Metal Circus Abstraction and Method in Aldo Rossi's Early Work Pier Vittorio Aureli





Aldo Rossi and Luca Meda at the XIII Triennale "Tempo Libero," Milan, 1964. Photo by Ugo Mulas. Luca Meda, Gianugo Polesello, Aldo Rossi, Competition model for the Monument to the partisans in Cueno, Italy, 1962. From Nicola Braghieri, Sabina Carboni, Serena Maffioletti eds., Luca Meda. Architecture, Design, Drawings (Milan: Silvana Editore, 2021), 27 and 83.

Abstraction in architecture is not a style but the result of architecture's process of production. Historically, this process relies on the use of geometry, standardization, economy of means, etc. All these factors imply a process of reification that makes architecture the product less of the builders' empirical know-how and more of the division of labor through which large-scale societies are organized. As the history of modern architecture taught us, the abstraction of architecture as a built form—its reduction to simple, abstract elements such as gridded loadbearing structures and bare façades pierced with uniform fenestration—arose as a direct consequence of the standardization and industrialization of building processes and materials. Take for example one of the most famous images of modern architecture: Le Corbusier's drawing of the structural skeleton of Maison Dom-ino (1914), a prototype for mass housing where the structure was reduced to horizontal slabs and thin columns. In this depiction of a housing structure we see two apparently opposing conditions for architecture that, in Adolf Max Vogt's words, are "the perfectly pure" and the "raw real."01 While the perfectly pure is the structure's formal abstraction, the raw real is its construction system, where Le Corbusier adapts the technology of industrial architecture to the architecture of the house. This example shows how abstraction in architecture is inextricably linked to industrial production. Here, abstraction manifests itself both as a process and as a form that makes explicit the conditions of its (industrial) production. 02

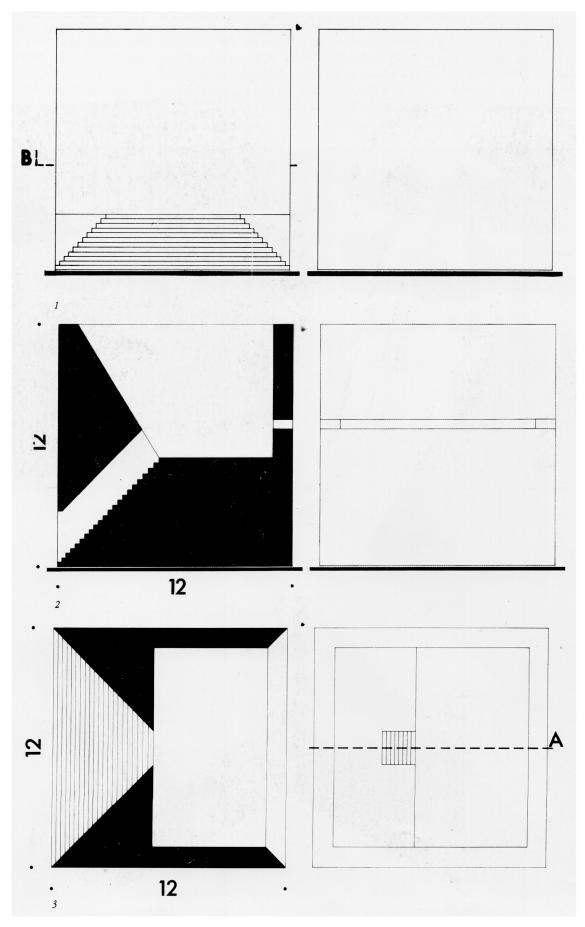
In his numerous writings on architecture and the city, Aldo Rossi rarely used the word "abstraction." His architectural output is mostly known

through projects and buildings imbued with a sense of oneiric melancholia. This is the case of his "iconic" works, such as the extension of the San Cataldo Cemetery in Modena (1971-1980) and the Teatro del Mondo (1980). The impact of these buildings, plus Rossi's evocative drawings of architectures and cities, has overshadowed the dry abstraction of his early work prior to 1966. The polemical and acerbic austerity of Rossi's early projects positioned him closer to architects such as Hans Schmidt and Max Bill, than to the postmodern milieu in which he later found himself.⁰³ Moreover, when closely reading his early essays, it is possible to detect a certain enthusiasm for the possibility of reducing architecture to its barest volumetric expression.⁰⁴ In this respect, Rossi's review of Emil Kaufmann's writings on Claude-Nicolas Ledoux and the "Revolutionary Architects" is particularly revealing.05 Rossi noted how for Kaufmann, Ledoux's use of simple geometric forms was the consequence of the French architect's confrontation with new building programs that had no reference to the past. Following Kaufmann, Rossi interpreted the simplification of form, typical of modern architecture, as both the outcome of the crisis of the classicist tradition and the overcoming of such a crisis by resorting to a simple and elementary architectural language. This position was further elaborated by Rossi in 1967 with his introduction to Etienne Louis Boullée's Architecture, Essay on Art published in 1967. In this essay, Rossi wrote of "exalted rationalism" as a fanatical commitment to a rational idea of architecture.⁰⁶ By adhering to such an idea of "rationalism," which culminated in the exhibition at the XV Triennale di Milano curated by Rossi himself in 1973 under the title "Architettura Razionale," or the Milanese architect understood the radical simplification of form as both an adaptation to technical and economic necessities and as a way for architecture to preserve—and even radicalize—its monumentality. The notes that follow attempt to offer an alternative interpretation of Aldo Rossi's work by emphasizing the abstraction and elementarism of his early projects. The main argument is that in Rossi's early work the goal was not the creation of an architectural style through the production of evocative architectural images but the elaboration of a transmissible and sharable design method defined by both the radical abstraction of architecture and the possibility to turn this abstraction into a monumental form.

FORMAL TERRORISM

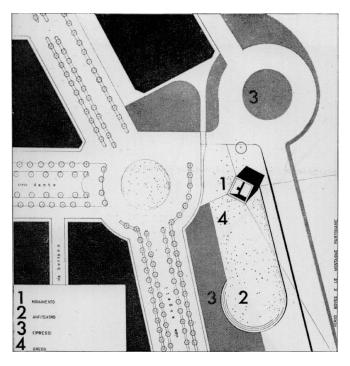
The dialectic between abstraction And monumentality, elementarism and symbolism, is at stake in all of Rossi's early projects, especially those produced between 1962 and 1964 in collaboration with Gianugo Polesello and Luca Meda, with whom Rossi formed his first professional studio.08 Among these projects, the two most exemplary are the 1962 competition entries for the Monument to the Partisans in Cuneo and the Centro Direzionale in Turin.

- 03 One of the few in-depth studies of Rossi's early work is Beatrice Lampariello, Aldo Rossi e le forme del Razionalismo Esaltato. Dai progetti scolastici alla "città analoga" 1950-1973, (Macerata: Quodlibet,2017). Needless to say, the present essay is profoundly indebted to Lampariello's reading of Rossi's oeuvre.
- Most notably in: Aldo Rossi, "Emil Kaufmann e l'architettura dell'illuminismo," "Casabella-Continuità", 22, November-December, 1958, 43-46; republished in Aldo Rossi, Scritti Scelti sull'architettura e la città, 1956-1972 (Macerata: Quodlibet, 2012), 57-65.
- 05 Ibid., 62.
- Aldo Rossi, "introduzione' in Etienne-Louis Boullée, Architettura saggio sull'arte" (Padova: Marsilio, 1967), 7-24; republished in Aldo Rossi, Scritti Scelti sull'architettura e la città, 1956-1972, 321-337.
- 07 Aldo Rossi, Gianni Braghieri, Franco Raggi (editors), Architettura Razionale, XV Triennale, Sezione Internazionale di Architettura (Milan: Franco Angeli, 1973).
- 08 For a reconstruction of Rossi's early engagement with the profession see Beatrice Lampariello, "L'architettura negli anni della 'coscienza storica:' i progetti di Luca Meda con Giorgio Grassi, Gianugo Polesello e Aldo Rossi" in Nicola Braghieri, Sabina Carboni, Serena Maffioletti (editors) Luca Meda. Architecture, Design, Drawings (Milan: Silvana Editoriale, 2021), 78-99.



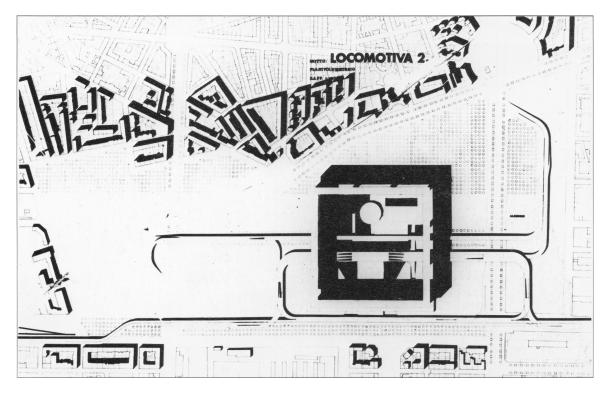
Luca Meda, Gianugo Polesello, Aldo Rossi, Monument to the Partisans in Cueno, Italy, 1962, competition design. Plans, elevation and section. From Peter Arnell, Ted Bickford, Aldo Rossi. Buildings and Projects (New York: Rizzoli, 1985), 30.

The Cuneo monument was to be built on the edge of the city, overlooking the hills of Boves, a town that was the stage of heavy fighting between partisans and Nazi-Fascist troops. For their competition entry, Rossi and his teammates designed the monument in the form of a cube as part of an ensemble of elements—a small park, an open-air theater, and a cluster of cypresses. Oriented towards the hills, the cube is excavated by a triangular staircase leading to a roofless space that, due to a long slot placed at eye level, would act as an observatory towards the battlefield. With its thick concrete walls and horizontal slot, the cube is vaguely reminiscent of a military fortress or bunker. At the same time, the monumental staircase, whose width ceremonially decreases towards the top, and the cladding made of white stone, evokes an ancient monument like a Roman mausoleum or a triumphal arch. Recalling their design process, Polesello wrote that that the idea of this figure came from two sources: Polesello's own reinterpretation of a design by Ledoux- the Maison des directeurs de la loue designed for Chaux—and a drawing by Luca Meda representing a cube, a homage to Max Bill's sculptures, which were greatly admired by Meda, who had been a student of Bill's at the Ulm School of Design.⁰⁹ In the Cuneo monument, the subtle manipulation of a simple form like a cube opens the monument to different and even contrasting readings. Yet the abstraction of such form-reinforced by its blank walls-prevents it from acting as a symbol or being too direct of a reference to any specific precedent. In the Cuneo monument, we see emerging one of the most defining tropes of Rossi's early work: the whiteness of the walls. Regardless of whether it would be built in concrete, steel, or bricks, Rossi imagined all his architectures to be painted or cladded in white. Reinterpreting and exaggerating a fundamental trope of modern architecture, Rossi wanted the white of his architectures to render them as abstract as possible in order to emphasize their estrangement from the context. In the Cuneo monument, the bombastic symbolism of Ledoux's architecture parlante is countered by Bill's hermetic geometry.



Luca Meda, Gianugo Polesello, Aldo Rossi, Monument to the partisans in Cueno, Italy, 1962, competition design. Site plan. From Peter Arnell, Ted Bickford, Aldo Rossi. Buildings and Projects (New York: Rizzoli, 1985), 31.

A similar dialectic between symbolism and abstraction is at work in Rossi's, Polesello's, and Meda's competition entry for the Centro Direzionale in Turin, where their proposal concentrated all the required program in a gigantic ring-like slab suspended on top of an elevated platform. The result of this simple and yet radical gesture is a stark block whose form is both monumental—the closed form resembles a squarish arena or colise-um—and radically abstract, as the façade of the block is simply rhythmed by the floor slabs. The abstraction of the Centro's form is further radicalized by the use of anonymous industrial elements such as the cylinders that contain all the vertical circulation, the oblique planes of the ramps, and the sphere of a steel dome.

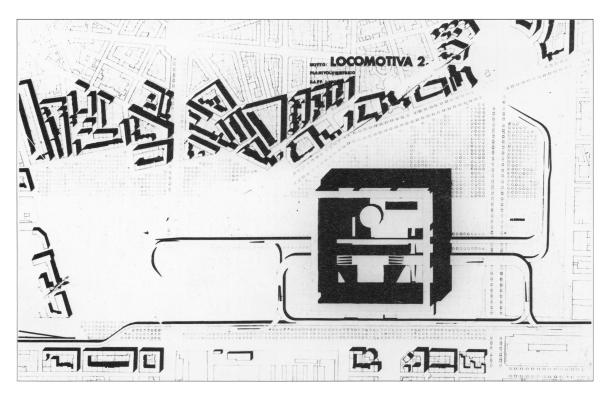


Luca Meda, Gianugo Polesello, Aldo Rossi, Centro Direzionale, Turin, 1962, competition design. Site Plan. From Peter Arnell, Ted Bickford, Aldo Rossi. Buildings and Projects (New York: Rizzoli, 1985), 41.

Centri Direzionali were business districts planned to support Italy's major industrial centers by concentrating tertiary activities in close proximity with major infrastructural nodes. This urban typology was developed as a way to coordinate the growth of service and administrative work with the planning of major metropolitan centers. The idea of the Centro Direzionale was the outcome of planning policies that were advanced in Italy on the wake of its massive industrialization. These policies required coordinated planning of all the major productive sectors—especially manufacturing and services—into a coherent and organic system in which the transportation of people and goods played a major role. This new condition was theorized by architects and planners as the "Grande Dimensione," a scale of intervention that would coalesce planning, urban design, and architecture within one overall project.¹⁰ Yet it was very difficult for architects to understand how this new "great dimension" of regional planning was to be translated into specific architectural interventions such as the Centro Direzionale. This led many participants of the competition

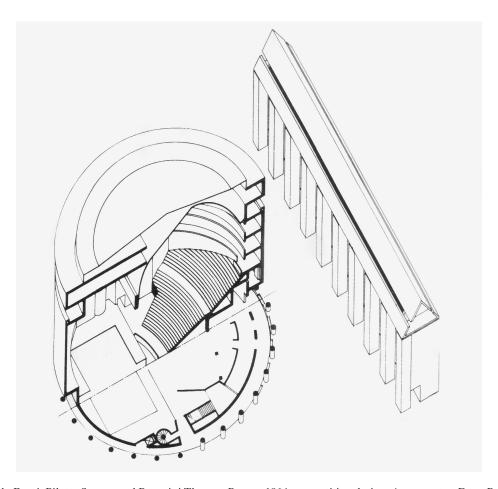
for the Centro Direzionale—among which was Manfredo Tafuri as part of the studio Architetti Urbanisti Associati—to produce over-designed urban ensembles whose forms were complex and irreducible to any typological principle.

Rossi, Polesello, and Meda instead proposed a straightforward strategy: to concentrate all the required program into one finite form. In doing so, they imagined the new structure as a legible embodiment of the economic and political quantum leap provoked by the new program of the Centro Direzionale. This strategy also allowed the architects to free up much of the site and propose a green parterre that was meant to remain empty or to allow the building of a second block, identical to the first. The composition of the free-standing squarish coliseum placed on a green parterre was meant to be a clear reference to the image of the Campo dei Miracoli in Pisa, in which the three main monumental structures—baptistery, church, and tower—are laid down on a green surface as three finite forms. However, like in Cuneo, it is precisely the relentless abstraction of the Turin building, whose façade is made of the repetition of the horizontal slabs, that prevents its association with any precedent, even though the squarish plan of the centro was a nod to both Alessandro Antonelli's "Mole," a structure designed as a synagogue turned civic monument that dominates Turin's skyline, and the city's Roman grid as shown by a sketch drawn by Rossi in 1971.



Gianugo Polesello, Aldo Rossi, Worker's Housing in Caleppio, 1961, competition design. Site plan. From Peter Arnell, Ted Bickford, Aldo Rossi. Buildings and Projects (New York: Rizzoli, 1985), 28.

This design method in which complex programs are organized through the composition of simple forms is further developed by Rossi through other projects, such as the Workers' Housing in Caleppio near Milan (1961) the Country Club in Fagnana near Milan (1962, in collaboration with Polesello), a school in Monza (1962, in collaboration with Meda, Vanna Gavazzeni and Giorgio Grassi), the Iron Bridge and Park Exhibition at Milan Triennale (1964, in collaboration with Meda and Polesello), and the competition entry for the new Paganini Theater in Parma (1964).



Aldo Rossi, Pilotta Square and Paganini Theatre, Parma, 1964, competition design. Axonometry. From Peter Arnell, Ted Bickford, Aldo Rossi Buildings and Projects (New York: Rizzoli, 1985), 49.

Rossi referred to the severe appearance of these early projects as "terrorismo formale"11 (formal terrorism) in order to emphasize the stark simplicity and confrontational crudeness of their appearance. Beyond the provocation, what is at stake in these projects is the formation of a design method based on a combinatory logic in which different compositions of simple volumes based on plane geometry produce a multiplicity of results out of a restricted vocabulary of elements. For Rossi, Polesello, and Meda, only an extremely simplified architecture could cope with the increasing complexity of programs and activities brought by the sudden modernization of Italy. Yet, the insistence on an architecture made of simple forms and the possibility to establish a design method was also a polemical reaction to the design sophistication of much postwar architecture, of which the high-end design oeuvre of architects such as Giò Ponti and Luigi Caccia Dominioni were clear examples. 12 What Rossi disliked about this kind of architecture-known in Italy as 'professionalismo' (professionalism)—was the loose and stylish formalism, which gave a lot of emphasis to the architect's masterly hand at the expense of any intelligibility of the design process. Following the steps of architects such as Boullée, Jean-Nicholas-Louis Durand, Adolf Loos, and Schmidt, Rossi saw in the establishment a clear design method as the only way to save architecture from empty formalism.

¹¹ Aldo Rossi, Quaderno azzurro, Giugno 1972, 12. See also: Beatrice Lampariello, Aldo Rossi e le forme del razionalismo esaltato. Dai progetti scolastici alla "città analoga" 1950-1973 (Macerata: Quodlibet, 2017), 141.

Rossi wrote that architects within the tradition of "professionalismo" approached design without a logical framework, without a theory. See: Aldo Rossi, "Architettura per i Musei" in Aldo Rossi, Scritti scelti sull'architettura e la città, 1956-1972, (Macerata: Quodlibet, 2012), 300; Rossi's critica reception to architects such as Luigi Caccia Dominioni was echoed by Manfredo Tafuri, see: Storia dell'architettura in Italia, 1945-1985 (Milan: Einaudi, 1985), 87-88; See also: Daniel Sherer, "The Caccia Effect: Milan's Hidden Master of Design and Architecture," in PIN-UP, 16 (May 2014), 207-216.

PIECES AND PARTS: SABOTAGING COMPOSITION

Perhaps the best explanation of Rossi's design method is Ezio Bonfanti's essay, "Elementi e costruzione: note sull'architettura di Aldo Rossi," published in 1970 in the journal Controspazio.¹³ Bonfanti describes Rossi's architecture as made of recognizable "pieces" (pezzi) and "parts" (parti). For Bonfanti the pieces are simple and irreducible building elements such as the wall, the cylindrical column, the quadrangular pillar, the blade column, the dome, the flat roof, etc.¹⁴ Parts are, instead, architectural compositions made of pieces and therefore more complex to define and classify—and yet always finite in their character, like the Monument in Cuneo and the Centro Direzionale. For Bonfanti, parts include the row house (or blade building), the gate, the gallery, and the fountain monument.¹⁵

To sum up, we can say that, while pieces are building elements, parts are composite figures. The compositional logic of the parts is limited by the restricted nature of the repertoire of pieces and always produces finite forms. In some cases, pieces and parts can almost coincide, like in the case of the monolithic form of the Cuneo Monument, where the cube can be read both as a piece and a part. What links pieces and parts is the compositional method pursued by Rossi, that Bonfanti defined as "procedimento additivo" (additive procedure or additive method). This method consisted of composing elements by either succession or juxtaposition. In both cases, pieces are composed into parts, yet this operation resulted in a distinct, finite figure. Rossi's competition entry for the Pilotta Square and Paganini Theater in Parma represents this additive method at its best. Keeping in mind Bonfanti's distinction between pieces and parts, Rossi's intervention can be read as two clearly distinct "parts:" a theater and a gallery. A third part—the sunken piazza-platform that supports the theater and gallery—remains invisible on the ground level. The theater is a drumlike building whose façade is a superimposition of three main registers: a gallery on the bottom, a loggia on the top, and a blank, windowless wall in between. Like in the Cuneo monument and the Centro Direzionale, the form of the theater vaguely alludes to an ancient monument like a baptistery—a clear nod to the famous twelfth-century baptistery in Parma with its loggia principle—or an amphitheater. The gallery is rhythmed by a series of piers, or quadrangular columns that contain the vertical circulation and link the platform below the square to a gigantic triangular concrete bridge beam. The platform on which the two "parts" are placed acts much as the green parterre in the Centro Direzionale: it presents both theater and gallery as two self-standing monuments in the manner of Pisa's Campo dei Miracoli. Here, the additive logic dictates both the composition of the parts and the composition of the pieces. Both pieces and parts are composed with the same directness with which children assemble their toy blocks. Rossi's composition seems to lack any sophisticated guiding principles beyond the simple juxtaposition of pieces and parts. So, while Rossi's stark element-based approach seems to celebrate composition as the main moment of design, he also undermines composition's main purpose, which is to create coherent and convincing wholes.

Composition presupposes the singularity of each piece, but it always strives for a coherent whole. The search for a coherent whole is the very ideology of composition, especially as it was theorized by Leon Battista Alberti in his book De Pictura. Here, Alberti addresses pictorial composition as the way in which painting can be organized so that each element

¹³ Ezio Bonfanti, "Elementi e Costruzione. Note sull'architettura di Aldo Rossi," in Controspazio 10, Ottobre 1970, 19-28; the essay was republished in Ezio Bonfanti, Nuovo e moderno in architettura, edited by Marco Biraghi and Michelangelo Sabatino (Milan, Mondadori, 2001), 343-358

¹⁴ Ibid., 21

¹⁵ Ibid., 22.

Leon Battista Alberti, On Painting, translation by Rocco Sinisgalli (Cambridge UK: Cambridge University Press, 2013), 44-73.

plays its part in the effect of the whole. As noted by Michael Baxandall,¹⁷ Alberti's concern was to foreground composition in order to reinforce the narrative relevance of painting, and its ability to clearly communicate stories to its beholders. In architecture, such an idea of composition is embodied in the Albertian concinnitas, that is to say the coherence of the individual parts of a building assembled according to principles such as numerus, finitio and collocatio. For Alberti, concinnitas was the precondition of beauty itself and depended on the architect's mastery of composing the heterogeneous formal vocabulary of architecture into plausible and pleasant wholes. As many have noted,¹⁸ the source for such an ordering principle was the art of rhetoric, since what is at stake in both architecture and rhetoric is the making of coherent but also—and especially—persuasive discourses.

The architecture governed by the compositional logic of concinnitas was the architecture of the classical orders, understood as the coherent assemblage of columns and architraves ruled by certain proportions. This ordering logic started to be challenged in the eighteenth century,19 and from that moment onwards, composition in architecture became a much vaguer concept, more difficult to theorize. Paradoxically, it was precisely when composition was no longer perceived as subject to certain rules that it became an even more present concern among architects. In his seminal essay on composition,²⁰ Colin Rowe noted how this design technique became a popular theme among architects and landscape designers at the same moment that the "ideal" principles of classicist architecture failed to adapt to the emergence of new typologies and programs. Rowe defined composition as an empiricist method for accomplishing not the metaphysical order of classicist architecture but a pleasing "picturesque" assemblage of things. Against this idea of composition as a way to make a pleasant assemblage, Rossi recuperated the stark composition practiced by architects such as Claude-Nicolas Ledoux and Etienne Louis Boullée, in whose work, as Kaufman noted, architectural volumes are juxtaposed rather than amalgamated. Kaufman developed this interpretation as a genealogy of the formal vocabulary of modern architecture that went from Ledoux to Le Corbusier.²¹ Yet, while with Le Corbusier composition becomes a sophisticated play of volumes—the jeu savant—guided by systems of proportions, Rossi opted for a simpler compositional approach that was inspired by more formally restrained precedents such as Ludwig Hilberseimer's and Hans Schmidt's austere modernism. Bonfanti defined Rossi's almost crude version of composition as "paratactic," which means that both pieces and parts are composed not by compenetration but by juxtaposition.²² Parataxis is a literary technique that favors short sentences devoid of subordinating conjunctions. For Bonfanti, Rossi's composition was paratactic because it was devoid of any overall subordinating logic besides the simple alignment of the "pieces." This compositional logic is best illustrated by another Monument to the Partisans, which Rossi designed for the town of Segrate in 1965 and only partially built.

¹⁷ Michael Baxandall, Giotto and the Orators. Humanist Observers of Painting in Italy and the Discovery of Pictorial Composition (Oxford: Oxford University Press, 1971), 129.

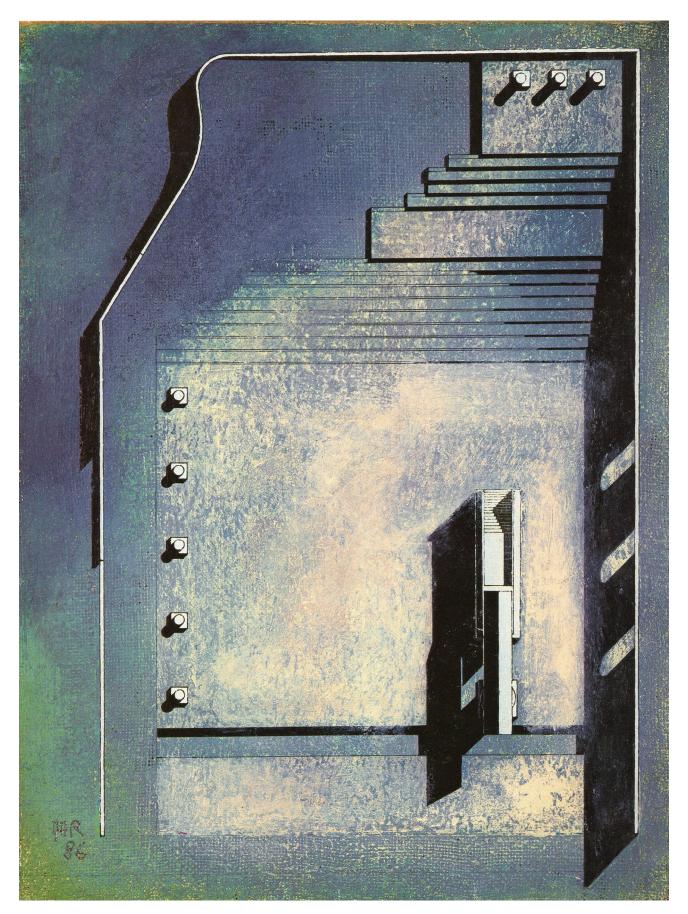
See: Robert W. Tavernor, Concinnitas in the Architectural Theory and Practice of Leon Battista Alberti, Doctoral Thesis at University of Cambridge, 1985, https://www.repository.cam.ac.uk/handle/1810/239042

¹⁹ See: Jacques Lucan, Composition Non-Composition, Architecture and Theory in the Nineteenth and Twentieth Century (London: Routledge, 2012).

Colin Rowe, "Character and Composition; or, Some Vicissitudes of Architectural Vocabulary in the Nineteenth Century," Oppositions 2 (1974), reprinted in The Mathematics of the Ideal Villa, and Other Essays (Cambridge: MIT Press, 1976), 59–118.

²¹ Emil Kaufmann, Ledoux bis Le Corbusier. Ursprung und Emtwicklung der Autonomen Architektur (Rolf Passer Verlag: Leipzing – Vienna, 1933).

²² Ezio Bonfanti, "Elementi e Costruzione. Note sull'architettura di Aldo Rossi," in: Controspazio n. 10, October 1970, 24.



Aldo Rossi, city hall square and monument to the partisans, Segrate, 1965. Site Plan. From Alberto Ferlenga, Aldo Rossi, Architetture 1959-1987 (Milan: Electa, 1987), 35.

Here, the Milanese architect designed a square enclosed on three sides by a wall pierced on one side by three arches. On two sides of the square, a series of low cylinders on square bases are placed along the walls to evoke the ruin of a portico. On the north side, the square is framed by broad concrete steps, arranged as if they would lead to the entrance of a sanctuary. Walls, arched openings, cylinders, and steps are simple elements composed in such a manner as to evoke the archaeological excavation of a Greek temenos or Roman Forum. Again, we see a vague evocation of a monument, yet, as in the previous cases, the abstraction of the elements frustrates such allusions, making the square more appropriate to its anonymous suburban context rather than to an archaeological site. The square provides the stage for the most important "part," the monument to the partisans, which takes the form of a fountain whose water basin delineates the square along its fourth, open side. The fountain is composed of four pieces: a cylinder, a square base, a triangular prism that acts as the duct of the fountain, and a rectangular block excavated by a staircase leading to the back of the duct. At first sight, the monument appears to be an arbitrary composition of different pieces put together in strict alignment. Yet, knowing that this is a monument to the partisans, it becomes quite clear that the composition mimics the form of a machine gun, the partisans' weapon of choice. Here we see a blatant example of "architecture parlante" à la Ledoux. Such figural reading is countered by the insisted staccato logic of the monument, where the singularity of each piece—the triangular prism, the cylinder, and the rectangular volume-prevail over the whole, making the latter an improbable form, cartoonish and infantile. What is remarkable about Rossi's composition as it emerges in the Segrate monument and in the Parma theater is its total lack of formal virtuosity. This deliberate avoidance of bravura is sustained by the relentless adherence to a design method. This combination of ostensible clumsiness and lucid method is perhaps something that Rossi learned from one of his favorite authors, Raymond Roussel.23

'HOW I DESIGNED SOME OF MY PROJECTS'

Unpopular or simply ignored during his lifetime, praised by the Surrealists and rediscovered by the writers associated with the French New Novel, the writer, poet and playwright Roussel wrote fiction whose main feature was the lack of any depth or psychological refinement. Novels such as La Doublure (1897), Impression D'Afrique (1910), and especially Locus Solus (1914), which inspired Rossi's use of the concept of locus in The Architecture of the City, were collections of trite literary platitudes and of the most improbable absurdities a writer could put on paper. Moreover, Roussel's books are full of relentless descriptions of objects, such as in Locus Solus, where the main protagonist, Martial Cantarel, guides a group of colleagues to see a series of inventions displayed on the grounds of his villa. The novel is a paratactic sequence of complex and absurd tableaux vivants, described by Roussel in all their most minute details. Page after page, Roussel describes, but nothing he describes leads to some significant or unexpected development of the story. This gives to Roussel's stories a sense of stillness that greatly fascinated Rossi.²⁴ Everything is absurd and yet nothing is strange. As Alain Robbe-Grillet remarked, Roussel "has

Rossi mention Roussel in many of his writings, most notably in: Aldo Rossi, "Architettura per i Musei" in, Scritti scelti sull'architettura e la città 1956-1972, edited by Rosaldo Bonicalzi, (Macerata: Quodlibet, 2012), 311.

²⁴ Alain Robbe-Grillet, "Enigmas and Transparency in Raymond Roussel," in: For a New Novel (Evanston: Northwestern University Press, 1989),

nothing to say and he says it badly."25 And yet, Roussel produced all his novels under the strictures of a formal logic he had imposed on himself, which was revealed only after his death by the publication of a posthumous text titled, "How I Wrote Some of my Books," a title paraphrased by Rossi in many of his lectures as "How I design some of my projects." ²⁶ In this text, Roussel finally disclosed that many of his novels were conceived as "bridges" between two phrases whose structure and words were almost identical, but in which small alterations of letters would produce completely different meanings. It was precisely this logic that fascinated Rossi, because in Roussel's work, invention always ends up in absurdity, but the mastery of the words and their combination is always ruled by a method. As Bonfanti remarked, for Rossi, like for Roussel, invention depends on contingency, on the occasion, on exceptional circumstances, and perhaps even on the author's intentions and obsessions. Invention is inevitably the personal, the individual, the singular, the inscrutable—what ultimately cannot be taught or transmitted. It is this personal character of Rossi's later work that would eventually be highlighted and praised by many critics, especially in the wake of the publication of the countless autobiographical drawings and sketches he produced. Yet, as Bonfanti seems to suggest,²⁷ Rossi was also interested in the adoption of a method that would allow the architect to constrain invention into something that was meant to be shared and practiced beyond the architect's personal imagination. In an attempt to overcome the authorial dimension of design, Rossi worked with simplified forms that could accept change and interpretation.

This abstraction of architecture, which verges on the ideogrammatic, led Rossi to search for an even more general method through which architecture could be produced beyond the limitations of the architect's imagination. This method was found by Rossi in the concept of typology—the discourse on architectural types. For Rossi typology was the possibility to extend a methodic way to think and design architecture beyond the singularity of the building, towards the city itself. While the additive method abstracts architecture into simple volumes, typology abstracts architecture into spatial schemes and thus presupposes a way to think of architecture no longer as only made of finite "parts" but, also as a pattern, as ordering structures able to define the city as a whole.

BEYOND INVENTION: TYPOLOGY AS METHOD

In 1963, Rossi began writing Manuale di Urbanistica (Manual of Urbanism), the first draft of what would later become The Architecture of the City, published in 1966.²⁸ While working on the manual, he was tasked by the Istituto Lombardo per gli Studi Economici (ILSES) to research a typical block of the Milanese urban fabric. In the same year, he also started his academic career at the Istituto Universitario di Architettura di Venezia (IUAV), teaching—alongside Carlo Aymonino—a course on the relationship between typology and urban morphology. Through all these activities, Rossi focused on the study of architectural types. As he argued in his first important text on typology, "Considerazioni sulla morfologia urbana e la tipologia edilizia" (1964), types are the structuring principles of buildings—principles that are informed by the economic, political, and

²⁵ See: Raymond Roussel, How I Wrote Certain of My Books, translated by John Ashbery, Harry Mathews, Kenneth Koch, and Trevor Winkfield (Paris: Exact Change, 2005). See also Riccardo Palma, "Per una archeologia del progetto in Aldo Rossi, Raymond Roussel e I quaderni azzurri" in: Annalisa Trentin (editor), La Lezione di Aldo Rossi, (Bologna: Bonomia University Press, 2008), 86-91.

See for example the latest monographic study on Rossi: Diane Ghirardo, Aldo Rossi and the Spirit of Architecture (New Haven, London: Yale University Press, 2019).

²⁷ Ibid., 26.

On the editorial history of Rossi's book see: Elisabetta Vasumi Roveri, Aldo Rossi e L'architettura della città. Genesi e Fortuna di un Testo (Turin: Umberto Allemandi Editore, 2010).

social conditions of a specific time.²⁹ Even if certain types—such as the gallery or the courtyard house—persist through time, their emergence or diffusion is always dependent on specific use and specific conditions. The structuring principles at work in every type are revealed by the urban morphology—that is to say, the concrete, physical form of the city.

Therefore, for Rossi, the study of types always presupposes the study of urban morphology and vice-versa. While morphology consists of the empirical study of the urban landscape, the study of types allows the discernment and classification of spatial motives that emerge from such landscapes. The emergence of these motives allows the architect to link political and economic processes with the evidence of urban form. For example, the emergence of the housing type based on the long and narrow lot, which played an important role in the thirteenth and fourteenth-century European city, is related to the increasing importance of private ownership and the rise of a mercantilist class. For Rossi, the datum of typology is therefore land-use, the way in which the ground is subdivided according to economic conditions such as the rise of property relationships. It is here that Rossi identified the relationship between typology and the politics of the city. As Rossi writes: "The form of urban parcels (lotti urbani), their formation and evolution, represents the long history of property. This history addresses social classes: as the French Urban geographer Jean Tricart has written, the geometry of urban parcels is the history of class struggle."30 From this perspective, typology is seen as an understanding of architecture that goes beyond empirical evidence in order to reach a deeper structural layer. This is why Quatremère de Quincy's definition of typology became useful for Rossi. For Quatremère, type cannot be reduced to an image or model to be copied but is rather an idea of something that becomes a rule to be followed.³¹ Rossi interpreted these rules not just as aesthetic or functional devices but, rather, as principles charged with symbolism and social customs. Typology thus became for Rossi the methodological link between urban form at large and the formal logic of architecture as a building.

Through the abstraction of buildings to their type, it is possible to understand the rules, customs, and politics that govern the city at large. It is useful to remember that Rossi started his investigations into typology when spatial planning became an important topic in Italy in the early 1960s. As we have seen, the interest in spatial planning was the consequence of the sudden modernization of the country's former rural landscape. Confronted with this issue, Rossi argued that the concrete reality of planning, with its laws, regulations, and strategic economic decisions, manifests itself not in the grand scale of regional planning, or in "grand plans," but in the way specific types inform the morphology of the urban landscape. Ultimately, planning policies and regulations employ spatial devices—such as dimensions, location, separation, connection, and above all, housing types. Types are thus an architectural microcosm through which the urban macrocosm becomes legible. For Rossi, the problem was not planning per se, but its naïve translation of regional planning into novel architectural forms such as the megastructure—the merging of architecture and large-scale infrastructure as one organic form. Typology, on the

²⁹ Aldo Rossi, "Considerazioni sulla morfologia urbana e la tipologia edilizia" in Various Authors, Aspetti e Problemi della tipologia edilizia. Documenti del corso di caratteri distributivi degli edifici, academic year 1963-64 (Venice: Cluva, 1964), republished in: Aldo Rossi, Scritti scelti sull'architettura e la città, edited by Rosaldo Bonicalzi (Macerata: Quodlobet, 2012), 195-210.

³⁰ Ibid. 223.

An example of this idea of type is, for Rossi, the idea of central plan in Renaissance architecture. Following Rudolph Wittkower's analysis of this type in his seminal book Architectural Principles in the Age of Humanism, Rossi argued that the idea of central plan gave rise to a multitude of interpretations, none of which can become the definitive model for this type. A type like the central plan is thus a rule that presupposes symmetry, the use of the dome, and the isolation of the building from its context. See: Aldo Rossi, Tipologia, Manualistica e Architettura in Documenti del corso di caratteri distributivi degli edifici, academic year 1963-64 (Venice: Cluva, 1964), republished in: Aldo Rossi, Scritti scelti sull'architettura e la città, edited by Rosaldo Bonicalzi (Macerata: Quodlibet, 2012), 281-282. See also Rudolph Wittkower, Architectural Principles in the Age of Humanism (London: W. W. Northon & Company, 1971).

contrary, offered a more precise resolution to assess the impact of politics and economic conditions on the minute fabric of the city itself.

Indeed, it is property lines, density indexes, and building codes that influence the development of the city at large. The methodological purpose of typology for Rossi was to link these urban factors to the morphology of the city. The ultimate goal of typological research was to generate structural principles in which the social and political are translated into the spatial and the formal at the scale of each building. According to this understanding of typology, for instance, a Renaissance palace can be abstracted to the principle of the enfilade, a spatial template produced by certain social and economic customs, such as the internal subdivision of houses for the sake of domestic management. On the other hand, modern social housing can be abstracted to the principle of the gallery-corridor serving independent housing units; in this case, the gallery is a mode of spatial organization introduced to ease circulation and further isolate each housing unit from its neighborhood. Therefore, types such as the enfilade or the gallery condense into a spatial arrangement how customs and daily habits have been organized and consolidated. According to Rossi these structuring principles are visible in any architecture but become more explicit—and thus legible—with the architecture of housing. Building many housing units at once implies the standardization not only of building components but also of plans and elevations. In his famous essay "On the Typology of Architecture"³² the art historian Giulio Carlo Argan argued that the importance of typology for art and architecture arose with the advent of industrialization, in which standardization became a crucial factor. This is particularly true for modern housing, where standardization of both building components and architectural plans was also accelerated by the widespread use of textbooks and manuals by and for architects and engineers. Both Rossi and his older colleague Carlo Aymonino noted33 that many "overlooked" architects of the Modern Movement, such as Alexander Klein, Ludwig Hilbserseimer, and Ernst May had focused their work more on typological research than on the creation of stylistically recognizable buildings. While the historiographies of modern architecture proposed by Nikolaus Pevsner and Sigfried Giedion had often traced the development of modern architecture through the work of a handful of influential protagonists, Le Corbusier in primis, for Rossi and Aymonino, the study of typology and its relationship with urban morphology promised a more structural understanding of the city based on its "anonymous" architecture. It is for this reason that, for Rossi, the study of typology was not just a method of reading the relationship between architecture and the city but also for designing architecture. In Rossi's terms, type is not reducible to the singularity of the building; however, it is possible to visualize it as a diagram that summarizes, in visual terms, how this principle becomes a parti. The proliferation of diagrams within modern architecture-from Jean-Nicholas-Louis Durand's diagrams of ensembles d'édifices, to Alexander Klein's housing schemes-signals the importance of formulaic design principles for architecture when what is at stake is the standardization of design solutions. Ultimately, diagrams are linked to techniques of power that focus on the governance of life itself. Gilles Deleuze famously addressed the diagram as a machine that directly produces effects of power and not merely as a means of the synthetic representation of concept and form.34

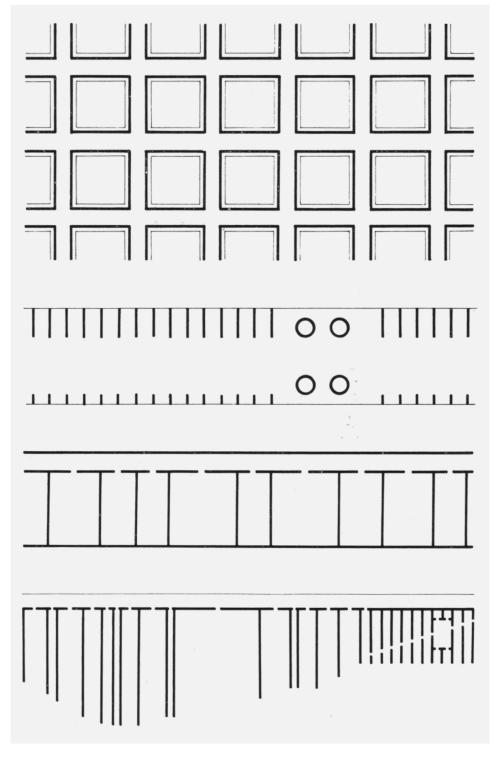
Within the architecture of modern housing, diagrammatic organization is paramount, because what becomes crucial in the standardized house is the governance of habits and domestic roles. Even though Rossi's subtle

³² Giulio Carlo Argan, Il problema della tipologia, in: Progetto e Destino (Milan: Il Saggiatore, 1965), 75-81.

This is Aymonino main conclusion on his essay on typology, "La Formazione di un moderno concetto di tipologia edilizia" in Various Authors, Rapporti tra la morfologia urbana e la tipologia edilizia (Venice: Cluva, 1966), 15-51.

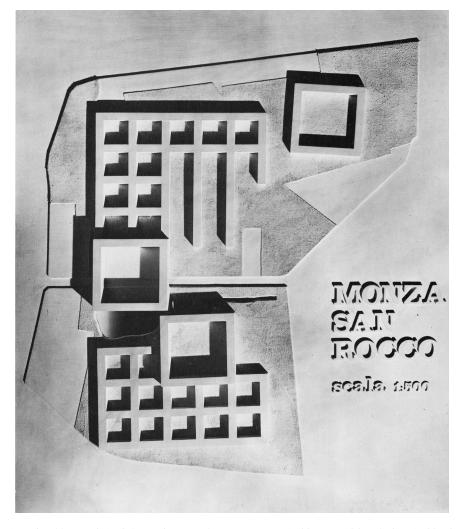
³⁴ Gilles Deleuze, Foucault, trans. Sean Hand (London: Continuum, 2006).

definition of typology could have allowed the possibility to read types as diagrams of governamentality, he never pursued this research. Typology for Rossi remained a way to study, and eventually appropriate existing spatial templates as they were produced by the historical evolution of the city. Unfortunately, it was this rather neutral approach to typology that was embraced by many of Rossi's followers, and thus typology became a way to safeguard the disciplinary "integrity" of architecture.³⁵



Aldo Rossi, Diagrammatic drawing of three projects: San Rocco (1966); Gallaratese (1969), Triennale (1964). From Aldo Rossi, 'Due progetti di abitazione' in Lotus International n.9, 1970, 62.

Rossi identified the diagrammatic essence of architecture as "rational" because it relied not on senses but on reasoning, or what Rafael Moneo described as "concrete and sharply defined faculties." Rational architecture is therefore comparable to a diagram, as in the case of Durand's public buildings, in which the purpose of architecture as a spatial template becomes self-evident. Discussing Durand's building models, Aymonino noted how it was precisely their abstraction—their reduction to diagrams that allowed Durand to propose not just a taxonomy of architectural templates but also a combinatory method where each element of the building can be composed in different ways, depending on the program required.³⁷ What Aymonino described about Durand is what is at stake in both the elementarism of Rossi's early architectural works and in his interest in typology: the search for a framework within which composition is driven by the capacity of architecture to be abstracted to its most essential template. By rejecting an architecture built on the acceptance of given norms, Rossi proposes the study of typology as a way to reason about these norms and thus as the possibility to change or alter not the image but the very structure of architectural space. This attempt is very visible in Rossi's housing projects, such as the competition entry for the San Rocco social housing complex in Monza, designed in collaboration with Giorgio Grassi (1966).



Giorgio Grassi, Aldo Rossi, Social Housing complex 'San Rocco', 1966, competition design, 1966. View of the model. From Peter Arnell, Ted Bickford, Aldo Rossi. Buildings and Projects (New York: Rizzoli, 1985), 63.

The proposal consists of a grid of two-storey housing blocks that define a sequence of courtyards. The uniformity of the solution is broken by three larger courtyards that repeat the structuring principle of the whole project—the type—at a larger scale. The design is presented through a series of very simplified plans and a model whose whiteness evokes the abstraction of Piero Manzoni's achromes. In this project, Rossi and Grassi abstracted the form of this housing complex to the extent that even the potential built form would make its typological template legible rather than hiding it within an overdesigned proposal. The abstraction and elementarism implied in the "procedimento additivo" described by Bonfanti were thus a way for architecture to make visible and legible, in the clearest terms, the structuring principles through which architecture emerges as a form.

It is precisely when we see how the abstraction and elementarism of architectural form serve the possibility of a typological architecture that we can consider the ambition of Rossi's architectural program. Not by chance, both a design method and typological research were developed by Rossi while teaching in the context of what at that time was becoming the "mass-university" which required a more collective pedagogy rather than the traditional, elitist education of the architect as a creative genius. Like in the case of Durand, Rossi's method would ease the "effort" of design so that it was approachable by a larger number of students and architects beyond the limits of the traditional "masterclass." We could say that Rossi's method would have fit with a situation in which—as wage earners—architects, like other technicians, would not overwork to endlessly refine difficult design schemes. The advent of free-lance work changed this situation by turning architects into precarious workers, often working for free, while celebrating creativity as a key value of design. In this way, architecture has again become a time-consuming process, especially in terms of design, since projects often become more and more formally elaborated in order to compete in the market of recognition. The formal exuberance of the last forty years, where architects produce unprecedented shapes, has been fed with increasingly unpaid labor spent on endless processes of "formal iteration." We are far from the laconic world of Aldo Rossi's architecture driven by simple forms and a clearly defined design method. Ironically, starting from the early 1970s, Rossi's ambition to put forward a professional and pedagogic design method was jeopardized by his own interest in presenting his work in a more personal way, where the production of evocative images became far more important than any other method. There is no doubt that this is the architecture of Aldo Rossi that is popular today, in a time in which the selling of architecture as both an image and a commodity has overwhelmed any possibility of a shared design method.

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