site was also consonant with the 1945 “AR plan” for reconstructing Milan, a plan which sought, among other things, to construct symbols of stability in those quarters most damaged by the 1943 bombardment.

By the mid-1950s, the “economic miracle” of Italy had created the conditions for the realization of Pirelli’s dream. Commissioned to design it, Gio Ponti envisioned the Pirelli skyscraper as a “work of art” that “challenges war by its own fragility.”²¹ As the building was to embody the aspirations of post-War Milan, Ponti sought to reflect in this work what he called the “true tradition” of Milan, defined as “the old Italian energy of continuous transformations.”²² “On the brink of balance,” the slender form of Ponti’s design embodied that “daring modernity” that Ponti argued was the essential character of Milan, the dynamic city in which he worked and lived.²³ Still, Ponti had served in the First World War and survived the Second — difficult life experiences which led him to reassess the capacity of the architect to contribute much of anything to humanity. So while Ponti envisioned his design of the Pirelli as a crystal, he was quick to voice his more modest expectations for it, admitting that the work of architecture was not unequivocally a crystal, but instead “like a crystal — in the disorder of nature.”²⁴ For Ponti, the Pirelli was therefore not a perfect diamond but a relatively flawed conception that might offer the people of post-War Milan, at least, “the comfort of the imagination” and a kind of “beauty” that comes, as he said, “with effort, with sorrow, with pain and with uncertainty.”²⁵

The “light” Pirelli skyscraper consequently expressed more than Ponti’s desire to challenge the physical laws of gravity: it was instead *the psychological laws of gravity* — the difficult conditions of “being human” in unsettling times — that Ponti dreamt might one day be conquered through such creative efforts. Ponti’s expansive, existential perspective diverged radically from the more local focus of his Milanese contemporary Ernesto Rogers, as demonstrated by Rogers’ many *Casabella* editorials, and most visibly in his firm’s heavy and somber *Velasca* tower, realized in Milan in the same years

as the Pirelli skyscraper. Whereas Ponti’s *grattaciello* [skyscraper] prefigured a lighter life for the *Milanesi* (a life not unlike that enjoyed by many Americans at the time), Rogers’ *tore* [tower] recollected for the *Milanesi* the weight of their own architectural and cultural past. More of a hopeful futurist, Ponti had envisioned the Pirelli skyscraper as an integral part of the evolving crystallization of Milan of a character not unlike the Alps that surround it. In fact, many published photographs of the Pirelli capture the skyscraper as an elegant, slender, silhouette standing aloof like a crystal in the Milanese skyline amongst the Alps’ peaks.²⁶ “To look at it against the sky,” wrote Ponti, “gives the same enchantment of excess... that a crystal gives.”²⁷

The images of the Pirelli as an expression of post-War Milan captured the imagination of writers, artist, filmmakers, journalists and advertisers who, in turn, transformed this building into a leading character in their various and diverse performances. For a fashion shoot for *Life* magazine entitled “The Dramatic Decade of Italian Style” (December 1961), the seductive young Pirelli was accompanied by a handsome fashion model wearing a *haute couture* dress by Fabiani. For an advertisement printed in *Progressive Architecture* (February 1972), the elegant and dignified Pirelli promoted an American building product. For tourists maps distributed by COIN, the popular Milanese chain of department stores, the more established Pirelli stands proudly among the significant historical landmarks of the old city. For an international squadron of architectural critics, the reflective Pirelli became a centerpiece, both for-and-against itself. In the United States and England, the critics generally responded favorably to the Pirelli; while in Italy, the Pirelli met a curious mix of silence (Rogers) and embarrassment (Bruno Zevi), juxtaposed as it was to its heavy Milanese partner, the *Velasca* tower.²⁸ Meanwhile, for Antonioni’s film *La Notte* [The Night], the superior Pirelli of 1961 looked down upon the smallness of a post-War Milan, still struggling for its own survival on the Lombardian plane. Despite Ponti’s vision of the Pirelli’s roof as something of a summer hat, lifted from the head of a Spanish dancer, Antonioni portrayed the same architectural element as something dark and sinister — a reflection of the pervading alienation experienced by many post-War inhabitants of Milan.

In so many ways, the crystalline Pirelli has characterized the complex, multifaceted condition of Milan. In its more heroic roles, the Pirelli connoted the liberty of a nation’s renewed democracy and the extraordinary economic result — the “economic miracle,” of post-War Italy. In its more sinister roles, the Pirelli connoted the human oppression, the alienation, that often arises from rapid economic development, particularly within populous cities like Milan. And in 1978 — as if the Pirelli hadn’t played enough dramatic roles already — this icon of the private sector was newly-named the Government seat for the Region of Lombard. From its inception, the Pirelli skyscraper has undergone a continual metamorphosis from a work of architecture to a “social butterfly”; an architectural existence so light, so ethereal, that it could be transported easily to the southern hemisphere, reconstituted far-less brilliantly as the West Plaza building.

In Auckland in 1975, the West Plaza was a new building in a “new city” that alluded to the Pirelli, a relatively new building in an old city. The West Plaza consequently expressed the desire of its architects to offer New Zealand’s largest city an image as elegant and dignified as that lent to Milan by the Pirelli. Meanwhile in the Milan of 1975 — paradoxically — there remained a disparity between the vision of the ideal (Roman) city versus the real Italian city; a disparity between the economic “miracle” of post-War Milan and the conditions of everyday life there (its streets overrun by rubble, by the homeless, by cars, scooters, and pets). As Ponti had anticipated, no work of architecture — now matter how magnificent — could dramatically change the entire future of such a large, complicated and war-damaged city as Milan.

On the other hand, in the Auckland of 1975, there remained the

disparity between the yet-defined notion of a "New Zealand" city versus the Victorian city constructed on an old British model. Whereas Milan was bombed by enemy planes, Auckland's bombardment was self-afflicted. In a relatively short period, numerous buildings in downtown Auckland were destroyed, their sites cleared, and new buildings erected in their place. The pervasive destruction of Auckland's urban core was motivated largely by the post-War, post-colonial tendency of New Zealand to distance itself from British Dominion and prove itself an urbane, dignified presence in the South Pacific.²⁹ Photographs of 1920s Auckland show a lively place defined by multi-story brick Victorian buildings, tram cars, and hoards of pedestrians. This bustling metropolis has since been emptied: the bustle of the 1920s city, replaced by anonymous, mirrored-glass, hi-rise buildings modeled mostly upon the worst of the American model.³⁰ The recent reconstruction of downtown Auckland nevertheless reflects the evolving cultural, political and social structures of New Zealand: its "boom and bust," pioneering attitude, its pride in individualism, and its growing acknowledgment of the significant numbers of non-European people who live there.

Among the many obviously flawed crystals that now make-up the Auckland skyline, the West Plaza is a more virtuous example. By doubling Milan's recent jewel, the West Plaza lends "something sculptural to the city," an attribute that brings to Auckland something of the *Urbanitas*, *Dignitas* and *Elegantia* of the old Italian city, whether or not the public is aware of its source.³¹ The New Zealand press was full of it: above numerous pictures of the West Plaza — under construction and completed — the headlines read "Architect ventures into space age"; "Bright Horizon"; "Top Engineering Award"; "[Price] burns midnight oil to enliven Auckland skyline." Meanwhile, there was the applause of the local critics: Lillian Chrystal reported that the West Plaza is "an emblem. It achieves a freedom and style none of our inner-city office buildings ever managed"; Peter Hill had already defined the just-completed West Plaza "an established Auckland City landmark"; and Rolly Adams was drawn to the West Plaza's "lovely curve, simply and rationally analyzed that appeals to a lot of people...."³²

In spite of all these accolades, however, the image of West Plaza shatters upon entering the building. The interior spaces of the West Plaza — the places where people spend their working day — are as banal and as uninspired as other speculative office buildings; whereas the interiors of the Pirelli remain true to Ponti's hope for a "lighter" Milanese life. In the Pirelli, as Ponti described, "the search for essence and unity... is apparent not only in views of the external and internal walls, but also in the design of the furniture, and in the fact that it is the same, and of the same perfection, for all who work in the building.... Same colors, same floors and ceilings, same finish of the walls, same comfort and style in all the interiors."³³

But these are details that few will ever see. The Pirelli and the West Plaza — lozenge shaped buildings on podiums occupying two prominent urban sites — have a curious and undeniable coexistence. The Pirelli skyscraper has lent itself to a curious kind of emulation — an emulation prefigured in the architect's own vision. Perhaps Gio Ponti was thinking about the Pirelli when he described the printed page as "air-borne, wonderful, as light as a thought, a surface without substance."³⁴ But meanings get lost when they travel long distances. The strange flight of the Pirelli skyscraper from Milan to Auckland typifies an unmistakable urban phenomenon of recent decades: the architectural character of old and new cities, rather than crystallizing in the miraculous way Ponti imagined, is instead becoming increasingly unstable and confused.

NOTES

- ¹ Italo Calvino, *Invisible Cities*, trans. W. Weaver (London: Vintage, 1974), p. 22.
- ² The West Plaza's podium was designed to contain a restaurant, a bank and shops; the Pirelli's podium serves primarily as a parking structure.
- ³ The fact that these two buildings occupy prominent urban sites makes this case of "architectural doubling" relatively more complex than, say, the case of the "Parthenons" where the "double" is situated in a relative vacuum within Nashville.
- ⁴ Gio Ponti, "Espressione dell'edificio Pirelli in costruzione a Milano," *Domus* 316 (March 1956), pp. 2, 4.
- ⁵ Gio Ponti, *In Praise of Architecture* [*Amate l'architettura* (1957)], trans. G. and M. Salvadori (New York: Dodge, 1960), p. 29.
- ⁶ *Ibid.*, p. 33.
- ⁷ *Ibid.*, pp. 32-33.
- ⁸ Along with Nervi, Ponti developed this project in cooperation with Arturo Danusso, Antonio Fornaroli, Alberto Rosselli, Giuseppe Valtolina and Egidio Dell'Orto.
- ⁹ Gio Ponti, *In Praise of Architecture*, p. 44.
- ¹⁰ Related by Lisa Licitra Ponti in *Gio Ponti, The Complete Works 1923-1978* (Cambridge, Massachusetts: MIT Press, 1990), p. 88.
- ¹¹ These quotes drawn from press clippings in the *Price, Adams, Dodd* archive of University of Auckland.
- ¹² *Domus* p. 316 (March 1956) and p. 379 (June 1961).
- ¹³ Gio Ponti, "'Si fa coi pensieri,'" *Domus* 379 (June, 1961), p. 2.
- ¹⁴ *Ibid.*, p. 2.
- ¹⁵ Gio Ponti, *In Praise of Architecture*, p. 8.
- ¹⁶ Roland Barthes, *Elements of Semiology* [1964], trans. A. Lavers and C. Smith (London: Jonathan Cape, 1967), p. 90.
- ¹⁷ Manfredo Tafuri, "Architecture and Its Double: Semiology and Formalism," *Architecture and Utopia: Design and Capitalist Development* [1973], trans. B. La Penta (Cambridge, Massachusetts: MIT, 1990), p. 165.
- ¹⁸ *Ibid.*, p. 161.
- ¹⁹ Paolo Cevini, *Grattacieli Pirelli* (Rome: La Nuova Italia Scientifica, 1996), p. 11.
- ²⁰ *Ibid.*, p. 23.
- ²¹ Gio Ponti, *In Praise of Architecture*, p. 129.
- ²² *Ibid.*, pp. 84, 86.
- ²³ *Ibid.*, p. 84.
- ²⁴ *Ibid.*, p. 142.
- ²⁵ *Ibid.*, p. 116.
- ²⁶ For one instance: in F. Dal Co and S. Polano, "The Twentieth Century Architecture and Urbanism: Milan," *a+u* 20 (1991): 20.
- ²⁷ Gio Ponti, *In Praise of Architecture*, p. 33.
- ²⁸ A "positive response" from the English critics: W. MacQuade, "Powerful tower, delicate shell," *Architectural Forum* 2 (February 1961): 90-93. An "embarrassed response" from the Italian critics: Bruno Zevi, "Londra chiama — telegraficamente Roma risponde" [London calls, Rome responds by telegraph], *L'architettura* 50 (December 1959), p. 512-513.
- ²⁹ See D. Mitchell and G. Chaplin, *The Elegant Shed: New Zealand Architecture since 1945* (Auckland: Oxford University Press, 1984), pp. 8, 31.
- ³⁰ *Ibid.*, p. 38.
- ³¹ *Ibid.*, p. 40.
- ³² The *Price, Adams, Dodd* archive.
- ³³ Gio Ponti, "'Si fa coi pensieri,'" p. 12.
- ³⁴ Gio Ponti, *In Praise of Architecture*, p. 196.