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ALDO ROSSI,
THE LOGIC AND INVENTION
OF THE PROJECT

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LOGIKA I INWENCJA PROJEKTU

Abstract

Rational architecture represents the choice of a field that seeks to point to a precise direction for research. A disciplinary framework of reference based on theoretical research and design which tend to constitute a rational theory of architectural design where the analytical moment of knowledge is for the project a primary but not definitive point whose results are still unpredictable and are linked to talent and intelligence. Indeed, for Aldo Rossi: *The logical construction of architecture is the profession, the theoretical and practical corpus of architecture, but it cannot be identified with the result of the architecture.*

Architecture is a discipline that can be taught and transmitted but it is absolutely necessary to understand that this is not an applicable method, but an experience that requires logical abilities and imagination on the same plane.

Keywords: rational architecture, theory, imagination, choice, subjective element

Streszczenie

Racjonalna architektura reprezentuje wybór dziedziny, która dąży do wskazania dokładnego kierunku badań. Dyscyplinarne ramy odniesienia oparte na badaniach teoretycznych i projektowaniu zwykle stanowią racjonalną teorię projektowania architektonicznego, w której analityczny moment wiedzy jest punktem podstawowym, ale nie ostatecznym dla projektu, a jego wyniki są nadal nieprzewidywalne i związane z talentem i inteligencją. Aldo Rossi twierdzi, że istotnie: *Logiczną konstrukcją architektury jest zawód, teoretyczny i praktyczny korpus architektury, ale nie można go utożsamiać z rezultatem architektury.*

Architektura jest dyscypliną, której można nauczać i ją przekazywać, ale absolutnie konieczne jest zrozumienie, że nie jest to stosowana metoda, a doświadczenie, które wymaga zarówno zdolności logicznych jak i wyobraźni.

Słowa kluczowe: racjonalna architektura, teoria, wyobraźnia, wybór, subiektywny element

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If we also had a Fantastic, as we have a Logic, then the art of inventing would be found.
(Novalis *Fragment* no. 1466.)

Besides the charm and expressive force of his architecture, Aldo Rossi represented a way of thinking: architecture is a discipline that can be taught and transmitted.

As far as I am concerned, I can say that the lessons of Aldo Rossi and his writings were essential for me as a student; finally someone was stating clearly from which architecture his architecture was born, I was finally discovering that the discipline could be transmitted.

The writings of Rossi in his most important book *L'architettura della Città*, a book that still sparks discussion, one of the most read and studied on university courses, and as fascinating or fatal as his long architectural tale *The Scientific Autobiography*, believe in the necessity of a rational theory of architectural design for the project and for teaching that aspires to a logical construction of architecture. In fact, for Rossi, “a rigorous discourse on architectural design should be based on logical and rational foundations”¹ without forgetting that “rational architecture is not an aesthetic or moral vision, a way of living, but the sole systematic response to the problems posed by reality”².

His theoretical work indicated the main directions to develop research in this field and, in particular, those where the relationship with history, the city, and urban issues were considered “the basis of architecture”. In fact, for Rossi *the history of architecture constitutes the material of architecture*³. But here history is understood as the history of “urban facts”, a history of types that are certainly not like the recovery of stylistic elements and forms borrowed from the past.

Rational architecture represents the choice of a field that seeks to point to a precise direction for research. A disciplinary framework of reference based on theoretical and design research which tend to build a rational theory of architectural design where the analytical moment of knowledge is for the project a primary but not definitive moment where the results are still unpredictable and are linked to talent and intelligence. Indeed, for Aldo Rossi: *The logical construction of architecture is the profession, the theoretical and practical corpus of architecture but it is not identified with the result of architecture*⁴.

Staying with the subject of the rational approach to architecture in *Architettura per i Musei*, Rossi, after discussing the importance of the study and analysis of monuments, stipulated that ... *a position of this type should illuminate our projects and we should be able to clarify from which architecture our own architecture is born. Here is included the problem of the choice that constitutes the decisive character of design*⁵, and that expresses with great clarity just what the rational nature of architecture is. The steps that guide the

¹ A. Rossi, *Architettura per i musei*, [in:] Vv.Aa. *Teoria della Progettazione architettonica*, Dedalo, Bari 1968; [in:] *Scritti scelti*, edited by R. Bonicalzi, clup, Milan 1975, p. 339.

² A. Rossi, Introduction to *Hans Schmidt, Contributi all'architettura 1924–1964*, Franco Angeli, Milan 1978, p. 11.

³ A. Rossi, [in:] *Introduction to the Portuguese edition*, contained in “L'architettura della Città”, CLUP, Milan 1978. p. 236.

⁴ A. Rossi, *Introduzione a Boullée*, [in:] *Etienne-Louis Boullée, Architettura saggio sull'arte*, Marsiglio, Padua, 1967, p. 8, 9.

⁵ A. Rossi, *Architettura per i musei*, [in:] Vv.Aa. *Teoria della Progettazione architettonica*, Dedalo, Bari 1968; [in:] *Scritti scelti, op.cit.*, p. 332.

project are logical and rational, and concern the architecture, not only in the aspects relating to its *utilitas* but also and especially as regards how to rationally compose the themes and responses offered by those works of architecture that have been studied and loved in synthesising a new project.

Then he also pointed the way to learning the trade through the study of architecture understood as a discipline with its own benchmark “theoretical and practical corpus”, and equally explicitly, he reminded us, that the criterion of choice is fundamental in any project and this concerns “the subjective element” that cannot be rationalized. Rossi therefore brought to light the contradictions existing between systematic teaching and the need for expression and the relationship between the theory of design and the autobiographical contribution of the author.

It is no coincidence that, within the many relationships between the autobiographical components and the logical aspect of a project, Rossi brought out the role of the unforeseen as a decisive factor in design invention.

Through a study of Boullée, he then felt the need to conceive the project starting from an emotional core of reference, a theme that allowed him to decide and choose the design path, which was certainly not resolved by a summation of analytical data that led to a result. Ultimately, this meant achieving a synthesis.

For Rossi the question of themes in architecture also meant taking a distance from *functionalism* and raising the issue of the *character* of buildings. A building without a theme, without a character, and without theoretical foundations, was a work devoid of meaning and significance that only served its function. For Rossi, character was “the nature of the subject”; character constituted the evocative and emotional part of the design invention.

For me, the introduction to the essay by E. L. Boullée, *Architettura, saggio sull'arte* (*Architecture, an essay on art*), is one of Rossi's most beautiful and meaningful pieces of writing, where he clarified just what is meant by Rationalism, introducing the term “exalted rationalism” (“exalted, emotional and metaphorical”) in contrast to an academic “conventional rationalism”. A rationalism with which to transcribe, through his own spirit, beloved and studied things and works of architecture, opening up the possibility of the imagination of the individual and fostering in this way, through the project, a fertile and rediscovered relationship between humankind and *the world*.

In *The Scientific Autobiography* Aldo Rossi tells how his projects were born, and here it is evident that the relationship with history and knowledge of the disciplinary corpus of architecture are at the basis of the inventive process, and that, at the same time, material of this kind that is recalled undergoes a process of transfiguration through an analogical and imaginative thinking that produces a new design synthesis.

The analytical aspect is fundamental in the training of an architect, it is the refinement of a culture of reference, nonetheless, how a project is made, I must repeat, depends on talent and intelligence, i.e. on certain personal choices made with respect to one's own personality, passions and obsessions. The relationship between logic and imagination, between logic and autobiography in Aldo Rossi is resolved by interpreting this tension, as Ezio Bonfanti wrote, taking into account both terms which do not offset one another but are added together.

Architecture is a discipline that can be taught and transmitted but it is certainly necessary to understand that this is not an applicable method, but an experience that requires logical abilities and imagination on the same plane.



Ill. 1. Canaletto (Antonio Canal), “Capriccio con edifici palladiani”, 1756/1759, Parma, Galleria Nazionale

1. Theatre, City, Architecture

*La Nature est un temple où de vivants piliers
Laissent parfois sortir de confuses paroles;
L'homme y passe à travers des forêts de symboles
Qui l'observent avec des regards familiers*
Charles Baudelaire *Correspondances*⁶

Il Teatro del Mondo⁷ moves towards the Venetian domes and monuments and then sets sail, comparing itself ideally with the Venetian civilization of the Adriatic, as far as Dubrovnik. In its passage it creates new and unexpected urban compositions with the places met. It is a theatrical machine on multiple levels; in addition to allowing representation inside itself, it is a point of observation also to be observed; this allows a sort of reversal of theatre and the city: on its passage, by modifying the various urban scenes in sequence, it invents possible “analogous cities.”

The theatre is a tower that recalls other public buildings, a beacon, other theatres and puppet theatres, other Venetian buildings constructed for the celebrations on the water, it is

⁶ C. Baudelaire, *Correspondances*, [in:] ID, *Les Fleurs du mal*, 1861; published by Critica, Librairie J. Corti, Paris 1968.

⁷ A. Rossi, *Teatro del Mondo*, Venice Biennale, inaugurated on 11 November 1979.

a building that recalls a Venice not yet of stone. Ultimately, it is a poetic synthesis, around “forms without evolution”, where the “analogies are endless”.

Il Mondo, the “Globe”, suspended above a barge is exposed to the power of the water – the sudden tides and the meekest storms – and, like a Shakespearean theatre, this is a theatre that squeaks and wobbles during the show.

The urban scenes, defined by the theatre on its passage and those defined by the various viewpoints once it is anchored at the Punta della Dogana, were in part already provided by a series of earlier drawings, like the analogical one prepared to present the project for Cannaregio Ovest – a collage with the project and some Venetian monuments – where the theatre would be “positioned” at a certain point. Other drawings and paintings were made over time on this same theme: drawings verifying an idea of architecture and cities where the Venetian cityscapes, built up using the collage technique, included projects by Rossi and other projects and creations of Venetian monuments. These show the possibilities for the design of a logical system that allows us to understand, to know, and to operate on reality: the theory of the *città analoga* (“analogous city”). But the most important check on the theory remains the journey made by the theatre, with its many meetings, at times foreseen at times fortuitous and in some way surreal, which gave rise to countless fleeting analogous cities.

At the end of the day, all projects for Venice will be emblematic in the verification of this device and in proposing analogies between theatre, city and architecture.

The theory of the analogous city, voiced on several occasions by Rossi, and that would become one of the dominant themes of his thinking, after the period of necessary scientific research and the ensuing period for the finalization of a logical design system, essentially introduced a compositional method.

Through reference to the *Capriccio Veneziano*⁸, painted by Canaletto, a collage of existing and proposed Palladian monuments assembled in the real environs of the Rialto Bridge, Rossi indicated how a logical-formal operation could result in a way of designing *where the elements are predetermined, formally defined, but where the meaning that emerges at the end of the operation is the authentic, unexpected, original sense of research*⁹. Thus, through the collage technique, Rossi built an imaginary, analogous Venice, implanted on the real one, where projects and things, invented and real, cited and juxtaposed, proposed an alternative to reality through a technique that identified the design elements in “fragments of a secure reality”. This is a logical process that permits following the rules, the tradition of the craft, and perhaps also a certain naturalism, but where the singularity of the personal experience, through the choice of things and the proposals of brand-new juxtapositions, is what makes the system extraordinarily alive. The images of a new-found architecture broaden the intelligibility of the work and open the story up to multiple interpretations, also through the evocative value of elementary figures.

The attempt is to build a “useful” beauty and to have the capacity to propose an alternative to reality through the imagination. These are essentially projects that arose as a civil response to the problems posed by the contemporary city and that seek to offer an alternative to the development of the city outside of bureaucratic urban models shielded from fashions.

Aldo Rossi repeatedly stated his passion for the theatre and it runs throughout his work becoming one of his deepest interests.

⁸ Canaletto, *Capriccio con edifici palladiani*, 1756/1759, Parma, Galleria Nazionale.

⁹ A. Rossi, *Prefazione alla seconda edizione italiana*, contained in *L'architettura della Città*, CLUP, Milan 1978. p. 231; A. Rossi, *La città analoga: tavola*, in *Lotus International* 13, 1976, p. 6.

The cityscapes, the urban scenes that Rossi drew and designed for Venice are theatres that await the start of the performance or that perhaps offer the possibility for life to ensue in that place. The architecture, by refining its spatial devices and techniques, prepares the places and creates the backdrop for the unfolding of history. *Architecture is a tool that allows the unfolding of an event.*

The cities analogous to the Venetian subject designed by Rossi on various occasions were virtual theatres that suggest an analogy between the theatre and architecture understood as a *fixed scene of the affairs of humankind*¹⁰.

The understanding of “architecture as a rite rather than creativity”¹¹, that proceeding by continuity and repetitions so typical of the theatrical rite to make the theatre a sort of medium to understand the link between architecture and human events.

2. Bonnefontenmuseum

In the report that accompanies his Maastricht museum project¹², Aldo Rossi leads the visitor above the belvedere of the dome that dominates the landscape of the river Maas. From there he shows us the museum in its unity, but warns us that “maybe” it is ... *a lost unity that we recognize only by those fragments of our life which are also the fragments of art and of the old Europe*¹³. This admonition reveals one of the impossibilities of our era and introduces one of the central themes of his work: the question of the *fragment* in architecture. *This ability to use pieces of mechanisms which the general sense has partially lost has always interested me, also on a formal level. I think of a unity, or a system made only of reassembled fragments: perhaps only a major popular insistence could give us the sense of a general design*¹⁴.

The list of parts and fragments chosen “between imagination and memory” that return in his projects is not neutral; it refers to a world of affection, to his collection of works of architecture, forms retrieved from the memory – *Recalling a thing was having invented it* so said an old Hollywood director – as fulfilling the tasks of a project for their usefulness and not only for their aesthetic connotation.

His projects are compositions of fragments of autonomous works of architecture which, in following the building programme propose an idea of the city. The compositional method of addition brings new meaning to architecture, and indeed for Rossi “the emergence of relations between things, more than the things themselves, always establishes new meanings”¹⁵. The project does not have a single unique image, but several images that allude and refer to works of architecture, city parts seen or studied and the places they come from. The images of “a new-found architecture” broaden the intelligibility of the work and open the story up to multiple interpretations, also through the evocative value of elementary figures.

¹⁰ A. Rossi, *L'architettura della Città*, clup, Milan 1978, p. 12.

¹¹ A. Rossi, *A Scientific Autobiography*, Oppositions Books, The MIT Press, Cambridge, Massachusetts (USA) 1981; *Autobiografia scientifica*, Pratiche, Parma 1990, p. 41.

¹² A. Rossi, *New headquarters for the Bonnefontenmuseum in Maastricht (Netherlands)*, in collaboration with G. Da Pozzo, U. Barbieri, M. Kocher, 1990–1994.

¹³ A. Rossi, *Tutte le opere*, (edited by A. Ferlenga) Electa, Milan 1999, p. 271.

¹⁴ A. Rossi, *Autobiografia scientifica*, Pratiche, Parma 1990, p. 15.

¹⁵ *Ibidem*, p. 24.

The Bonnefanten Museum is situated on the river Maas, in an urban suburb lying on the other side of the river in relation to the historic city of Maastricht, a village connected to the city since ancient times by the Roman bridge from which the town takes its name: *Traiectum Mosae*. The museum dialogues with the river landscape and with the city's waterfront, with its towers, churches, Romanesque-Gothic architecture and the profile of the Onze Lieve Vrouwebasiliek inserted by Aldo Rossi in a study drawing with the profile of the Museum.

The project consists of a large courtyard opening onto the river and a central building that cuts the courtyard along its central axis. The central building is a paratactic composition of characteristic elements arranged linearly. The elements arranged along the central axis of the building identify the eminently public parts of the museum. This composition of autonomous works of architecture, already present in the first study drawings, is clarified in its spatial quality by the design of the longitudinal sections (project summary).

Inside the museum many spaces are in fact for the public, for the visit and for other entertaining and educational aspects; the museum today is also a public edifice, a part of the city where the collective spaces are identified by recognizable architectural elements endowed with evocative power. Instead, the spaces for art are hosted in places attentive to the traditional features of museums, where the formal choices do not annul the value of the works.

The entrance to the museum is defined by two stone towers that encompass a portal in iron. This great portal, used on other occasions by Rossi, refers to a general idea of the doorway that belongs to the collective memory: this doorway has similarities with those shown in the painting by Paul Klee *Revolution of the Viaduct*.

From the foyer shaped like a telescope, a sort of *Lichtraum* which carries "the lights of the sky" inside, we pass to the grand staircase that leads to the spaces of the museum: this is the invention of the project. In the early design studies Rossi was already repeating a drawing that featured a stairway: this was to become the section of the Museum and the main element of the building which, beyond its functionality, as Rossi wrote, "contained the meaning of the Museum". This stairway has been defined a *Treppenstrassen*, a stepped urban street, delimited by walls of brick. Natural light falls from a skylight, highlighting the pattern of the walls and restoring a relationship with nature; lights and shadows reveal the architecture. Its space suspended between the interior and the exterior accentuates the character of a public building, a place to linger, walk and meet like the public spaces of the city, in addition to allowing everything that was envisaged by the functional brief, since the museum is a collective building *par excellence*. This is linked to the possibility of making full use of its spaces and thinking of the building as an urban route, a meeting place, where the reasons for the visit and the cultural interests mingle with chance and the unexpectedness of possible encounters. The materials employed, the clay brick walls, the wood that clads the steps and the iron and glass of the skylights, further broaden the intelligibility of the work since they also possess an evocative value.

The stairway ends close to the dome, a particular exhibition space that becomes a fixed point of the riverine landscape and the centre of the project; the dome refers by analogy to other domes and civic towers announcing the public usage. The whole work is yet again presenting the theme of the urban monument in an exemplary way.

The form of the public building is composed, as Rossi wrote, *like an imagined or analogous city made up of places and buildings which intersect each other in relation to the city itself*. These places and these constructions are therefore a poetic synthesis, around "forms without evolution", where the "analogies are endless".

It is a “city museum” whose architecture is not overlapping but simply puts itself at the service of the work, looking for the best conditions for its development in an attempt to build a fixed scene for the works exhibited, conceivably an atmosphere. The exhibition spaces of the Maastricht museum, positioned inside the buildings as lateral combs, are open-ended rooms of varying sizes which invoke the tradition of venues for collections. They provide different possibilities of natural lighting and, as noted by the museum’s director, *without this condition the work of art would be prematurely reduced to a reproduction*.

The compositional choices, the materials, and the language define the civic nature of the public building, of the museum with its desire to be a “factory of culture”.

The character of the buildings that constitute the complex changes through the linguistic choices made, and by the use of different materials according to the destinations of use and the different meanings the blocks assume with respect to the city, and to the site. In fact, the parts devoted to the spaces of the museum and exhibitions, feature rather closed, introverted shapes; instead, the connecting elements and the central block open onto the internal courtyards and hint at some characteristics of industrial architecture.

Right from the study phases the project revealed the insistence of architectural forms, those same ones that structure his imagery, which, in the transcription from the idea to the project, are able to assume new meanings every time depending on the criteria of choice and fresh combinations. Establishing an analogy with the poetry of Valéry, we can recognize that the value of this architecture is *The force to bend the common word to unexpected ends without violating the time-honoured forms*¹⁶. Time, place and imagination change and conform the architecture, freeing the inventive aspect and what is not predictable in the necessary rational search.

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